TOUCH THE WATER & NORTH SHORE PROMENADES

CONCEPT DESIGN REPORT

September, 2021

dub

Edmonton

ISL

SLOSS

0.0 TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

This report summarizes the current status and project background for the Touch the Water and North Shore Promenades project. Located in central Edmonton along four kilometres of the north bank of the North Saskatchewan River, the project proposes a new riverfront public space. The project proposes to improve access and safety to the River and through the central river valley, in response to increased use and associated conflicts. A preferred concept design has been developed, which illustrates how the project could provide new connections to communities and to nature, celebrate a deep, layered Indigenous, industrial and natural history, and provide opportunities for riverfront gathering and recreation not found elsewhere in the region.

Project development phases are anticipated to be complete by the end of 2021. Detailed design and construction for the project is currently unfunded.

Aerial Photo of Touch The Water & North Shore Promenade Site

2.0 PROJECT INTRODUCTION
PROJECT TEAM

CITY OF EDMONTON
& STAKEHOLDERS

PROJECT TEAM
Open Spaces Planning & Design
Open Spaces Infrastructure Delivery
Indigenous Relations
Communications & Engagement
River Valley Parks & Facilities
Urban Growth & Open Space

STEERING COMMITTEE
Open Spaces Planning & Design
Open Spaces Infrastructure Delivery
Engineering Services
River Valley & Horticulture
Civic Events & Festivals
Indigenous Relations
Urban Growth & Open Space
Urban Strategies
Communications & Engagement
Infrastructure Operations

DESIGN & TECHNICAL ADVISORS
Environmental Engineering
Geotechnical Engineering
River Valley Parks & Facilities
Urban Growth & Open Space
Facility Planning & Design
Urban Strategies

DESIGN STAKEHOLDERS
EPCOR
Transportation Planning & Design
Parks & Roads Services
Facility Engineering
Accessibility Advisory Committee

Refer to City's project stakeholder register

CITY CONTRACTED CONSULTANTS
Aubin Consulting - Indigenous Engagement

Stantec - Public Engagement

AECOM & Nichols Environmental - Environmental Risk Management & Assessment

TetraTech - Geotechnical

DUB ARCHITECTS MANAGING PRIME CONSULTANT

MICHAEL DUB, PRINCIPAL-IN-CHARGE
GENE DUB, ADVISING PRINCIPAL
CASS MILFORD, PROJECT COORDINATOR

+

STOSS DESIGN LANDSCAPE ARCHITECTURE FIRM

CHRIS REED, DESIGN DIRECTOR
AMY WHITESIDES, STUDIO DIRECTOR
DAVI PARENTE SCHOEN, PROJECT DESIGNER

+

ISL LOCAL LANDSCAPE ARCHITECTURE FIRM

KEVIN DIETERMAN,
SENIOR LANDSCAPE ARCHITECT
JAMES ALLEN, C.A. LEAD

SUBCONSULTANT TEAM

CIVIL
ISL ENGINEERING

DARIN HICKS, CIVIL LEAD
BARRY RAYNARD, WATER RESOURCES

ENVIRONMENTAL
SPENCER ENVIRONMENTAL

LYNN MASLEN, SENIOR ENVIRONMENTAL SCIENTIST
ANDRA BISMANIS, PROJECT MANAGER

ARCHEOLOGY
TURTLE ISLAND

GARETH SPICER, PRINCIPAL ARCHAEOLOGIST

COST
BTY

ALLEN REID, COST CONSULTANT

STRUCTURAL - SITE
ISL ENGINEERING

JAMES CHAPMAN, STRUCTURAL LEAD, BANK & RIVERBED
ROBERT COLWELL, STRUCTURAL ENGINEER

HYDROLOGY
NORTHWEST HYDRAULIC

EUGINE YAREMKO, PRINCIPAL
AGATA HALL, ENGINEER

BIOLOGIST
KINGFISHER AQUATICS

ERIK STEMO, SENIOR FISHERIES BIOLOGIST

2.1 PROJECT INTRODUCTION
PROJECT DESCRIPTION

The North Saskatchewan River valley is a regional destination, and a place where people have been drawn to and gathered at since time immemorial. With this understanding, The City of Edmonton has advanced the development of the Touch the Water and North Shore Promenades project, which reimagines four kilometres of central riverfront along the north bank of the North Saskatchewan River as a new public outdoor space for many different types of people, abilities and activities.

Pedestrian and cyclist traffic along the existing shared use pathway along the project area has increased 100 per cent from 2019 to 2020. Through public engagement and site visits, the City of Edmonton has observed existing conflicts between users walking, cycling and rolling, and associated safety concerns that accompany the increased use of the area. Therefore, the project explores new ways to improve access and safety to and within the central river valley, and to provide new and unique opportunities and places for people to gather at the River, to learn about the multilayered history and heritage of the area, to connect more people with nature, and to restore and maintain local ecological connections.

The project stretches across two distinct but connected project areas. The Touch the Water Promenade project area is adjacent to the Rossdale neighbourhood, from 94 Avenue to the Walterdale Bridge. The North Shore Promenade continues upstream from the Walterdale Bridge adjacent to River Valley Road to Government House Park.

This concept design will act as a blueprint for future development in the project area that reflects a shared vision for the central river valley, and will serve as a long term plan that could be implemented in phases over time.

2.2 PROJECT INTRODUCTION
PROJECT SCHEDULE

WE ARE HERE

STAGE I

CONCEPT DESIGN

During the Concept phase, the project team gathers program and site information to formulate a series of design options. A site analysis is a critical tool to not only assess how site characteristics can affect the design, but also in identifying what characteristics to should be preserved or intensified. The two projects encompass a sizable area adjacent to the river, and an in-depth analysis of both sites is fundamental prior to the advancement of concept options that includes the following characteristics:

- Historically and culturally significant areas
- Existing and proposed underground utilities
- Existing river hydraulic conditions and drainage patterns
- Geotechnical and environmental constraints

Design options will be evaluated and a preferred design approach will evolve out of discussions with the client group(s) as well as public and other engagement sessions.

CONCEPT DESIGN PHASE **DEC, 2018 - JULY, 2021**

FUNDING

- ■ Touch the Water Promenade | FUNDED
- ■ North Shore Promenade | FUNDED

STAGE II

PRELIMINARY DESIGN

The Preliminary Design phase is perhaps the most critical design phase in that it builds upon the high level ideas and solutions identified in the Concept Design phase for each project and transforms them into a coherent project design. The nodes, pathways and activities established in each project's concept plan are refined, materials are assigned and a design language is introduced. During this phase, characteristics such as topography and it's effect on surface drainage are explored and resolved.

Sub-consultants are expected to bring their designs to a level where spatial coordination of systems is reviewable and proper integration of services is planned for.

PRELIMINARY DESIGN **JULY - DECEMBER, 2021**

FUNDING

- ■ Touch the Water Promenade | FUNDED
- □ North Shore Promenade | PENDING FUNDING

DETAILED DESIGN

This phase, which is dependent on securing funding for both projects, reflects a steady refinement of the concept developed for each project in the Preliminary Design Phase. Elements developed in earlier phases are now reviewed, confirmed, and definition is added. The design is translated into construction documentation and technical requirements. By this stage the design is fixed and the process moves to the fine detailed requirements that allow the project to function correctly, be built accurately and communicated effectively to contractors and trades bidding the project.

Details must be developed with an eye to adhering to the construction budget. Any potential impacts to budget need to be tracked and mitigated (either through revision of detail or exploring trade-offs with other program elements).

DETAILED DESIGN **DURATION: 7 - 10 MONTHS**

FUNDING

- □ Touch the Water Promenade | PENDING FUNDING
- □ North Shore Promenade | PENDING FUNDING

STAGE III

BUILD IMPLEMENTATION

This phase involves the tender, award, and construction of each project, either simultaneously or separately.

During construction, administration of the contract that focuses on facilitating three-way communication between the client, the prime consultant and the construction site team.

DURATION: EST. 24 MONTHS, TO BE CONFIRMED BASED ON SCOPE

FUNDING

- □ Touch the Water Promenade | PENDING FUNDING
- □ North Shore Promenade | PENDING FUNDING

BUILD CLOSE OUT

Following construction completion and building / site occupancy, site reviews are preformed on an as-needed basis to ensure outstanding construction deficiencies, including any seasonal deficiencies, are properly addressed.

DURATION: 12 MONTHS

2.3 PROJECT INTRODUCTION
PROJECT PROCESS

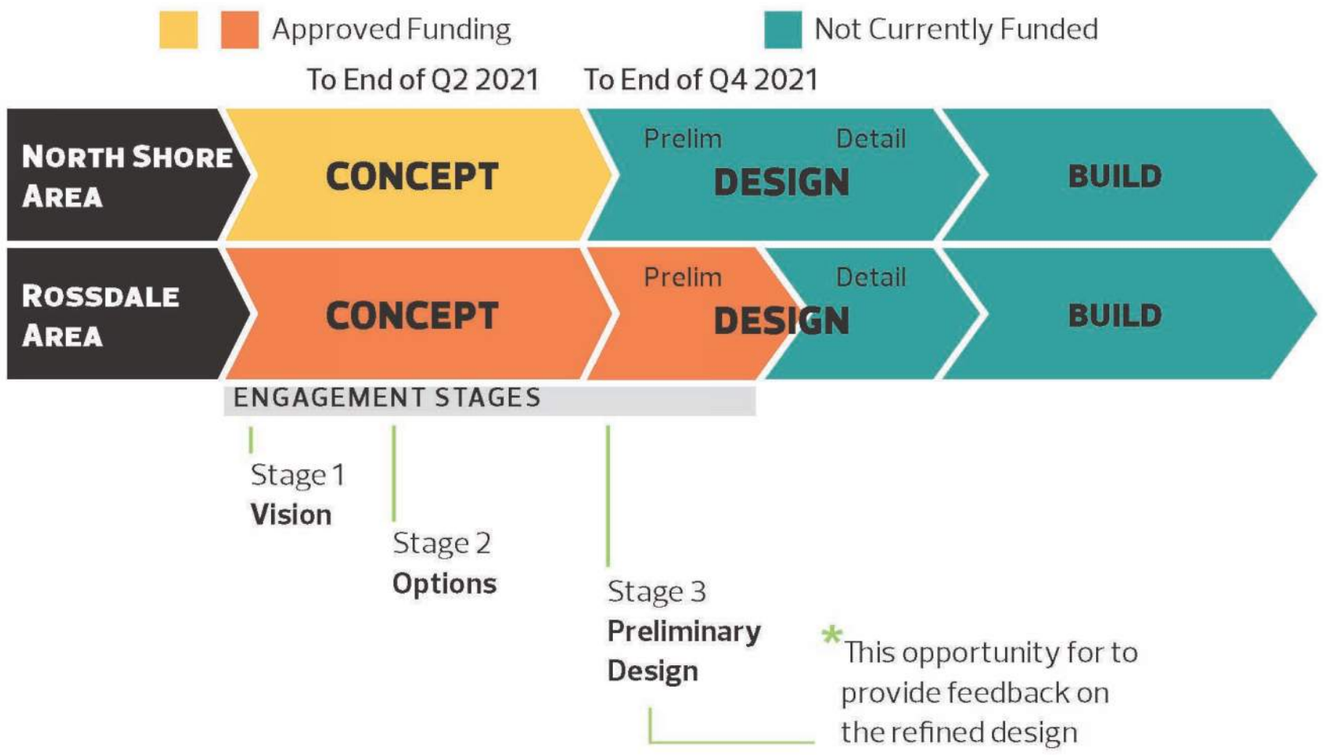
City Council approved the development of both the Touch the Water and North Shore Promenades as part of the 2019-22 Capital Budget cycle, to Checkpoint 3 and Checkpoint 2, respectively, in alignment with the Project Development and Delivery Model (PDDM) and the Capital Governance Policy C591. Although funded separately, The City of Edmonton has completed concept planning and design for the two project areas together following Urban Planning Committee's February 20, 2018 motion to align and integrate project design and engagement between the North Shore and Touch the Water areas.

The City of Edmonton has advanced project development through the concept phase by completing two rounds of engagement with regional Indigenous Nations and Communities, the public and stakeholders, as well as initial technical and cultural resource studies, a review of relevant City policies and plans, and an analysis of current site conditions including recent usage data of the existing shared use pathway.

Following the initial round of studies and engagement in fall 2019, a draft project vision, design principles, and two concept design options were developed. The vision and design principles prioritize and organize the project's many objectives, in alignment with the three overarching themes of Celebration, Ecology, and Wellness from Breathe: Edmonton's Green Network Strategy, with a specific focus on improved safety and universal accessibility. The two draft concept design options, "Gateways" and "Threads", illustrated how the vision and principles could be achieved and balanced throughout the project area in different ways.

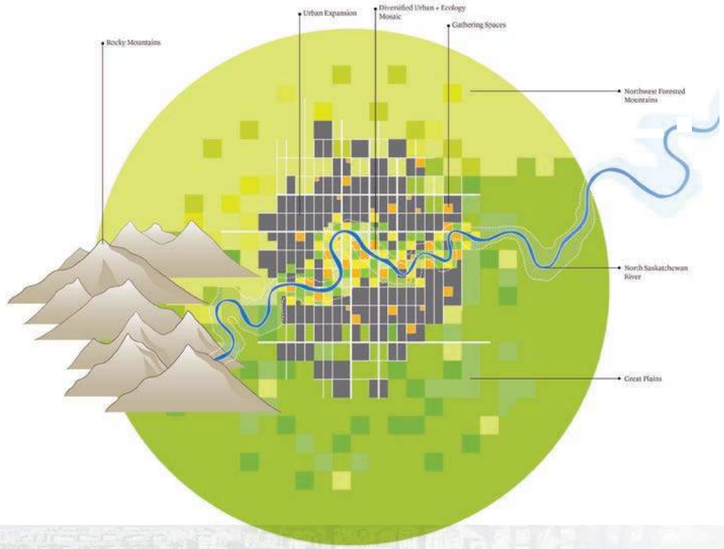
Due to the COVID-19 pandemic, Stage Two of pubic engagement was delayed until November, 2020. This stage of engagement used online opportunities to share information and gather feedback on a draft project vision, design principles and two draft concept options. The feedback received from the second round of public engagement, internal technical review, and the wisdom and advice shared by regional Indigenous Nations and Communities, has guided the development of a single preferred concept design.

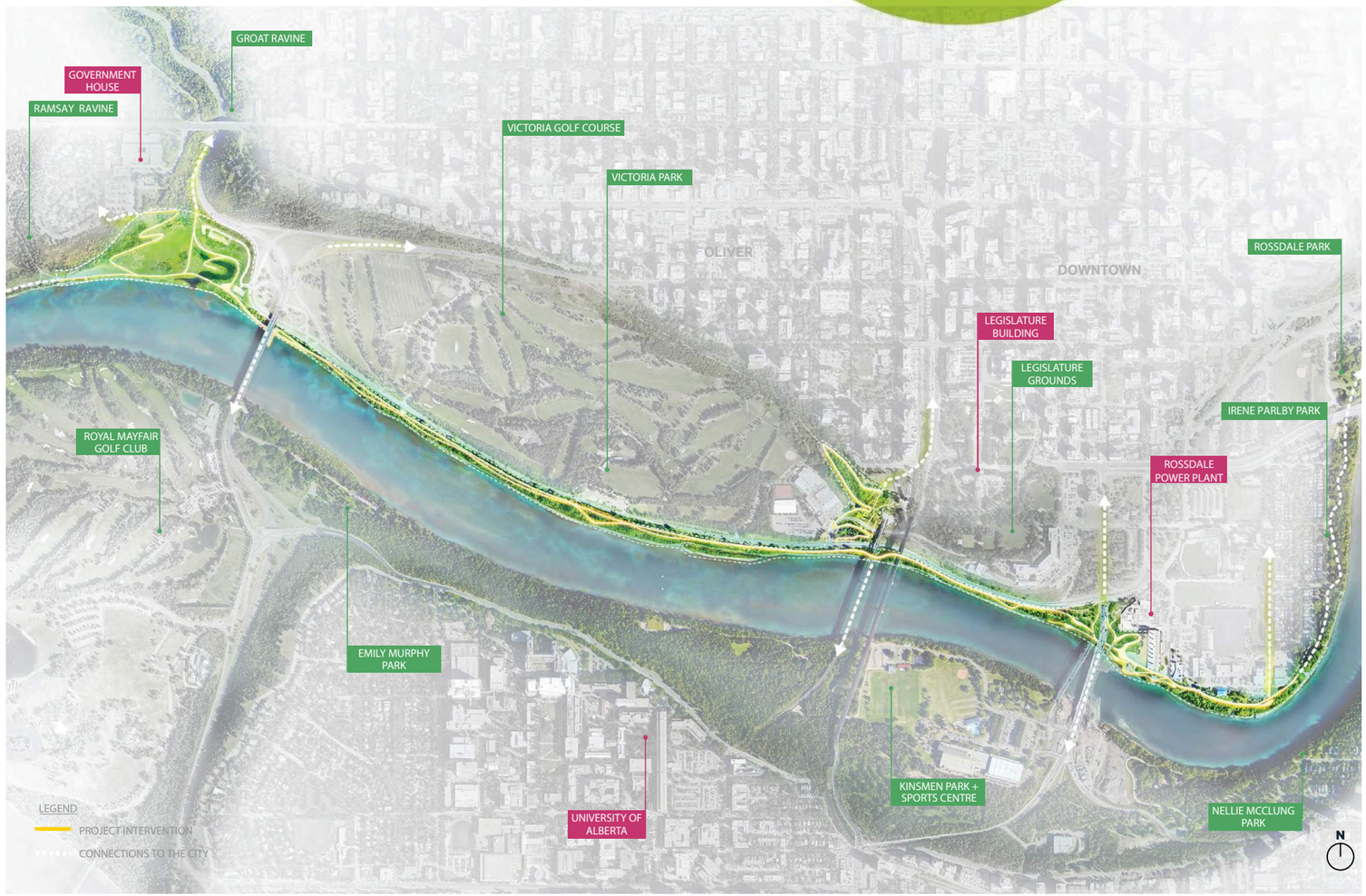
Based on the input from Public Engagement, the preferred concept design takes a hybrid approach that uses and advances parts of both draft concept options, rather than selecting one option or another, and includes revisions and new ideas that were shared with the City of Edmonton through Indigenous and public engagement.



3.1 SITE ANALYSIS
LOCATION

The Touch the Water and North Shore Promenade sites are located within Edmonton's central downtown river valley. Sweeping east to west along the north shore of the North Saskatchewan River Valley, the Touch the Water site begins at the east edge of the Rossdale neighbourhood at 94 Avenue NW and ends at the west edge of the Walterdale Bridge, with the North Shore site continuing from the Walterdale Bridge, west to Government House Park and the start of the MacKinnon Ravine. The Touch the Water site will consider design elements to connect the existing historic Rossdale Generating Station and pump houses, the new Walterdale Bridge and surrounding pathways, and create a series of spaces that can be used for public gatherings or individual enjoyment of the river and river valley. As guided by the River Crossing Heritage Interpretive Plan, this project will link and reflect the rich Indigenous and settler history of the site with a dynamic urban future. The North Shore Area will extend along the northern bank of the North Saskatchewan River from the western edge of the Walterdale Bridge to Government House Park, west of Groat Road Bridge (alongside River Valley Road). Development of the North Shore Area will enhance the riverwalk experience.



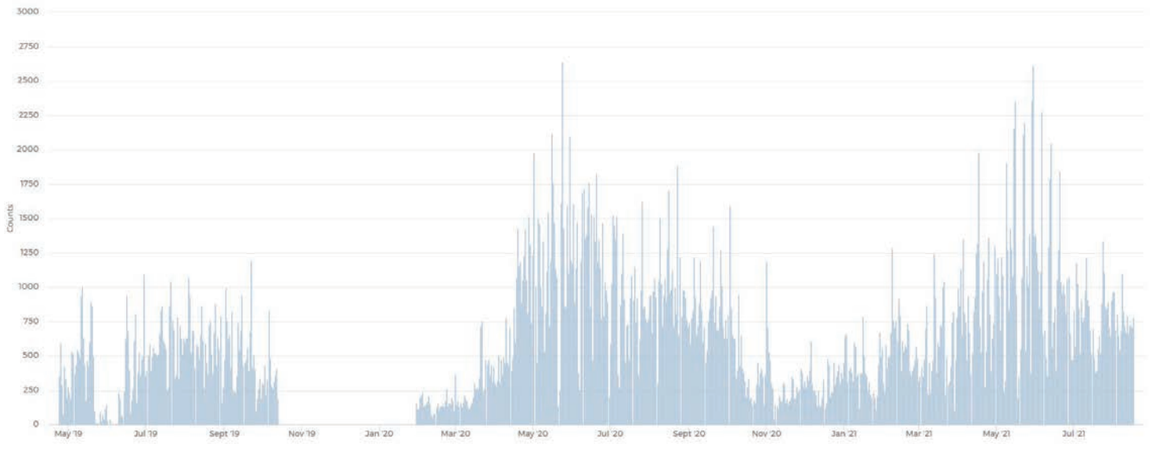


3.2 SITE ANALYSIS
ACCESS ANALYSIS

The Touch the Water and North Shore promenade sites are accessible by walking, cycling, driving, and public transit. The availability of public parking lots, pedestrian circulation, transit access, and bicycle transit are detailed in the adjacent graphics. A number of parking lots transect the overall site providing vehicular access. The most prominent parking locations include the Victoria Park parking lot, the parking lot south of the climbing stairs at Ezio Faraone Park and 105 Street, and at Government House Park. The preferred concept design has put forward enhancement to all three lots to provide improved access to the site. Additional parking lots are available on the south side of the river, a short walk from bridge crossings at Groat Bridge and High Level Bridge, and Walterdale Bridge.

Beyond vehicular access, the multi-use trail network provides ample opportunity for active transportation access with usage by pedestrians and cyclists having increased from 2019-2021 per the below graph. Prominent access points such as the climbing stairs and proposed enhanced barrier-free pathway at the High Level Bridge Hill, walking path adjacent to Victoria Golf Course, a proposed connection between Government House and Government House Park, as well as connections across the Groat Bridge, High Level Bridge, Walterdale Bridge, and connections from the Rossdale community. While public transit access is slightly further removed from the Touch the Water and North Shore Promenade sites, potential future linkages may be explored with adjacent projects.

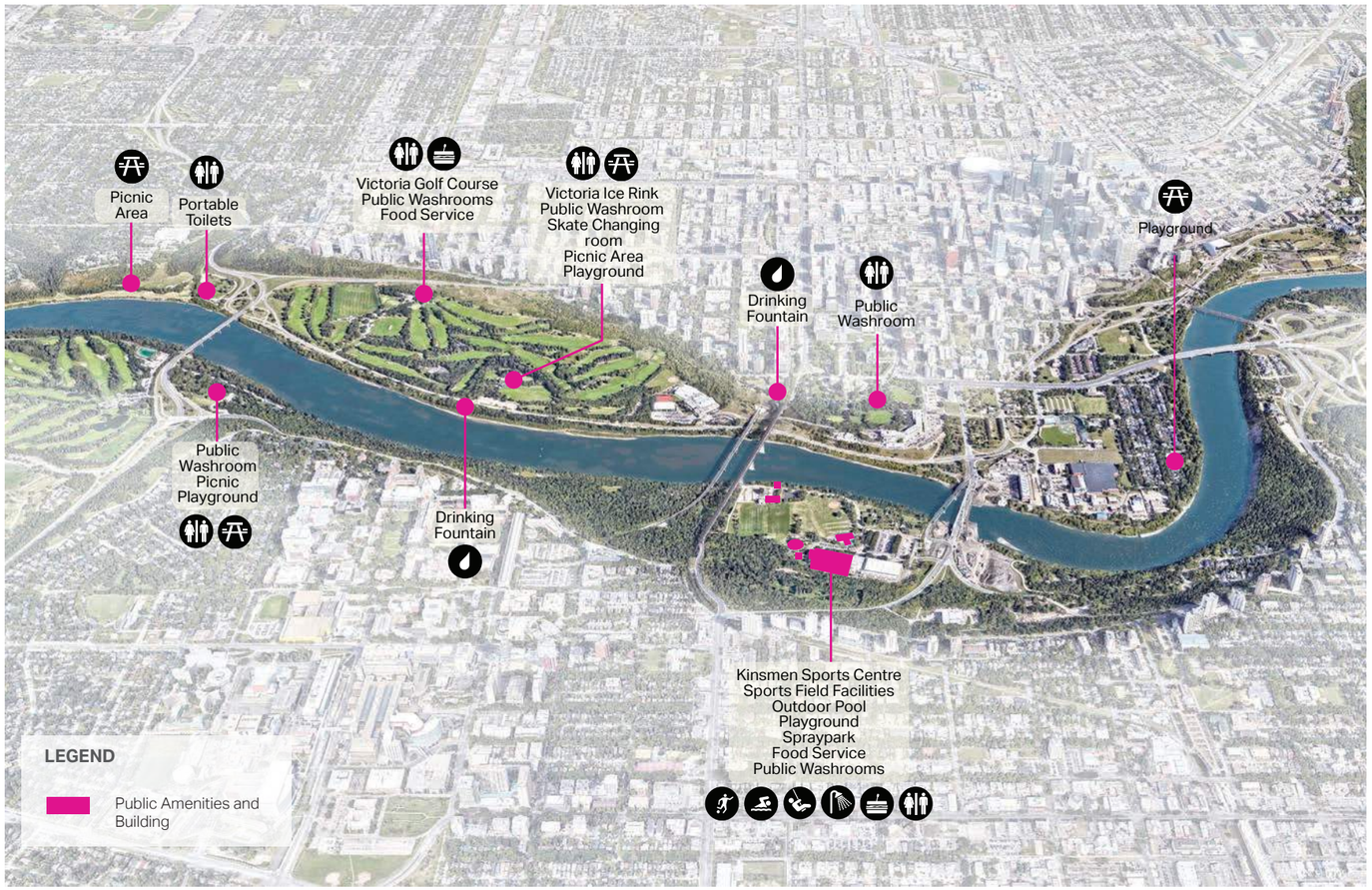
PEDESTRIAN AND CYCLIST SHARED PATH USAGE BY HOUR ALONG ROSSDALE TRAIL



3.2 SITE ANALYSIS
ACCESS ANALYSIS - EXISTING CONDITIONS

3.2 SITE ANALYSIS
ACCESS ANALYSIS - EXISTING CONDITIONS

The adjacent graphic illustrates the location of site-wide public amenities and buildings.



3.3 SITE ANALYSIS
WATERWAY & BANK ANALYSIS - EXISTING CONDITIONS

The North Saskatchewan River (NSR) at the study site is set within a winding, trench like valley of postglacial origin (Kellerhals et al., 1972). There are four fragmentary terraces that have been identified in the area, with the lowest terrace corresponding to the adjacent floodplain. The project area is located primarily on the lowest terrace. The overall channel pattern consists of irregular, entrenched meanders with frequent point and side bars. The banks consist of silt, sand and minor amounts of gravel and are relatively easily erodible. In locations where the channel flows against the valley, slow toe erosion can lead to periodic slumps. The bed consists primarily of gravel with a measured median diameter (D50) equal to 31 mm. Below the riverbed, shallow bedrock is present (Edmonton Formation) consisting of poorly consolidated shales and sandstones.

There are occasional locations where the bank is protected in the form of sparsely placed concrete or rock riprap. Specifically, there are concrete blocks on the bank at Government House Park and there is Class 2 Riprap with bioengineered planter boxes embedded around the abutments of the Walterdale Bridge. The bank is vegetated with trees, brush and grasses along most of the reach. There were several outfalls along the reach, which are assumed to discharge primarily stormwater into the river. The reach encompasses four bridges including: Groat Road Bridge, Menzies Bridge (LRT), High Level Bridge and Walterdale Bridge. There is a small island located adjacent to the left bank (the downstream end of island is 325 m upstream of the Menzies Bridge). The island is approximately 225 m long by about 15 m wide. There is a small subchannel (10 m wide) that runs between the island and the left bank. There are two concrete water intake structures located in the middle of the channel near the upstream end of the island. There is also a concrete water intake structure on the left bank approximately 70 m downstream of the Walterdale Bridge. There is a boat launch located on the left bank approximately 700 m downstream of the Walterdale Bridge.

Water levels along the entire reach for 2-, 5-, 10-, 25-, 50-, and 100-year return periods have been determined and considered in the enhancement of the bank and design of gathering spaces, overlooks and promenades.

A hydrotechnical assessment for the proposed project areas was conducted. The scope of work included site reconnaissance and a desktop aerial photograph assessment of lateral stability of the north riverbank. The scope also included the development of a one-dimensional hydraulic model to determine river levels under open water and ice cover conditions and a two-dimensional hydraulic model to estimate local flow velocities along the bank to assess risk of bank erosion, deposition and ice forces. The assessment found that, in general, the north bank of the NSR in the project area is not susceptible to significant bank erosion and has been relatively stable for the past 60 years. Based on the velocity contour maps for the NSP project area, highest velocities are generally in the center of the river channel near Groat Bridge. Lowest velocities were found in a narrow band along the riverbank. These findings informed the location of design elements such as the various look-outs, Rossdale scramble, and naturalized wetlands and inlet at Government House Park.

The flood fringe and floodway noted in the adjacent drawing is per the Government of Alberta.

3.3 SITE ANALYSIS
WATERWAY & BANK ANALYSIS - EXISTING CONDITIONS

Dub Architects Limited	PHOTO LOCATION STUDY LIMIT BRIDGE ROAD	SCALE 1:15,000 0 125 250 500 750 M N	Touch the Water Promenade and North Shore Promenade Hydrotechnical Assessment
nhc northwest hydraulic consultants	*Data Sources: Esri basemap imagery*	Coordinate System: NAD 1983 UTM ZONE 12N Units: METRES Job: 1004400 | 3 June 2020	**PHOTO LOCATIONS** **FIGURE 2-4**

3.3 SITE ANALYSIS
WATERWAY & BANK ANALYSIS - EXISTING CONDITIONS

1) Looking at concrete bank armouring upstream of Groat Road Bridge.

2) Looking at existing outfall on left bank upstream of Groat Road Bridge.

3) Looking at left bank downstream of Groat Road Bridge.

4) Looking at left bank between Groat Road and Menzies Bridge.

5) Looking at upstream end of island on left bank.

6) Looking at existing outfall on left bank upstream of Menzies Bridge.

3.3 SITE ANALYSIS
WATERWAY & BANK ANALYSIS - EXISTING CONDITIONS

7) Looking at concrete bank armouring downstream of High Level Bridge.

8) Looking at vegetated riprap on left bank at Walterdale Bridge.

9) Looking at left bank downstream of Walterdale Bridge.

10) Looking at left bank downstream of Walterdale Bridge.

11) Looking at existing boatlaunch on left bank.

12) Looking at left bank at the downstream end of the project area. .

3.4 SITE ANALYSIS
NATURAL LANDSCAPE INVENTORY - EXISTING CONDITIONS

GEOLOGICAL OVERVIEW
The North Saskatchewan River provides drainage for the Edmonton area and is more or less coincident with buried valleys containing sand and gravel deposits in the region. Groundwater flow has a downward component in most of the area and has historically been calculated south toward the North Saskatchewan River. Infiltration of groundwater is greatly influenced by the lithology, soil type and topographic position of the area.

The local topography is primarily flat with a downward slope toward the North Saskatchewan River, and based on previous assessments areas of fill material are present along this north riverbank. Surface drainage along the project site is anticipated to be primarily via overland flow toward the adjacent manholes or to the North Saskatchewan River.

For the portion of the North Saskatchewan River where the proposed Touch the Water and North Shore Promenades project is located, the flow in the river is generally from west to east. The shoreline near the Groat Road Bridge is located on the outside bend of the river and more susceptible to river erosion impacts. The shoreline from Victoria Golf course to Royal Glenora Club is a moderate inside bend and deposition of river deposits has occurred along the toe of the bank slope leading to shallow deposits and formation of a sand bar that are apparent. From Royal Glenora Club to the Walterdale Bridge, the river bank is on a gradual outside bend and deposition along the shoreline for this portion is apparently less.

In areas where the bank has been eroded, recycled concrete armouring debris can be found along the water's edge. Additionally, the bank itself is denuded in many locations.

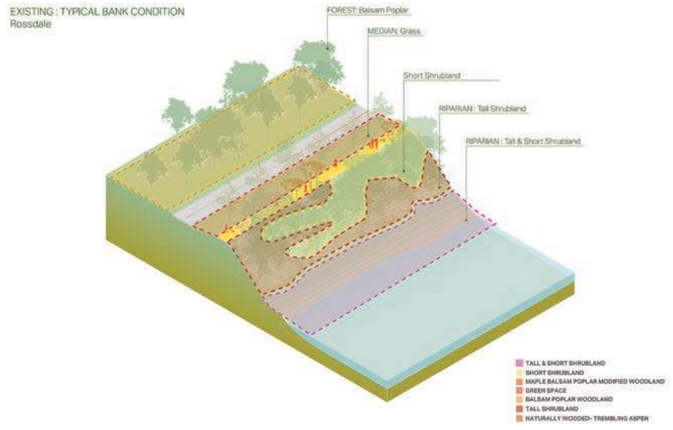
Preliminary geotechnical and environmental overview assessments have been completed.

