

## REPORT

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### City of Edmonton

### Rainbow Valley Bridges Terwillegar Drive Stage 2 Upgrades Site Location Study 2021-3981



SEPTEMBER 2021

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## EXECUTIVE SUMMARY

The City of Edmonton proposes to construct a new pedestrian bridge over Whitemud Creek, as part of the Terwillegar Drive Stage 2 project. There is currently a pedestrian sidewalk on the westbound bridge over Whitemud Creek; however, it will be removed when the east and westbound bridges are expanded to accommodate four lanes of traffic in each direction. The new pedestrian bridge meets numerous goals and objectives under the following City of Edmonton plans and policies:

- Natural Area Systems Policy C531;
- Breathe: Edmonton's Green Network Strategy;
- Ribbon of Green SW + NE;
- ConnectEdmonton: Edmonton's Strategic Plan 2019-2028;
- The Way We Green, Edmonton's Environmental Strategic Plan;
- The Way We Live, Edmonton's People Plan; and
- For the Love of Winter, WinterCity Strategy Implementation Plan.

The pedestrian bridge will provide a safer and quieter user experience as it will be much wider than the previous sidewalk, accessible at road grade, and completely separate from the traffic on the other bridges. Whitemud Creek and Ravine provide important habitat for wildlife in the area. During design and construction, mitigation measures will be taken to limit effects on the environment and wildlife inhabiting the area.

The North Saskatchewan River Valley Area Redevelopment Plan (Bylaw 7188/18889; City of Edmonton 2020a) requires a Site Location Study (SLS) and for all proposals to develop a major facility on public land (i.e., river valley lands). Associated Engineering was retained to complete an SLS. This study report is intended to fulfill the SLS requirement using the City's Guide to Completing a Site Location Study. Construction will not commence until the Edmonton City Council has approved the SLS and Environmental Impact Assessment per Bylaw 7188/18889.

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# 1 INTRODUCTION

## 1.1 Terwillegar Drive Stage 2 Project

Associated Engineering was retained by CIMA+ (prime consultant to the City of Edmonton) to complete a Site Location Study (SLS) for the pedestrian bridge portion of the Terwillegar Drive Stage 2 project. The project includes rehabilitation and widening of the Rainbow Valley Bridges, a new pedestrian bridge over Whitemud Creek, upgrades at the Whitemud Drive and Fox Drive interchange and at the Whitemud Drive and Terwillegar Drive interchange, and road widening of Whitemud Drive. The Rainbow Valley Bridges, the new pedestrian bridge over Whitemud Creek, and the Whitemud Drive and Fox Drive interchange all fall within the North Saskatchewan River Valley Area Redevelopment Plan boundary (Bylaw 7188/18889; City of Edmonton 2020a). The new pedestrian bridge over Whitemud Creek is the primary focus of this SLS as it is a new permanent development that falls under the Outdoor Participant Recreation Services definition (City of Edmonton 2017a).

## 1.2 Regulatory Trigger

Pursuant to Bylaw 7188/18889, all proposals for the development of a major facility that is publicly owned or is developed on public land shall be subject to an SLS detailing financial, social, environmental, and institutional constraints which make the river valley location essential. The Whitemud Creek Ravine falls within Bylaw 7188/18889. This SLS outlines the constraints of a pedestrian bridge in Rainbow Valley for review and approval by Edmonton City Council. Associated Engineering has also completed an Environmental Impact Assessment (Associated Engineering 2021a) to meet the requirements of Bylaw 7188/18889.

# 2 PROJECT DESCRIPTION

The project area encompasses lands from the Whitemud Drive and Fox Drive interchange south to the Whitemud Drive and Terwillegar Drive interchange, including the extension of Terwillegar Drive to 40 Avenue, and extending east from the Whitemud Drive and Terwillegar Drive interchange over the Rainbow Valley Bridges to 122 Street.

