

**TERWILLEGAR PARK
FOOTBRIDGE SITE LOCATION
STUDY LOCATED
WITHIN 10-52-25 W4M,
EDMONTON, ALBERTA**



Prepared for:
City of Edmonton

Prepared by:
Stantec Consulting Ltd.

February 2014

Stantec Quality Management Program

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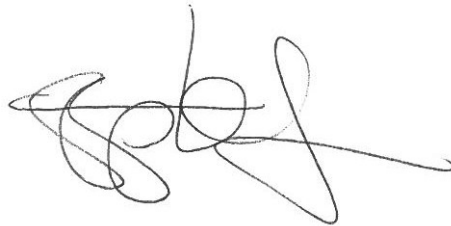
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Executive Summary

Stantec Consulting Ltd. was retained by the City of Edmonton to complete a Site Location Study (SLS) for the proposed footbridge within Terwillegar Park (Park) located in 10-52-25 W4M (Study Area) Edmonton, Alberta. The Terwillegar Park Footbridge will span the North Saskatchewan River (NSR) and be a part of the main multiuse trail within the North Saskatchewan River valley. This footbridge and trail system will form a portion of the trail connection system between Devon and Fort Saskatchewan, with connections across the river. The North Saskatchewan River Valley Area Redevelopment Plan (NSVARP; City of Edmonton Bylaw 7188) requires that an SLS be completed for the proposed project.

The primary municipal regulation pertaining to this project is the North Saskatchewan River Valley Area Redevelopment Plan (City of Edmonton Bylaw 7188), designed to protect the ecological value of the NSR Valley Area by restricting and regulating construction projects. Under this regulation, a footbridge is classified as a 'Major Facility' and an Environmental Impact Assessment has been prepared for this project as per Section 3.3.3 of the NSRVARP. There will be further disturbance to this already anthropogenically altered landscape through the removal of some trees on both sides of the river. Grading and the construction footprint will cause further impact, both temporary and permanent in nature.

However, the proposed footbridge within the NSR Valley meets a number of the Major Parkland Development Objectives of the NSRVARP, including:

- 2.3.3 *To provide a pedestrian movement network, and other non-motorized vehicular networks including the provision of River and Ravine Crossings, throughout the Plan area.*
- 2.3.4 *To ensure that park and recreation facilities have pedestrian and vehicular access.*
- 2.4.2 *To consider environmental factors when planning for use in the River Valley.*

The footbridge is designed in the spirit of the Ribbon of Green Master Plan (City of Edmonton 1992) and Bylaw 15100 (City of Edmonton 2010). These regulations emphasize the continuation of an integrated trail system and the protection, preservation, and improvement of the North Saskatchewan River Valley and Ravine System as an accessible year round place for recreation and activity for people of all ages.

The City of Edmonton's Natural Area Systems policy aims to enhance and sustain the quality of life for Edmontonians while ensuring consistent, uniform and equitable conservation practices that are based on the best available science. The location for the proposed Project was chosen to minimize environmental disturbance. Any adverse impacts to the native communities in proximity the Project will be mitigated for. Adhering to this policy will guide developers to sustainably create an amenity that will be used by Edmontonians.

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In conclusion, the construction of the Terwillegar Park Footbridge is an essential addition to the North Saskatchewan River Valley and enhances the well-being of citizens in the City of Edmonton by preserving the natural integrity of the valley and providing further recreational possibilities.

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Introduction
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1.0 Introduction

The City of Edmonton has retained Stantec Consulting Ltd. (Stantec) to complete a Site Location Study (SLS) for the proposed Terwillegar Park Footbridge (Project), within Terwillegar Park (Park) located in 10-52-25 W4M (Study Area), Edmonton, Alberta (Site Location; Figure 1-1).