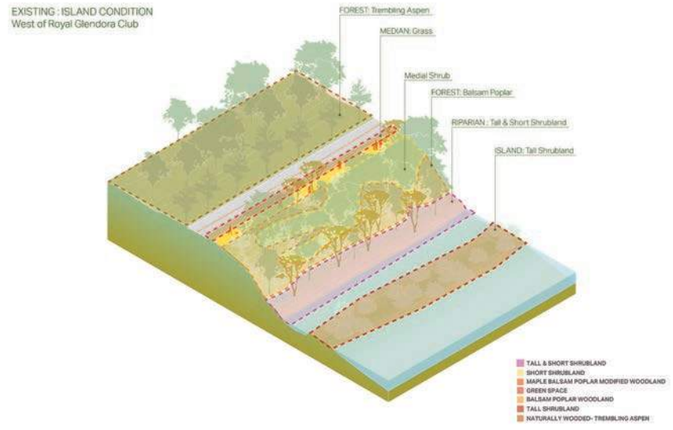
VEGETATION OVERVIEW
As with the rest of Edmonton, the area is located in the aspen parkland biome, which marks the transition between the boreal forest to the north and the grassy prairie to the south. The natural vegetation of the region consists of stands of Aspen Poplar interspersed with shrubs. Small areas of grassland and forested ravines are typical.

Vegetation within the project area is a mixture of manicured land and natural shrub and forest communities. The City's urban Primary Land and Vegetation Inventory (uPLVI) mapped five native plant communities in the North Shore Promenade project area: balsam poplar (Populus balsamifera) forest, medial (semi-open) shrub, open shrub, closed shrub and non maintained grass/shrubs. Balsam poplar was the dominant tree species within the forested communities of the North Shore Promenade project area, however, closer to the Rossdale Power Plant, Manitoba maple was the dominant tree species. Other tree species interspersed within this community included Manitoba maple , trembling aspen and white spruce . The shrub layer in the balsam poplar forest community comprised red-osier dogwood , buckbrush prickly rose, and caragana.

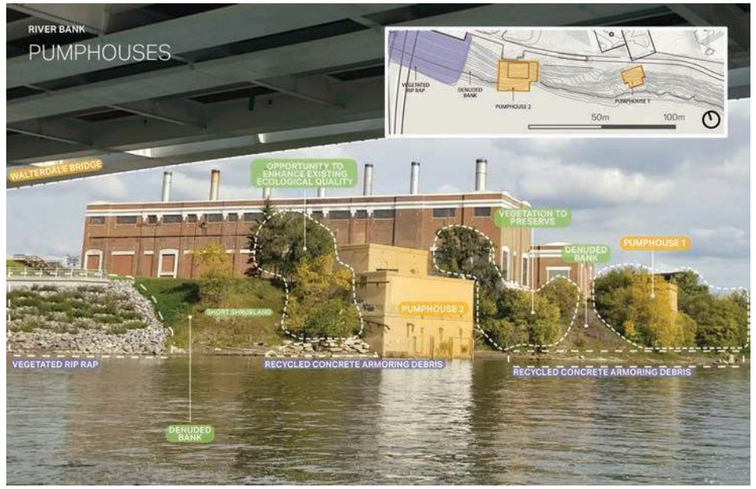
Portions of Government House Park, Victoria Park and lands adjacent the High Level Bridge contain manicured/maintained grass landscapes.

In areas where the bank has been eroded, recycled concrete armouring debris can be found along the water's edge. Additionally, the bank itself is denuded in many locations.

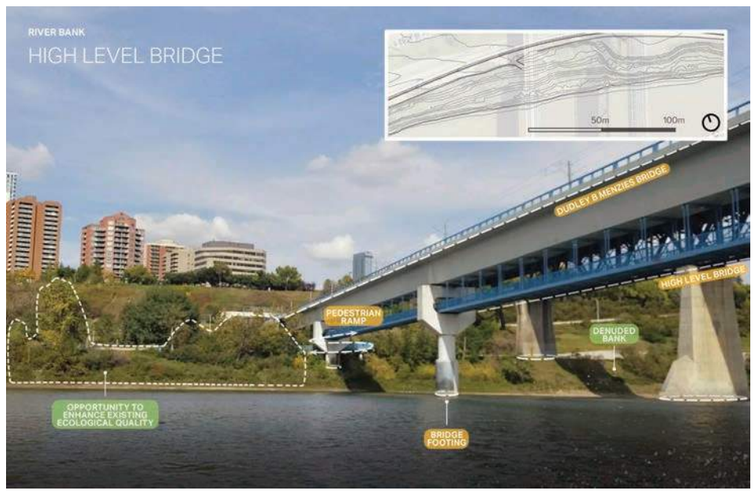




3.4 SITE ANALYSIS
NATURAL LANDSCAPE INVENTORY - EXISTING CONDITIONS



3.4 SITE ANALYSIS
NATURAL LANDSCAPE INVENTORY - EXISTING CONDITIONS



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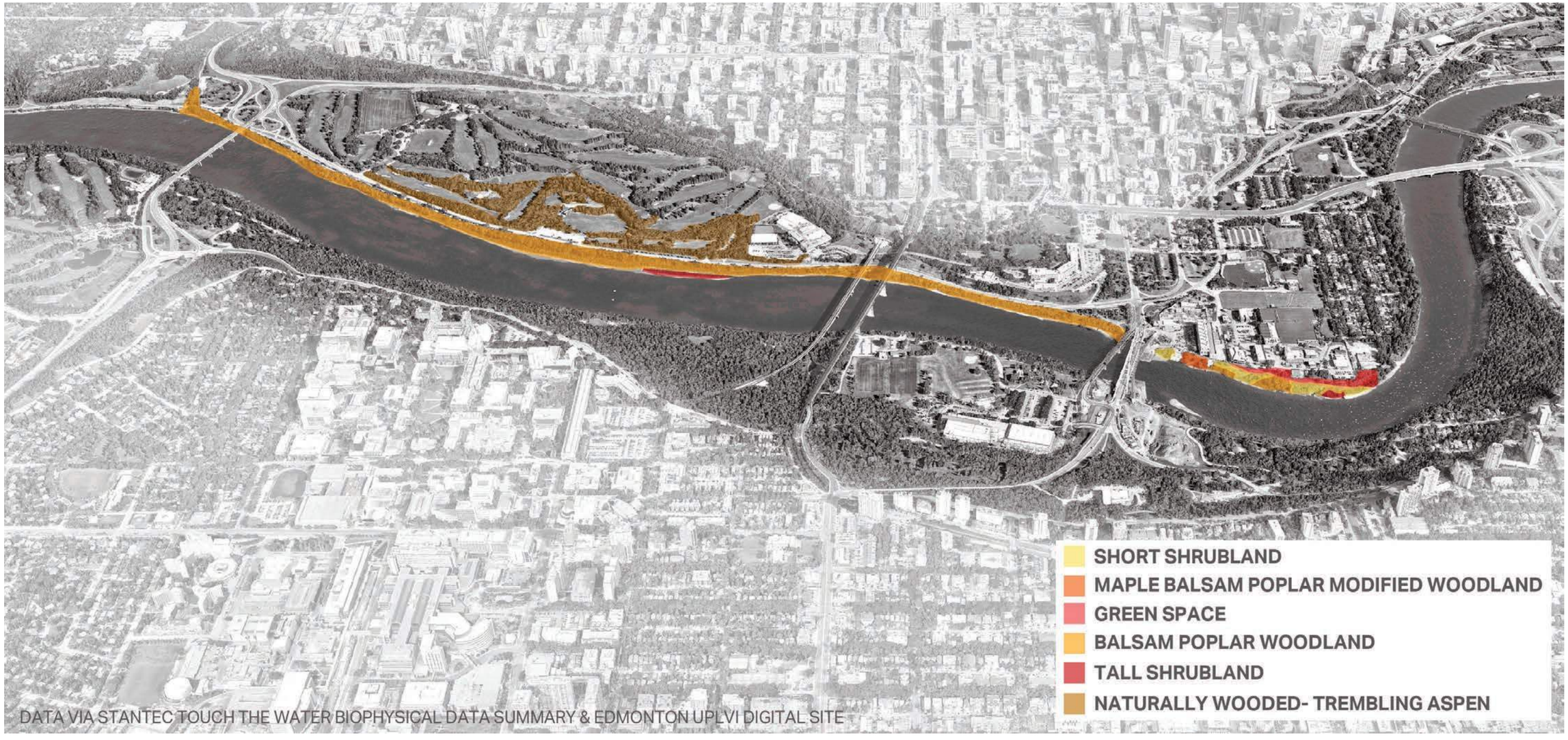
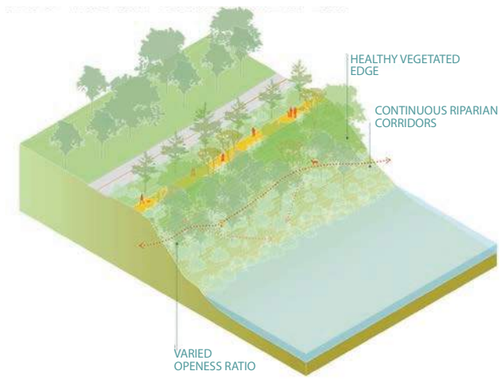


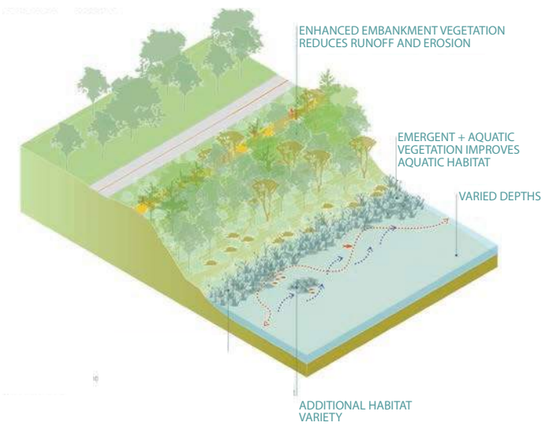
DATA VIA STANTEC TOUCH THE WATER BIOPHYSICAL DATA SUMMARY & EDMONTON UPLVI DIGITAL SITE

3.4 SITE ANALYSIS
NATURAL LANDSCAPE INVENTORY - EXISTING CONDITIONS

TERRESTRIAL SPECIES HABITAT



FISH HABITAT



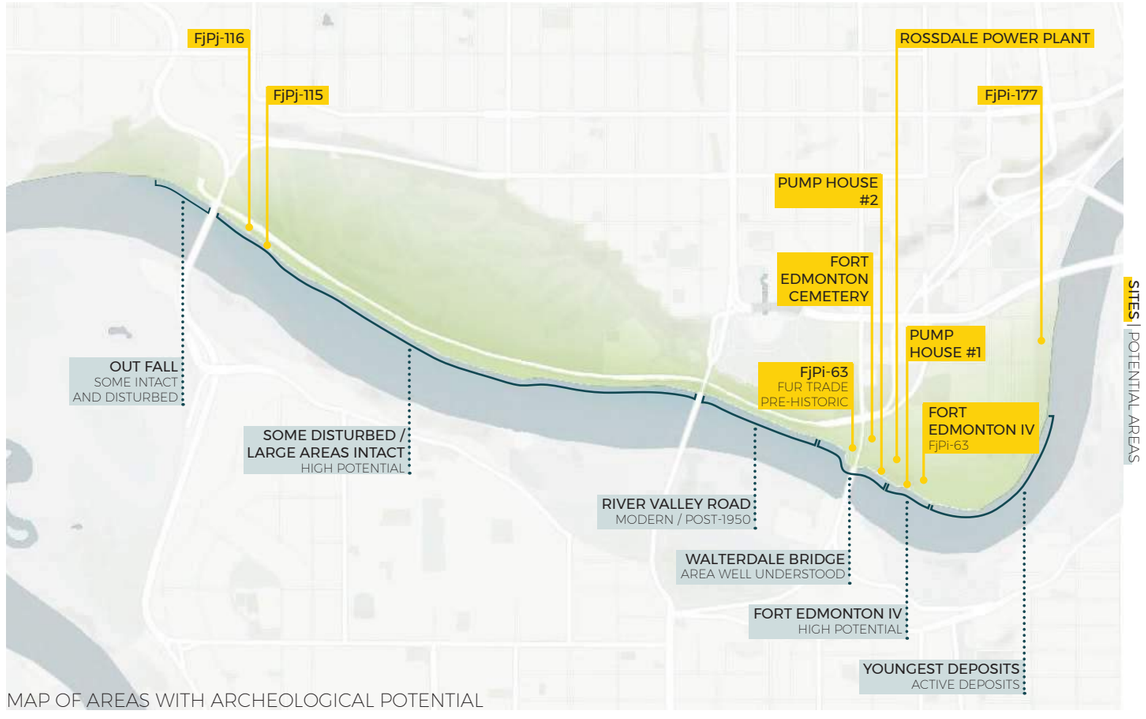
3.5 SITE ANALYSIS
CULTURAL LANDSCAPE INVENTORY

After a review of previous completed cultural resource assessment work carried out in the project area, all elements of the Touch the Water / North Shore Promenade Project have been assessed in relation to known cultural resources, level of existing disturbance, age of deposits, and expected level of disturbance posed by the current Project. This work allows the project team to identify locations within the project areas where cultural resource concerns are absent or present, the nature of these concerns, and any management required. This strategy has been successful in determining cultural resource risk for numerous past City of Edmonton infrastructure projects including the Walterdale Bridge Replacement, Mill Creek Bridges Rehabilitation, Groat Road Bridges Rehabilitation, North Saskatchewan River Mechanized Access, West Rossdale Arterial Roadway Improvement, Rossdale Sewer Rehabilitation, and Imagine Jasper Avenue. To complement this review, the results of geotechical samples as collected by Tetra Tech (RFP - Geotechical Engineering Services - Investigation and Assessment - Touch the Water and North Shore Promenade Project - August 30, 2018) have been examined to determine the location and depth where intact flood plain deposits are present. Based upon this analysis, the potential risk to archaeological and paleontological resources (both known and expected) have be determined. In the case of the Rossdale Sewer Rehabilitation, and Imagine Jasper Avenue Projects, data collected from geotechnical bores were used to identify these locations with success. In these cases, the inspection of sediment samples was carried out to determine the location of intact deposition and subsequent HRIA testing and monitoring. The inspection of geotechnical bore samples collected for the current Project will form the foundation of the cultural resource management plan outlined in these methods.

The overall site is home to extensive and significant archaeological findings from the Prehistoric, Fur Trade and Historic Periods. The site includes multiple Prehistoric period artifact concentrations, the remains of a Hudson's Bay and Northwest Company trading facility, a Fur Trade period cemetery compound, and the Rossdale Power Plant buildings. A considerable amount of archaeological work has been carried out at the site. Recent cultural resource management work related to the EPCOR Transformer Yard has identified an intact Prehistoric deposit dated to 10,500 years before present. In addition, a multi-component cultural deposit including Fur Trade, Late and Middle Prehistoric components, has been identified immediately adjacent to the north abutment of the new Walterdale Bridge.

An important cultural artifact of the site is the Rossdale Power Plant. Constructed in sections between 1932 and 1955, the Plant, inclusive of the Low-Pressure Plant (Boiler Hall, Turbine Hall, and Switch House), and Pump House 1 and 2, is integral to the story of Edmonton's industrial heritage. The Low-Pressure Plant and Pump House 1 are both designated as Provincial Historic Resources, while both Pump House 1 and 2 are also listed on the Inventory of Historic Resources. The Rossdale Power Plant is currently undergoing a conservation effort focusing on the eventual adaptive re-use of the facility.

Historic Resource Act requirements have been received for both project areas, including recommendations from Alberta Culture, Multiculturalism, and Status of Women. Future project phases will review and incorporate these recommendations, as well as, areas of high interpretive potential into the project design.



MAP OF AREAS WITH ARCHEOLOGICAL POTENTIAL

3.5 SITE ANALYSIS
CULTURAL LANDSCAPE INVENTORY

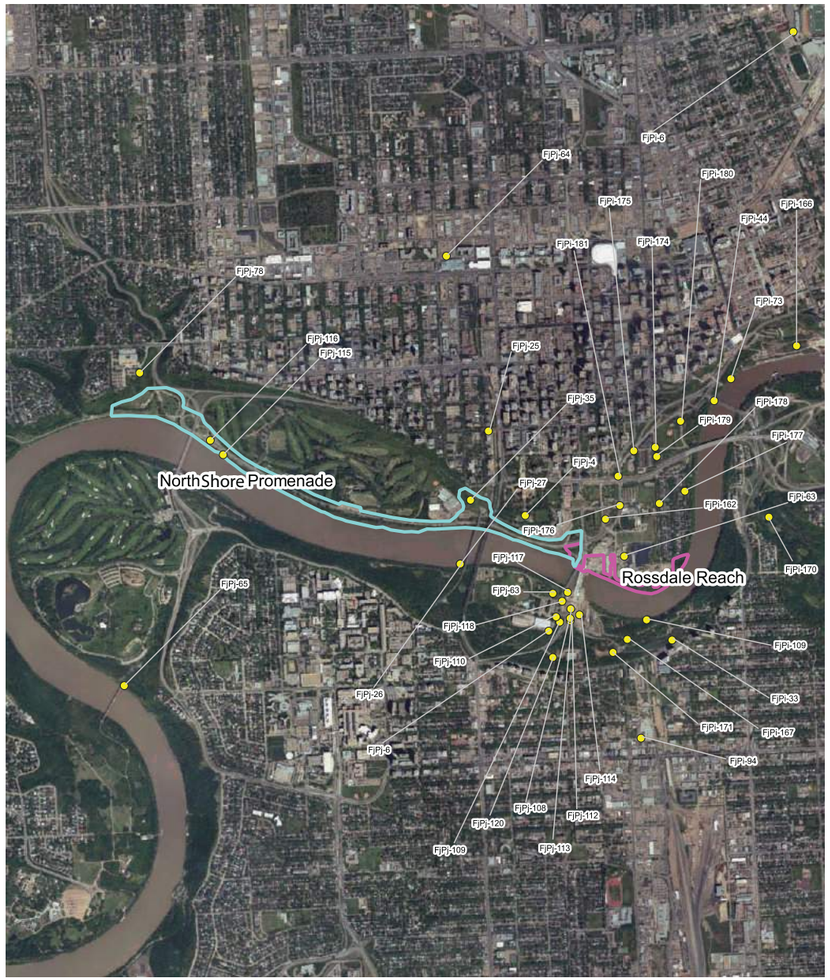


Figure 1: Cultural resource sites - Touch the Water

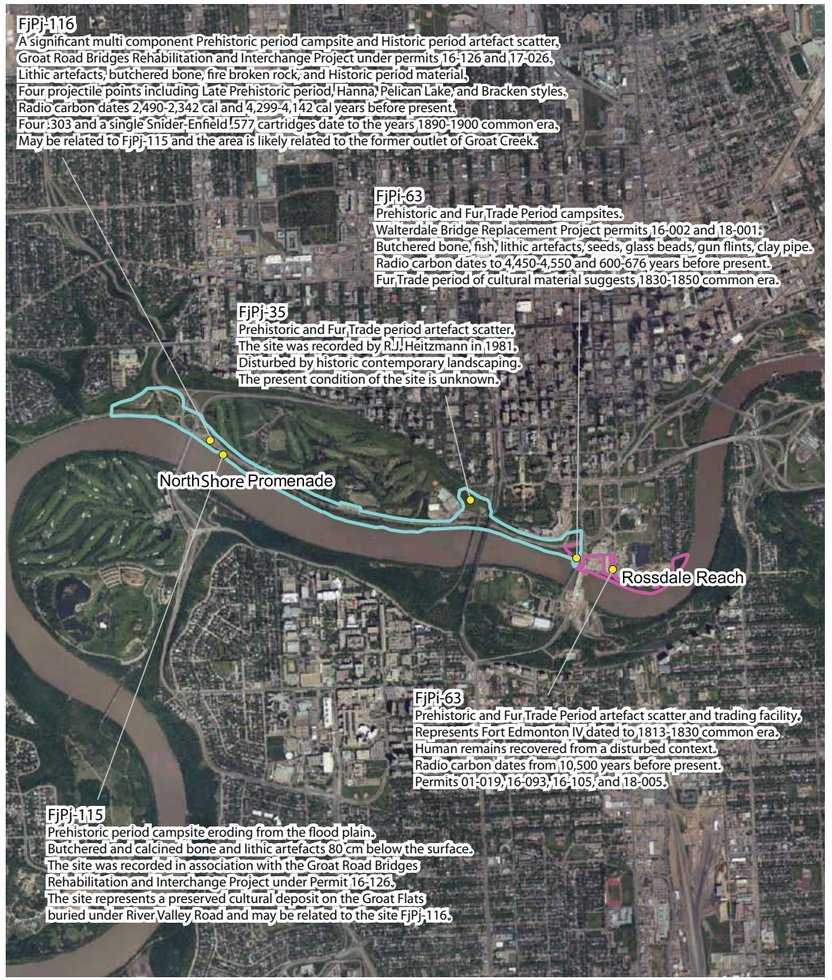


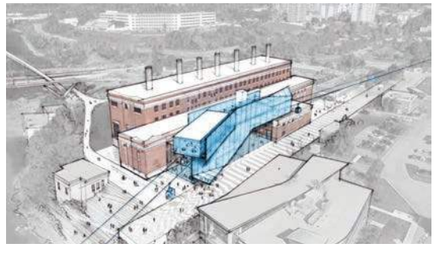
Figure 2: Cultural resource sites in project area - Touch the Water

3.6 SITE ANALYSIS
ADJACENT PROJECT OVERVIEW

The Touch the Water Promenade is adjacent to the following projects:

Rossdale Power Plant Advanced Assessment and Priority Rehabilitation
The Rossdale Power Plant is a unique heritage resource with tremendous reuse opportunities to help activate the River Crossing area.
The City is currently determining the current building condition and preparing a heritage conservation plan. This information will inform investments to avoid deterioration of the buildings and strategic improvements to allow for the staged re-use of the Power Plant.

EPCOR Rossdale Water Treatment Plant Flood Protection
This project works to protect the Rossdale Water Treatment Plant from the impacts of a one in 500 year flood. In the event of a major flood, the project will ensure EPCOR limits potential damage to the facility and can resume water treatment to the community as quickly as possible afterwards.



Prairie Sky Gondola
A private group of investors has proposed the construction of a gondola to link the River Crossing area with downtown and Old Strathcona. Such a system could provide a new way for people to visit the area without needing to drive or park in the area.
The City is working with Prairie Sky Gondola to consider the proposal's viability and effectiveness.

River Crossing Implementation
In accordance with the River Crossing Business Plan, the City is beginning multiple projects to transform West Rossdale, including the concept design phase for a cultural interpretive park between Rossdale Road and 96 Avenue. It is intended to be a place for cultural celebration, connections and understanding, and where visitors can share stories and learn about the people and cultures connected to River Crossing. The interpretive park will be co-designed with Indigenous communities to ensure the park reflects their stories and is welcoming to all. Improving how people move through River Crossing and how they access the community is vital to supporting activation and redevelopment. To that end, the City is preparing a concept and preliminary design of the mobility networks in the area. The project aims to improve the road network to create streets for people while accommodating commuters who travel through the area to access downtown and other parts of the central city.

The North Shore Promenade is adjacent to the following projects:

High Level Line Initiative
The High Level Line is a proposed 4km long linear park between MacEwan University and Whyte Avenue. It utilizes the old Canadian Pacific Railway right-of-way and the top of the High Level Bridge. The project is currently in the proposal stage.

Future Provincial Legislature Grounds Planning
Future consideration may be given to the continued development of the Provincial Legislature Grounds.

Long Term River Valley Road Renewal
Future consideration may be given to the renewal and improvement of River Valley Road.

4.1 HERITAGE CONTEXT
HERITAGE OVERVIEW

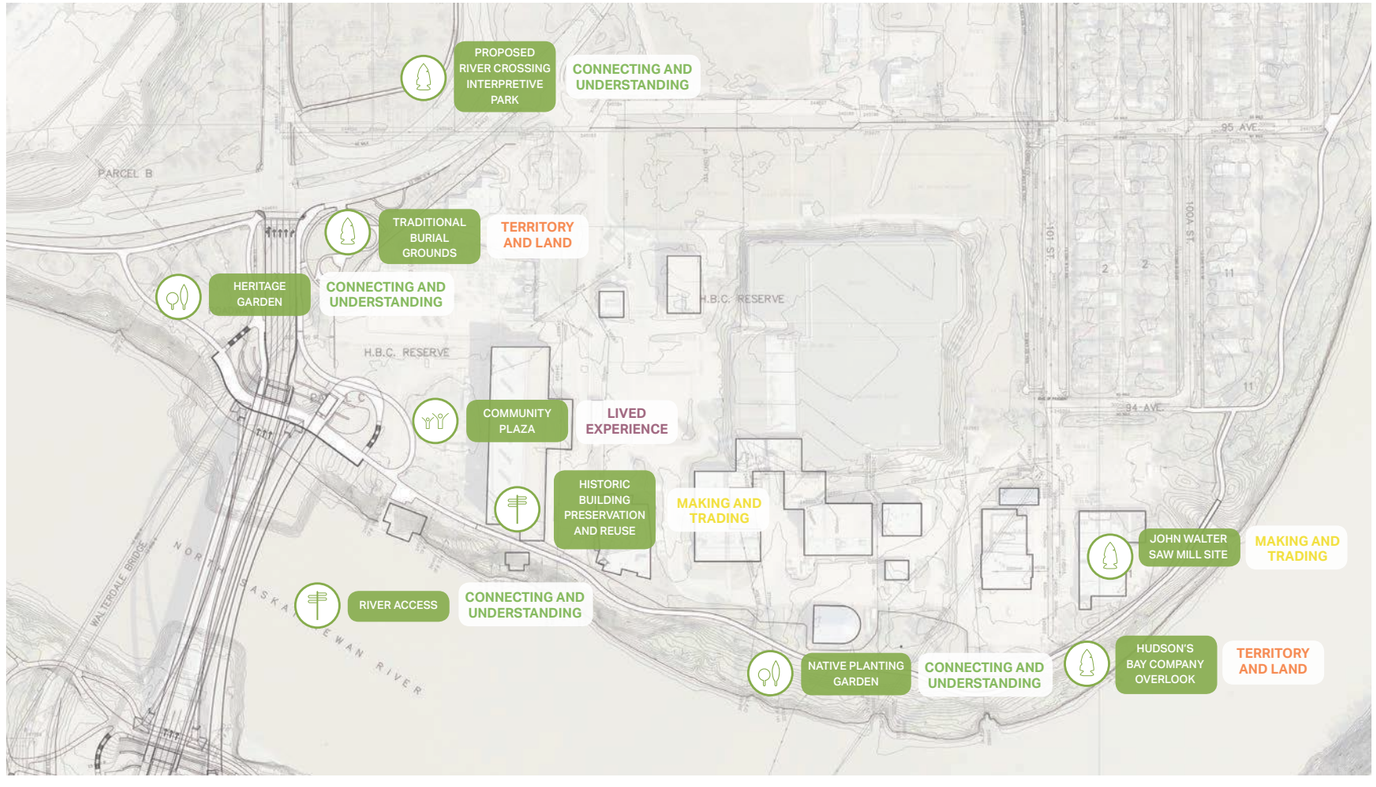
Touch the Water Promenade runs along the North Saskatchewan River at the heart of Edmonton. It is a place of historical and cultural significance to First Nation, Métis, and Indigenous peoples. This land has been a gathering place and travelling route for First Nations since time immemorial, home to a Metis river lot pattern. As the birthplace of both the city and the province, and the site of early community and economic activity, it is a place of historical significance to Edmontonians and Albertans.

Guided by the principles set forth in the River Crossing Heritage Interpretive Plan, this project seeks to help users understand why this place is important from multiple perspectives. Part of this heritage recognition includes the integration of the tangible built heritage, which includes the remnants of the site's previous life as an industrial centre. This includes the Rossdale Power Plant and Pump Houses, the High Level Bridge piers and E.Y.&P. railway alignment.

As important is a recognition of the cultural heritage of the site. A key cultural site is the Traditional Burial Grounds and Fort Edmonton Cemetery. It is critical to recognize and protect the cemetery as it is vital to understanding how people feel about the area. This project will try to convey the more intangible cultural heritage of expression of values, oral histories, knowledge of nature. With input from our public and Indigenous engagement process, the design will continue to become more detailed and integrate ways to tell stories in the landscape and built environment about the River Crossing area.

The design will seek to create moments of contemplation and heritage interpretation, such as The Bend, at the boundary of the former HBC Reserve and the subsequent River Lot land system. These moments should serve to make the complexities of land and territory clear and visible and to show the overlapping and evolving identities of this place.

These heritage interpretive initiatives may also be taken up by the public art process, which will begin in the Preliminary Design stage.



5.1 POLICY AND REGULATION
POLICY OVERVIEW

The project is aligned with the City of Edmonton's Breathe Strategy, which seeks to enhance Edmontonians' connection to open park spaces within our city. In addition, the project is influenced by many other City of Edmonton plans and policies including but not limited to:

Ribbon of Green: Provides strategic direction to guide the protection and responsible use of Edmonton's river valley and the ravine system over the next 20 years.

ConnectEdmonton and City Plan: The City of Edmonton's 10 year strategic plan, as well as the guiding values, intentions, and directions, provide the foundation for how our city will grow. Project development has been positioned to align with ConnectEdmonton and to contribute to the strategic goals of Healthy City, Urban Places, and Climate Resilience. The project is part of Edmonton's Green and Blue Network and is located within the Centre City node as identified by the City Plan. The preferred concept design aligns with, and proposes advancement of, several City Plan Big City Moves including Greener as We Grow, A Community of Communities, and Catalyze and Converge.

River Crossing Business Plan: Provides a business case and implementation plan for integrated urban places investment and economically-sound development in the Rossdale neighbourhood.

River Crossing Heritage Interpretive Plan: Provides an approach to reflect the rich Indigenous and settler history of the site with a dynamic urban future.

River Access Strategy: Provides direction to address increasing demands for river recreation while protecting the river valley as the City's signature natural, cultural and recreational resource.

River Access Guiding Principles: The City of Edmonton will ensure environmental stewardship while encouraging a broader appreciation for activities on or alongside the river, and will provide direction regarding the safe use, programming, partnerships, operations, design and location of infrastructure that supports access to the river and activities associated with the river.

North Saskatchewan River Valley Area Redevelopment Plan (Bylaw 7188): Provides the environmental review framework and principles for future implementation plans and programmes for parks protection and development within the river valley & ravines.

Downtown Public Places Plan: Guides public space improvements to create a greener, healthier and more family friendly downtown.

Open Spaces Policy and Breathe – Edmonton's Green Network Strategy: As Edmonton's population grows and diversifies, neighbourhoods evolve and environmental conditions change, the City commits to maintaining a sustainable, inclusive, connected, multifunctional open space network that supports other city building objectives and responds to diverse needs. Key themes for open space function include Wellness, Ecology and Celebration.

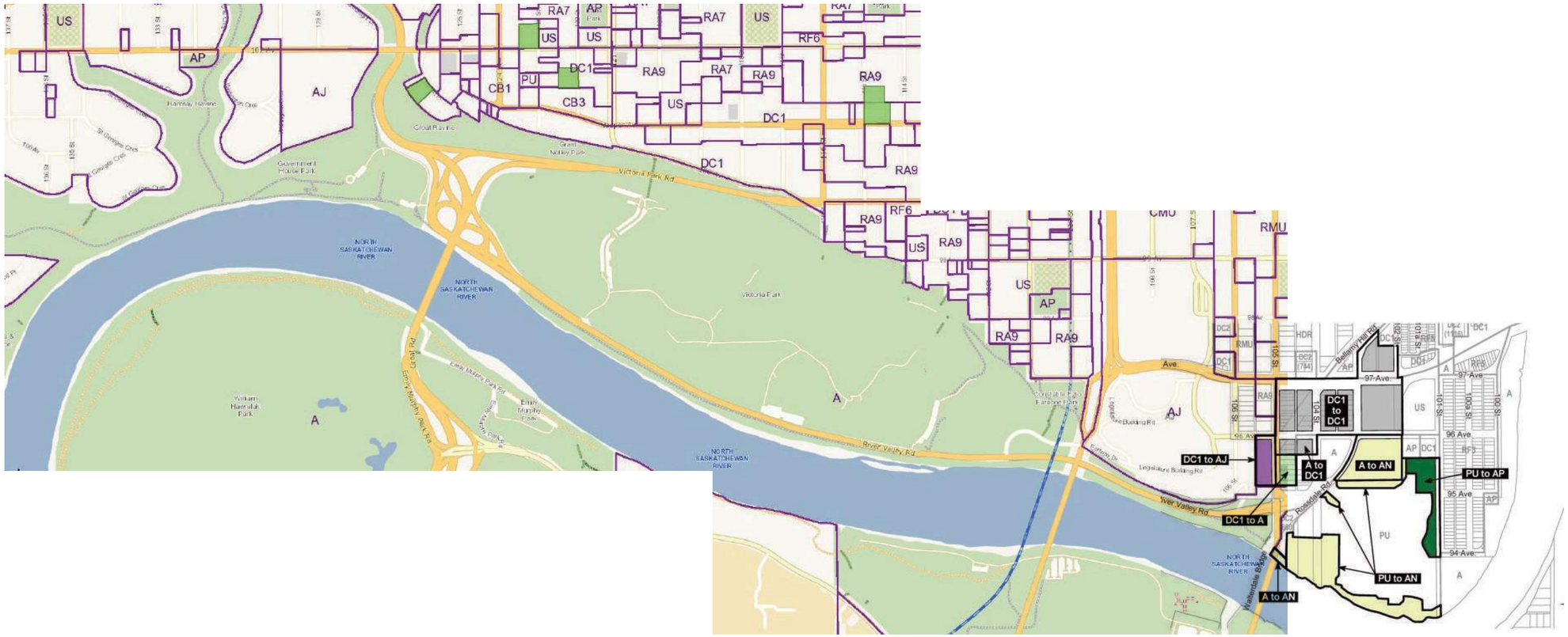
Capital Project Governance Policy: Provides overall framework to guide the management of the City's capital projects, including phased approach to project development and delivery.