The North Saskatchewan River Valley and Ravine System Protection Overlay overlaps the project area at two locations including the northernmost section around the Whitemud Drive and Fox Drive interchange and in the southeastern section along the portion of Whitemud Drive that extends from the west of the Rainbow Valley Bridges to 122 Street (Figure 2-1). These areas are subject to Bylaw 7188/18889.

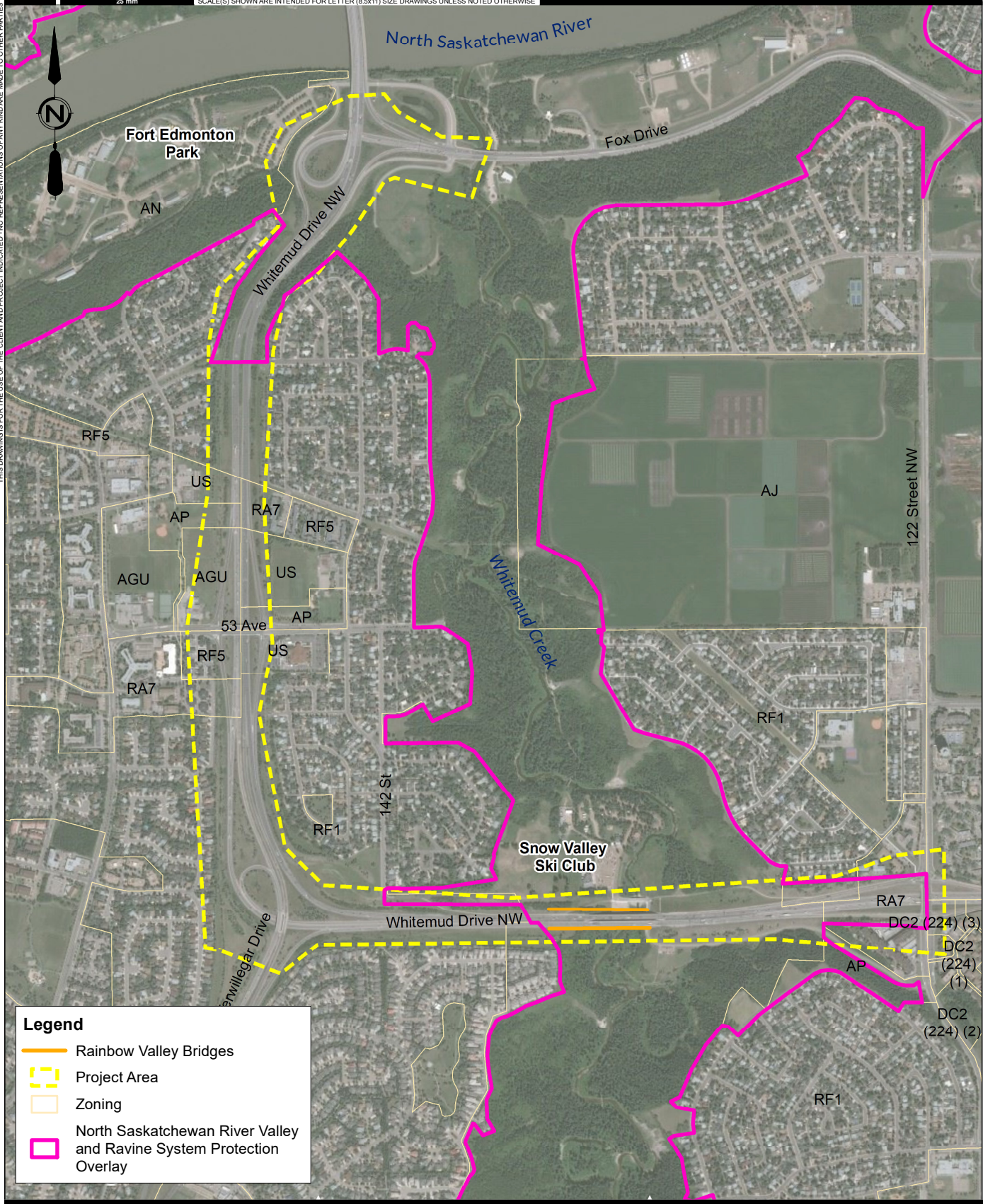
The Rainbow Valley Bridges are two traffic bridges: the westbound bridge was constructed in 1979 and the eastbound bridge was constructed in 1982. Both bridges span over Whitemud Creek and Rainbow Valley Road. Pedestrians and cyclists are currently accommodated only along the north side of the westbound bridge.