Construction of a new footbridge is essential to achieve the overall vision of the Capital Region's plan for the North Saskatchewan River Valley as outlined in the Ribbon of Green Master Plan (City of Edmonton 1992). Linking the two sides of the river is necessary for the proposed vision of a continuous multiuse trail running from Fort Saskatchewan to Devon, and through the five major parks (Big Island, Terwillegar, Twin Brooks, Buena Vista and Hermitage Parks), with connections across the river. The recreational trail will extend the entire length of the river valley and ravine system making it the largest river valley park system in North America. The bridge will enhance the recreational opportunities for citizens and tourists, as well as protect an important ecological feature. The trail will also link neighbourhoods and offer an opportunity to connect with nature.

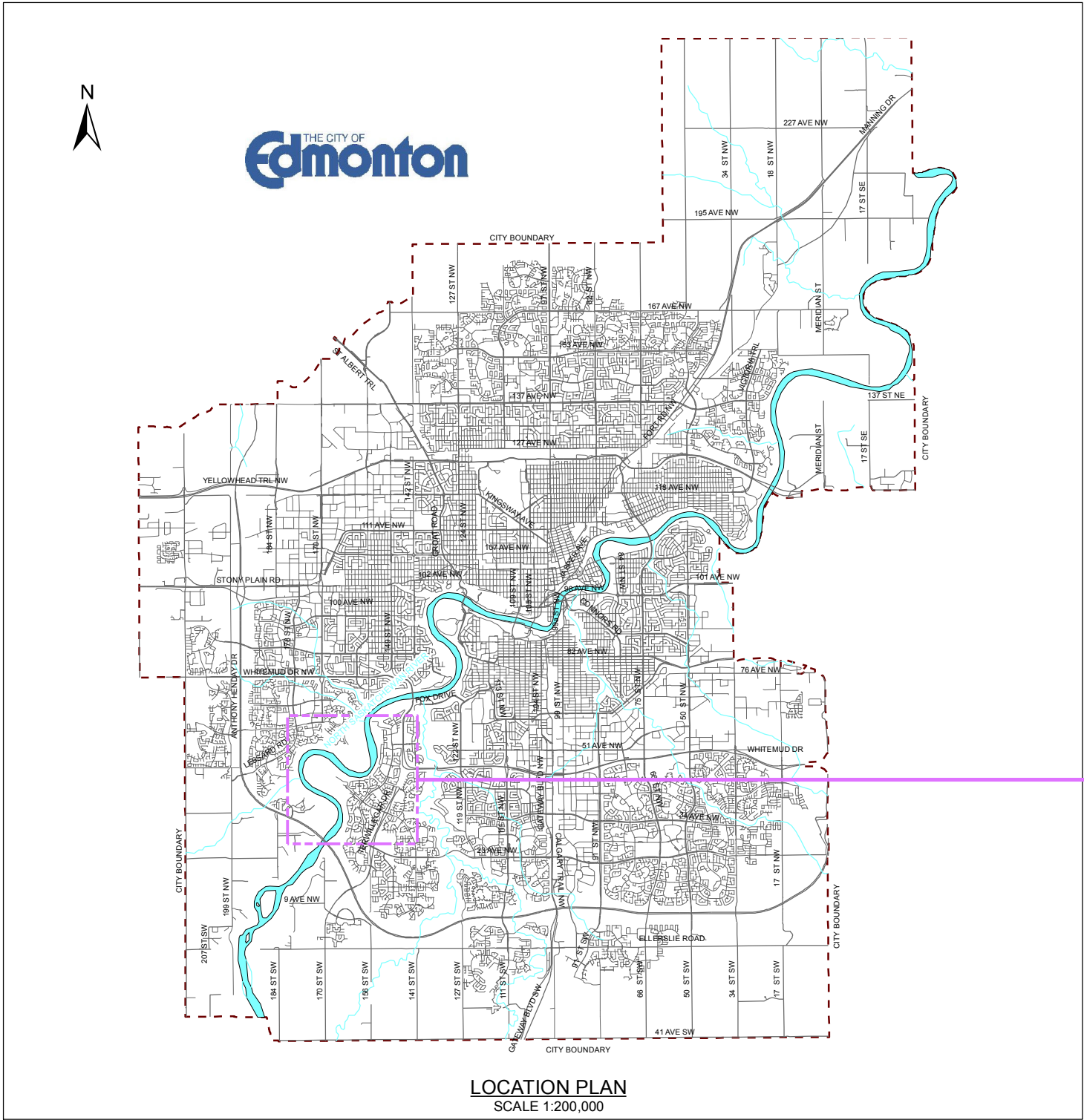
This footbridge follows the Ribbon of Green Master Plan by linking Terwillegar Park on the south side of the river to the vacant land on the north side (Study Area; Figure 1-2). The trail will extend from south of the Terwillegar Park Footbridge, then north through the vacant land to the existing Fort Edmonton Footbridge. The Terwillegar Park Footbridge will aid in further lengthening the continuous recreational trail within the North Saskatchewan River valley by 7 km for cycling, running or walking and is a key element of the City's vision for increasing walkability and passive recreation opportunities.