Capital City Recreation Park Development Plan (1974): Provides direction for the development of 16 kilometres of connected trails, pathways, and amenities in the central river valley. The trails and amenities here are among the most valued places in Edmonton to this day.

The preferred concept design proposes site-specific improvements in alignment with the active transportation network envisioned by the City Plan and the Bike Plan. Proposed improved crossings along River Valley Road support Vision Zero and the Safe Mobility Strategy. Opportunities to provide Edmontonians with a safe and accessible active transportation system supports Pathway 3: Low Carbon City and Transportation of the Energy Transition Strategy. Additionally, the ecological restoration and remediation proposed within the preferred concept design contribute to the Energy Transition Strategy's Pathway 4: Carbon Capture and Nature Based Solutions goals and strategies.

5.2 POLICY AND REGULATION
ZONING ANALYSIS

The Touch the Water and North Shore Promenade sites falls predominantly within two land use zones. These zones include the Metropolitan Recreation Zone (A) and the River Valley Activity Node Zone (AN). The Metropolitan Recreation Zone encompasses the water's edge and River Valley trail system. The primary purpose of this zone is to protect the natural area and parkland along the river and ravines, while providing areas of active and passive recreational uses and environment protection in conformance with Plan Edmonton and the North Saskatchewan River Valley Area Redevelopment Plan. The River Valley Activity Node Zone exists within the Rossdale area between 101 Street and the Walterdale Bridge, as well as the area west of, and including, the Rossdale Power Plant. The zoning throughout the site will allow for commercial development within this area, for active and passive recreational uses, tourism uses, and environmental protection.

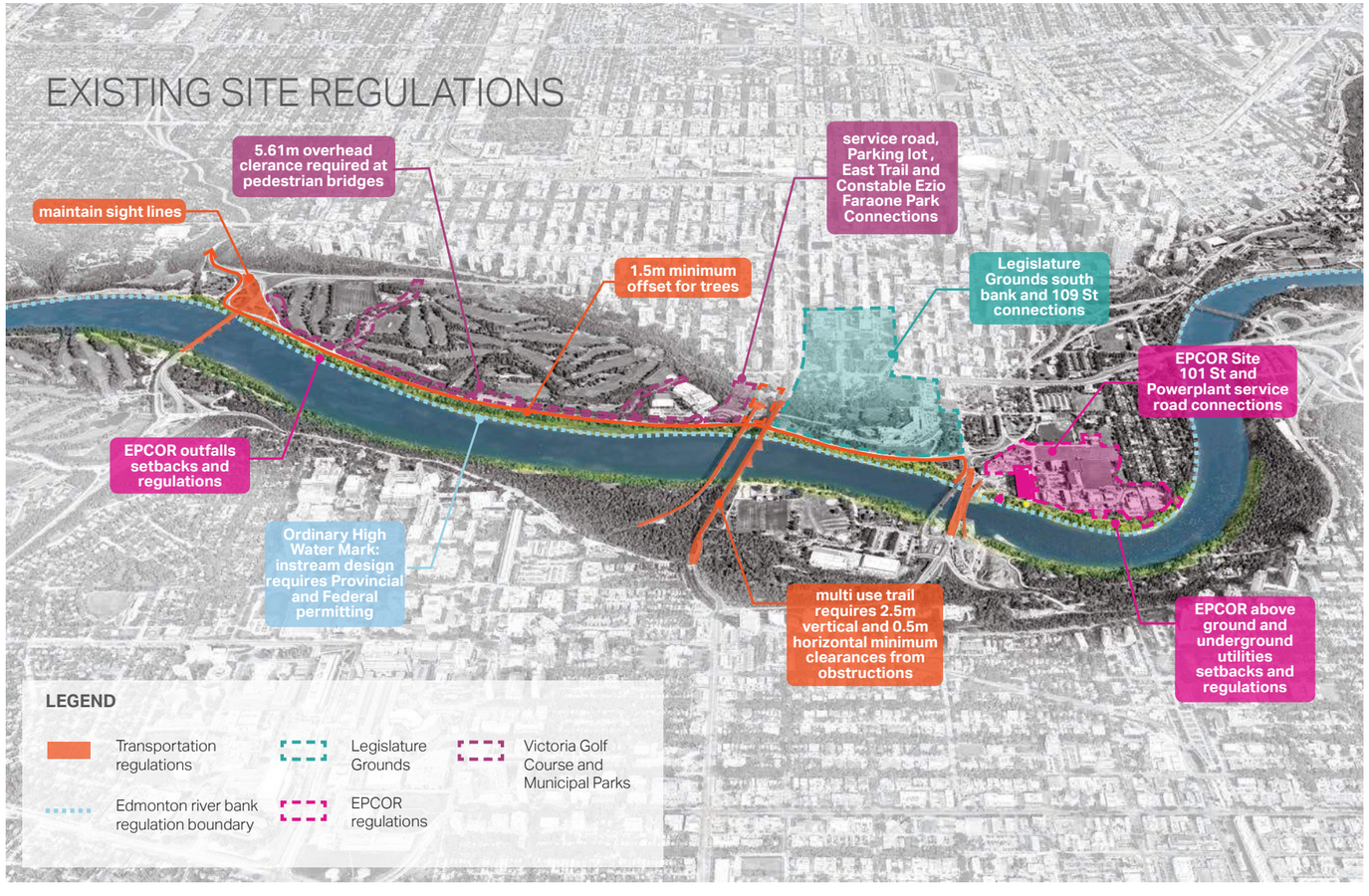


5.3 POLICY AND REGULATION
OVERLAYS & REGULATORY REQUIREMENTS

The City of Edmonton's North Saskatchewan River Valley Area Redevelopment Plan Bylaw 7188 requires the completion of an environmental assessment for public development projects or development on public land. Technical and feasibility studies were also required to ensure that the proposal is safe, maintainable and considers impact to the adjacent neighbourhoods and ecological system. As increased recreational development and commercial amenities will be a part of these projects, it is anticipated that areas may require reclassification from an Ecological Park to a Metropolitan Park, in accordance with BREATHE: Edmonton's Green Network Strategy.

The project site also falls within the North Saskatchewan River Valley and Ravine System Protection Overlay, as well as the Floodplain Protection Overlay and therefore must comply with the development regulations set forward in these overlays.

In addition to overlays, there are a number of policies which have guided the design of the preferred concept. Some of these policies include the Development Setbacks from River Valley/Ravine Crests (C-542) which governs setbacks from the river valley, Open Space Policy (C-594) which commits the City to collaborative planning in service of an integrated, sustainable, vibrant, multi-functional green network, and the Natural Areas Systems (C-531) which balances environmental, economic, and social considerations by conserving Edmonton's natural areas. Additionally, plans such as BREATHE, Edmonton's Green Network Strategy, Ribbon of Green, Complete Streets Policy, and City of Edmonton Design and Construction Standards have largely impacted the overall design of the preferred concept.



5.4 POLICY AND REGULATION
PROVINCIAL & FEDERAL REQUIREMENTS

PROVINCIAL APPROVALS
The bed and shore of the North Saskatchewan River are owned by the Government of Alberta under the Public Lands Act. Temporary work in, or permanent occupation of, the bed and shore of the river requires a provincial Public Lands Act disposition which ensures alignment of the proposed activity with provincial policies. The Government of Alberta owns all water in the province and regulates activities and development in waterbodies through the Water Act, requiring biophysical and hydrological assessments and review of impacts to water quality, fish and wildlife habitat, and river geomorphology and hydrology. The Alberta Environmental Protection and Enhancement Act requires a duty to report releases of substances into the environment that may cause an adverse effect, such as contamination in fill materials, sediment, construction machinery and equipment, and waste. A water quality assessment and protection plan have been developed. Site improvements in proximity of identified historic resources will need to be reviewed against applicable Provincial and Municipal historic designation guidelines and the Standards and Guidelines for the Conservation of Historic Places in Canada.

Environmental Protection and Enhancement Act
The purpose of the Environmental Protection and Enhancement Act (EPEA) is to ensure sustainable use of the environment through protection, enhancement and wise use of natural resources. This process helps predict potential environmental consequences of an activity and minimize any adverse impacts before they occur.

Public Lands Act
The Public Lands Act regulates various public land uses, the sale and purchase of land, and the declaration of water bodies as being owned by the Crown.

Water Act
Pursuant to Section 36 of the Water Act, activities that may impact water bodies and the aquatic environment require an approval unless otherwise authorized by the Water Act.

Wildlife Act
The Wildlife Act and Wildlife Regulation provide the regulatory provisions to protect and manage wildlife on all land in Alberta. The Minister responsible for Fish and Wildlife Management has the authority under the Wildlife Act to influence and control activities that may have direct adverse effects on the populations and habitat of wildlife species.

Historical Resources Act
The Historical Resources Act requires clearance for any development that may impact historical resources in Alberta. Historical resources include structures, archaeological sites, paleontological resources and other works of humans or nature that are of value.

FEDERAL APPROVALS
The federal Fisheries Act requires that projects avoid harm to fish and fish habitat. Potential impacts of development include direct loss of fish habitat or deterioration of fish habitat downstream of the beach due to changes in stream morphology, water quality, and hydrology. A habitat restoration or creation plan would need to be developed. The Navigation Protection Act is administered by Transport Canada, which regulates modifications to the river. This would require a notice to the Minister of Transport and may require an approval pursuant to the Act.

Canadian Environmental Assessment Act
The Canadian Environmental Assessment Act, 2012 project review process is required when a federal authority proposes a project, grants money to a project, grants an interest in land to a project, or exercises a regulatory duty in relation to the project.

Fisheries Act
The Fisheries Act is administered by Fisheries and Oceans Canada (DFO). It is aimed at the protection of fish and fish habitat from serious harm and applies to all projects that have a potential to cause serious harm to fish and fish habitat that are part of or support a commercial, recreational or Aboriginal fishery.

Navigation Protection Act
The Navigation Protection Act (NPA) provides protection of navigation on all public navigable waterways in Canada through the Navigation Protection Program. Regulatory approval is required in scheduled navigable waters where the works risk a substantial interference with navigability.

Migratory Birds Convention Act
The Migratory Birds Convention Act (MBCA) provides protection and preservation for migratory birds and migratory bird habitat through the Migratory Birds Regulations and Migratory Birds Sanctuary Regulations.

A comprehensive list of potential regulatory requirements are included in the Environmental Overview located in the appendix.

5.5 POLICY AND REGULATION
GBA+ CONSIDERATIONS

A well designed city is inclusive, accessible, safe and considers the needs of everyone, regardless of age and ability. Using the guiding principles of Universal Design, age-friendly and child friendly cities, the City of Edmonton is committed to building a more accessible city for everyone. The City of Edmonton has adopted a Gender-Based Analysis Plus (GBA+) process to improve inclusion and equitable outcomes for projects and services.

As an open and inclusive public amenity, it is assumed that a very diverse range of types of identities will make use of Touch the Water Promenade. Although not selected as a GBA+ pilot project, the principles and intent of GBA+ have been applied to the concept design of the Touch the Water and North Shore Promenades project. Design features will also be developed in tandem with the City of Edmonton's Access Design Guide.

Incorporating diverse perspectives from varied lived experiences and intersectional identities, through both the project team and engagement, has been integral to project planning and design. Generally, the relevant input received focused on improving accessibility both to the water and to the river valley overall for many different abilities and types of people (e.g. people with strollers and young children, persons with disabilities, Elders), ensuring safety is prioritized, and creating culturally respectful and welcoming, comfortable spaces.

Relevant design considerations that will contribute towards this process include:

-Flexible and welcoming seating and rest areas.

-Additional pathways and widened walkways, to provide enhanced separation between disparate speeds of travel and ability.

-Additional connections to the park systems for users, including enhanced barrier-free parking and vehicle drop-off lay-bys, and barrier-free connections to surrounding spaces and neighborhoods.

-Enhanced crosswalks at road crossings, to assist with safe traffic crossing.

-Crime Prevention through Environmental Design (CPTED) principles to maintain sightlines and remove hazards associated with hidden spaces.

-Well-lit paths that extend the safe use of the spaces into darker hours.

-Washroom amenity facilities shall provide gender inclusive washrooms for all occupants and a minimum of two self-contained barrier-free washrooms.

Despite the constraints of Covid on the in-person engagement process, public engagement and indigenous engagement sought to promote strong and broad awareness of the project, and seek out feedback from various identities. As engagement progresses, a GBA+ lens will be used to assess whether the outreach strategies and engagement content are seeking out input to increase inclusivity.

6.1 PROJECT VISION & PRINCIPLES
VISION & PRINCIPLES

VISION - Instantly recognizable as Edmonton's premiere riverfront destination, this incredibly vibrant public space evokes a unique sense of place in Canada's northern-most major city. The Touch the Water Promenade celebrates the central river valley's multi-layered history and special significance to Indigenous Nations & Communities, restores its natural systems and resiliency and re-connects the central city to the river. By improving access into and within the river valley network, the Promenade provides diverse opportunities for riverfront gathering and recreation not found anywhere else in the region.

PRINCIPLES - Touch the Water Promenade project has been guided by Breathe, the City of Edmonton's strategy for parks and open spaces planning and design. The main goal of Breathe is to plan and sustain a healthy city by encouraging connection and integration of open space at the site, neighbourhood, city and regional levels. As a central riverfront public space, Touch the Water Promenade has incorporated the three themes from Breathe into the concept design options design: Ecology, Wellness and Celebration.

Ecology Principles
1. To restore and enhance the central river valley as an ecological network and wildlife corridor within a wider, interconnected network.
2. To expand, enhance and diversify the urban forest, improve the river shoreline and restore natural ecosystems and habitats within the project area.
3. To connect communities to nature by promoting ecological stewardship through amenities which promote and educate on positive ecological practices, such as watershed quality and naturalization.

Wellness Principles
1. To provide varied and unique spaces that allow for a more diverse range of recreation and mobility activities, as well as spiritual wellness.
2. To encourage healthy and active living by further activating and improving the central river valley multi-use path network.
3. To provide more direct and accessible connections between the promenade, central river valley destinations like Victoria and Government House Parks, and city centre neighbourhoods.
4. To increase diversity of use, safety and appeal by providing options for users through active and passive pathway separation.

Celebration Principles
1. To promote community interaction through the development of vibrant, welcoming, accessible, inclusive and playful gathering spaces along the river's edge, in all seasons.
2. To respectfully commemorate the diverse Indigenous history, use, and contributions to the area, and provide gathering spaces to celebrate, teach and promote culture.
3. To strengthen Edmonton's identity by telling the story of this place's diverse cultural significance and rich, multi-layered history, as envisioned by the River Crossing Heritage Interpretive Plan.
4. To provide more inclusive access and connection to the river itself for social, cultural and recreational use as a water corridor and for restorative contemplation.

6.2 PROJECT VISION & PRINCIPLES
STAGE 1 ENGAGEMENT FEEDBACK

In fall 2019 the project team initiated Stage One of public engagement with the goal of creating the project vision and design principles that would guide the development of concept options for the Touch the Water Promenade. Understanding how people use the area, the public views and values regarding their use of the project area allowed the project team to begin designing an authentically Edmonton riverfront experience.

Engagement was undertaken throughout October and November of 2019 with engagement focused on raising awareness of the project, understanding how people currently use the area, and collecting ideas for future opportunities and possibilities. Engagement activities included pop-up events, stakeholder meetings, graffiti walls , and an online survey.

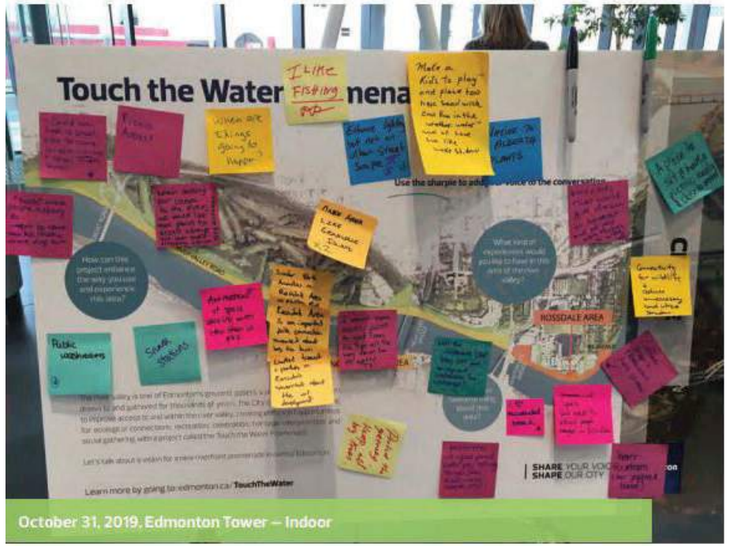
Through conversations with the public and data received from the survey, the project team heard the following themes emerge:

- Edmontonians love the North Saskatchewan River Valley
- Trees are cherished in the river valley
- People use and want to continue to use the area for a wide range of activities from racing and training at one end to strolling and sitting to enjoy the view at the other end
- Those who don't use this area of the river valley prefer to use the natural areas closer to their home or explained they did not have a reason to go to the area
- Safety concerns could be improved through enhanced pedestrian lighting and trail separation.
- Access to the water, as well as access into and out of the river valley is challenging considering the steep banks.
- Development interests were diverse and ranged from do not touch the river valley to interest in retail development in certain areas.
- Park infrastructure enhancements such as garbage cans, washrooms, and lighting were generally supported.

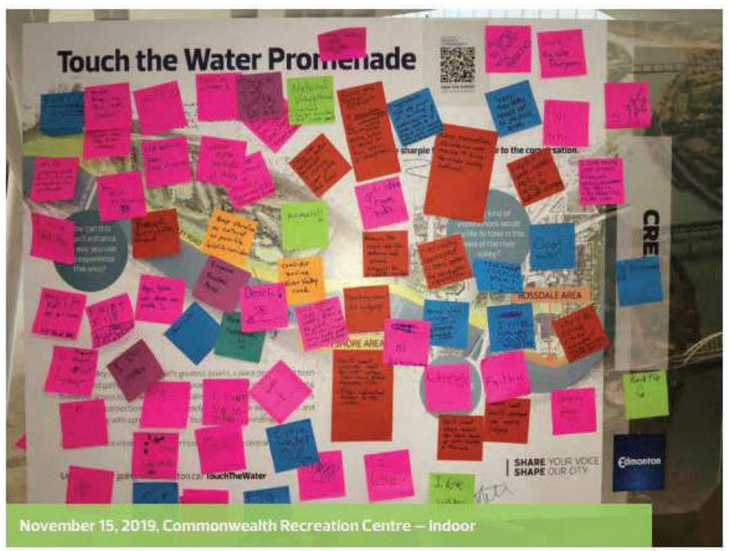
The full What We Heard Report is available in the Appendix.

Recognizing the significance of the river valley to Indigenous Communities and peoples, the City of Edmonton facilitated two identical full-day workshops and site visits with an invitation to Indigenous Communities to share their perspectives and to better understand any historical and cultural connections to the Touch the Water Promenade focus areas.

During the site visits some common design recommendations emerged, such as year-round activity use, information/educational plaques and signage to share Indigenous culture and history, additional seating/benches, and accessible/inclusive designs for those with mobility impairments. Additionally, incorporated information about Indigenous peoples' who traditionally used the focus areas should be presented in a meaningful and informative way that is true to history and recognizes Indigenous contributions.



October 31, 2019, Edmonton Tower – Indoor



November 15, 2019, Commonwealth Recreation Centre – Indoor

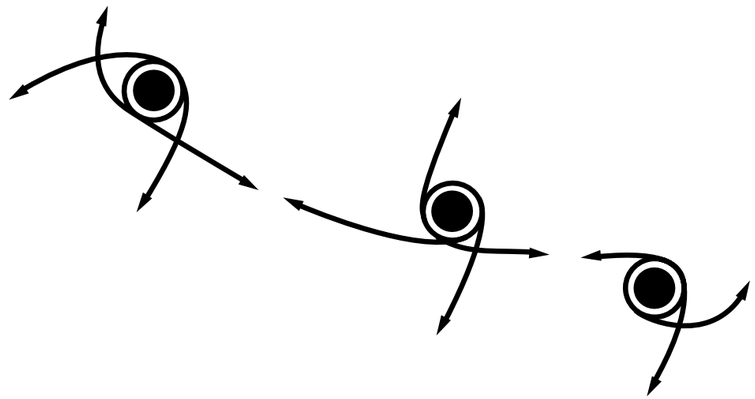
7.1 DESIGN METHODOLOGY
CONCEPT OPTIONS OVERVIEW

Following Stage one of Public Engagement and Indigenous Engagement, and in response to the Project Vision and Principles brought forward from engagement, two concept options were developed.

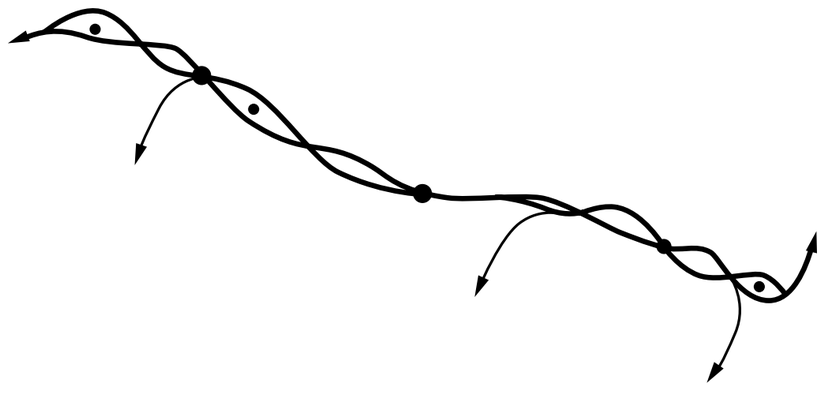
GATEWAYS
The first concept titled Gateways, proposed three large-scale public gathering spaces along the length of the project. These Gateways were located at Government House Park at the West end, High Level Bridge Hill in the middle, and the Rossdale Power Plant to the East. Each gateway provided unique spaces for gathering, while also providing connections into the surrounding City. These three interventions were connected by an enhanced riverfront promenade that unified the experience.

THREADS
The second concept titled Threads, proposed series of more intimately scaled gathering and resting spaces along the length of the riverfront. These Threads were integrated more into an enhanced promenade experience, with more of an emphasis on the river edge, and continuous series of spaces connected by movement.

GATEWAYS



THREADS



CONCEPT OPTION GATEWAYS

CONCEPT OPTION THREADS

THE TERRACES

THE HITCH

THE BRIM

THE PASS

THE DECK

THE LANDING

THE BEND

Government House

Groat Bridge

Victoria Park

Royal Glenora Club

Legislature Building

North Saskatchewan River

LRT Bridge

High Level Bridge

University of Alberta

MID-BANK PROMENADE

TOP-OF BANK PROMENADE

SEPARATED PROMENADE

7.2 DESIGN METHODOLOGY
STAGE 2 ENGAGEMENT FEEDBACK

Using information gathered from Stage One, two draft concepts for the Touch the Water Promenade were presented to Edmontonians in Stage Two of public and stakeholder engagement. Due to the COVID-19 pandemic and resulting public health measures, Stage Two engagement used online opportunities to share information and gather feedback. The Engaged Edmonton site for the project contained several different opportunities for engagement. Approximately 2,400 people visited the Engaged Edmonton site (with over 4,000 views of the project video) during the engagement which ran from November 9 - November 30, 2020. Information was shared and exchanged through different tools on the site including a project flyover, video, flipbook, quick polls, Ideas Board and online survey.

Many respondents participated in the engagement by providing comments on the draft concepts and the project in general. The feedback has been summarized and themed based on the principles of the project and the method of collection.

Vision - The majority of participants supported the project vision presented. Edmontonians love the river valley and want to enjoy it either by walking, strolling, biking or running through it, contemplating the river and the natural environment, acknowledging those who came before us, or stopping and having a coffee while watching the river. Respondents expressed a desire for it to be a destination and they liked the proposed activities and spaces illustrated by the concepts but some expressed caution on the amount of development and the level of change and disturbance that would be required to build the project in the future.

Ecology - The natural beauty of the river valley attracts people to the area. Participants expressed love for Edmonton's river valley and some described it as a treasure. Many comments supported the daylighting of Groat Creek at Government House Park in the Gateways concept and encouraged further protection of wildlife corridors, riparian areas, trees and the environment in general. Many raised concerns regarding flooding and ice levels in the area and that the concepts did not appear to consider the potential for significant erosion of the river bank. Although some wanted no development, most participants whose focus was ecology preferred the concept elements displaying less or more context appropriate development of the area. There were a number of comments specifically unhappy with the amount of concrete in the draft concepts with some supporting gravel paths over concrete. Threads was often chosen as the preferred concept because of the smaller gathering areas and a sense that it would have less of an impact on the environment. However, other participants and stakeholders preferred Gateways from an ecological perspective because of this option's use of existing infrastructure and areas of disturbance, as well as a single mid and top of bank pathway.

Wellness - Overall, survey and Quick Poll respondents preferred the concept design option at each area of the project with more opportunities to recreate, gather and play. Participants discussed enjoying cycling, running and walking through the area as well as their appreciation for nature brought by the river valley. They recognized benefits of separate pathways proposed in Threads to allow for people to use the space at different speeds and with different modes but also to separate people from traffic in order to buffer noise and pollution. Participants talked about being able to escape the city and connect with nature in the area. Some were keen to connect with the water either directly through kayaks, boats or fishing — or through better views that are not obstructed by bushes and trees. Many comments described the importance of access to and within the area to maximize opportunities for people to enjoy the area. Based on the feedback, there is a need to accommodate mobility issues using Universal Accessibility standards. Some explained their connection to the area went back decades when they would bike, walk or jog to and through the river valley but now mobility issues limited their access to the area and public transit and parking was required for them to enjoy the area. Many liked the proposed path in the Gateways concept at the High Level Bridge Hill, which supplemented the existing stairs with an accessible pathway down the hill to the river. Several people highlighted the importance of connecting the river valley with other parts of the city, including downtown, while some simply pointed out the challenge of accessing the river valley given the steepness of the banks. Safety was raised many times. Separation between cyclists and pedestrians was frequently commented on as a requirement, as was separation between cars and pedestrians not just from a safety stand point, but also to buffer noise and make the area quieter and more enjoyable. Many liked the designs accommodating safer crossings of River Valley Road, while some questioned whether the proposed pedestrian and cyclist overpasses were safer or cost-effective as compared to improved at-grade street crossings. Others raised concerns around the need for more lighting in the area. The issue of safety was also raised in regards to river access with participants noting how dangerous the water can be.

Celebration - Some saw the potential of a tourist destination in the area and wanted to see food services, four-season designs (e.g. warming areas) and washrooms. The Rossdale Power Plant was frequently mentioned as an area for development of retail and food services. People expressed interest in continuing to use the area for biking, running, strolling and stopping to view the river. Respondents expressed excitement for the gathering areas at Government House, High Level Bridge Hill and Rossdale Power Plant, and envisioned festivals and musical performances in the plazas suggested in the Gateways concept. Many supported the idea of educating and celebrating the heritage and Indigenous culture of those whose footsteps traveled the area long before.

Other Feedback - Many expressed their excitement of the draft concept design options and wanted the development to occur sooner rather than later. A few preferred the Gateways concept because they saw it as a bold design that was needed and more attractive. Of interest were people who preferred the Threads concept and described the area as one you move through as opposed to go to. Others preferred the Gateways that provided destinations. Many people raised concerns regarding the cost of the project and questioned the City's ability to finance the development. Some felt that there were other priorities for the City to consider especially during the COVID-19 pandemic. Some were concerned that other parks in the City had maintenance issues and that this should be considered when planning such a project. Other participants shared that open space projects and City initiatives in other parts of the City outside of the central core should take priority over this project.

16 Indigenous Nations and Communities participated in a series of remote engagement sessions that occurred in November and December 2020. The main focus of this second round of engagement was to engage Indigenous Nations and Communities on the following main questions:
- Is anything missing in the draft vision and principles?
- Which concept design option, or parts of an option, do you like?
- Which parts need to be changed or improved?
- What areas of the project could show more opportunities for storytelling, cultural commemoration, recognition and celebration?

Overall, a few comments were provided on the Draft Project Vision and Principles, with minor revisions only being suggested for the Draft Principles of "Celebration" and "Wellness."

Most of the engagement focused on a discussion regarding the two concept design options (Gateway and Threads), exploring the unique design components of each option. Nations and Communities shared specific feedback on both options identifying components that they liked and where caution should be exercised. However, much of their input was applicable to both designs, which led to some Nations and Communities requesting a possible "hybrid" concept to be explored.

Indigenous Nations and Communities have expressed that they appreciate the opportunity to participate and provide their feedback on the Touch the Water Promenade and other City projects. As shared during this project and previous projects, the City recognizes that Indigenous engagement is critical to the success of City projects given the historical, environmental and cultural connection of numerous Nations and Communities to this land.