Whitemud Park has an extensive trail system, with a trail passing under the Rainbow Valley Bridges on the east side of Whitemud Creek and tying into trails to local neighbourhoods and the westbound bridge sidewalk. Snow Valley is a recreational area located adjacent to the project site, which can only be accessed by Rainbow Valley Road. It has several recreational facilities that are accessed year-round, including the Ski Club, the Aerial Park, and the Rainbow Valley Park & Campground.


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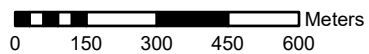
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**Legend**

-  Rainbow Valley Bridges
-  Project Area
-  Zoning
-  North Saskatchewan River Valley and Ravine System Protection Overlay

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DATE: 5/28/2020



**AE PROJECT No.** 2019-3585  
**DATE** 2020 MAY  
**SCALE** 1:16,000  
**APPROVED**  
**REV**  
**DESCRIPTION** ISSUED FOR REPORT

**FIGURE No. 2-1**  
**RAINBOW VALLEY BRIDGES RENEWAL AND WIDENING / TERWILLEGAR DRIVE STAGE 2 UPGRADES**  
**LANDUSE AND ZONING**



The Rainbow Valley Bridges cross Whitemud Creek and Whitemud Ravine, which are important natural areas in Edmonton and are part of the North Saskatchewan River Valley network. Whitemud Ravine provides important habitat and is an essential corridor for wildlife movement through the city.

Construction access to the work areas below the bridges will be via Rainbow Valley Road from 119/122 Street. It is anticipated that the contractor will use the gravel parking lot adjacent to Snow Valley as the primary construction laydown area. This was the designated contractor laydown area throughout the Rainbow Valley Access Bridge Rehabilitation in 2017. Coordination will be required with Snow Valley to ensure that use of this gravel lot is permitted for long-term laydown throughout the duration of the project. The parking lot and the green space areas to the east and west of the lot are potential construction laydown areas that may be made available to the contractor based on the extent of construction activity and equipment/delivery coordination.

### 3 PROJECT SCOPE

CIMA+ previously provided recommendations for the widening of Whitemud Drive eastbound and westbound to accommodate four travel lanes and widened shoulders (CIMA+ 2020).

Associated Engineering considered four widening options and recommended widening of the current structures rather than a full replacement (Associated Engineering 2020). The City of Edmonton proceeded to preliminary design with Option 2: Widening with SUP (Shared Use Path) on Separate Structure, which entails road bridge widening and a new pedestrian bridge as a separate structure.

The new pedestrian bridge will have a concrete bridge deck with a transverse broom finish, stainless steel reinforcement in the deck, and steel pipes (Associated Engineering 2021b). Every effort will be made to consider universal accessibility. The 100-year design water level is 627.9 m, which is significantly below the design minimum soffit (639 m) of the pedestrian bridge; therefore, overtopping during a 100-year design flood event is not a concern (Associated Engineering 2021b). The current sidewalk on the westbound bridge has a clear width of 2.3 m, and the new pedestrian bridge will have a clear width of 4.2 m, which will be safer and allow for a greater number of concurrent users.