In response to the desire to undertake this proposed project, the City of Edmonton has been directed by the department of Sustainable Development to undertake a Site Location Study (SLS) that meets the requirements of the North Saskatchewan River Valley Area Redevelopment Plan, with the footbridge deemed an essential major facility (NSRVARP 1985, City Bylaw No. 7188).

The purpose of this SLS is to examine the financial, social, environmental, and institutional constraints that make it essential that the development of the Project within Terwillegar Park occur within the NSRVARP.

1.1 SITE DESCRIPTION

The Project is located on the southern shore of the North Saskatchewan River, east of the parking lot, within Terwillegar Park (Figure 1-1). The Park is a 459 acre reclaimed gravel pit, converted into a public amenity. It includes 9 ponds left from the aggregate mining, an extensive trail system for walkers, skiers, and mountain bikers, as well as a large area dedicated to a leash-free dog park. The network of trails regularly play host to mountain bike races.



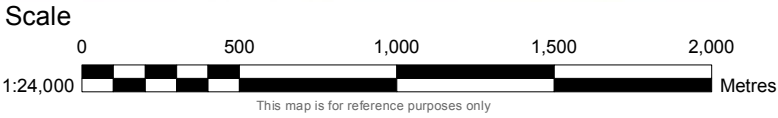
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January, 2014
1135-60353



- Study Area
- ATS Quarter Section Grid
- Bridge Alignment (as of Dec 19 2013)