SITE-WIDE PRINCIPLES

ECOLOGICAL/ENVIRONMENTAL

1. In areas of existing disturbance, minimize ecological impact and re-naturalize where possible, restoring waterways and native vegetations
2. Stabilize banks, especially through more naturalized means
3. Enhance and protect the wildlife corridor
4. Protect ecologically sensitive areas
5. Promote ecological eduction and understanding
6. Minimize flood risk, as much as possible

CELEBRATION

1. Promote heritage recognition and understanding
2. Provide places for gathering of various scales and oriented towards varied functions/programs, including large festival events and uses
3. Re-utilize existing infrastructure

WELLNESS

1. Connect back to the city to improved access to the river valley
2. Promote active modes of transit
3. Promote inclusive mobility
4. Improve safety for non-vehicular traffic, especially at crossings and other pinch points
5. Ensure the safety and access for the multiple modes and speeds of transit that will utilize the corridor

GATEWAYS

GROAT

1. Strong support for daylighting
2. Support for increased habitat and ecological improvements
3. Mixed opinion on need for amenity building vs. smaller washroom
4. Suggestion to allow for great connection/access to the water

HIGH LEVEL

1. Strong support for measures to improve safety and access to the river valley and across roads
2. Existing stairs are an important asset
3. Suggestion of creating opportunity to view/access the river here

ROSSDALE

1. Provide varied and unique spaces
2. Balance getting down to water with minimal disturbance (questions about boat launch)
3. Celebrate heritage and gathering
4. Support for increased accessibility

WHAT WE HEARD

THREADS

HITCH

1. Support for improved connectivity and access
2. Concerns with hardscape and impact on existing vegetation

PASS

1. Mixed input on overlook over oval/ skating rink
2. Support for improving safety across River Valley Road but question of the cost of a bridge vs. at grade

BEND

1. Support for heritage celebration
2. Concerns with hardscape and impact on existing vegetation

GROAT

1. Some support for smaller washroom building
2. Suggestion to allow for greater connection/access to the water

BRIM

1. Questions around number of overlooks and siting overall
2. Concerns with hardscape and impact on existing vegetation

DECK

1. To provide varied and unique spaces
2. Concerns with hardscape and impact on existing vegetation

LANDING

1. Concerns with too much hardscape at edge
2. Support for improved accessibility

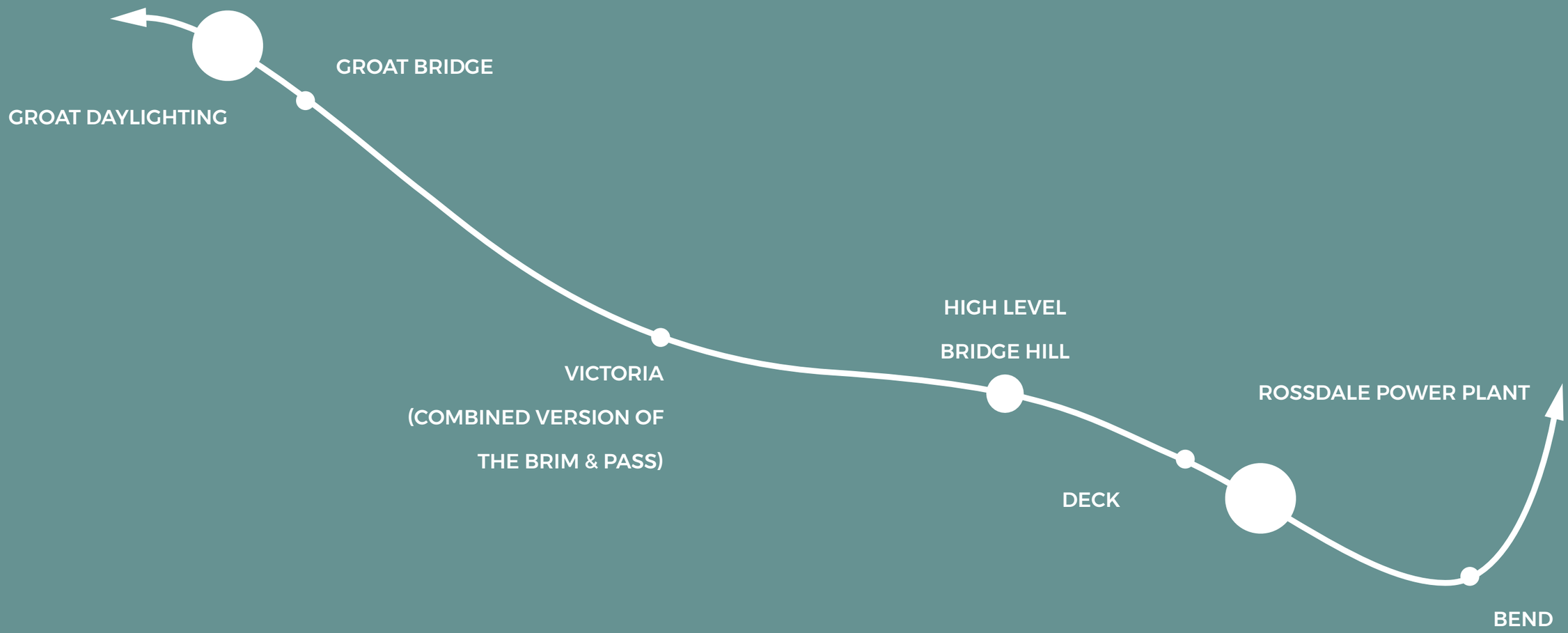
7.3 DESIGN METHODOLOGY
DESIGN DECISIONS & EVOLUTION OF DESIGN

Based on the Stage 2 engagement feedback, the preferred concept design has been designed to take a hybrid approach that uses and builds on parts of both draft concept options, including revisions and new ideas based on engagement feedback. The development of the preferred concept design aims to:

- Balance retaining the 'natural' and 'wild' character of the river with improved access to provide opportunities to better experience the river.
- Reduce the amount of proposed hardscaping along the river, and minimize impacts to existing vegetation and habitat corridors.
- Improve access to and within the river valley, for different types of people with different abilities, with a focus on universal accessibility.
- Provide more opportunities to celebrate the Indigenous, industrial and natural heritage and culture of the project area.
- Improve safety in the project area, which was shared as a major concern for people traveling at different speeds and modes through the river valley, as well as along the water's edge. The concept will guide future phases of design for the rest of the project, and will serve as a long term plan that could be built through phases over many years, as funding is available

The following pages illustrate the guiding feedback and design decisions made through the design process.

PREFERRED CONCEPT



EVOLUTION GROAT DAYLIGHTING

FEEDBACK FOLLOWING CONSULTATION

- Strong support for daylighting
- Support for increased habitat and ecological improvements
- Mixed opinion on need for amenity building vs. smaller washroom
- Suggestion to allow for greater connection/access to the water

ADDITIONAL INPUT THROUGH DESIGN PROCESS

- Support for gateways daylighting version
- Diverging direction on building site
- Support for simplified path
- Study wildlife movement in the proposal
- Support for improved connectivity and access
- Concerns with hardscape and impact on existing vegetation
- Support for smaller washroom facility on east side
- Explore options for better connectivity to Government House and integration/ improvement to west side
- Remove parking from west side but preserve overall number of parking stalls

INITIAL CONCEPT SKETCH

EARLY CONCEPT VERSION

PREFERRED CONCEPT VERSION

EVOLUTION GROAT BRIDGE

FEEDBACK FOLLOWING CONSULTATION

- Support for improved connectivity and access

- Concerns with hardscape and impact on existing vegetation

ADDITIONAL INPUT THROUGH DESIGN PROCESS

- Support for threads version with improved connectivity and access

- Support for accessible ramping connection to upper multi-use trail on bridge, to avoid at-grade road crossing

- Simplification at the expense of function and experience not supported

- Improve bank as wildlife passage and vegetated area

EARLY CONCEPT VERSION

PREFERRED CONCEPT VERSION

FEEDBACK FOLLOWING CONSULTATION

- Mixed input on overlook over oval/skating rink

- Support for improving safety across River Valley Road but question of the cost of a bridge vs. at grade

- Questions around number of overlooks and siting overall at Brim

- Concerns with hardscape and impact on existing vegetation at Brim

ADDITIONAL INPUT THROUGH DESIGN PROCESS

- Transportation preference for at-grade crossing (avoiding bridge crossings unless there are unique circumstances that support separation)

- Support for an overlook with good proximity to parking, with a single central overlook preferred

- Consideration of ecologically sensitive areas

EARLY CONCEPT VERSION

PREFERRED CONCEPT VERSION

EVOLUTION HIGH LEVEL BRIDGE HILL

FEEDBACK FOLLOWING CONSULTATION

- Strong support for measures to improve safety and access to the river valley and across roads

- Existing stairs are an important asset

- Suggestion of creating opportunity to view/access the river here

ADDITIONAL INPUT THROUGH DESIGN PROCESS

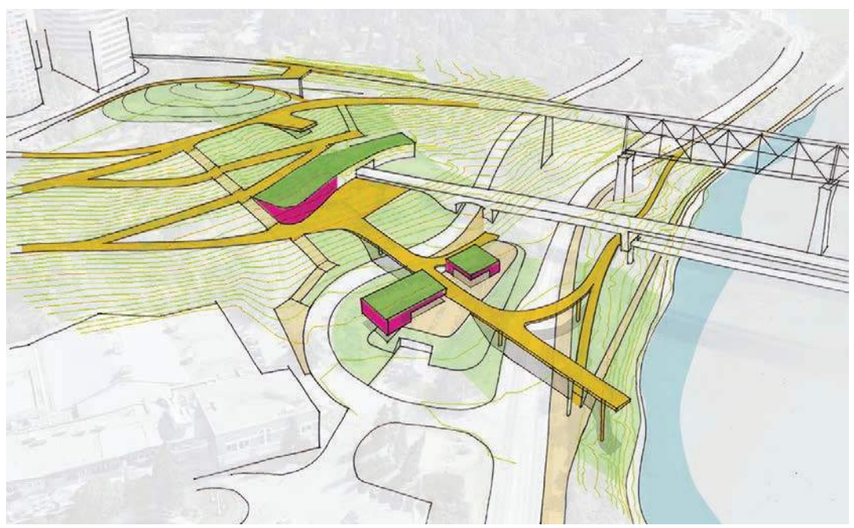
-Still strong support for measures to improve safety, inclusive mobility and access to the river valley and across roads

- While phasing is a possibility, accessible connections should be included within project as budget allows

- Support for riverside improvements

-Support for some parking access

INITIAL CONCEPT SKETCH



EARLY CONCEPT VERSION

PREFERRED CONCEPT VERSION

EVOLUTION DECK

FEEDBACK FOLLOWING CONSULTATION

- To provide varied and unique spaces

- Concerns with hardscape and impact on existing vegetation

ADDITIONAL INPUT THROUGH DESIGN PROCESS

- Preference for a more naturalized option

- Study simplification + reduction

- Study wildlife corridor

EARLY CONCEPT VERSION

PREFERRED CONCEPT VERSION

EVOLUTION ROSSDALE POWER PLANT

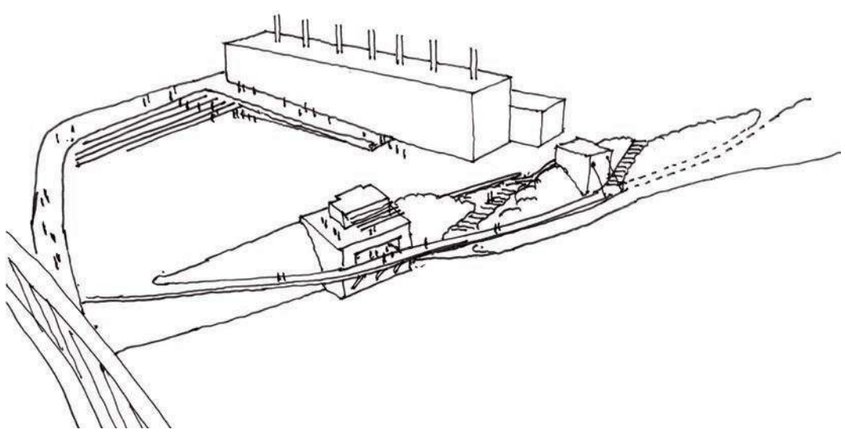
FEEDBACK FOLLOWING CONSULTATION

- Provide varied and unique spaces
- Balance getting down to water with minimal disturbance (questions about boat launch)
- Celebrate heritage and gathering
- Support for increased accessibility both to the site and to the water's edge

ADDITIONAL INPUT THROUGH DESIGN PROCESS

- Combined threads and gateways preferred
- Water access is critical
- Support for kayak-tie up on West side but no launch and no in water dock
- Support for gradient/variety of open spaces
- Simplify/reduce on east side of Walterdale
- Celebrate Indigenous heritage and culture
- Maximize universal accessibility to water's edge

INITIAL CONCEPT SKETCH



EARLY CONCEPT VERSION

PREFERRED CONCEPT VERSION

EVOLUTION BEND

FEEDBACK FOLLOWING CONSULTATION

- Support for heritage celebration
- Concerns with hardscape and impact on existing vegetation

ADDITIONAL INPUT THROUGH DESIGN PROCESS

- This contemplative area should be included
- Less hardscaping
- Incorporate heritage interpretive components
- Refinement around conflicts between pedestrians and cyclists (separating modes)
- Consider wildlife implications at outfalls

EARLY CONCEPT VERSION

PREFERRED CONCEPT VERSION

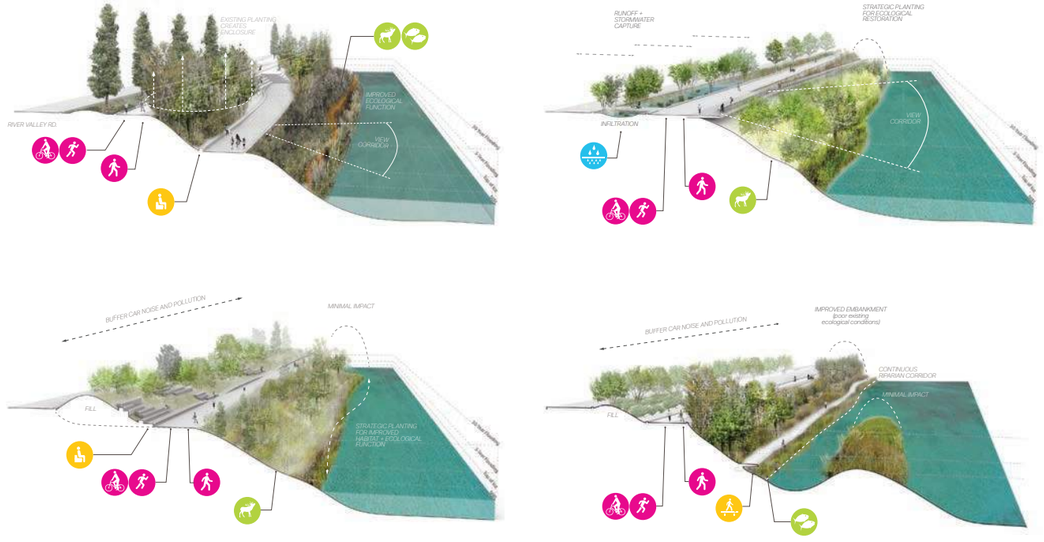
EVOLUTION PROMENADES

INPUT THROUGH DESIGN PROCESS

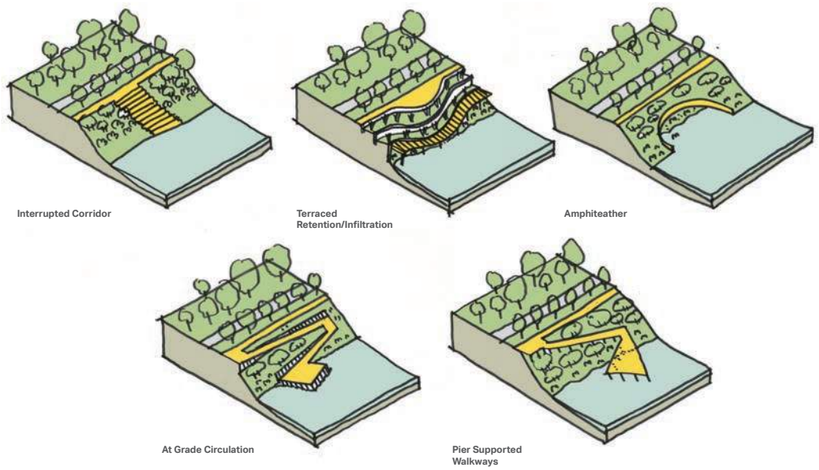
- Minimal disturbance to site ecology

- Refinement around conflicts between pedestrians and cyclists (separating modes)

EARLY CONCEPT VERSION



INITIAL CONCEPT SKETCH



PREFERRED CONCEPT VERSION

8.1 PREFERRED CONCEPT
CONCEPT SUMMARY

Through two phases of study, including both Indigenous and Public Engagement, a draft project vision, design principles, two concept design options were developed. The feedback toward these concept options led to the development of a preferred concept design. Rather than selecting one option or another, the preferred concept takes a hybrid approach that uses and advances parts of both draft concept options, and includes suggested revisions and new ideas that were gathered through Indigenous and public engagement. While calibrating the design proposals to better reflect the received input, the concept design continues to advance and balance the project vision and principles of Celebration, Ecology, and Wellness.

Special attention has been paid to the safety and universal accessibility of people travelling to and through the central river valley, and to the connection with the waterway itself. The preferred concept advances the improvement of access to and comfort within the promenade spaces, particularly among different modes and speeds of travel. The concept responds to technical and cost parameters by connecting to, and building off of, existing infrastructure wherever possible.

While maintaining priority elements that improve river access, safe mobility, and provide new spaces for gathering and play in the central river valley, the concept is also driven by ecological priorities. The concept design proposes maintaining or enhancing the existing ecological connections by reintroducing diverse, native plating and reducing the amount of hardscaping and hard infrastructure proposed in the earlier concept options. The ecological improvements proposed in the concept options that have been advanced include creek restoration and new fish habitat, improved stormwater management, and strategic replanting of the project area with tree and shrub species that are native to the region. Improving Edmontonians' access to nature and the River itself is a key theme of design in order to promote ecological stewardship of the River through lookouts, nature-based play and natural education opportunities near proposed ecological restoration areas.

Providing more opportunities to celebrate the multi-layered Indigenous, industrial and natural heritage and culture of the project area have also been incorporated into the concept design. Access to the adjacent Rossdale Power Plant and Pumphouses is integrated into the design of the Touch the Water Promenade. The concept design envisions a multi-use public plaza space with a variety of different spaces for play, seating and gathering in order to support the future redevelopment and reuse of these historic landmarks.

The concept design will act as a blueprint for future development in the project area that reflects a shared vision for the central river valley, and will serve as a long term plan that could be implemented in phases over time.

CONCEPT

GROAT BRIDGE CONNECTION

HIGH LEVEL BRIDGE HILL

ROSSDALE POWER PLANT

ROSSDALE BEND OVERLOOK

GOVERNMENT HOUSE PARK
& GROAT DAYLIGHTING

VICTORIA PARK OVERLOOK

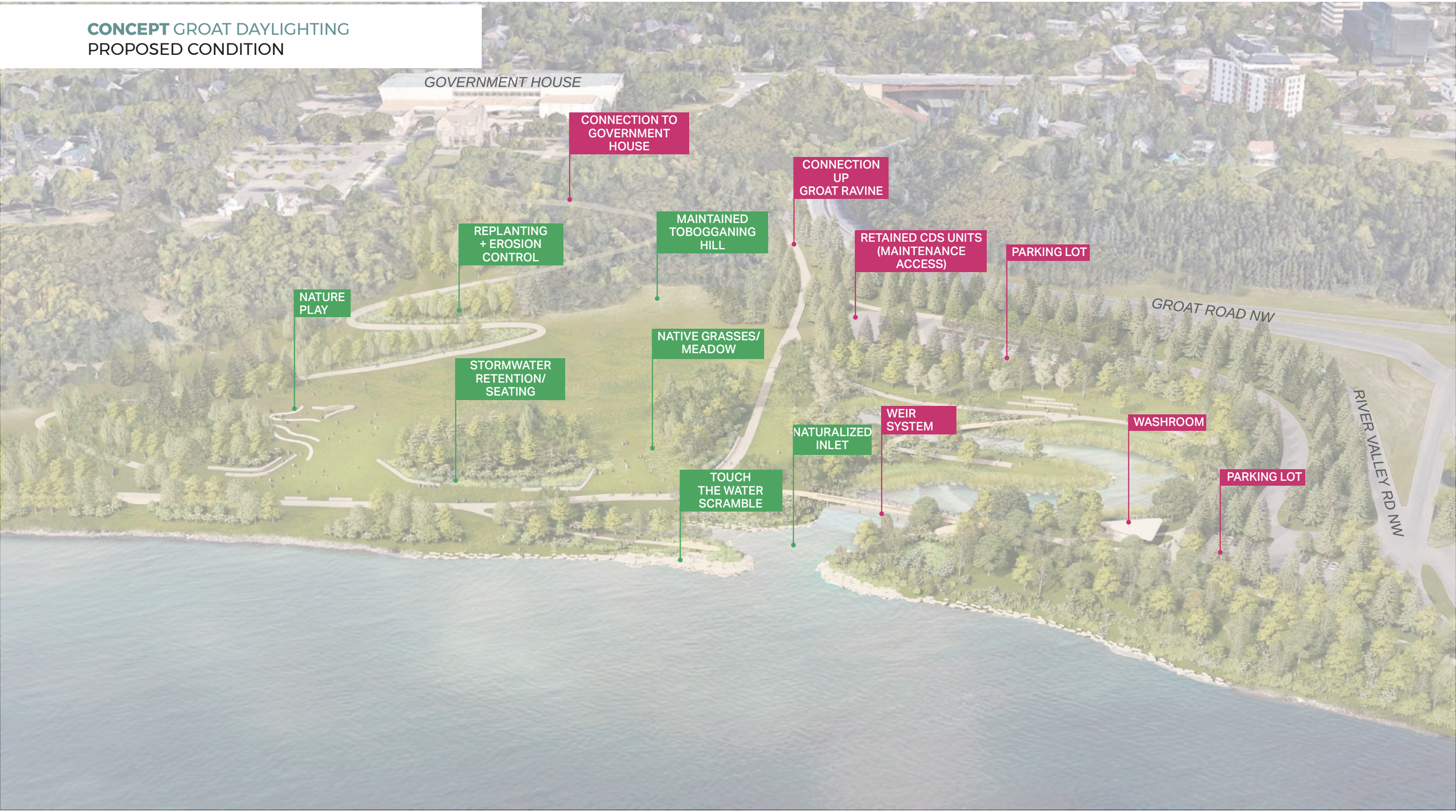
RIVER DECK OVERLOOK

CONCEPT GROAT DAYLIGHTING

CONCEPT GROAT DAYLIGHTING
EXISTING CONDITION

CONCEPT GROAT DAYLIGHTING
PROPOSED CONDITION

CONCEPT GROAT DAYLIGHTING
PROPOSED CONDITION



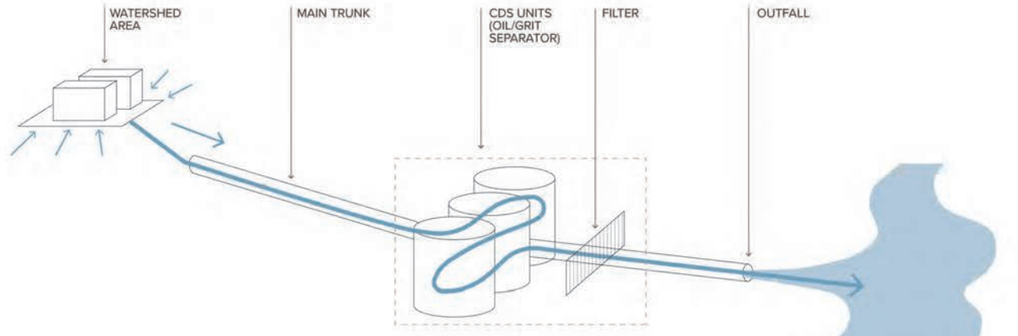
CONCEPT GROAT DAYLIGHTING
STORMWATER MANAGEMENT

EXISTING CONDITION

The site is currently home to a stormwater treatment facility comprised of CDS units and a sub-grade trunk. The intention of the facility is to manage stormwater run-off from the neighbourhoods and ravine north of the site.

PROPOSED CONDITION

Following prevous EPCOR wetland studies at this location, and constructed wetland precedents, EPCOR Drainage has supported the proposal to retain the CDS units and add naturalized wetlands, weir system, and naturalized outlet to manage additional infiltration. This proposal removes Filters south of the CDS units which will provide maintenance cost-savings.



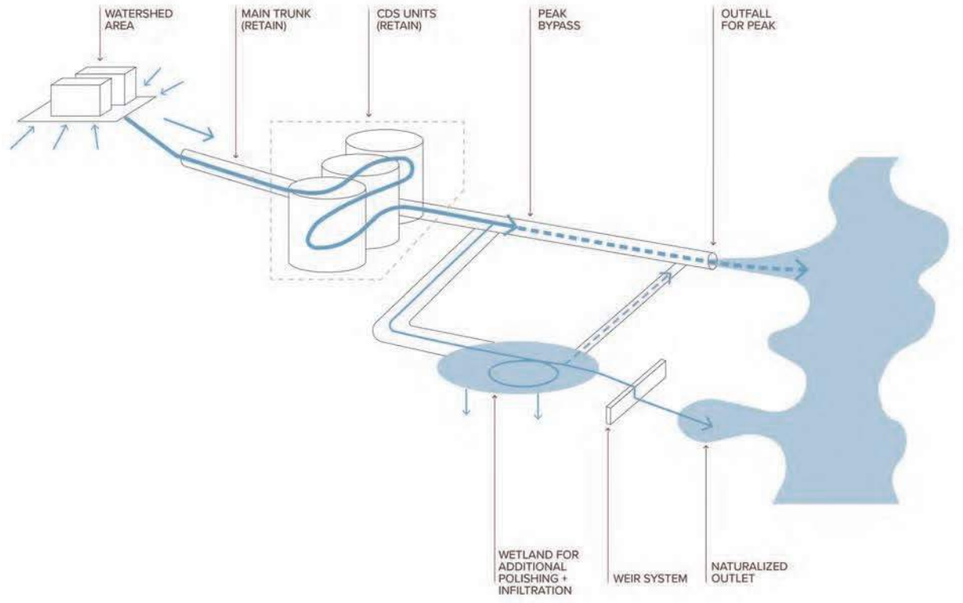
EXISTING CONDITION

GROAT RAVINE UNDERGROUND TREATMENT

CDS UNITS (TYPICAL)

GROAT STORMWATER CATCHMENT

PROPOSED CONDITION



DEEP WATER MARSH

VEGETATION

OFF-CHANNEL INLET

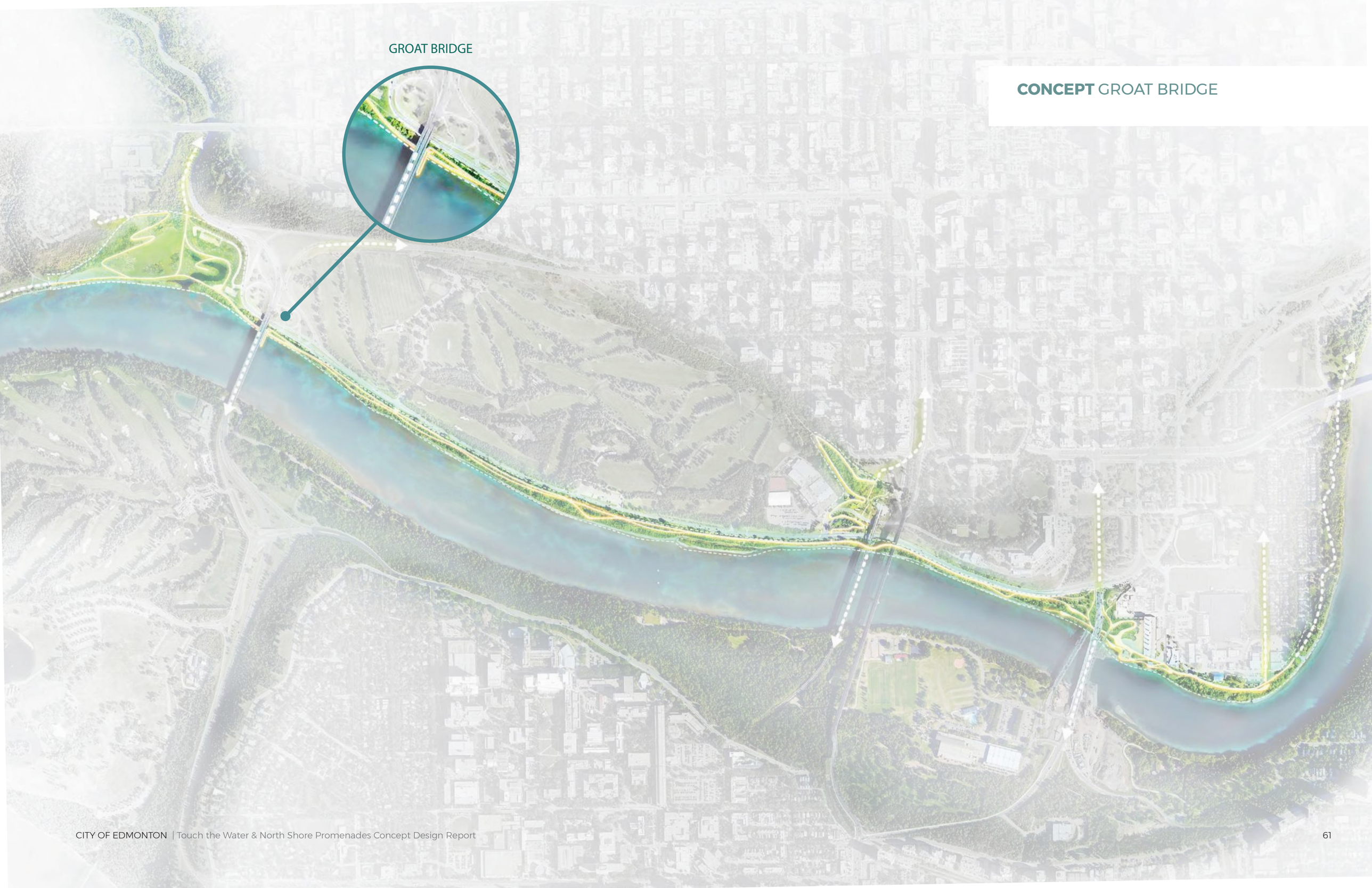
FISH HABITAT AND TERRESTRIAL HABITAT MOVEMENT

CONCEPT GROAT DAYLIGHTING
EXISTING CONDITION

CONCEPT GROAT DAYLIGHTING
PROPOSED CONDITION

CONCEPT GROAT DAYLIGHTING
EXISTING CONDITION

CONCEPT GROAT DAYLIGHTING
PROPOSED CONDITION


GROAT BRIDGE

CONCEPT GROAT BRIDGE
EXISTING CONDITION

CONCEPT GROAT BRIDGE
PROPOSED CONDITION

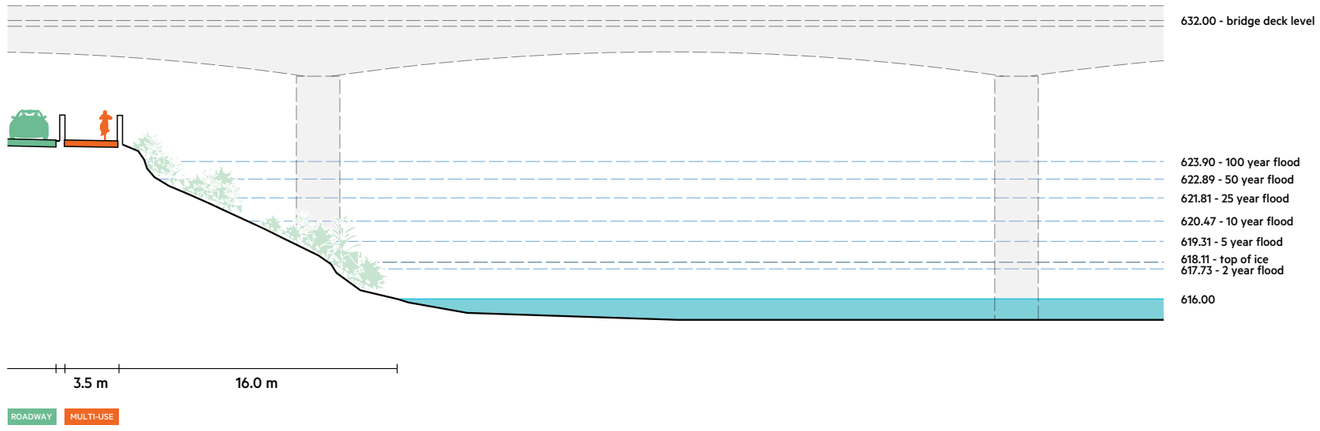
CONCEPT GROAT BRIDGE
PROPOSED CONDITION

CONCEPT GROAT BRIDGE
PROPOSED CONDITION

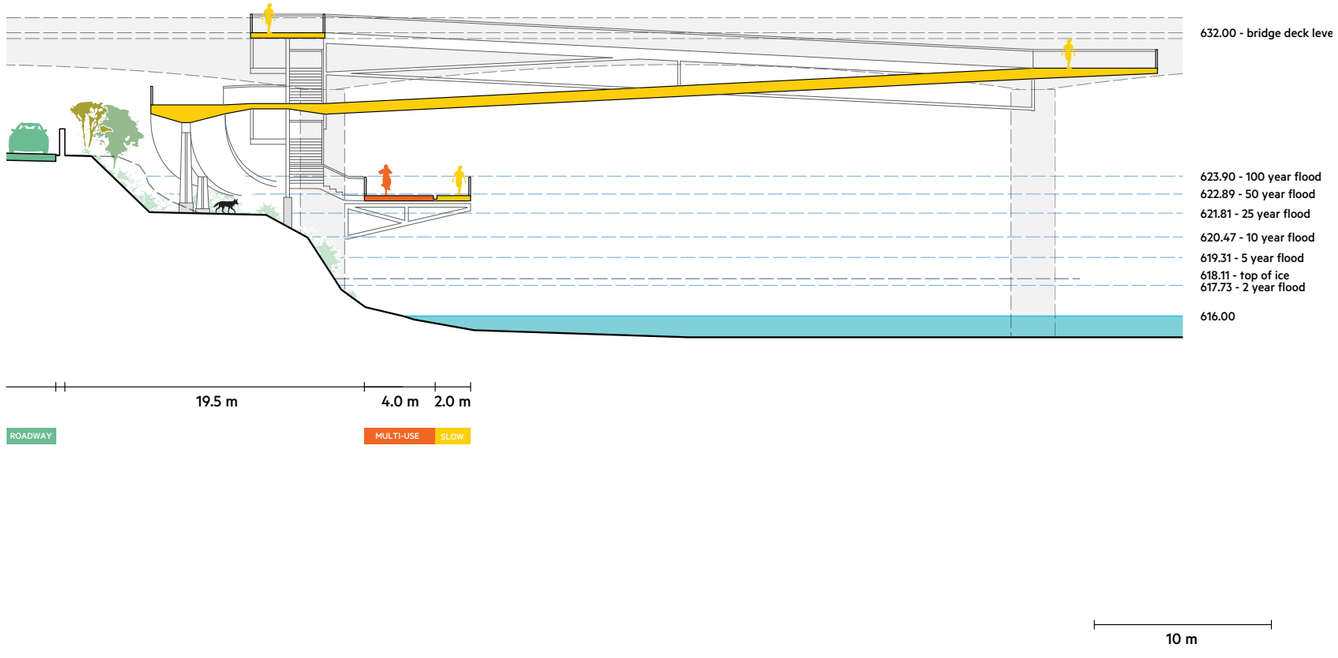
CONCEPT GROAT BRIDGE
PROPOSED CONDITION

CONCEPT GROAT BRIDGE
PROMENADE

EXISTING CONDITION

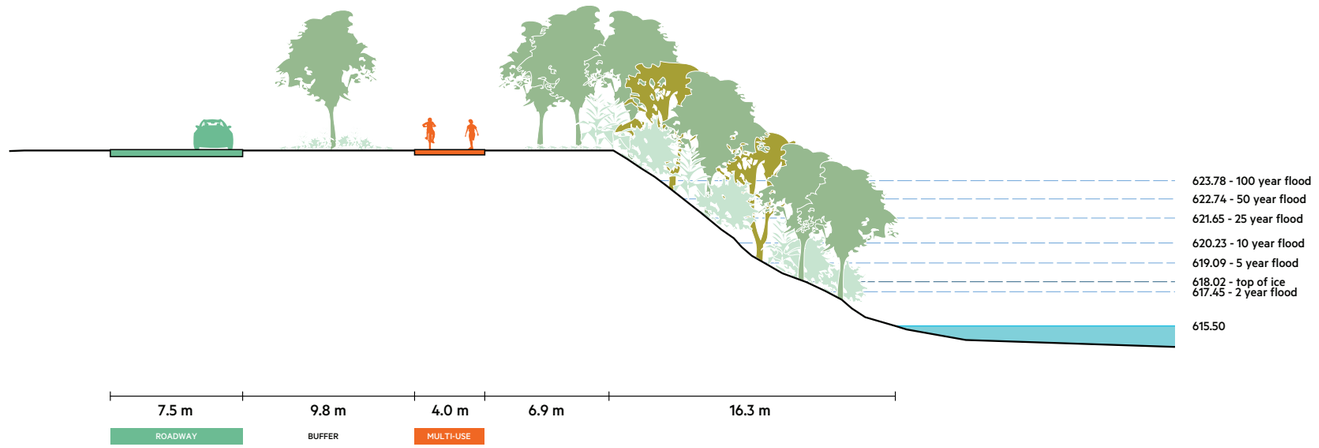


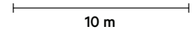
PROPOSED CONDITION



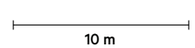
CONCEPT GROAT BRIDGE
SPLIT PATH PROMENADE