## 4 LOCATION ANALYSIS AND JUSTIFICATION

### 4.1 Alternative Location Review

**Q: What other locations were considered for this project including other river valley and non-river valley locations?**

Currently, the westbound bridge includes a pedestrian sidewalk. During the Stage 2 conceptual design, Associated Engineering considered the following four options:

- Option 1: Widening with SUP on WB Bridge
- Option 2: Widening with SUP on Separate Structure
- Option 3: Full replacement with Piers at New Locations (51.0 m – 59.0 m – 59.0 m – 51.0 m)
- Option 4: Full replacement with Piers at Existing Locations (58.0 m – 51.8 m – 51.8 m – 58.0 m)

Options 1 and 2 were recommended (Associated Environmental 2020), and the City of Edmonton decided to proceed to preliminary design with Option 2 (Associated Engineering 2021). Option 1 would have a slightly smaller footprint; however, Option 2 will provide a better user experience because the crossing will not be immediately next to traffic.

Non-river valley locations were not considered for this project. The Rainbow Valley Bridges are existing structures and the westbound bridge currently provides a pedestrian crossing. However, the purpose of the new pedestrian bridge is to connect the two sides of the river valley for pedestrians at the road level while providing a safer/quieter path away from the direct impacts of traffic from Whitemud Drive. Placing the pedestrian bridge near the current Rainbow Valley Bridges allows pedestrians to continue to access the area and minimizes impacts on users while improving the user experience. Additionally, locating the new structure near the existing infrastructure will minimize the impacts of locating the bridge in a potentially undisturbed area.

## 4.2 River Valley Dependencies

**Q: Could the proposed project reasonably function at a location outside of the North Saskatchewan River Valley Area Redevelopment Plan boundary?**

No, the proposed pedestrian bridge could not function outside of the North Saskatchewan River Valley Area Redevelopment Plan boundary. A pedestrian bridge already exists on the westbound bridge but is not preferred in the revised design plans for widening.

**Q: Is the project dependent on either the river valley and ravine location or the users of the users of the park system?**

Yes, the new pedestrian bridge is dependent on the Rainbow Valley location as there are already many users of the park system in that area, and a pedestrian bridge with improved safety and access will only increase use, drawing users from neighbourhoods on either side of the existing crossing.

## 4.3 Overview of Bylaws, Plans, and Policies

The following bylaws, plans, and policies apply to the development of the Terwillegar Drive Stage 2 project.

### 4.3.1 North Saskatchewan River Valley Area Redevelopment Plan, Bylaw 18889 (Amendment to Bylaw 7188)

Bylaw 7188/18889 protects the ecological value of the North Saskatchewan River Valley and regulates works conducted within it (City of Edmonton 2020a). The Plan is “based on the fundamental philosophy that a continuous open system, interspersed with recreational activity nodes, can meet the diverse demands for recreation in an urban setting and yet protect the river valley environment.” A policy of this Plan is that major public facilities shall not be constructed or expanded unless their location within the river valley is deemed essential and approved by City Council (this report). The major goals and the project-specific considerations are summarized in Table 4-1.

**Table 4-1  
Major Goals of Bylaw 7188/18889**

Goal	Project Specific
<p>To ensure the preservation of the natural character and environment of the North Saskatchewan River Valley and Ravine System.</p>	<p>Although there will be some disturbance of vegetation during bridge construction, disturbance will be minimized as much as reasonably possible to accommodate construction. The EIA outlines several measures to mitigate adverse environmental effects and steps to preserve the natural character and environment during construction and complete restoration following construction. Vegetation impacts will be managed following the Corporate Tree Policy (City of Edmonton 2020b).</p>
<p>To establish a public metropolitan recreation area.</p>	<p>A dedicated pedestrian bridge that is separate from the flow of traffic provides safer access to a recreational area for the public and an improved user experience.</p>
<p>To provide the opportunity for recreational, aesthetic, and cultural activities in the Plan area for the benefit of Edmontonians and visitors of Edmonton.</p>	<p>The new bridge will be a multi-use crossing, meaning that recreational activities may include walking, running, cycling and/or rollerblading. The new bridge will provide equal opportunity for cultural activities and the inclusion of people.</p>
<p>To ensure the retention and enhancement of the Rossdale and Cloverdale communities in the River Valley.</p>	<p>Not applicable.</p>
<p>To consider environmental factors when planning for use in the River Valley.</p>	<p>The EIA details several mitigation measures for the construction of the footbridge, including consideration of impacts on natural features such as vegetation, fish, and wildlife.</p>
<p>To control the expansion and construction of major facilities and minimize the adverse impacts of major facilities on the natural environment and park development.</p>	<p>The footbridge has been designed with the minimal footprint and piers possible to reduce disturbance to aquatic life and wildlife.</p>