Site Description
15-10-052-25 W4
Edmonton, Alberta

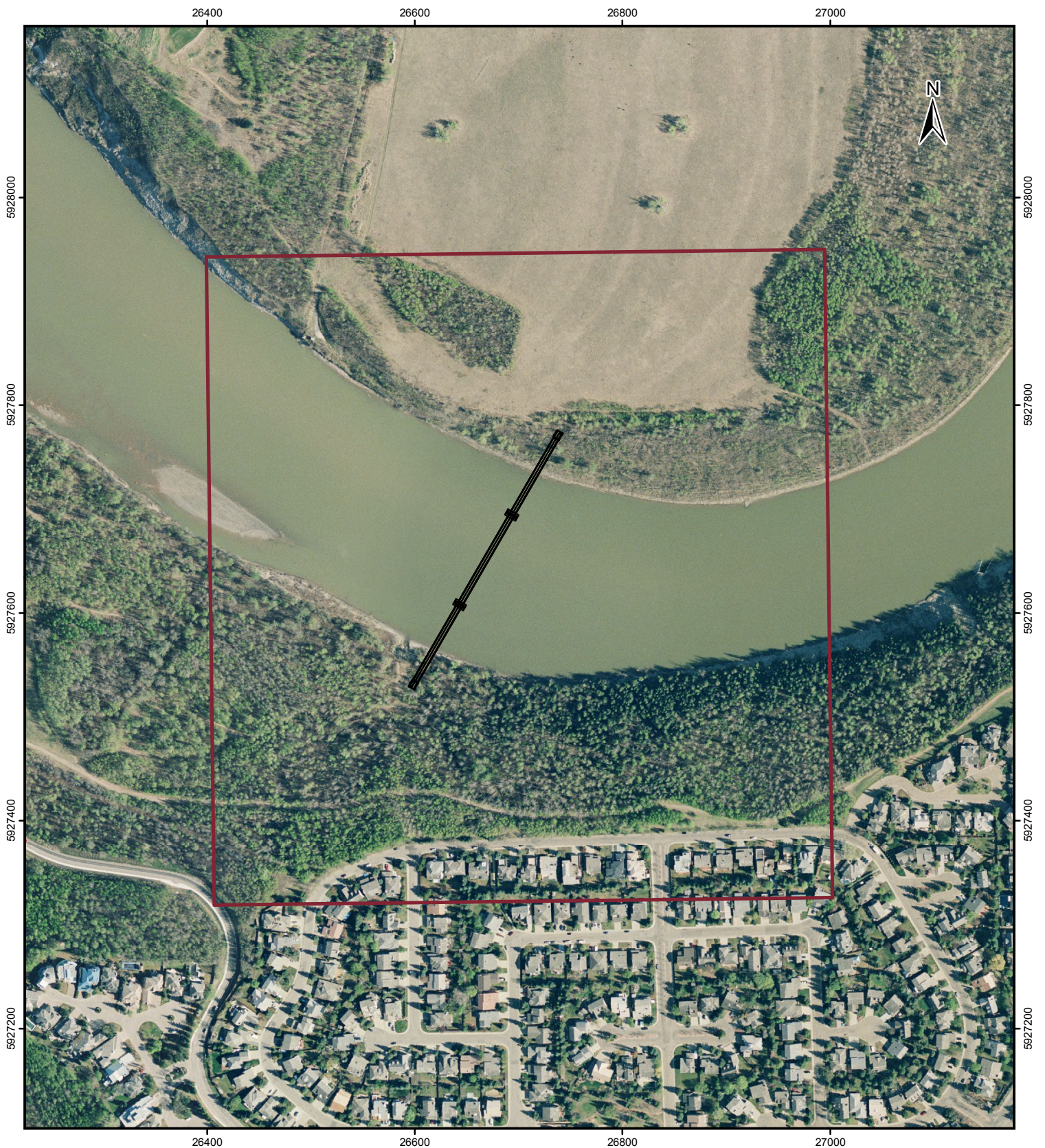


Client/Project
CITY OF EDMONTON
TERWILLEGAR PARK FOOTBRIDGE
CONSTRUCTION LOCATION

Figure No.
1-1

Title
SITE LOCATION PLAN

Projection: 3TM CM:114° Datum:NAD83
Imagery obtained from City of Edmonton,
Transportation Department, 2012.



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January, 2014
 1135-60353



- Study Area
- Bridge Alignment (as of Dec 19 2013)

Client/Project
 CITY OF EDMONTON
 TERWILLEGAR PARK FOOTBRIDGE
 CONSTRUCTION LOCATION

Figure No.

1-2

Title
STUDY AREA

Projection: 3TM CM:114° Datum: NAD 83
 Imagery obtained City of Edmonton,
 Transportation Department, 2012.



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The proposed footbridge is located on a river terrace or flat alluvial plain on the north side. The privately owned Edmonton Country Club is also located on the same plain but to the west of the Project Area. Downstream, on the south side of Terwillegar Park, the edge of land is a relatively undulating river bank. To the east of the river, or north of the Park, there are high, steep banks (Thurber 2013).

The Project Area currently consists of predominately aspen poplar woodland and balsam poplar woodland. The aspen poplar woodland has a deciduous-dominated canopy which is typically mixed with both aspen (*Populus tremuloides*) and balsam poplar (*Populus balsamifera*) species. This type of woodlot composition is generally found in moist rich sites with a willow understory, which is very common along the North Saskatchewan River Valley (Stantec 2013).

1.2 PROPOSED PROJECT

The proposed Project is the construction of a footbridge linking two sides of the North Saskatchewan River, allowing the continuation of the recreational trail on either side. Accessibility for the public of all ability demands ease of movement, including shallow (+/-3%) ramps on either end of the bridge (Drawing TPFB-PD-S02; Appendix A) (Stantec 2013). The walking path across the bridge and on either side will be paved smooth, ideal for wheeled vehicles such as bicycles or wheelchairs.