EXISTING CONDITION





PROPOSED CONDITION



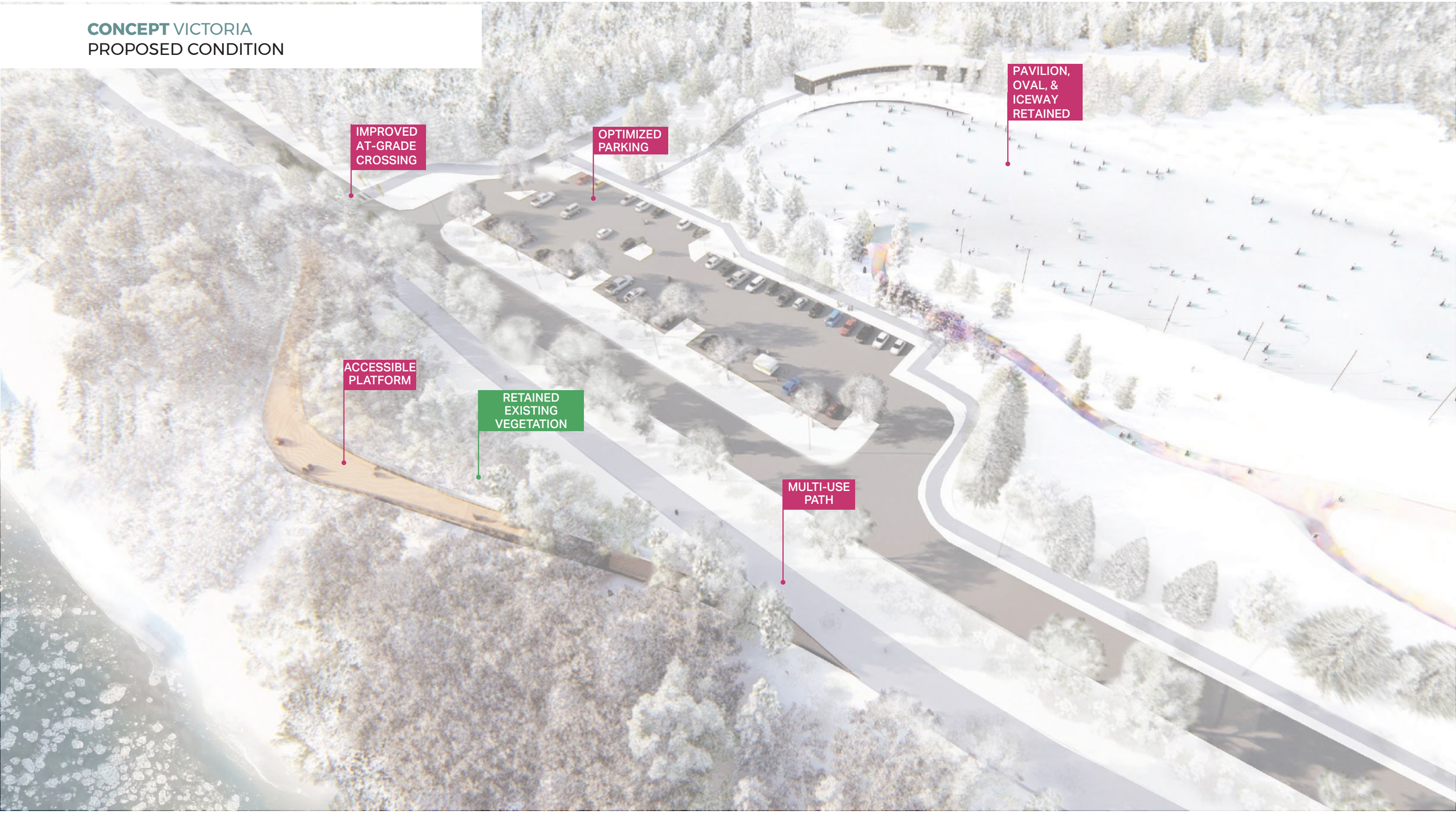
CONCEPT VICTORIA

VICTORIA

CONCEPT VICTORIA
EXISTING CONDITION

CONCEPT VICTORIA
PROPOSED CONDITION

CONCEPT VICTORIA
PROPOSED CONDITION

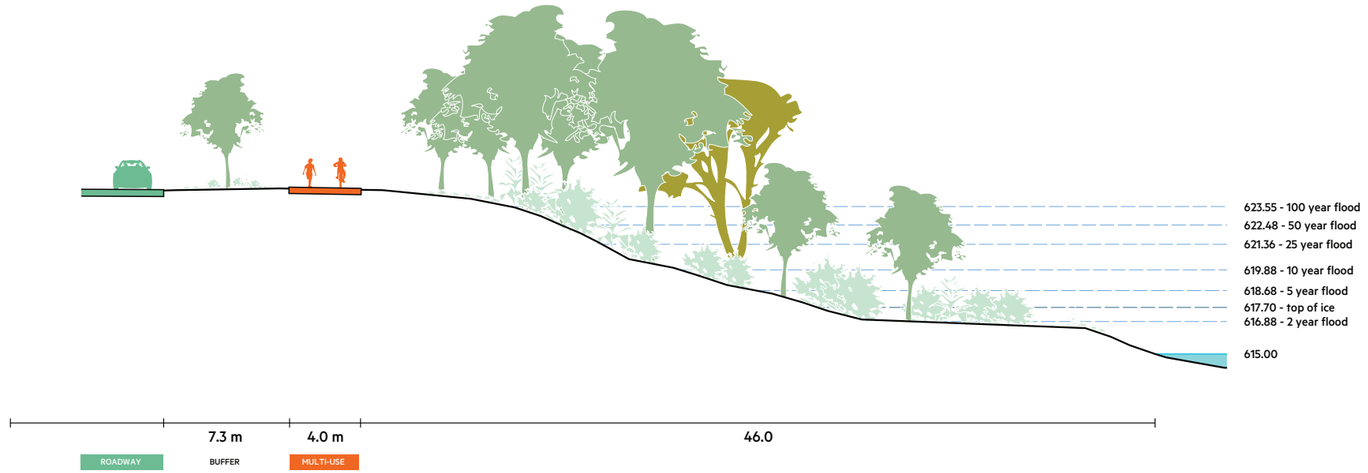


CONCEPT VICTORIA
PROPOSED CONDITION

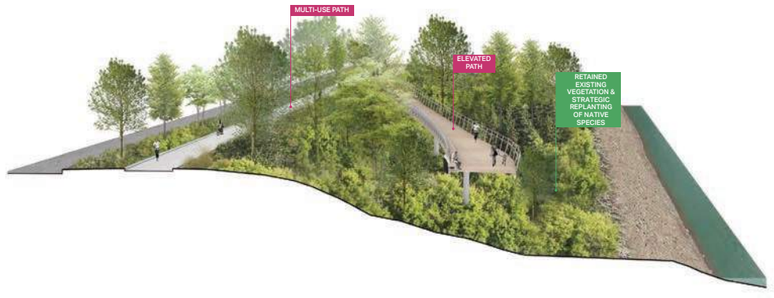
CONCEPT VICTORIA
PROPOSED CONDITION

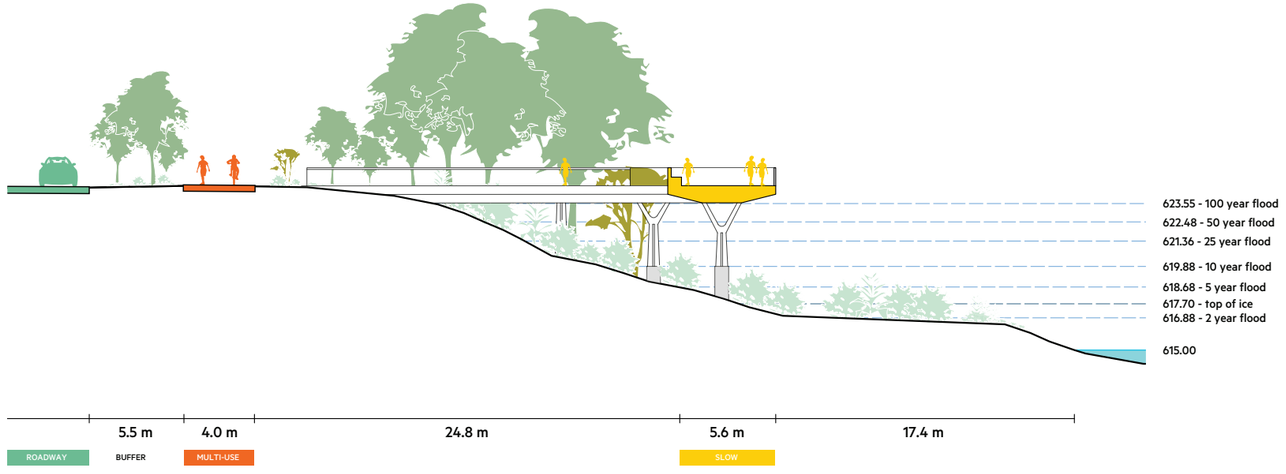
CONCEPT VICTORIA
PROPOSED PROMENADE

EXISTING CONDITION



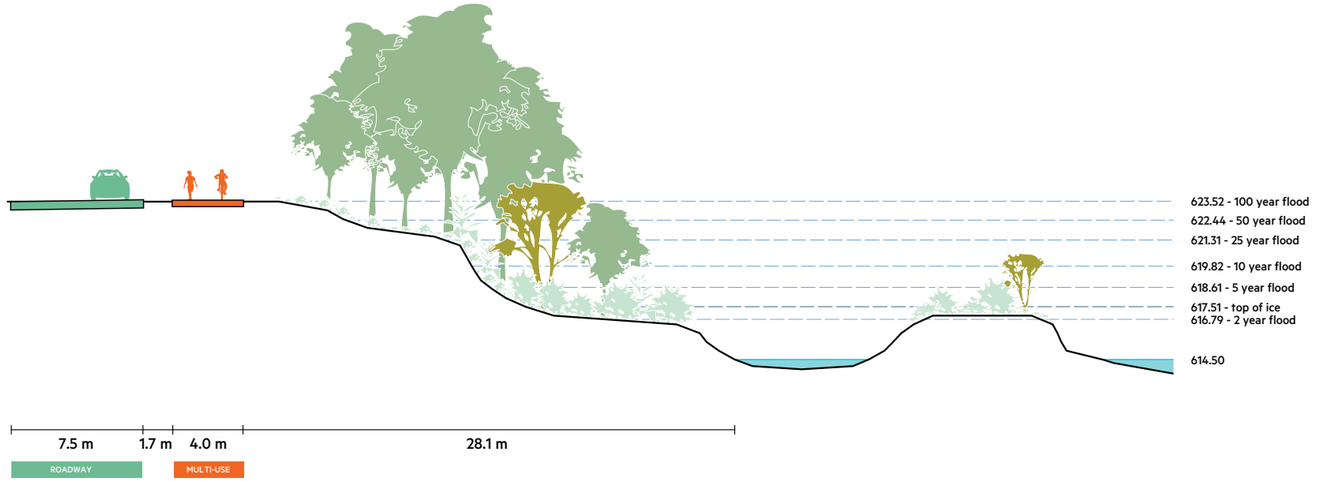
PROPOSED CONDITION



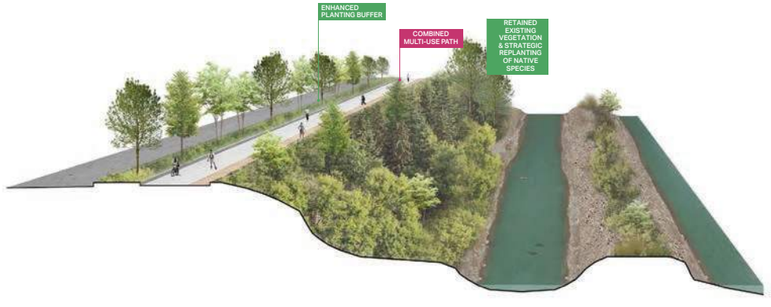


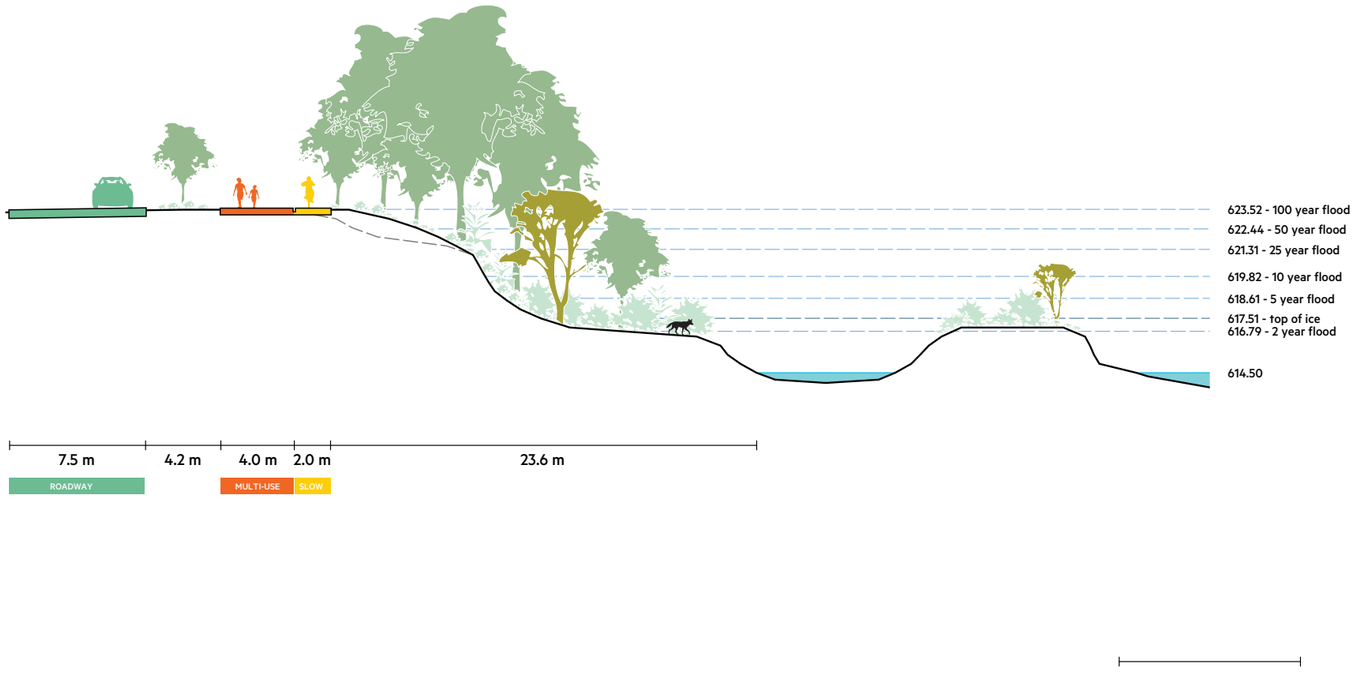
CONCEPT VICTORIA
PROPOSED COMBINED PATH PROMENADE

EXISTING CONDITION

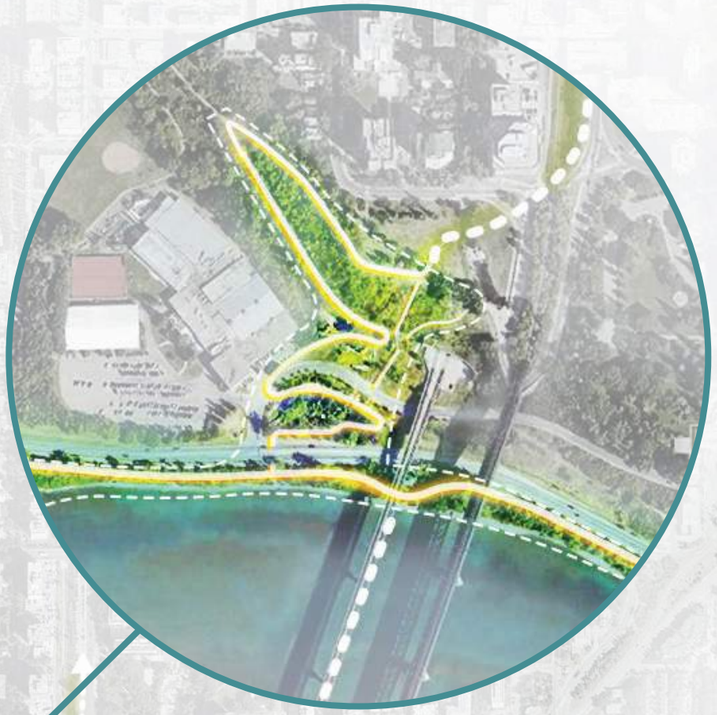


PROPOSED CONDITION





CONCEPT HIGH LEVEL BRIDGE HILL



CONCEPT HIGH LEVEL BRIDGE HILL
EXISTING CONDITION

CONCEPT HIGH LEVEL BRIDGE HILL
PROPOSED CONDITION

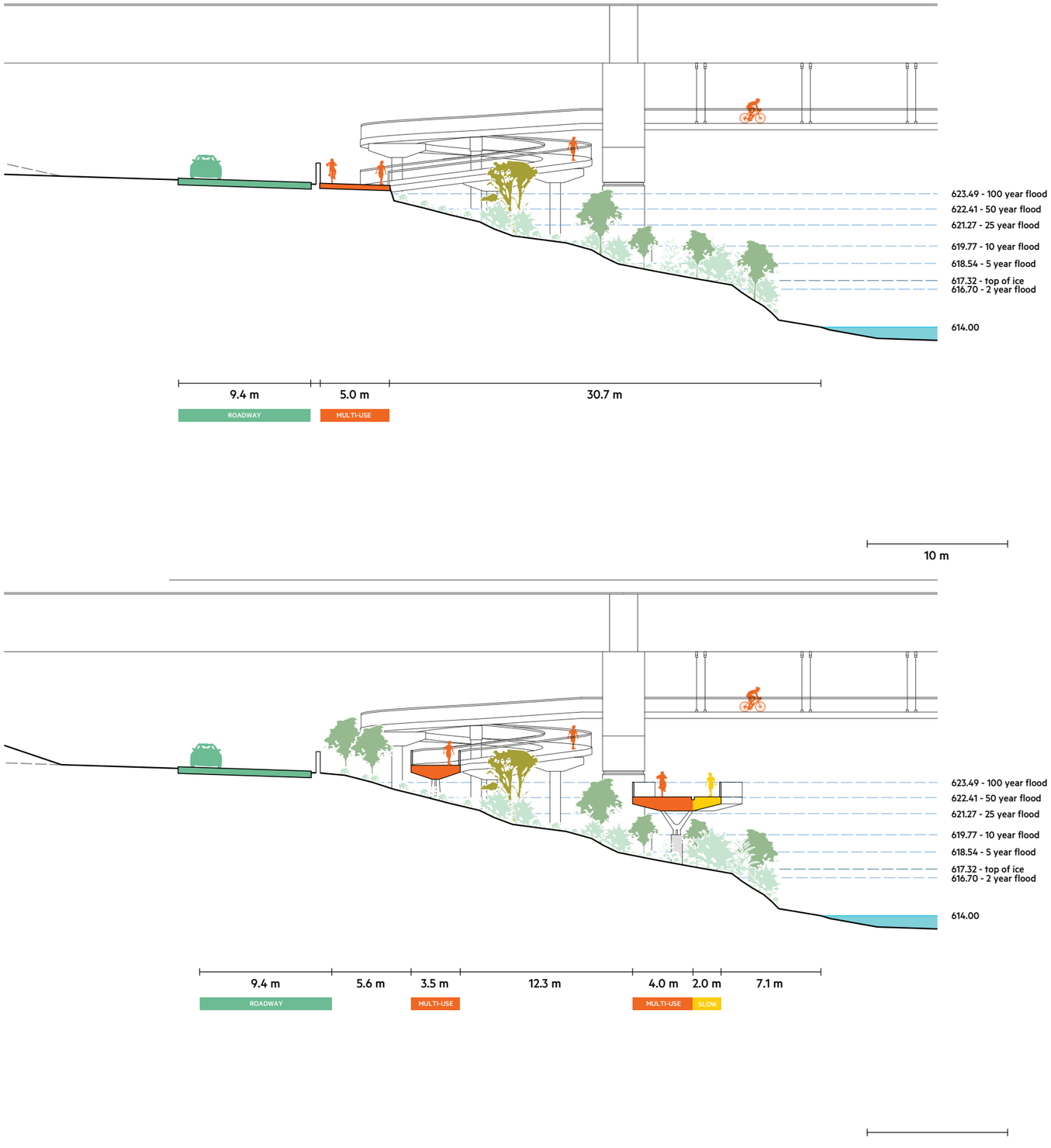
CONCEPT HIGH LEVEL BRIDGE HILL
PROPOSED CONDITION

CONCEPT HIGH LEVEL BRIDGE HILL
PROPOSED CIRCULATION

PATHWAYS
STAIRS
PROPOSED

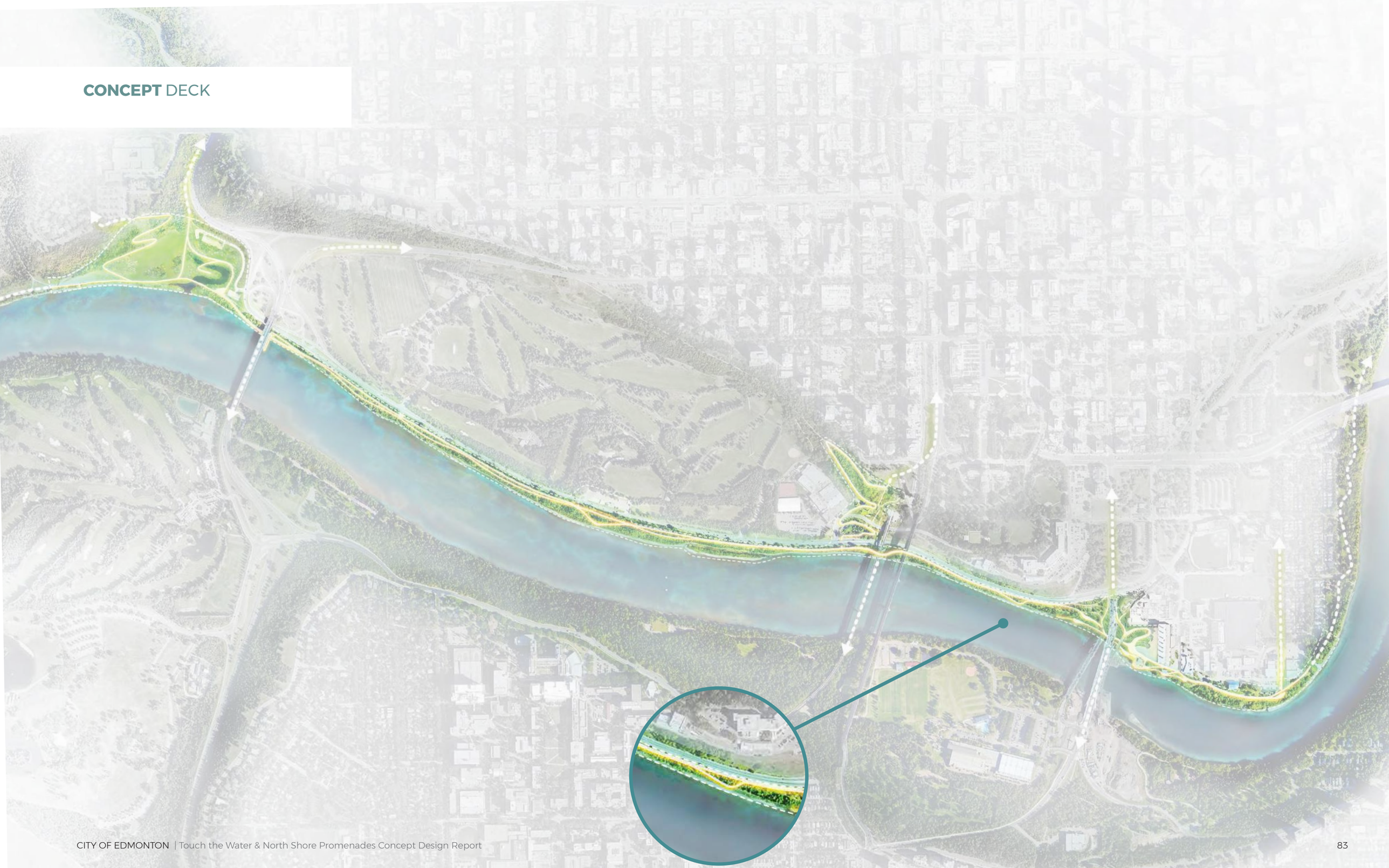
CONCEPT HIGH LEVEL BRIDGE HILL
PROPOSED PROMENADE