### 4.3.2 Drainage Bylaw, Bylaw 18093

Bylaw 18093 regulates surface drainage on public and private land and fosters the well-being of the environment by prohibiting the release of dangerous or hazardous materials into the sewerage system (City of Edmonton 2021).

Releases of water into storm sewers and watercourses must adhere to the requirements for restricted wastes in Schedule B of this Bylaw. Mitigation measures, including erosion and sediment controls, are to be incorporated into the Environmental Construction Operations Plan to maintain compliance with this Bylaw during the construction phase of the project.

**Project Specific:** During construction, mitigation measures must be in place to prevent releases of prohibited wastes and control releases of restricted wastes into the sewerage system and/or watercourses in accordance with this Bylaw.

### 4.3.3 Corporate Tree Management, Policy C456C

Edmonton's tree canopy, including all ornamental trees and natural treed areas on City property, will be procured, maintained, protected, and preserved by the City. The Policy requires that projects must take the necessary steps to protect and preserve City trees impacted by construction activities (City of Edmonton 2020b).

**Project Specific:** The removal of trees will be minimized wherever possible; however, the project will require the removal of trees to facilitate both temporary workspace and permanent infrastructure. Works are anticipated to be within 5 m of any ornamental tree and within 10 m of a natural tree stand, triggering Tree Preservation and Tree Protection Plan requirements under this Policy.

Vegetation clearing will minimally reduce the tree canopy cover within City-owned lands. The City's Urban Forestry Department will be involved throughout design to review construction plans and tree protection. The contract and tender packages' "special provisions" will include requirements for contractors to comply with the Tree Protection and Preservation Guidelines and with the Corporate Tree Management Policy. Any trees marked for removal to accommodate project work will be coordinated through Urban Forestry, including a monetary fee for removal and compensation.

### 4.3.4 Community Standards Bylaw, Bylaw 14600

Bylaw 14600 (City of Edmonton 2020c) regulates noise within the city. Under this Bylaw, construction is restricted to between 7 a.m. and 9 p.m. other than Sundays and holidays when construction is restricted to a timeframe between 9 a.m. and 7 p.m.

**Project Specific:** Construction will be planned within the timeframes described in this Bylaw whenever possible; however, overnight work may be required. Any work outside of the approved timeframe will be completed under the appropriate permits.

### 4.3.5 Parkland Bylaw, Bylaw 2202

Bylaw 2202 regulates the conduct and activities of people on Parkland to promote the safe, enjoyable, and reasonable use of such property and to protect and preserve natural ecosystems for the benefit of all citizens of the City.

**Project Specific:** Access onto Parkland will be required for construction. Access within areas covered under the Parkland Bylaw will require a Parkland Access Permit for the duration of construction.