The footbridge will be constructed in the style of a stressed ribbon; the bridge is a tension structure of approximately 262 m long that exerts a horizontal pull on the abutments. Each abutment will be anchored to the underlying bedrock. The bridge will be supported by two in-stream piers that will be supported by cast in place concrete caissons, installed with the use of temporary berms mid-stream.

1.2.1 Alternatives

There were three alternatives considered for the Project:

1. Redirecting the recreational trail to continue on the east side of the North Saskatchewan River along the top of bank. The trail would then travel within the adjacent neighbourhood of Henderson Estates and join up with the present trail by the Fort Edmonton footbridge, circumventing the need for a bridge in the proposed location.
2. Shifting the location of the footbridge within the park to cross further west along the river bank, with it landing within the Edmonton Country Club on the north side. The option is not possible due to the Edmonton Country Club being on private land. On the south side, the Project footprint has already shifted slightly eastward due to the presence of a significant historical site.
3. Relocating the bridge downstream to the south side of the Park. Due to the instability of the banks of the North Saskatchewan River and geotechnical constraints related to potential slide areas the bridge could not be moved further downstream.

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4. The current location. Land on both sides of the North Saskatchewan River are publicly owned, already disturbed and the geology and slopes of the land are appropriate for construction of a footbridge.

Ultimately, the current location was selected due to the geological stability of the banks on both sides of the river, the ease of building a public facility on public lands and the low ecological impact it will have on the landscape.

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2.0 Constraints Analysis

2.1 FINANCIAL OPPORTUNITIES AND CONSTRAINTS

Funding for the Project is coming from three different sources: the River Valley Alliance, the City of Edmonton and the federal government through the Building Canada Fund. The combination of their monies will allow the Project to be completed and made available to the public.

The funding has been allocated for this specific project. Restrictions include that the money be spent by the end of 2016. With funding from these sources the financial burden on the municipality is reduced.

As a condition of the funding, strict restrictions include money only being spent on the Terwillegar Park footbridge project. The money cannot be used for any other projects, otherwise the funding will be repealed. Without funding from the three sources, the footbridge would not be possible as the financial burden is too high for a single municipality to bear. A joint effort was necessary to realize the vision of the Ribbon of Green Master Plan as the footbridge would not have been possible without the pooled resources.

An economic opportunity lies in tourism. The recreational trail in its natural setting will aid to bring in money through visitors coming for events, races and festivals or for those tourists who want to experience what will be one of the largest river valley park systems in North America (RVA 2013).

2.2 SOCIAL OPPORTUNITIES AND CONSTRAINTS

Construction of the Project will likely pose some temporary social constraints to Terwillegar Park. During construction, the access road, laydown and staging areas of the construction site will cause some restriction to public access. There will be closure of some trails and restricted access to any of the construction zones, including the laydown and staging areas. Upon the completion of the footbridge, the construction access road, laydown and staging areas will be reclaimed and rehabilitated to restore them to their former state prior to the construction.

Ultimately, the construction of the Project within Terwillegar Park will provide a unique opportunity for the public. The lengthened park and footbridge will be an exciting addition to the valley trails for the public year-round because it provides a safe and enhanced recreational area. The public will be able to travel from Terwillegar Park north to River Valley Oleskiw and have the convenience and pleasure of an uninterrupted recreational trail. Further to that, the trail then links up with the existing trail crossing at the Fort Edmonton Footbridge, which continues up the river valley to Fort Saskatchewan. They can visit the park, the ponds, and the river, have a picnic, and use the trails without having to travel to multiple locations within the City.

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2.3 ENVIRONMENTAL OPPORTUNITIES AND CONSTRAINTS

The footbridge construction, which may include trenching for the electrical lines, will require some tree removal. Their removal will be regulated by the Corporate Tree Management Policy (C456A) (2010) and require financial compensation.

Much of Terwillegar Park is a reclaimed gravel pit, which already has a high level of anthropogenic disturbance associated with it. Construction activities in this area will have minimal environmental impact and costs. Regardless, the construction staging and laydown areas will be placed on land that is currently disturbed (Stantec 2013). Due to the high level of human activity already present within the Park, effects on wildlife are anticipated to be minimal as wildlife utilizing the area would likely already be disturbance adapted (Stantec 2014).