EXISTING CONDITION



PROPOSED CONDITION

CONCEPT DECK



DECK

CONCEPT DECK
EXISTING CONDITION

CONCEPT DECK
PROPOSED CONDITION

CONCEPT DECK
PROPOSED CONDITION

CONCEPT DECK
EXISTING CONDITION

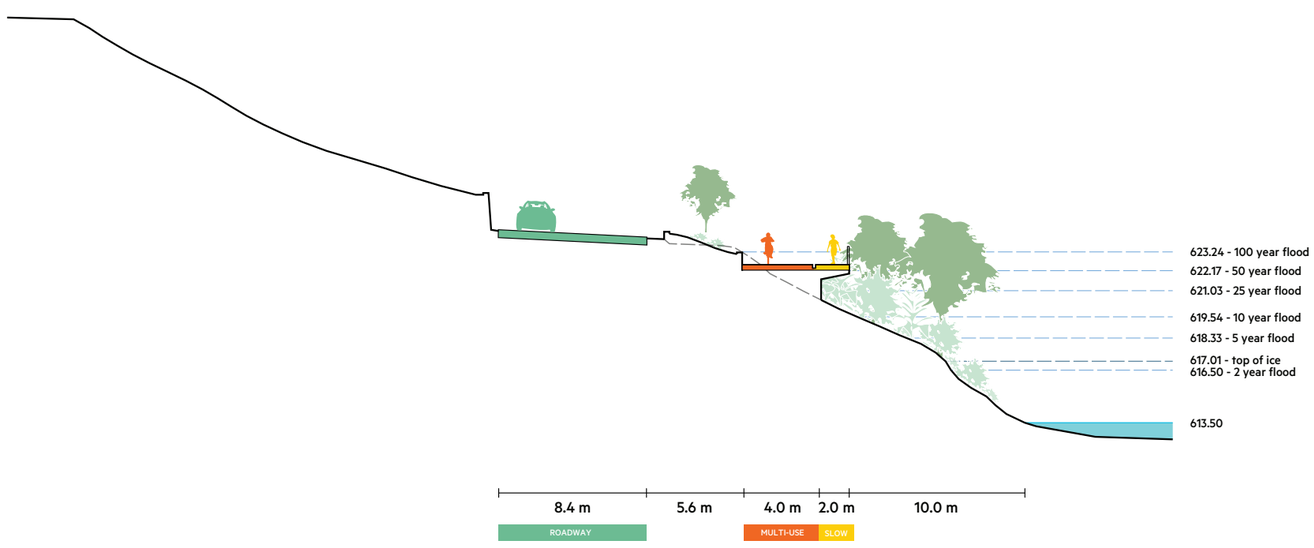
CONCEPT DECK
PROPOSED CONDITION

CONCEPT DECK
PROPOSED CONDITION

CONCEPT DECK
PROPOSED PROMENADE

EXISTING CONDITION

PROPOSED CONDITION



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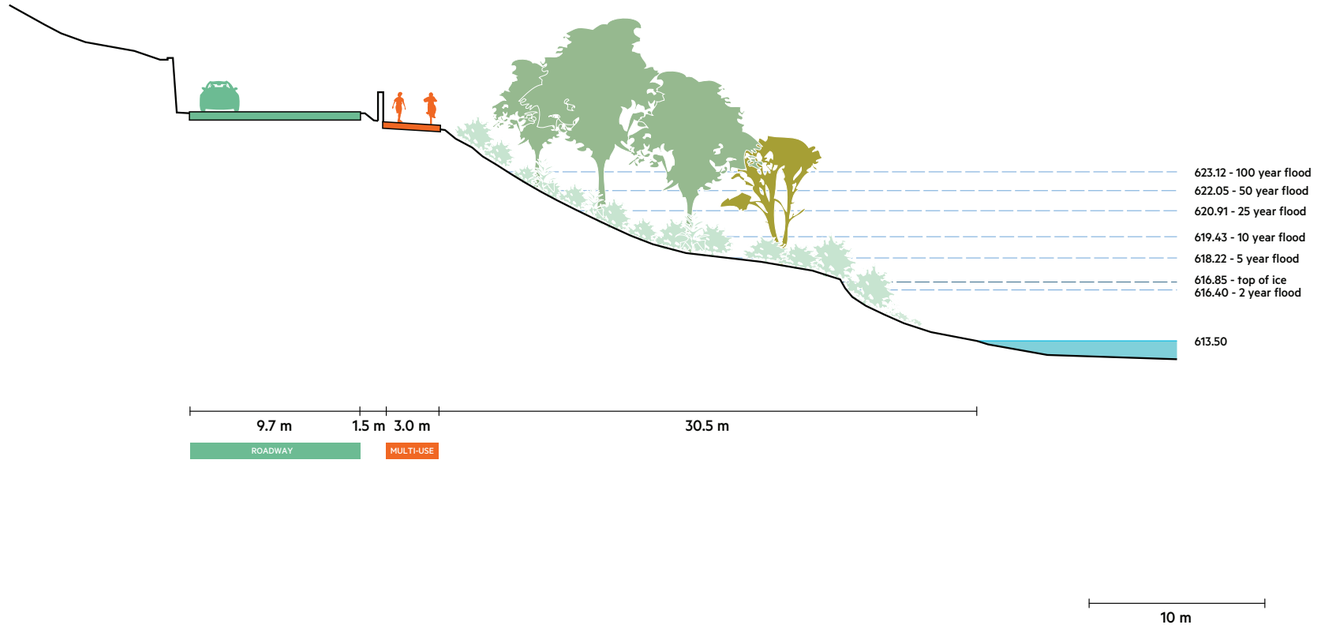
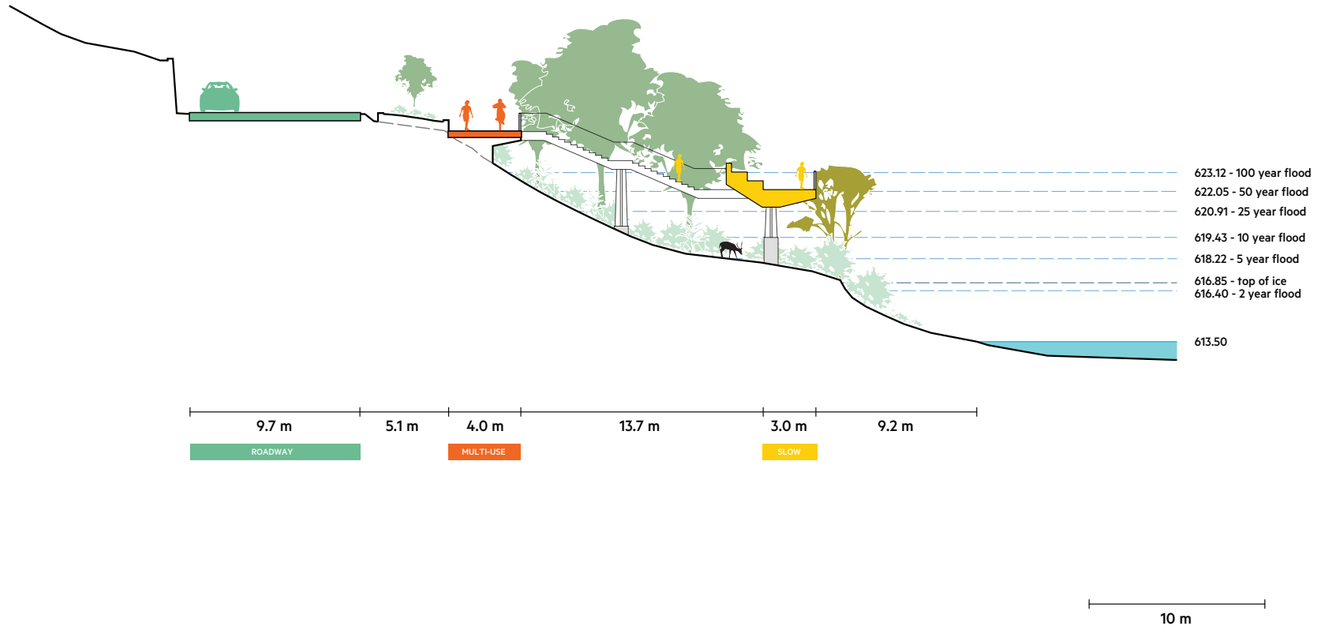
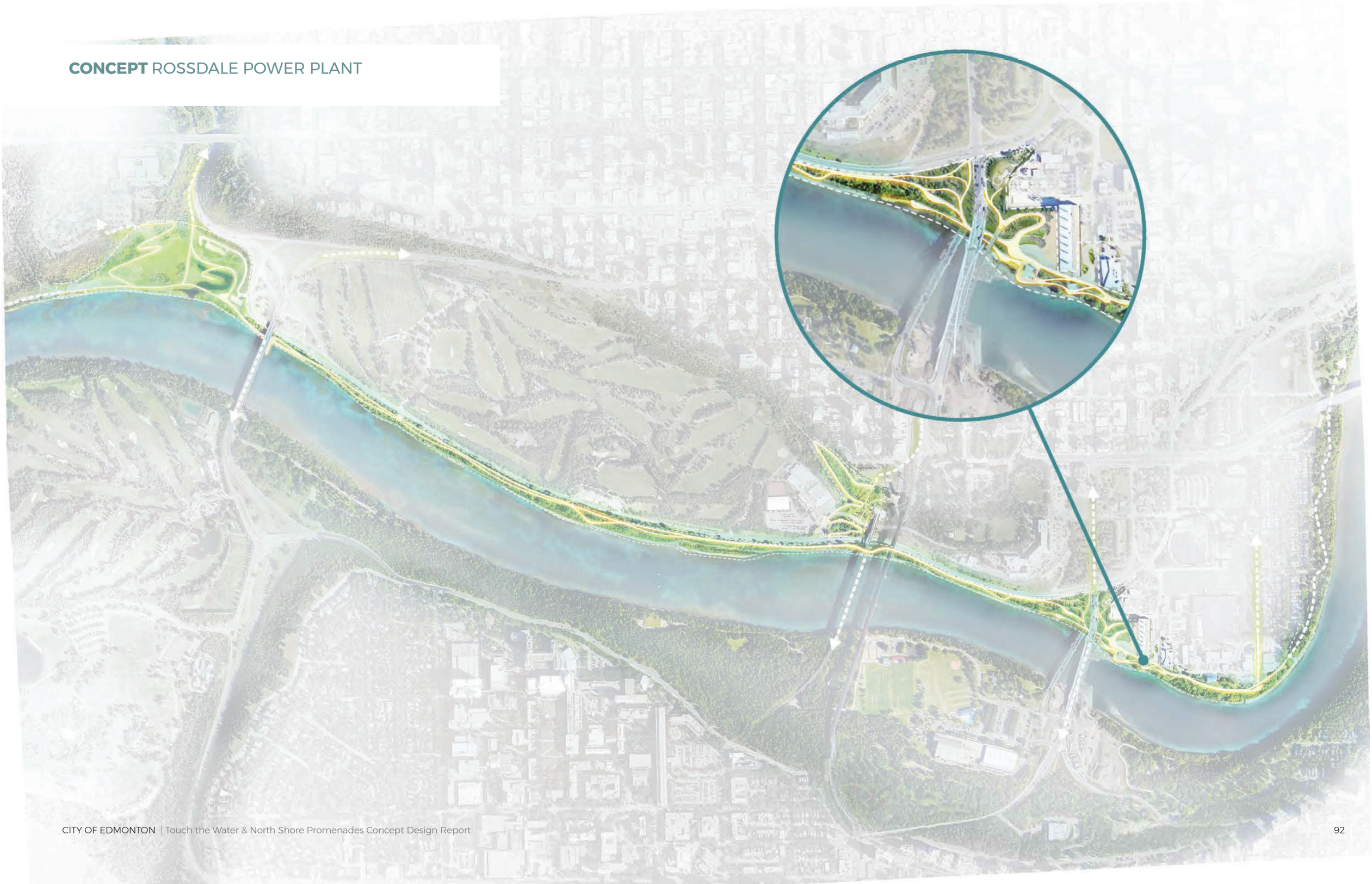


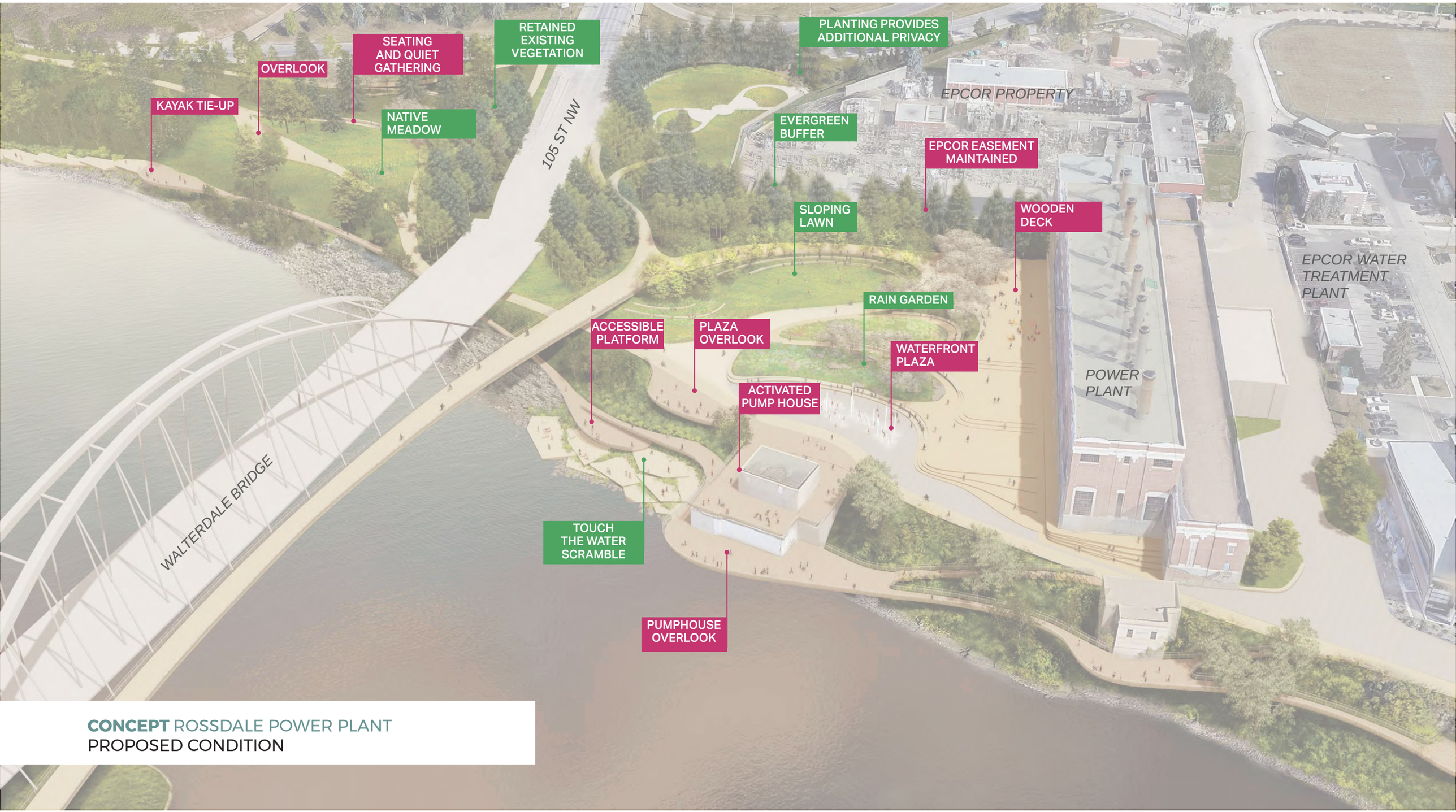
PROPOSED CONDITION





CONCEPT ROSSDALE POWER PLANT
EXISTING CONDITION

CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION



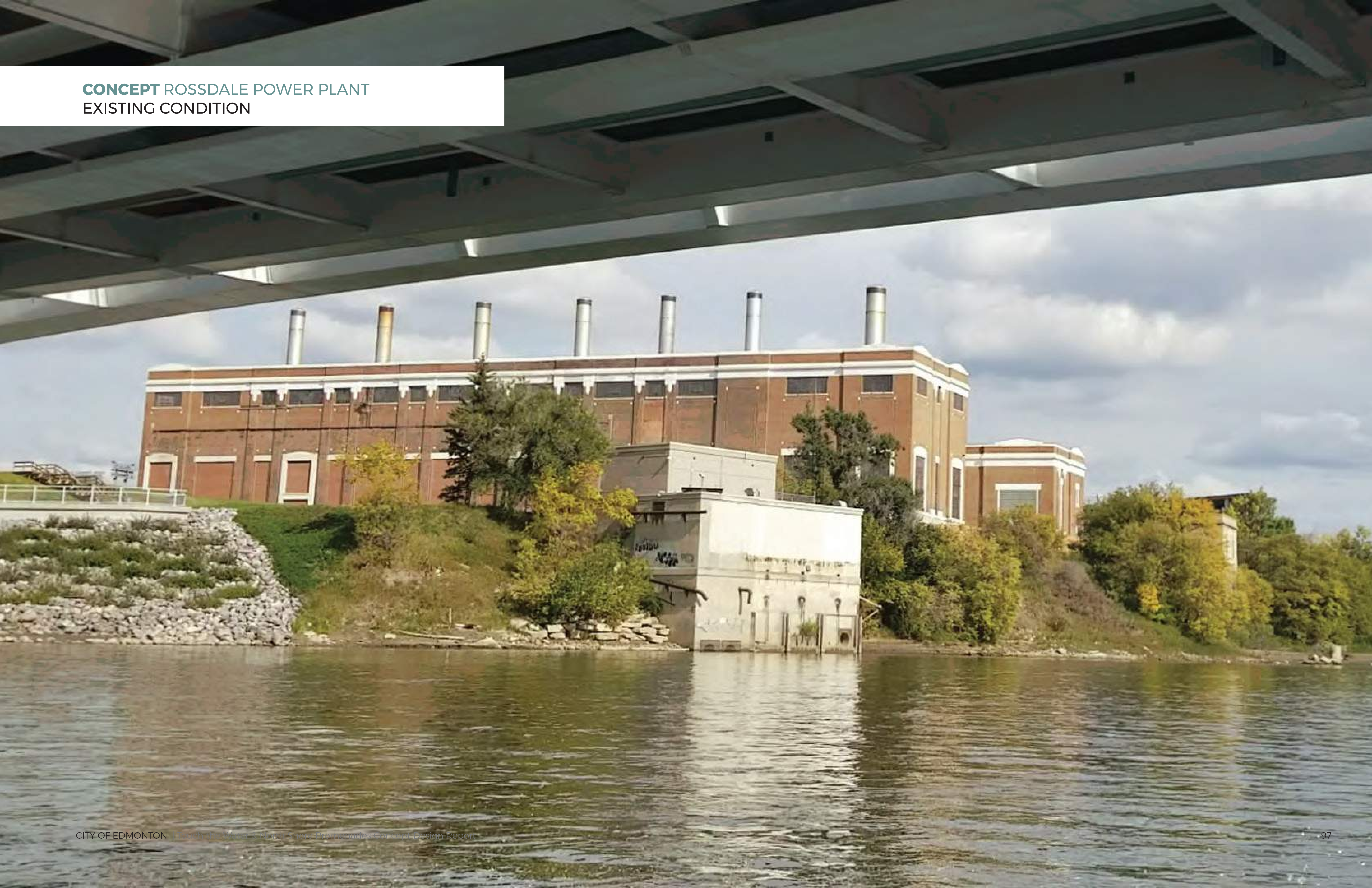
CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION

CONCEPT ROSSDALE POWER PLANT
AMENITIES

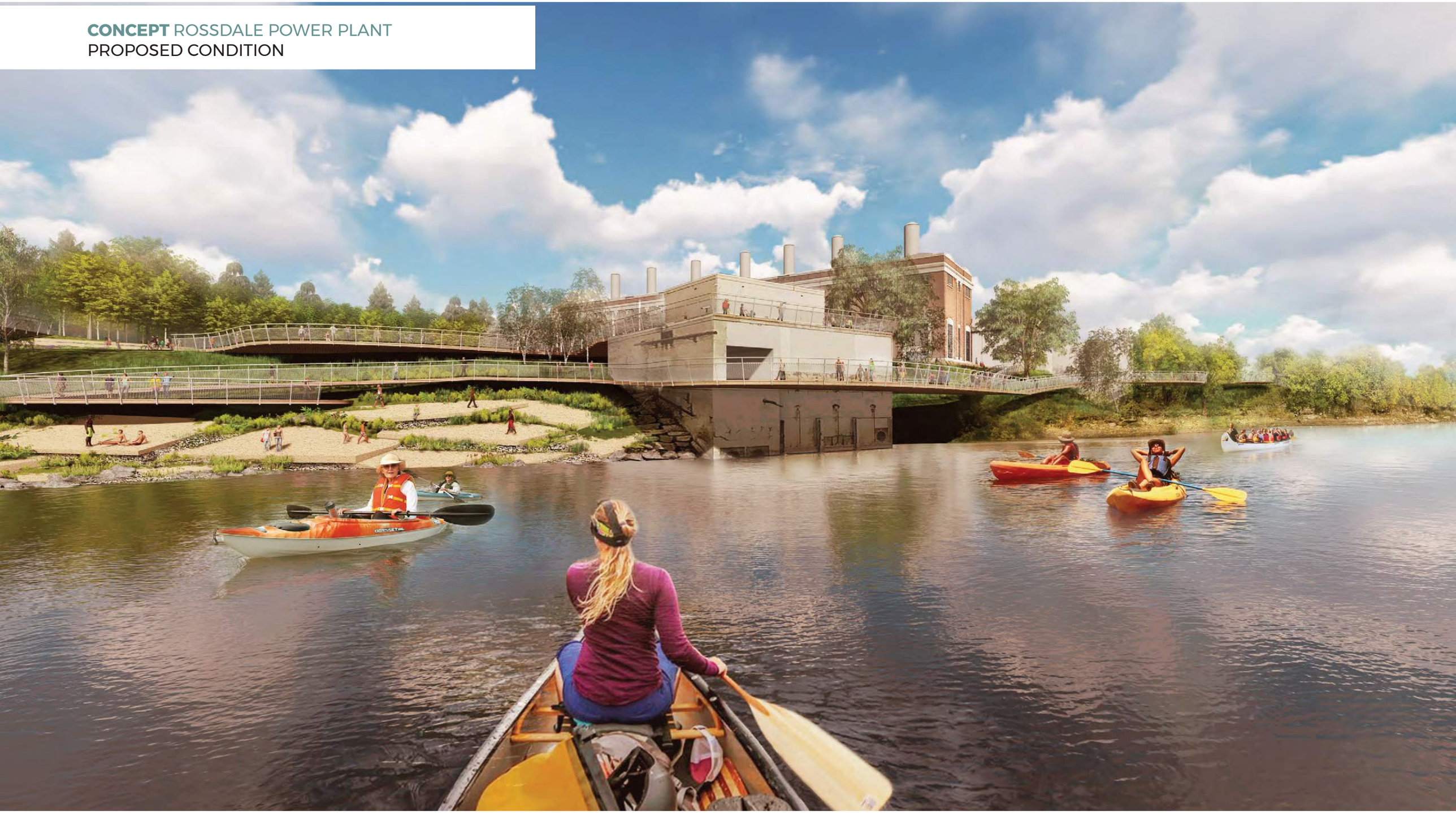
CIRCULATION

VEGETATION

CONCEPT ROSSDALE POWER PLANT
EXISTING CONDITION



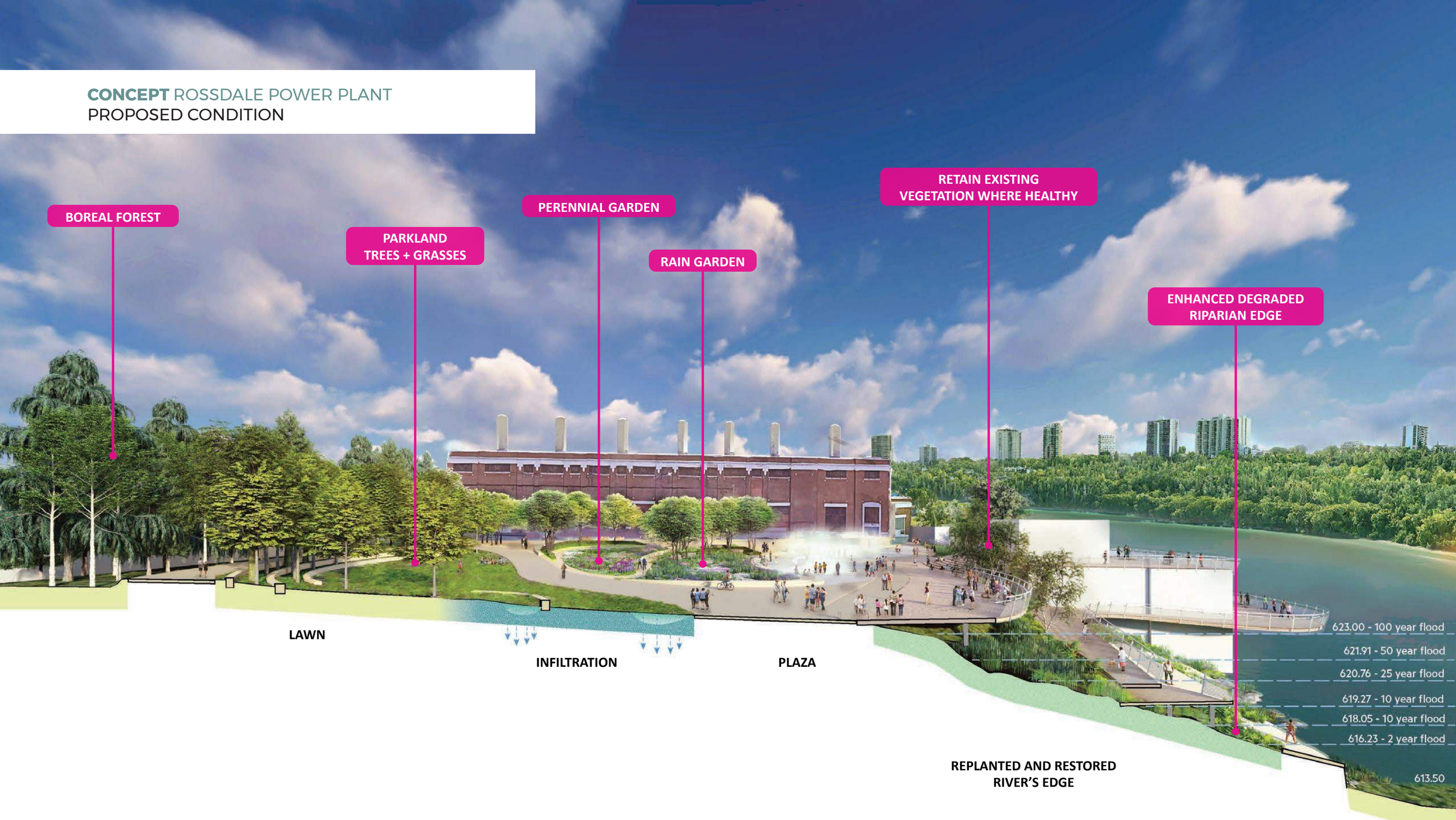
CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION



CONCEPT ROSSDALE POWER PLANT
EXISTING CONDITION

CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION

CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION



CONCEPT ROSSDALE POWER PLANT
EXISTING CONDITION

CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION

CONCEPT ROSSDALE POWER PLANT
EXISTING CONDITION

CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION

CONCEPT ROSSDALE POWER PLANT
EXISTING CONDITION

CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION

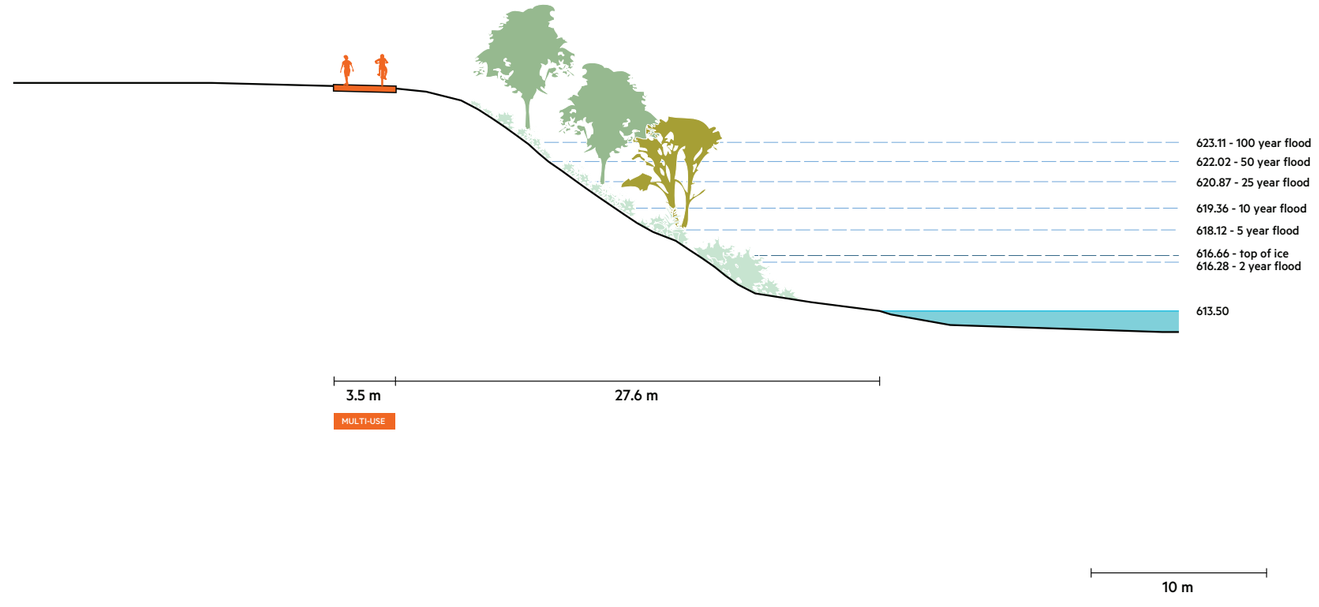
CONCEPT ROSSDALE POWER PLANT
EXISTING CONDITION

CONCEPT ROSSDALE POWER PLANT
PROPOSED CONDITION

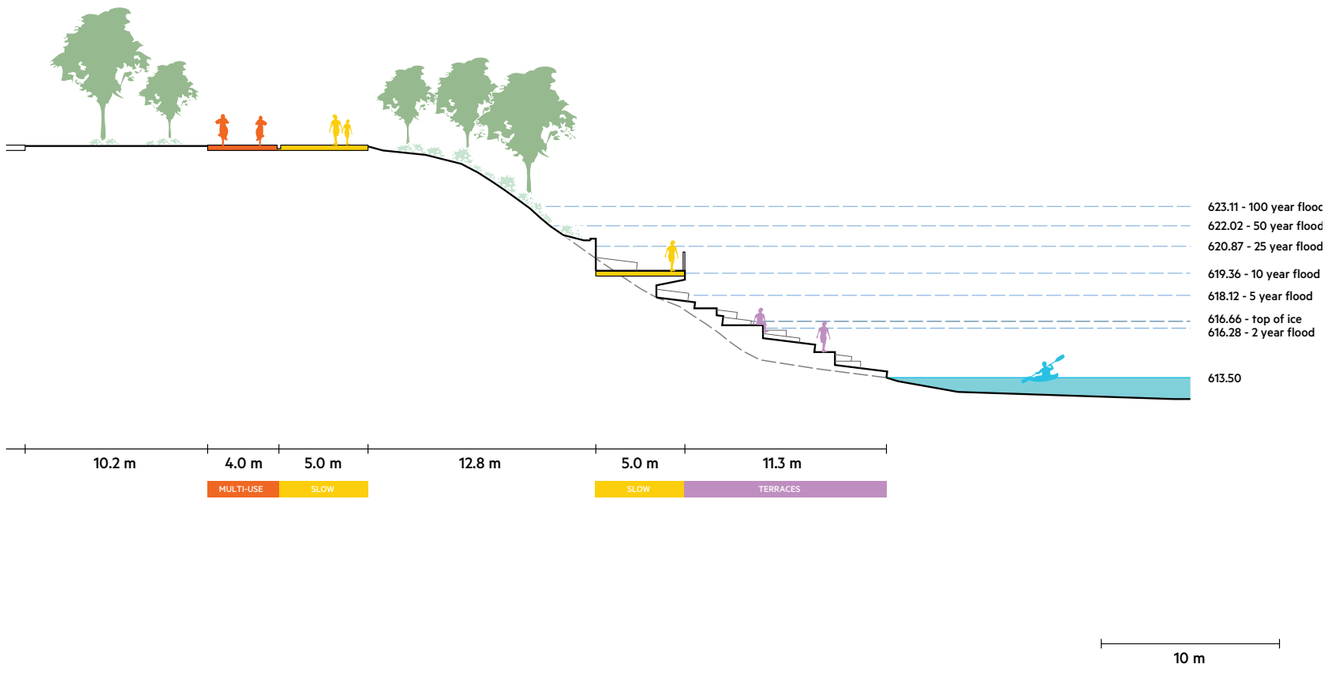
CONCEPT ROSSDALE POWER PLANT

PROPOSED PROMENADE WEST OF WALTERDALE BRIDGE

EXISTING CONDITION

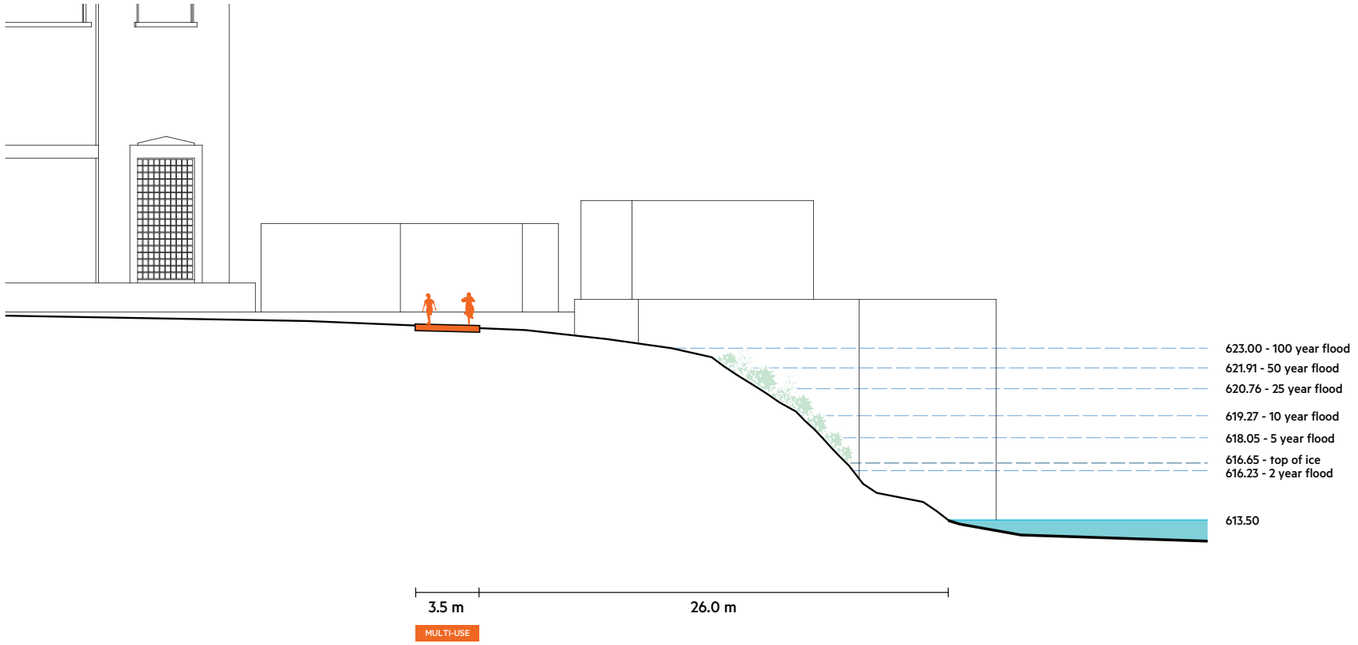


PROPOSED CONDITION



CONCEPT ROSSDALE POWER PLANT
PROPOSED PROMENADE

EXISTING CONDITION



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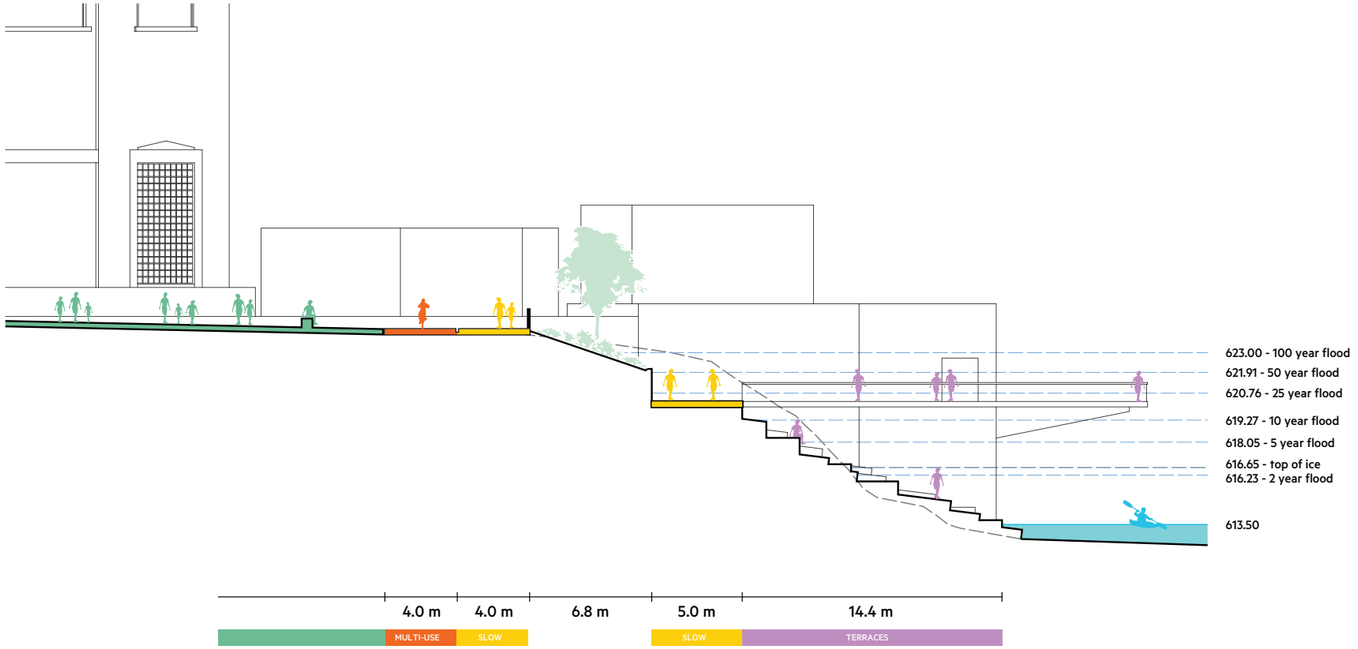
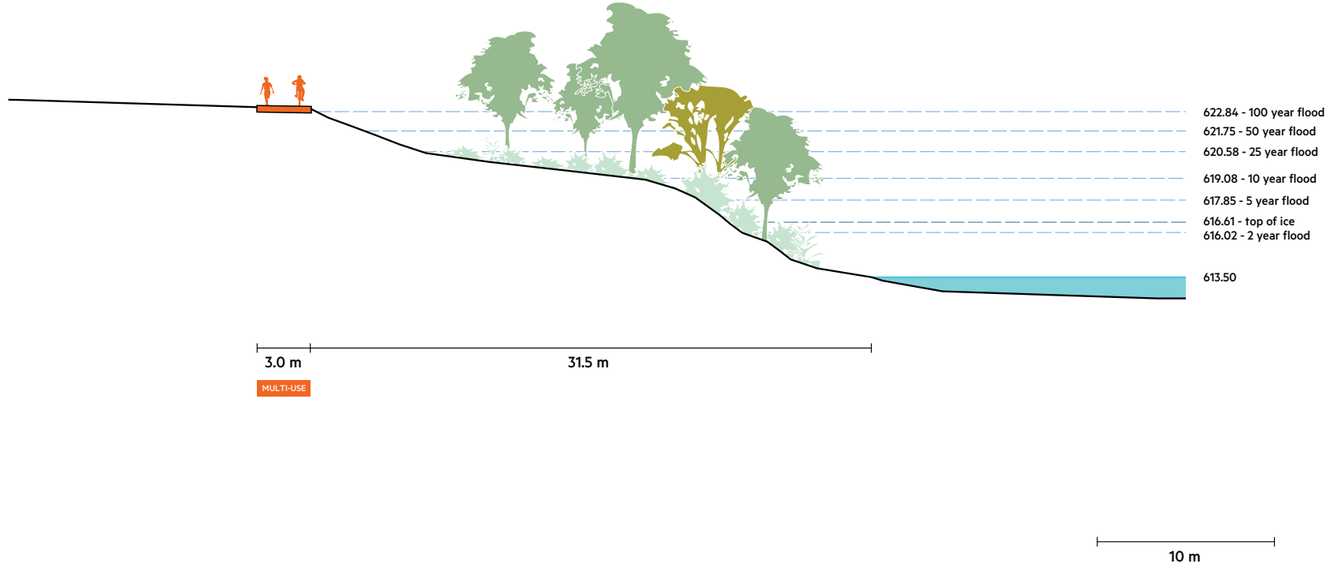