### 4.3.6 Natural Area Systems, Policy C531

This Policy is implemented to safeguard the City's natural capital and associated ecological services through conserving, protecting, and restoring natural uplands, wetlands, water bodies, and riparian areas as an integrated and connected system throughout the city (City of Edmonton 2007). The purpose of this plan is to:

- Enhance and sustain the quality of life for Edmontonians;
- Conserve, protect, and restore biodiversity throughout Edmonton, recognizing the urban context that we work within;
- Ensure consistent, uniform, and equitable conservation practices that are based on the best available science;

- Direct administration to:
  - Plan our city so that ecological systems will function effectively at neighbourhood, city, and regional scales;
  - Conserve natural area systems in discharging their duties; and
  - Require ecological information to support planning and development applications.
- Conserve, protect, and restore natural area systems through the physical planning and development process; according to the provisions of municipal, provincial, and federal policy and legislation;
- Encourage voluntary conservation and corporate and private sponsorship of natural areas;
- Promote the awareness and participation of landowners, the general public, and non-government organizations in conserving, preserving, and restoring natural areas; and
- Incorporate the local ecological knowledge of Edmonton’s citizens and organizations in our decisions.

**Project Specific:** The project will enhance the quality of life for Edmontonians by providing improved access to natural areas in the river valley. Conservation and protection of natural areas were considered during the project location planning. The design considers the importance of minimizing the spatial and temporal footprint of the project. One new pier encroaches on Whitemud Creek and may have minor temporary impacts on the watercourse during construction. The pier design was reviewed and installed at a deeper elevation to avoid any permanent impacts on the watercourse. Following construction, disturbed areas will be restored to minimize impacts on vegetation and wildlife.

#### 4.3.7 Breathe: Edmonton’s Green Network Strategy

Edmonton’s green network is an integrated system of open spaces and municipal parks and connects areas that provide value to residents and the environment (City of Edmonton 2017b). Breathe: Edmonton’s Green Network Strategy is a transformative strategy, meant to grow and adapt as the city grows, to ensure that neighbourhoods are supported by a network of open space for the next 30 years. It sets the direction for sustainable care and expansion of open spaces and how to preserve the integrity of open space environment in the city.

**Project Specific:** An improved pedestrian bridge in Rainbow Valley will improve the connection of open spaces and municipal parks. Within the extensive trail system in Whitemud Park, one trail passes under the Rainbow Valley Bridges on the east side of Whitemud Creek and connects to local neighbourhoods and the westbound bridge sidewalk. The new pedestrian bridge will provide a safer, more accessible, and more integrated trail system for Edmontonians at the road level without users having to meander down into the valley to cross.

#### 4.3.8 Ribbon of Green SW + NE

The Ribbon of Green provides strategic direction to guide the protection and responsible use of Edmonton’s River Valley and Ravine System over the next 20 years (City of Edmonton 2020d). Previous versions of this document were developed in 1990 and 1992 and are now being consolidated into an updated version. Throughout these revisions, the goal has remained the same: to conserve the natural features of the River Valley (e.g., wildlife, vegetation, and cultural resources) for future generations to prevent exploitation, destruction, or neglect. The vision for the Ribbon of Green is as follows:

“The North Saskatchewan River Valley and Ravine System is a protected, connected landscape that supports ecological resilience and promotes healthy living through opportunities for recreation, active transportation, learning, and gathering in the tranquility of nature.”

**Project Specific:** Project planning will limit and avoid, where possible, activities that have the potential to impact natural habitats in the project area. The impacts are expected to be limited primarily to the construction period as the new bridge is not expected to have significant long-term effects from the infrastructure that already exists at this location. Various mitigation measures have been developed to limit effects on vegetation and wildlife in the area, especially within the river valley. For example, the bridge design will need to accommodate the passage of wildlife below the bridge, and it will require an openness ratio of greater than 1.5 along with a space without obstructions. The Wildlife Passage Engineering Design Guidelines (City of Edmonton 2010a) are being incorporated into bridge designs. Additionally, disturbed areas will be restored in a way that minimizes potential environmental impacts.

Providing a safer and more accessible pedestrian bridge will support the vision of healthy living through recreation, active transportation, and gatherings in nature.