Due to the Project Area being within a river valley, the meandering nature of the river and the associated instability of building on shallow alluvial depositions over bedrock has limited the number of possible locations of the footbridge.

2.4 INSTITUTIONAL OPPORTUNITIES AND CONSTRAINTS

The City of Edmonton has policies and bylaws that regulate and guide the construction of new facilities below the top-of-bank within the North Saskatchewan River Valley. These policies are in place to protect Edmonton's natural features from increasing development pressures. Policies that may apply to the proposed project include, but are not necessarily limited to the NSRVARP, City Policy C456A (Corporate Tree Management), and City Policy C531 (Natural Area Systems). Each of these pieces of legislation is discussed below in regards to how they relate to construction of the Project.

2.4.1 Bylaw 7188: North Saskatchewan River Valley and Area Redevelopment Plan

NSRVARP (City of Edmonton 1985) was developed to protect the North Saskatchewan River Valley and Ravine System as part of the City of Edmonton's open space heritage. The NSRVARP envisions a major portion of the River Valley and Ravine System used as an environmental protection area. The major goal of the NSRVARP is:

- *To ensure preservation of the natural character and environment of the North Saskatchewan River Valley and its Ravine System.*

The Major Parkland Development Objectives that apply are:

2.3.1 *To provide park, open space, and a variety of recreational, educational and cultural uses.*

2.3.3 *To provide a pedestrian movement network, and other non-motorized vehicular networks including the provision of River and Ravine Crossings, throughout the Plan area.*

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- 2.3.4 *To ensure that park and recreation facilities have pedestrian and vehicular access.*
- 2.3.7 *To promote an exemplary standard of landscape, urban, and architectural design for all proposed developments, park amenities and the general environment.*
- 2.3.8 *To ensure handicapped people have access to the River Valley and Ravine System.*

The Major Environmental Protection Objective that applies to the proposed project is:

- 2.4.2 *To consider environmental factors when planning for use in the River Valley.*

The Major Transportation Objective that applies to the proposed project is:

- 2.5.1 *To support a transportation system which serves the needs of the City and the Plan area, yet is compatible with the parkland development and the environmental protection of the River Valley and its Ravine System.*

The Major Facility and Natural Resource Development Objectives that apply to the proposed project is:

- 2.6.1 *To control the expansion and construction of major facilities and minimize the adverse impacts of major facilities on the natural environment and park development.*
- 2.6.4 *To minimize the adverse environmental impacts of all existing and future public works, landfill and solid waste disposal facilities.*
- 2.6.5 *To control the design and construction of future public works in a manner which will enhance the natural environment.*

The Parkland Development Objectives that apply to the proposed project are:

3.2.2 *Intensity Range of Recreational Uses*

It is a policy of this Plan that a low to high intensity range of recreational activities will be developed and managed within the River Valley

3.2.3 *Location of Recreational Facilities*

It is the policy of this Plan to locate the higher intensity recreational and cultural facilities in close proximity to major roadways, public transit routes and direct River crossings, except in the Central area.

3.2.4 *Ravines and River Edges*

It is a policy of this Plan that ravines and river edge lands will be used for low intensity outdoor recreational use.

3.2.5 *Viewpoint Parks*



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It is a policy of this Plan that selected sites with existing and outstanding view potential will be encouraged to be developed as "viewpoint" parks.

3.2.9 Capital City Recreation Park

It is a policy of this Plan that the City will support the concept of the extension of the Capital City Recreation Park to the City's Northeast and Southwest boundaries.

3.2.10 Trail System

It is the policy of this Plan to establish pedestrian and other non-motorized vehicular movement systems; which includes bicycles, cross-country skitrail developments and equestrian trails in selected areas; as the primary modes of movement along and through the River Valley.

3.2.11 River and Ravine Crossings

It is the policy of this Plan to develop and/or improve River and Ravine crossings for pedestrians and other non-motorized movement systems so as to connect recreational activity nodes and other park amenities.