CONCEPT ROSSDALE POWER PLANT

PROPOSED PROMENADE AT EPCOR TREATMENT PLANT

EXISTING CONDITION



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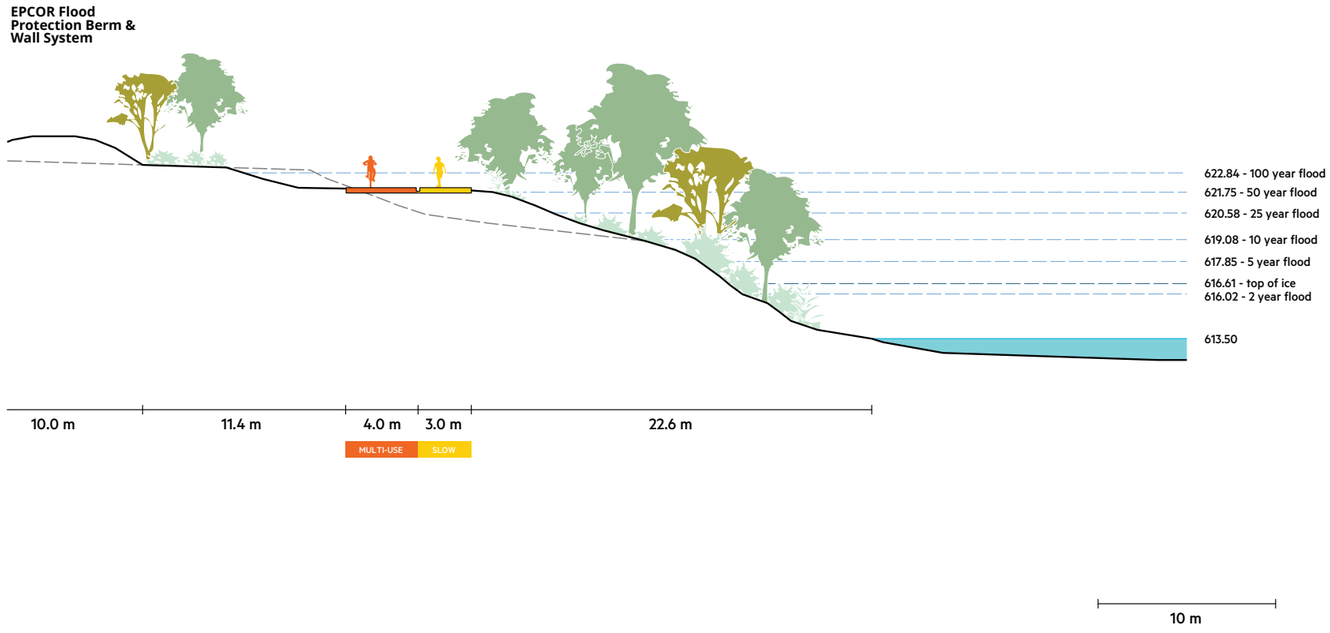


CONCEPT BEND

CONCEPT BEND
EXISTING CONDITION

CONCEPT BEND
PROPOSED CONDITION

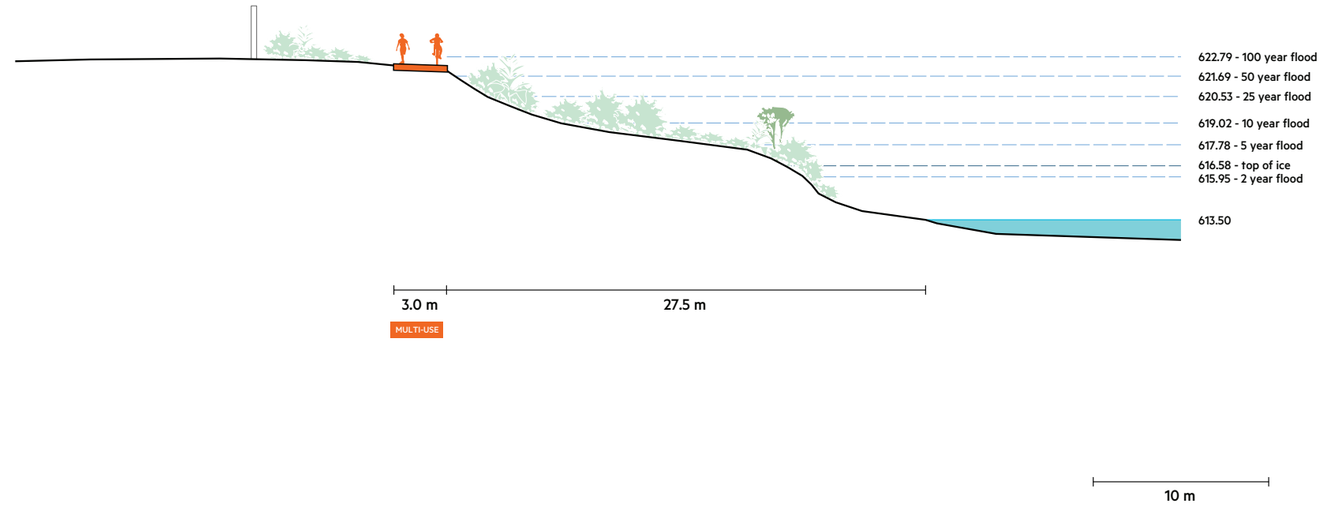
CONCEPT BEND
PROPOSED CONDITION

CONCEPT BEND
PROPOSED CONDITION

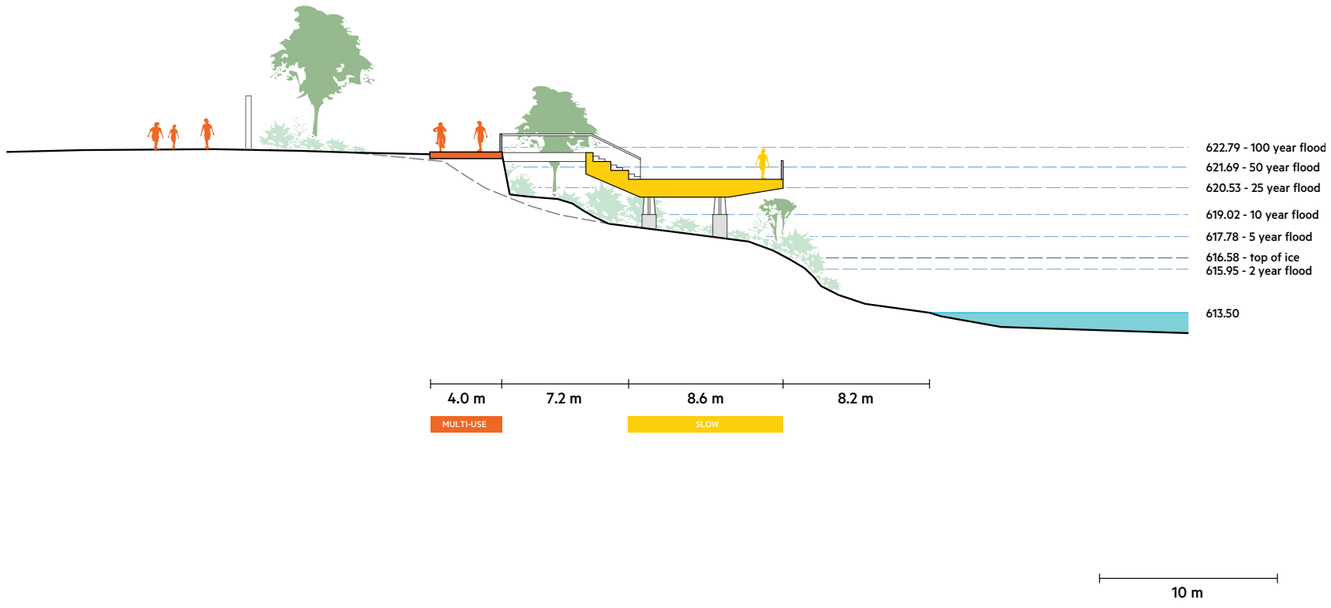
CONCEPT BEND
PROPOSED CONDITION

CONCEPT BEND
PROPOSED PROMENADE

EXISTING CONDITION



PROPOSED CONDITION



8.2 PREFERRED CONCEPT
ALIGNMENT WITH ADJACENT PROJECTS

Project development has been positioned to align with ConnectEdmonton and to contribute to the strategic goals of Healthy City, Urban Places, and Climate Resilience. The project is part of Edmonton's Green and Blue Network and is located within the Centre City node as identified by the City Plan. The concept design aligns with, and proposes advancement of, several City Plan Big City Moves including Greener as We Grow, A Community of Communities, and Catalyze and Converge.

The concept design proposes site-specific improvements in alignment with the active transportation network envisioned by the City Plan and the Bike Plan. Proposed improved crossings along River Valley Road support Vision Zero and the Safe Mobility Strategy. Opportunities to provide Edmontonians with a safe and accessible active transportation system supports Pathway 3: Low Carbon City and Transportation of the Energy Transition Strategy. Additionally, the ecological restoration and remediation proposed within the preferred concept design contribute to the Energy Transition Strategy's Pathway 4: Carbon Capture and Nature Based Solutions goals and strategies.

The Touch the Water Promenade project is identified in the River Crossing Business Plan as a catalyst to support the long-term redevelopment of Rossdale, and the central component of the River Crossing area's open space network. The River Crossing Heritage Interpretive Plan will guide all heritage interpretive elements and storytelling features incorporated in the project.

The concept design considers alignment, connections and access to a significant number of adjacent projects. This includes the Rossdale Power Plant Advanced Assessment and Priority Rehabilitation, EPCOR Rossdale Water Treatment Plant Flood Protection, and the private Gondola initiative projects in the Touch the Water Promenade project area. The concept design for the North Shore Promenade includes design flexibility to ensure future integration with the outcomes of the forthcoming High Level Bridge Renewal and potential High Level Line initiative, alignment with future Legislature Grounds planning through ongoing engagement with Alberta Infrastructure, and promoting a shared vision for accessibility through the project area with the renewal of River Valley Road in the long term.

Refer to Section 3.6 for detailed descriptions of adjacent projects.

8.3 PREFERRED CONCEPT
PHASING & PARTNERSHIPS

Currently the Touch the Water project has retained funding until the end of the Preliminary Design phase, while the North Shore project has retained funding until the end of the Concept phase. The implementation of subsequent phases will be primarily dependent on funding availability. As such, it is likely that the project may be developed following a phased approach as funding becomes available.

Although the combined promenade project is rooted in the idea of creating a single, continuous riverfront experience, the scale and variety of the project likely demands that the implementation of the design development and construction will require a sequential, phased approach. There is flexibility in the design for how this phasing of subsequent portions can occur. A phasing approach should consider funding constraints, the interim user experience, construction efficiencies and construction disturbances. Further costing analysis would take place in the preliminary design phase of the North Shore Promenade to assess and determine a recommended phasing strategy. Some of these phasing scenarios can generally be described as follows, but each is open to more specific adjustments to increments/timelines.

1. “East to West” Phasing
The implementation is broken into contiguous, linear segments, starting with Rossdale at the East end. The number of segments is flexible and would depend on a variety of factors including funding. This has the advantage of creating an unbroken stretch of renewed public realm, however it may not offer as much flexibility to prioritize segments outside of the geographic order.

“East to West” Phasing would first upgrade and add significant amenity to the Rossdale neighbourhood. As the Rossdale neighhourhood and surrounding roadways are undergoing renewal, and the Rossdale Power Plant is potentially undergoing rehabilitation, prioritizing the Rossdale area could reduce construction disturbance and maximize efficiency through coordinated site logistics. This implementation strategy helps to improve and upgrade access to the main activity node and the broader river valley network as the network continues East throughout the city. As funding allowed, segments of the project, moving west, would be developed in geographical order. This would ensure reduce construction disturbance to newly developed segments of the project, while providing continuity of the completed project segments, ensuring all developed project segments were easily accessible.

2. “Ends to Middle” Phasing
The Delivery of Rossdale at the east end of the site would be followed by the delivery of the improvements to Government House Park and the daylighting of Groat Creek. These two anchors would then be incrementally connected.

This implementation strategy focuses attention on two major activity nodes which bookend the project. This implementation strategy prioritizes construction of the Rossdale area which will act as a primary hub within the project. This area has a strong connection to the neighbourhood of Rossdale, south side of the river, and the river valley network to the east, anchoring the project to the surrounding urban realm. This implementation allows for a lengthened period of ecological growth at Government House and Groat Creek during the overall project schedule, while connecting the project to the river valley network and broader urban fabric to the west. Subsequent phases would build between these two bookends in a linear fashion as to reduce construction disturbances to previously completed project segments.

3. “River Edge to Inland Nodes” Phasing
This approach prioritizes the continuous pathways along the riverfront. Although it is assumed that the Rossdale gathering space adjacent to the power plant will be part of the initial phase, the improvements at Government House Park and High Level Bridge hill would follow. Additionally, the river edge could be segmented and implemented in pieces.

“River Edge to Inland Nodes” Phasing improvements are distributed throughout the project site, focusing on trails and nodes. Upgrades to existing trails could be strategically implemented to address the highest priority safety and maintenance concerns. Gathering areas along the trails should be constructed prior to the trail improvements.

4. “Non-linear” Phasing
This flexible phasing approach would give less emphasis to a geographical strategy, and instead would base implementation on a needs/benefits assessment of which portions or segments in order to establish a priority sequence.

This implementation strategy would be distributed through the project site and would prioritize safety, connectivity and maintenance concerns. This strategy may prioritize improvements in conjunction with surrounding enhancement projects.

Partnerships are recommended to support the implementation of Touch the Water and North Shore Promenade projects. Opportunity for strategic partnership could include alignment with surrounding projects such as the High Level Line, River Crossing Plan, EPCOR & DFO at Groat Creek, River Valley Road Renewal, among others. These partnerships may allow for grant access, while the ability to align construction implementation could provide beneficial cost savings to all projects.

Further costing analysis would take place in the preliminary design phase to assess and determine a recommended phasing strategy.

9.0 APPENDIX

9.1 APPENDIX
GATEWAYS & THREADS CONCEPT OPTIONS

The following pages elaborate on the Gateways and Threads described in Section 7.1.


Legislature Building
Royal Glenora Club
Victoria Park Gateway
Victoria Park
High Level Bridge
LRT Bridge
University of Alberta
North Saskatchewan River
Government House
Groat Bridge

GATEWAYS GROAT GATEWAY
EXISTING CONDITION

GATEWAY LOCATION

GOVERNMENT HILL

PARKING LOT

STORMWATER TREATMENT FACILITY

LAWN

GROAT ROAD NW

PICNIC TABLES

MULTI-USE TRAIL

PUBLIC RESTROOM

PARKING LOT

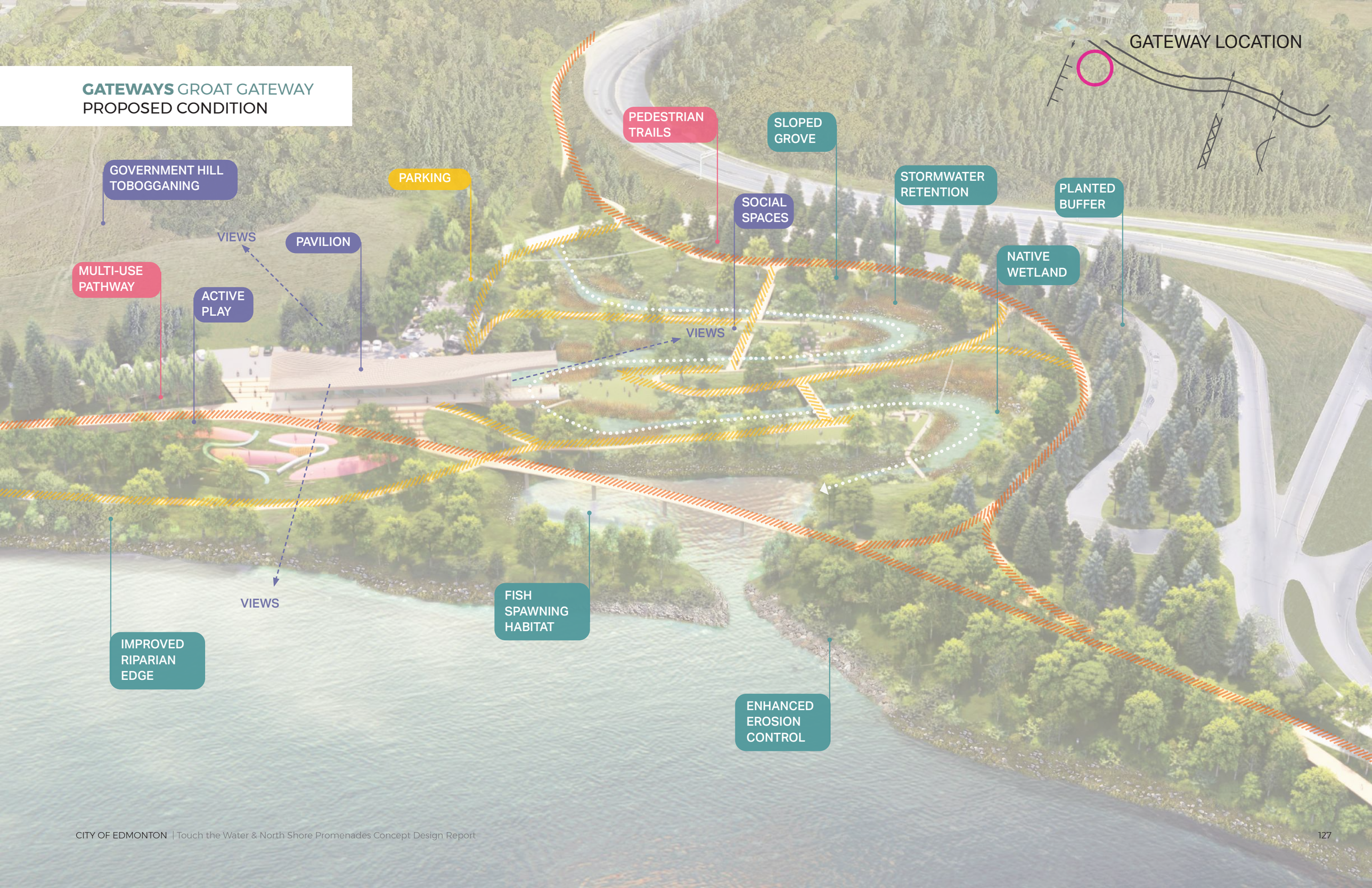
RIVER VALLEY RD NW

DRAINAGE OUTFALL

VEGETATED RIVER BANK

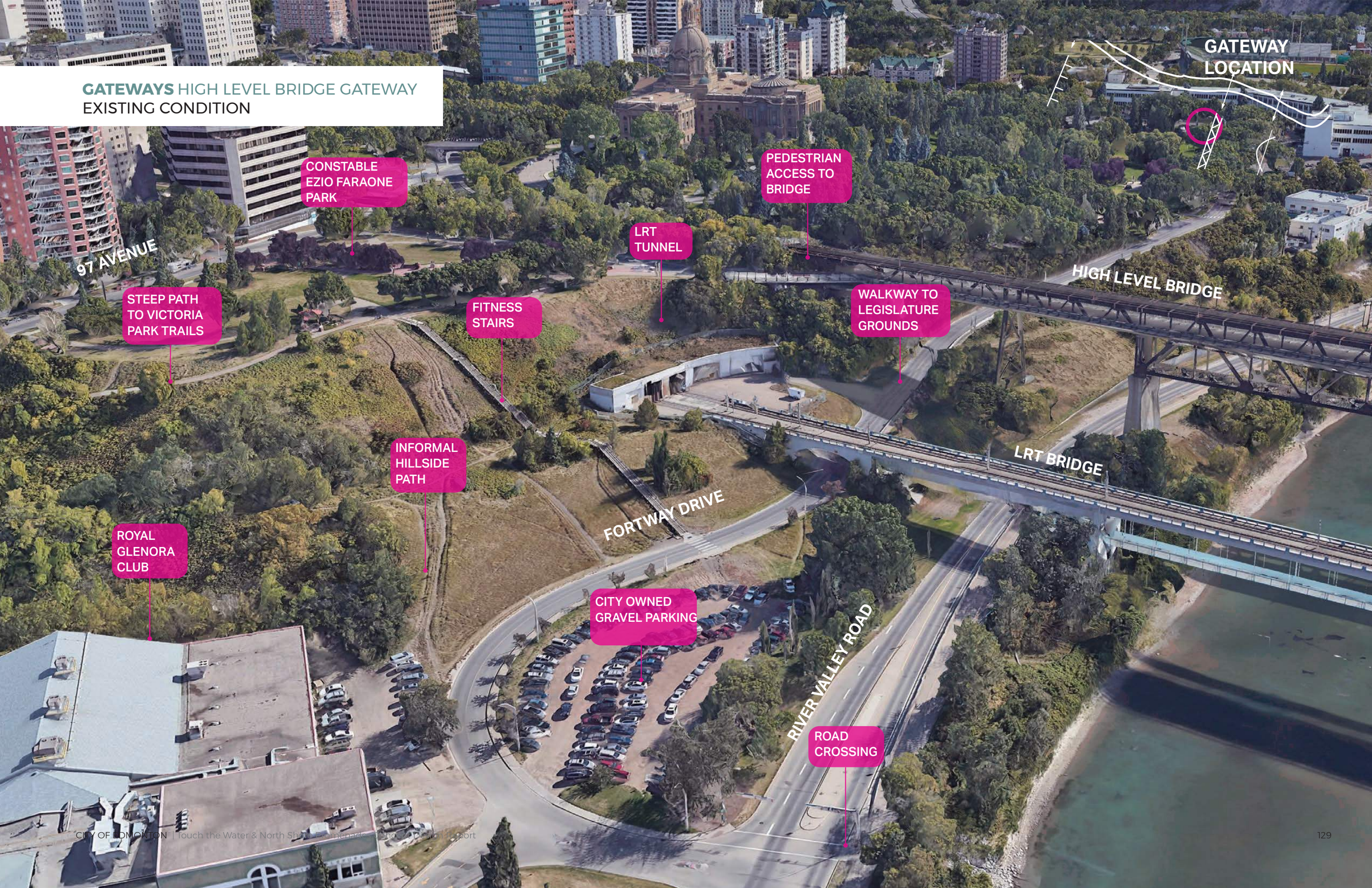
GATEWAYS GROAT GATEWAY
PROPOSED CONDITION

GATEWAYS GROAT GATEWAY
PROPOSED CONDITION



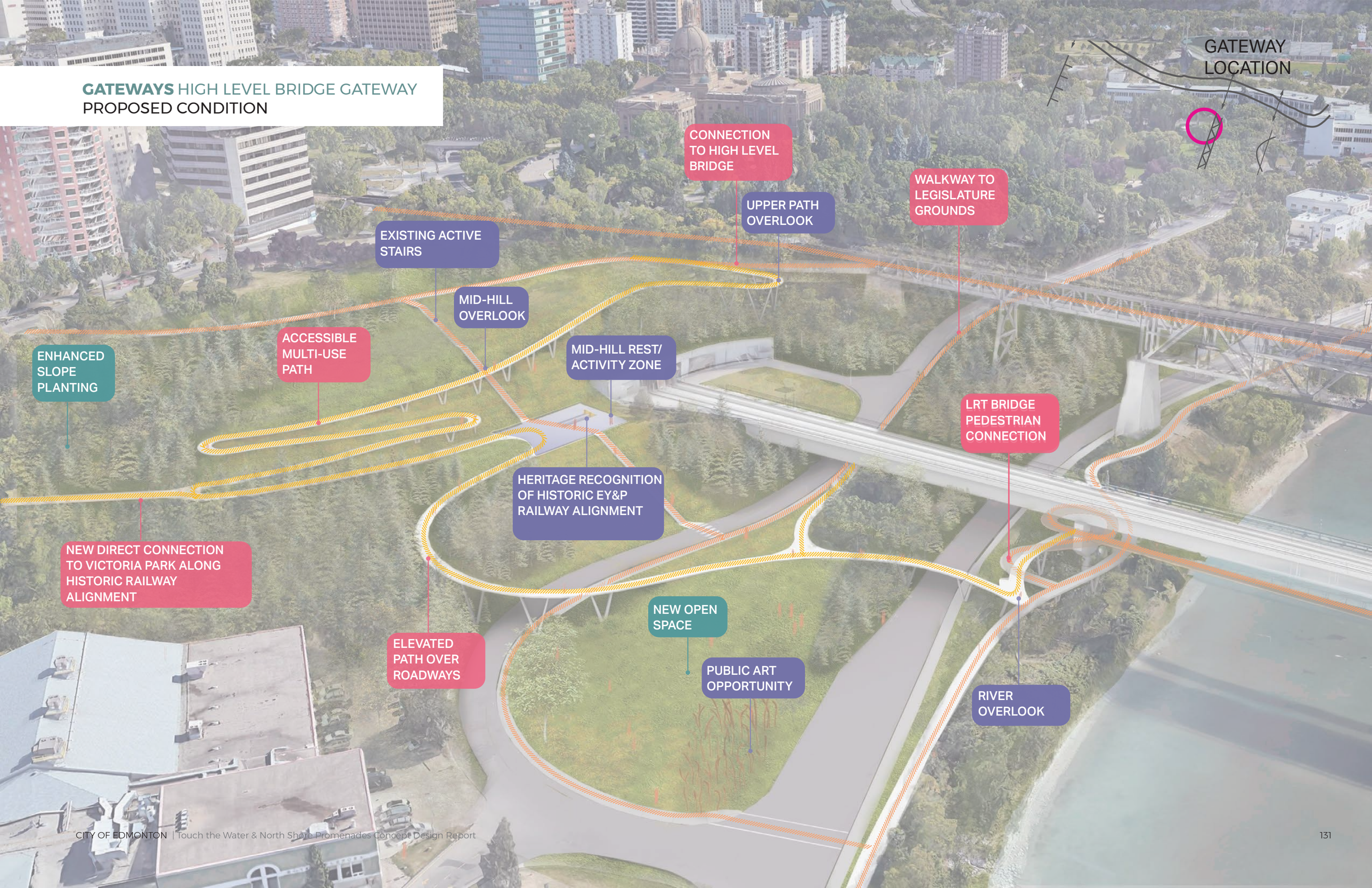
GATEWAYS HIGH LEVEL BRIDGE GATEWAY

GATEWAYS HIGH LEVEL BRIDGE GATEWAY
EXISTING CONDITION



GATEWAYS HIGH LEVEL BRIDGE GATEWAY
PROPOSED CONDITION

GATEWAYS HIGH LEVEL BRIDGE GATEWAY
PROPOSED CONDITION




Legislature Building
Royal Glenora Club
Victoria Park Gateway
Victoria Park
High Level Bridge
LRT Bridge
University of Alberta
North Saskatchewan River
Government House
Groat Bridge

GATEWAYS ROSSDALE GATEWAY
EXISTING CONDITION

GATEWAYS ROSSDALE GATEWAY
PROPOSED CONDITION

GATEWAYS ROSSDALE GATEWAY
PROPOSED CONDITION

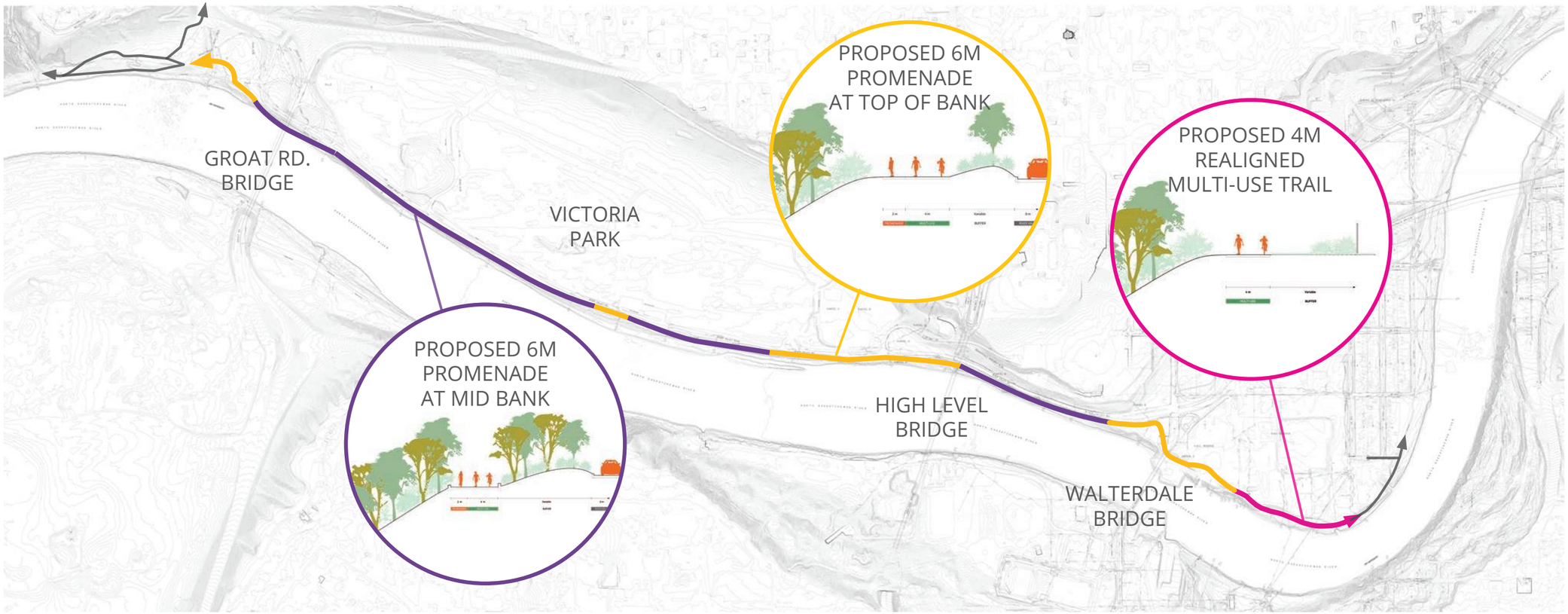
EXISTING TRAIL CONDITION

LEGEND

4M MULTI-USE TRAIL
TOP OF BANK

3M MUTI-USE TRAIL
TOP OF BANK

PROPOSED TRAIL CONDITION



LEGEND

- EXISTING 3M MUTI-USE TRAIL TOP OF BANK
- PROPOSED 4M REALIGNED MULTI-USE TRAIL
- PROPOSED 6M PROMENADE AT TOP OF BANK
- PROPOSED 6M PROMENADE AT MID BANK