#### 4.3.9 ConnectEdmonton: Edmonton's Strategic Plan 2019-2028

This Strategic Plan provides the collective vision for a future Edmonton and provides focus as the city grows (City of Edmonton 2019). The four strategic goals that focus on transformational change required in the next ten years are as follows:

1. **Healthy City** – Edmonton is a neighbourly city with community and personal wellness that embodies and promotes equity for all Edmontonians.
2. **Urban Places** – Edmonton neighbourhoods are more vibrant as density increases, where people and businesses thrive and where housing and mobility options are plentiful.
3. **Regional Prosperity** – Edmonton grows prosperity for our Metro Region by driving innovation, competitiveness, and relevance for our businesses at the local and global levels.
4. **Climate Resilience** – Edmonton is a city transitioning to a low-carbon future, has clean air and water, and is adapting to a changing climate.

**Project Specific:** The project aligns with all four strategic goals.

1. **Healthy City** – A new footbridge in the river valley will provide numerous recreational and personal wellness opportunities for Edmontonians. Creating more opportunities for community and wellness in different areas of the city promotes equity for all Edmontonians.
2. **Urban Places** – By improving the trail connections and accessibility, a new footbridge may bring more people to the nearby neighbourhoods.
3. **Regional Prosperity** – A new pedestrian bridge with an improved user experience may bring new traffic and awareness to the existing ski hill, aerial park, and campground.
4. **Climate Resilience** – The recommended bridge location uses the shortest span resulting in less materials and a lower carbon footprint. The bridge design elevation is well above the 100-year design flood levels to accommodate various potential river flow conditions in the future. Providing more opportunities for pedestrians to visit the Rainbow Valley area will allow greater access to the area using low-carbon modes of transportation.

#### 4.3.10 The Way We Green, Edmonton's Environmental Strategic Plan

The City of Edmonton protects, preserves, and improves the North Saskatchewan River Valley and Ravine System as an accessible year-round place for recreation and activity for people of all ages (City of Edmonton 2011).

**Project Specific:** The project will directly improve the connections within the river valley and make it more accessible for recreation and activity year-round.

#### 4.3.11 The Way We Live, Edmonton's People Plan

The City of Edmonton provides for the well-being of its citizens through outstanding parks, natural, green, and public spaces (City of Edmonton 2010b).

**Project Specific:** Improving the connectivity of the trail system will help improve the natural, green, and public spaces in Edmonton particularly in the Rainbow Valley.

#### 4.3.12 For the Love of Winter, WinterCity Strategy Implementation Plan

The goal of the WinterCity Strategy and Implementation Plan is to transform Edmonton into a world-leading winter city by focusing on four Winter Pillars – life, design, economy, and story (City of Edmonton 2013).

**Project Specific:** The project meets all four Winter Pillars including the following goals:

- Make It Easier to Go Play Outside: Provide More Opportunities for Outdoor Activity;
- Improve Winter Transportation for Pedestrians, Cyclists and Public Transit Users;
- Incorporate Urban Design Elements for Winter Fun, Activity, Beauty and Interest;
- Design Our Communities for Winter Safety and Comfort;
- Increase the Capacity and Sustainability of Edmonton's Winter Festivals;
- Enhance the Social and Economic Vibrancy of Our Streets and Public Places;
- Celebrate the Season and Embrace Daily Living in a Cold Climate; and
- Kickstart and Lead Implementation of Edmonton's Winter City Strategy: Apply a 'Winter Lens' to Our City.

## 5 CONSTRAINTS ANALYSIS

### 5.1 Financial Constraints

**Q: What are the financial constraints that limit the feasibility of locating the project outside of the river valley?**

The conceptual design report (Associated Engineering 2020) reviewed four bridge options and recommended widening the current bridge, which is more cost-effective than a full replacement. The City of Edmonton decided to proceed with preliminary design of widening the current bridges and adding a separate pedestrian bridge. A separate pedestrian bridge allows for a slender, cost-effective structure and a more aesthetically pleasing option.

### 5.2 Social Constraints

**Q: What are the social constraints which limit the feasibility of locating the project outside of the river valley?**

A new pedestrian bridge outside of the river valley would not have the same social impact as a bridge in the river valley. Social constraints of a bridge outside the river valley would include a potential lack of visitors to the area. Many Edmontonians and visitors know of the North Saskatchewan River Valley and visit the trails to recreate and enjoy nature. The facilities in Snow Valley also draw visitors to the area; therefore, maximizing the safety and accessibility of the area will improve the overall trail network and increase the number of people likely to visit the area.

The new pedestrian bridge will be significantly wider (4.2 m clear width) than the current bridge sidewalk (2.3 m clear width), which will create a safer crossing and allow more concurrent users. Mental health benefits may also result from providing the community with more locally accessible natural space. Exposure to nature helps reduce blood pressure, heart rate, muscle tension, and stress hormones (River Valley Alliance 2021). Author Richard Louv has linked the rise in obesity, attention disorders, and depression to the lack of nature in children's lives (Louv 2005). Nature deficit disorder is a disconnection from one's natural surroundings (North Vancouver Recreation & Culture 2017). Youth are recommended to spend 60 minutes per day doing physical activity, and only an estimated 7% of Canadian children meet this. Spending time in nature encourages physical activity, which in turn results in better motor skills, stronger immune systems, and a decreased risk of chronic disease.

### 5.3 Environmental Constraints

**Q: What are the environmental constraints which limit the feasibility of locating the project outside of the river valley?**

The pedestrian bridge will be located next to the existing westbound and eastbound Rainbow Valley Bridges. The existing bridges will be expanded, and the current pedestrian crossing will be removed to accommodate four lanes of traffic in either direction. Providing a new pedestrian bridge near the current bridges rather than in a new location will avoid disturbance in a larger area which in turn will limit the disturbance to vegetation and wildlife. Although there will be some impacts on the natural environment during construction, the recommended mitigation measures described in the EIA will limit or avoid impacts on wildlife during construction. Following the bridge construction, the operational environmental impacts are expected to be minor.

### 5.4 Institutional Constraints

**Q: What are the institutional constraints which limit the feasibility of locating the project outside of the river valley?**

A new pedestrian bridge will add connectivity to an already highly used existing trail network that connects to Whitemud Park. Additionally, there are already visitors attracted to the area that visit the ski hill, aerial park, and campground. This option is much more economical and efficient than building a bridge at a lesser-known site that isn't as well frequented. Locating the pedestrian bridge outside of the river valley would be constrained by the lack of visitors which are already drawn to the Whitemud Creek area and Snow Valley area.

## 6 CONCLUSION

Based on the assessment of potential financial, social, environmental, and institutional constraints, the proposed project will have an overall benefit to Edmontonians and other visitors to the area and a limited impact to the local environment. The project aligns with the goals and policies of the North Saskatchewan River Valley Area Redevelopment Plan, Bylaw 7188/18889, the River Valley Alliance's Plan of Action, as well as other City of Edmonton plans and policies. It will improve access to the river valley, connect people with nature, and provide an opportunity to value the area's ecological, recreational, and cultural resources in the area.

The EIA for the project assessed the potential environmental sensitivities and recommended mitigation measures and best management practices to minimize or avoid project impacts during the construction of the project. Construction will not commence until the Edmonton City Council has approved the SLS and EIA as per the direction provided in the North Saskatchewan River Valley Area Redevelopment Plan.



## CLOSURE

This report was prepared for the City of Edmonton for approval under the North Saskatchewan River Valley Area Redevelopment Plan, Bylaw 7188/18889.

The services provided by Associated Engineering Alberta Ltd. in the preparation of this report were conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty expressed or implied is made.

Respectfully submitted,  
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