0 100 200 500 1000

THE TERRACES

Government House

Legislature Building

Royal Glenora Club

Victoria Park

High Level Bridge

LRT Bridge

University of Alberta

North Saskatchewan River

Groat Bridge

THREADS THE TERRACES
EXISTING CONDITION

THREADS THE TERRACES
PROPOSED CONDITION

THREADS THE TERRACES
PROPOSED CONDITION

THE HITCH

Government House

Groat Bridge

Victoria Park

Royal Glenora Club

Legislature Building

LRT Bridge

High Level Bridge

University of Alberta

North Saskatchewan River

THREADS THE HITCH
EXISTING CONDITION

THREADS LOCATION

PATH ALONG CONCRETE ROAD BARRIER

TIGHT ROAD CROSSING

SHARED-USE PATH NEXT TO ROADWAY

GROAT ROAD

GROAT BRIDGE

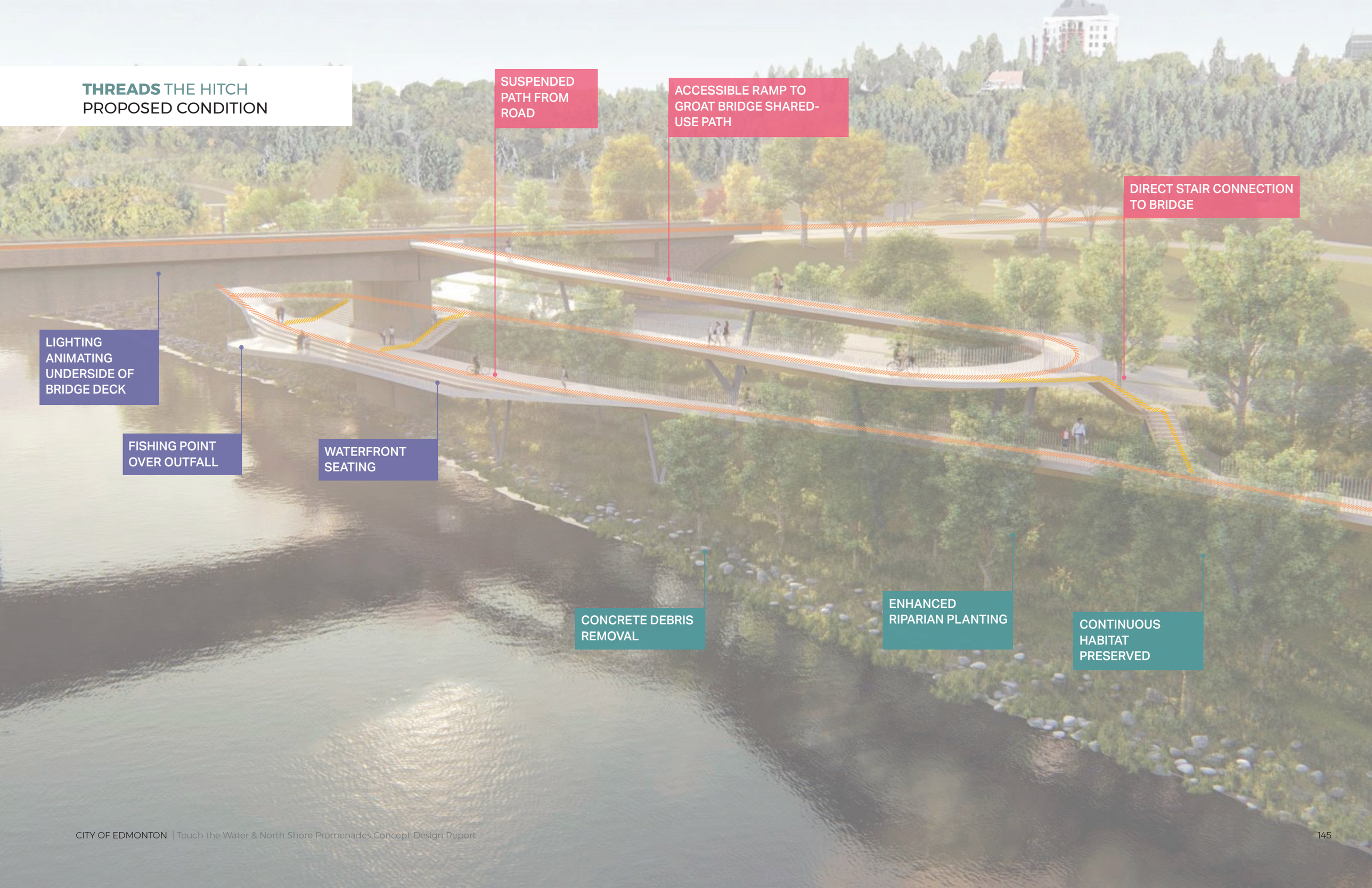
RIVER VALLEY ROAD

BROKEN CONCRETE DEBRIS ALONG BANK

STEEP BANK WITH SPARSE TREES

THREADS THE HITCH
PROPOSED CONDITION

THREADS THE HITCH
PROPOSED CONDITION

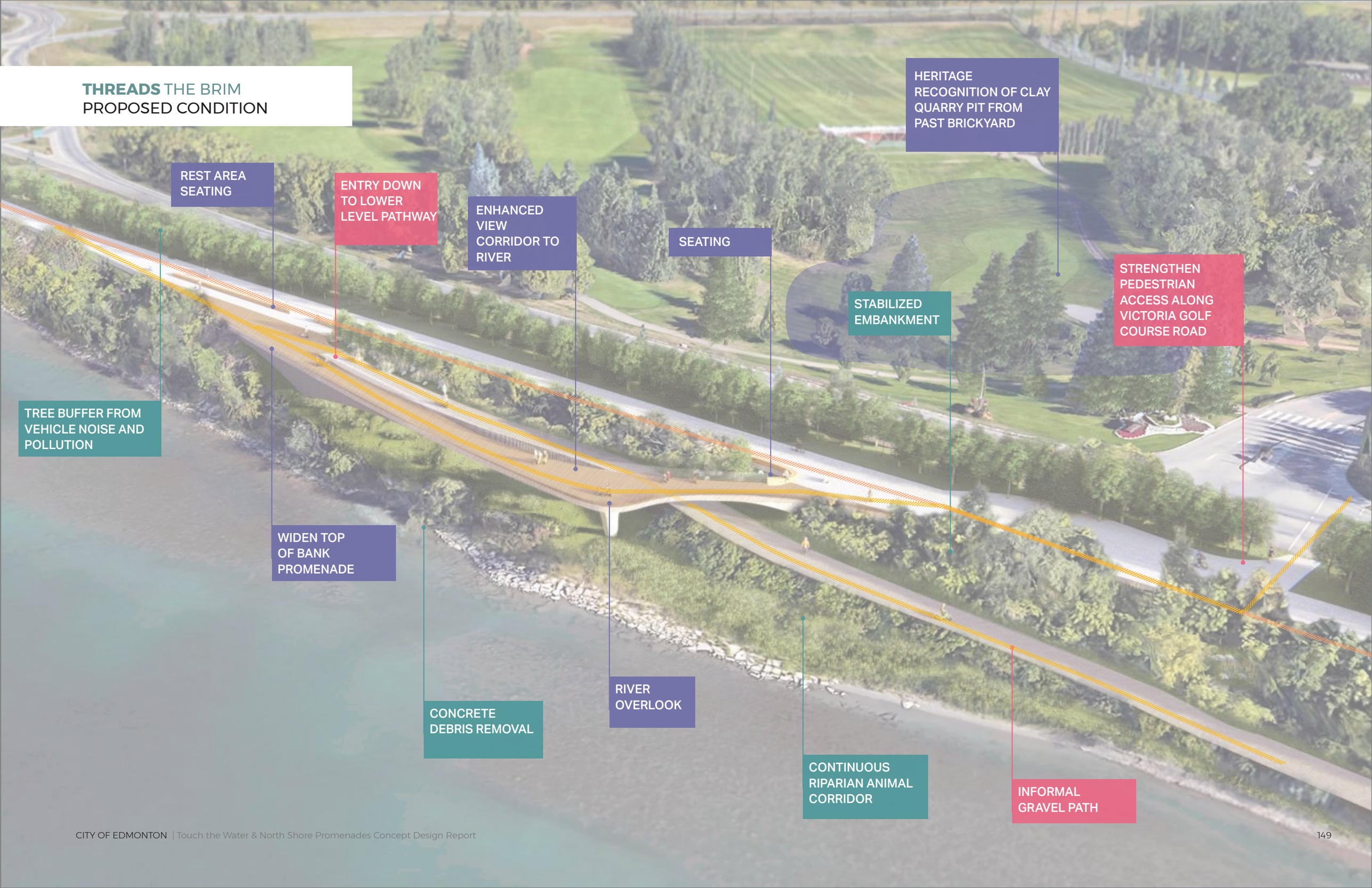



THE BRIM
Legislature Building
Royal Glenora Club
Victoria Park
High Level Bridge
LRT Bridge
University of Alberta
North Saskatchewan River
Government House
Groat Bridge

THREADS THE BRIM
EXISTING CONDITION

THREADS THE BRIM
PROPOSED CONDITION

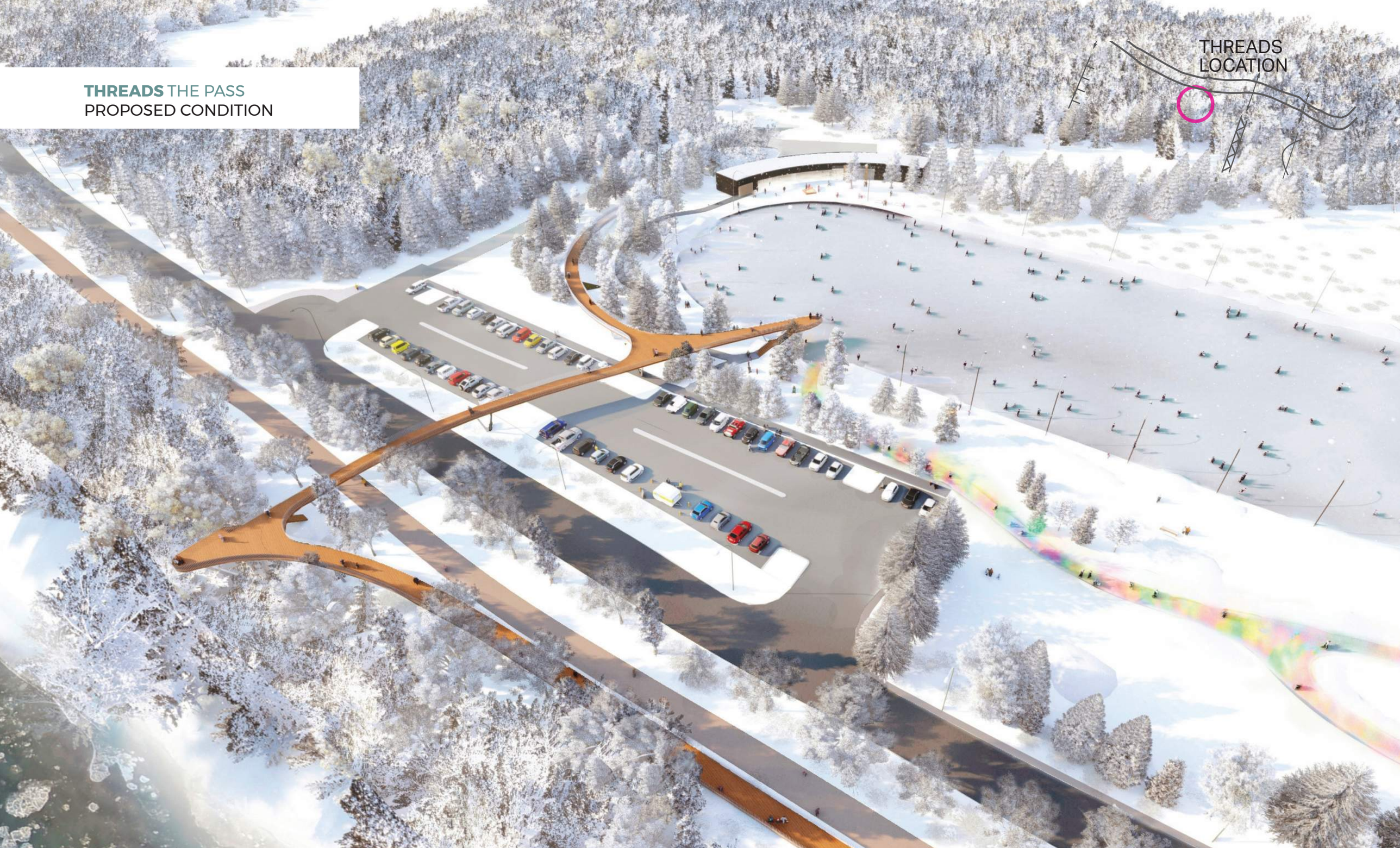
THREADS THE BRIM
PROPOSED CONDITION



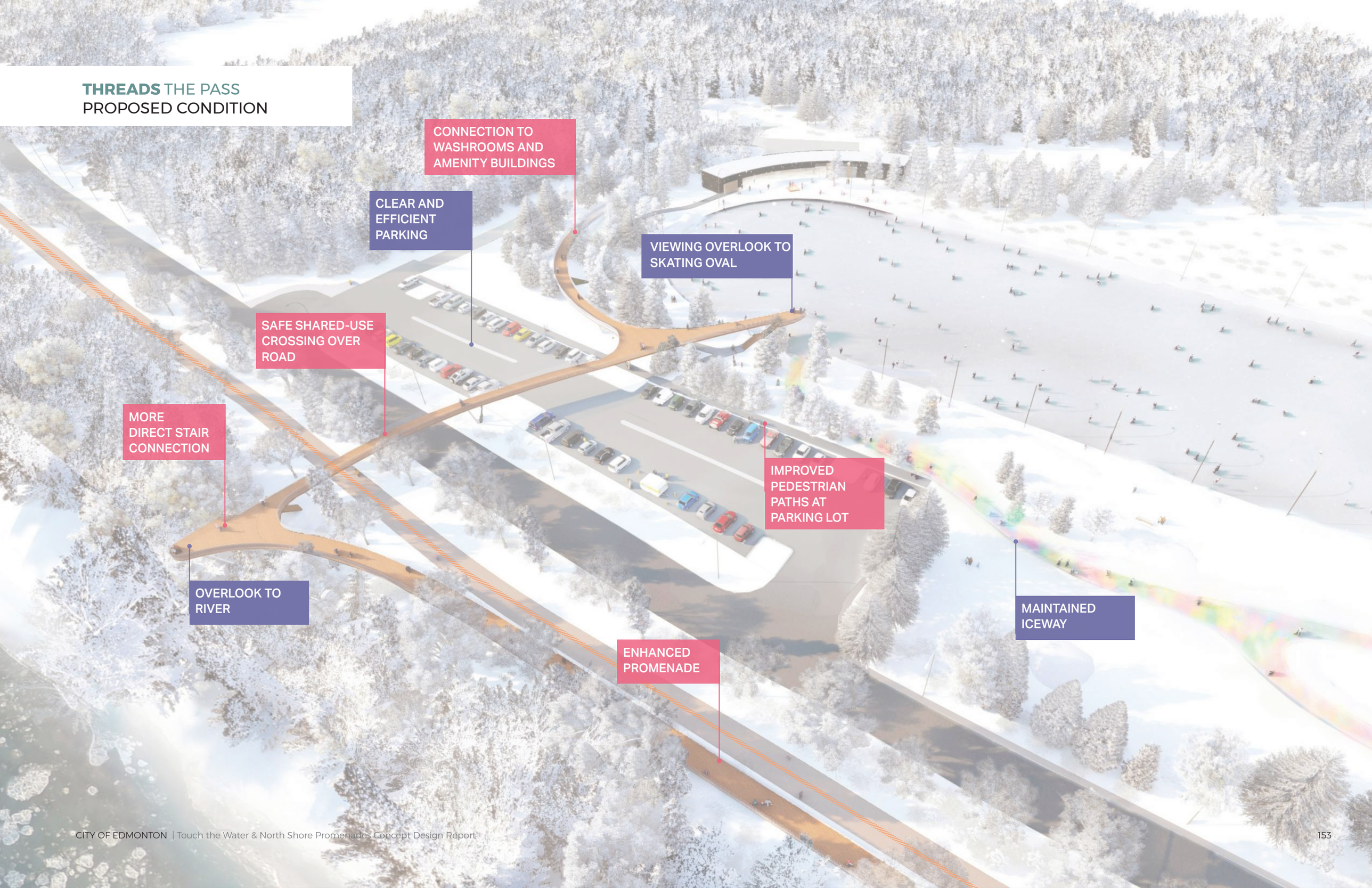

THE PASS
Legislature Building
Royal Glenora Club
Victoria Park
High Level Bridge
LRT Bridge
University of Alberta
North Saskatchewan River
Government House
Groat Bridge

THREADS THE PASS
EXISTING CONDITION

THREADS THE PASS
PROPOSED CONDITION



THREADS THE PASS
PROPOSED CONDITION



THE DECK

Legislature Building

Royal Glenora Club

Victoria Park

High Level Bridge

LRT Bridge

University of Alberta

North Saskatchewan River

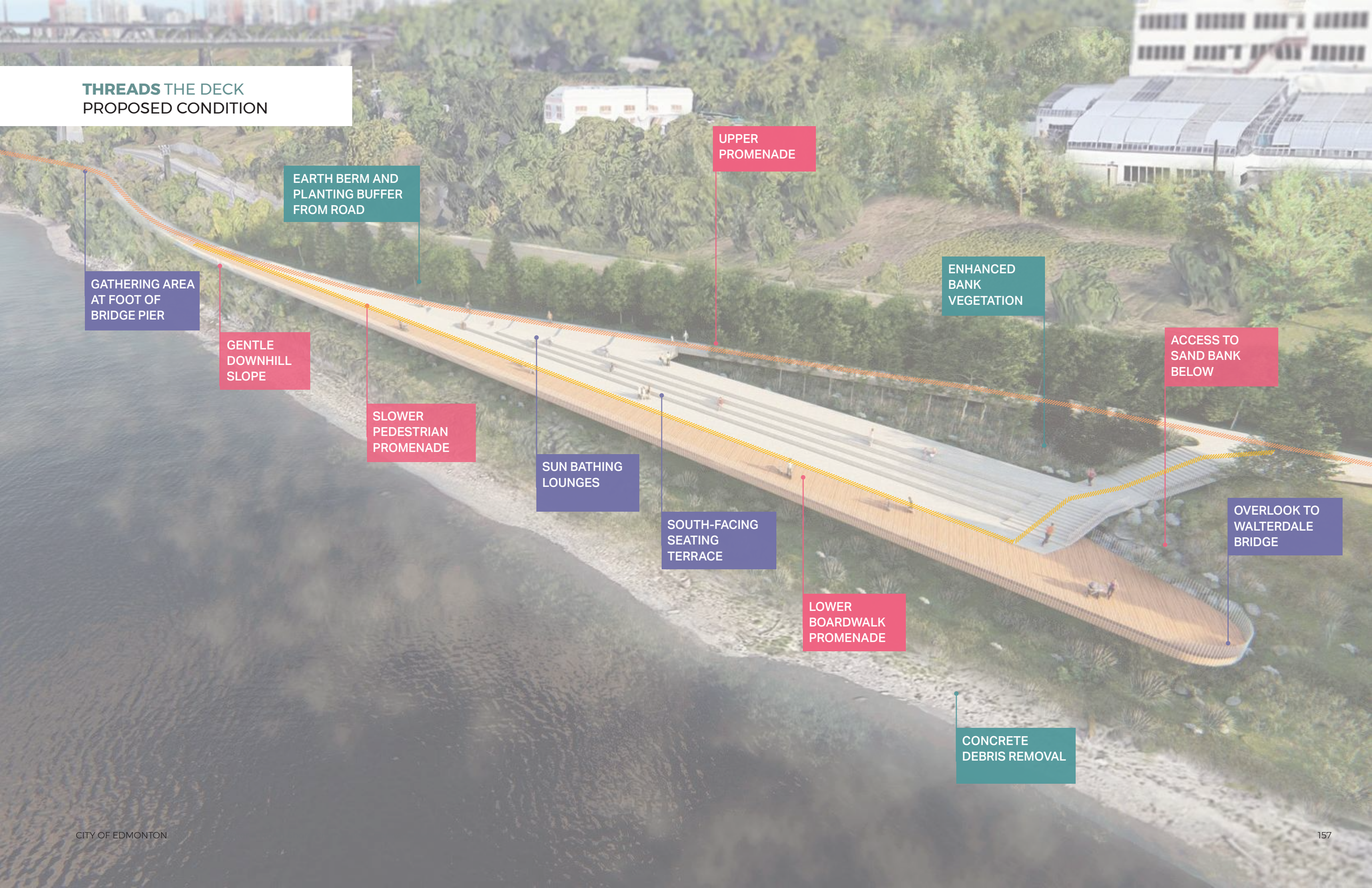
Government House

Groat Bridge

THREADS THE DECK
EXISTING CONDITION

THREADS THE DECK
PROPOSED CONDITION

THREADS THE DECK
PROPOSED CONDITION

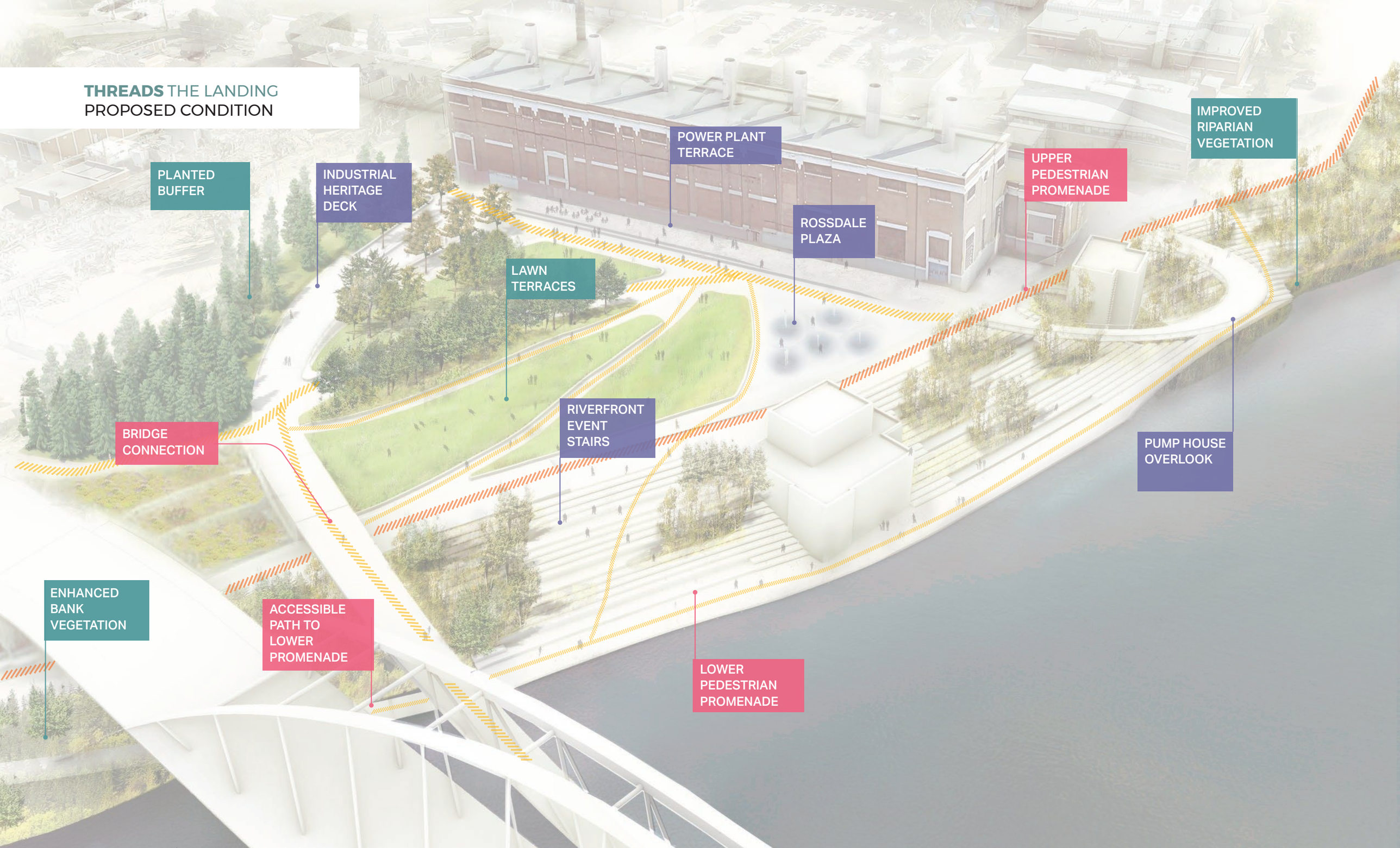



THE LANDING
Legislature Building
Royal Glenora Club
Victoria Park
High Level Bridge
LRT Bridge
University of Alberta
North Saskatchewan River
Government House
Groat Bridge

THREADS THE LANDING
EXISTING CONDITION

THREADS THE LANDING
PROPOSED CONDITION

THREADS THE LANDING
PROPOSED CONDITION



THE BEND

Legislature Building

Royal Glenora Club

Victoria Park

High Level Bridge

LRT Bridge

University of Alberta

North Saskatchewan River

Government House

Groat Bridge

THREADS THE BEND
EXISTING CONDITION

THREADS LOCATION

SCARCE TREE CANOPY ABOVE TRAIL

UTILITY INFRASTRUCTURE AND PARKING LOTS

OUTFALL

101 STREET IN ROSSDALE

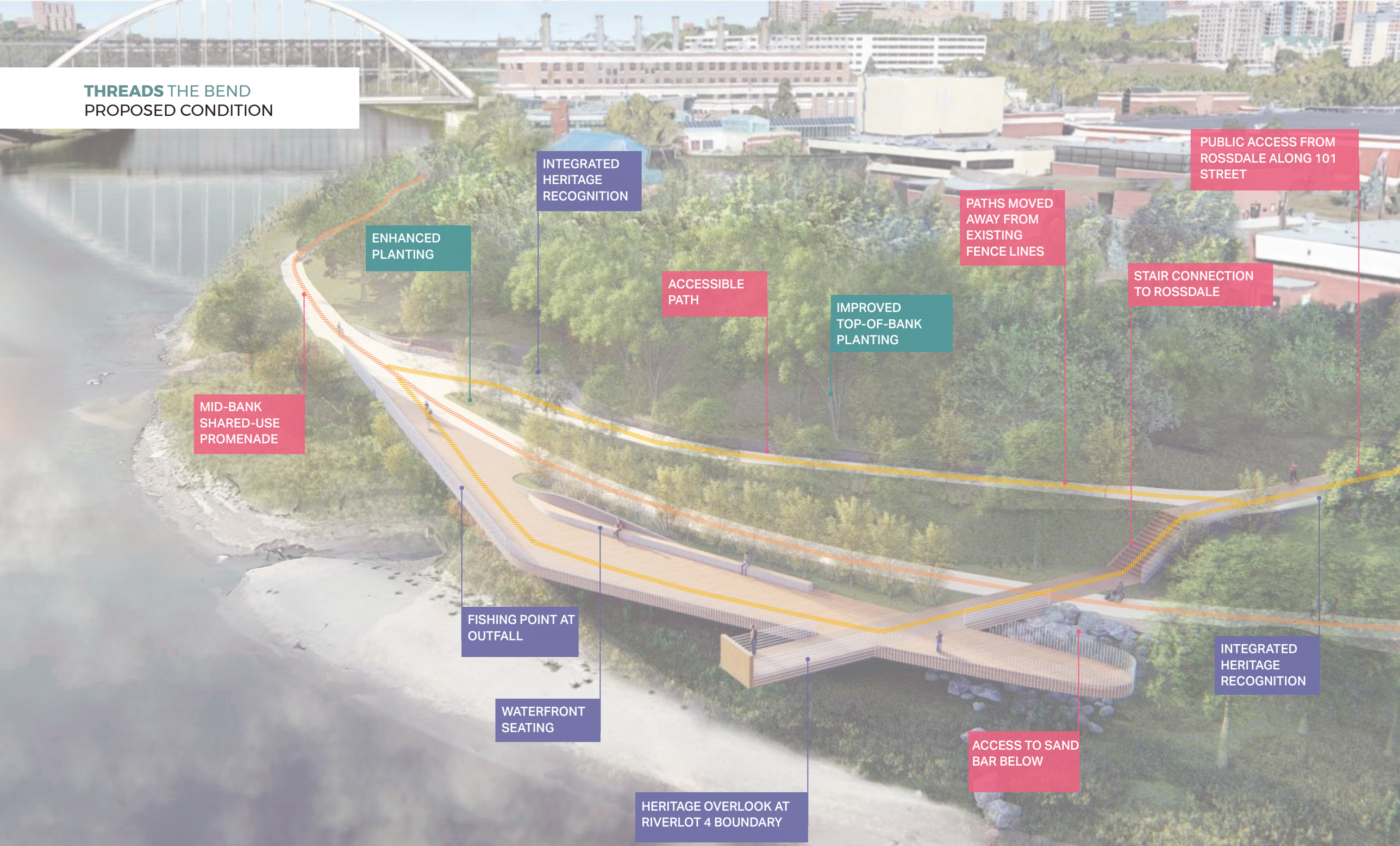
SHARED-USE PATH RUNS ALONG FENCE LINE

OUTFALL

SANDY DEPOSITS ALONG RIVER EDGE

THREADS THE BEND
PROPOSED CONDITION

THREADS THE BEND
PROPOSED CONDITION



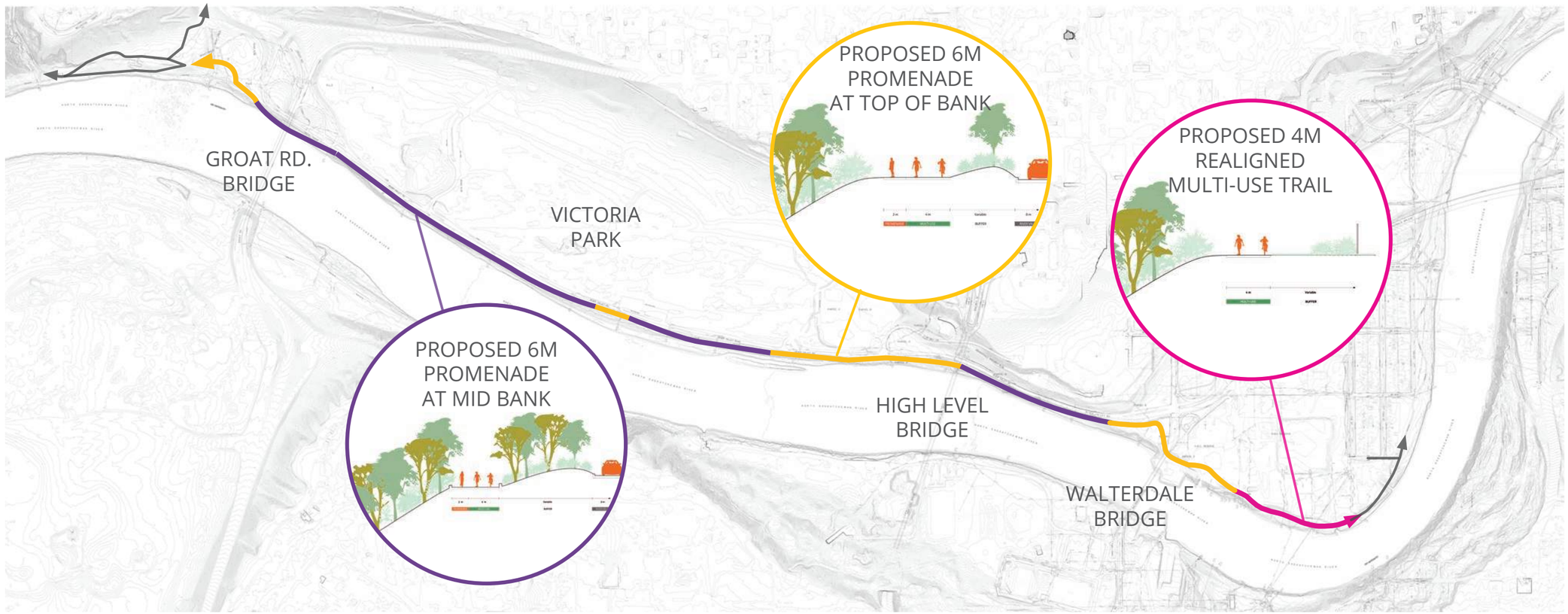
EXISTING TRAIL CONDITION

LEGEND

4M MULTI-USE TRAIL
TOP OF BANK

3M MUTI-USE TRAIL
TOP OF BANK

PROPOSED TRAIL CONDITION



LEGEND

- EXISTING 3M MUTI-USE TRAIL TOP OF BANK
- PROPOSED 4M REALIGNED MULTI-USE TRAIL
- PROPOSED 6M PROMENADE AT TOP OF BANK
- PROPOSED 6M PROMENADE AT MID BANK

0 100 200 500 1000

9.2 APPENDIX TECHNICAL STUDIES

Relevant technical studies are available for review at **edmonton.ca/touchthewater**