3.2.18 Access for the Handicapped

It is the policy of this Plan that recreational facilities will be designed, if feasible, to accommodate access and other requirements of the handicapped.

The Environmental Protection Policies that apply to the proposed project are:

3.3.2 Identification of Sensitive and Hazardous Lands

It is the policy of this Plan to identify environmentally sensitive and hazardous lands through a detailed resource management approach.

3.3.3 Application of Environmental Impact Assessment

It is the policy of this Plan to ensure the application of an environmental impact screening and assessment to all proposed public development and development on public land.

The Transportation Policies that apply to the proposed project are:

3.4.2 Negative Impacts of Existing and Future Transportation Facilities

It is the policy of this Plan that existing and future transportation facilities will be reviewed with the objective to eliminate, minimize or mitigate the negative effects of the facilities through design and landscaping measures.

3.4.3 Environmental Impact Assessment for Transportation Facility Proposals

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It is the policy of this Plan that proposals for the upgrading of approved transportation corridors and attendant facilities be subject to an environmental impact screening assessment (Schedule D) and that the identified adverse impacts be eliminated, minimized or mitigated through design and landscaping measures.

Applicable Major Facility and Natural Resource Development Policies of this ARP include:

3.5.1 Development of Major Facilities

It is a policy of this Plan 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.

3.5.3 Site Location Study and Environmental Impact Screening Assessment

It is a policy of this Plan that all proposals for the development of a major facility that is publicly owned or is developed on public lands shall be subject to an environmental impact screening assessment (ESR) as outlined in Schedule D, and a detailed site location study detailing costs, and social, environmental and institutional constraints which make a River Valley location essential must be prepared for Council approval. These studies shall be undertaken prior to Council committing funds for capital expenditure for the development of this proposal.

The proposed project meets the requirements of this bylaw in the following ways:

- A footbridge is classified as a 'Major Facility' under the NSRVARP (City of Edmonton 1985)
- Terwillegar Park is currently in a disturbed state; the removal of trees on both sides of the river, along with grading and the construction footprint will cause further disturbance, both temporary and permanent in nature.

The City of Edmonton proposed through the Ribbon of Green Master Plan (1992), and in conjunction with the River Valley Alliance, a continuous trail system be built in the North Saskatchewan River Valley. The recreational trail will extend the entire length of the river valley and ravine system and was proposed for the well-being of the citizens of the City and the protection of an important ecological feature. The plan includes the construction of eight river crossing bridges and an eventual link to adjacent municipalities.

- This SLS and an Environmental Screening Report are currently being prepared for the proposed project.

2.4.2 Ribbon of Green Master Plan (City of Edmonton 1992)

The Ribbon of Green Master Plan (City of Edmonton 1992) was developed to provide the planning framework for open space development in the river valley into the year 2000. The

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Master Plan establishes policy guidelines for the long-term development, use and care of the entire valley.

This document does not cover the Terwillegar Park Footbridge location; however, this project is intended to follow the spirit of the Ribbon of Green Master Plan. The following policies within the Master Plan are relevant to the proposed construction of a footbridge in Terwillegar Park:

- Emphasizing the continuation of an integrated trail system and the development of natural parks utilizing existing or restored resources to their best advantage.
- Recreate a natural preserve and re-establish a viable ecology while minimizing any additional development which may be contrary to the parks' primary use.
- Limits development to an integrated trail system, which makes the river valley accessible to the public, yet protects the natural landscape and wildlife habitat areas.

2.4.3 Bylaw 15100: The Way We Grow, Municipal Development Plan (City of Edmonton 2010)

The Way We Grow, Municipal Development Plan (City of Edmonton 2010) is the City of Edmonton's strategic growth and development plan over the next ten years. It is closely integrated with the *Transportation Master Plan* in that it identifies future growth and development of the City's infrastructure. This plan will give guidance to the City by developing it into a more compact, transit orientated, and sustainable city. This Project is a part of the City of Edmonton's active transportation growth strategy. This bylaw includes the following policies that are relevant to the proposed construction of a footbridge in Terwillegar Park.

5.6.1 *Ensure public spaces and the buildings that frame them are inviting to residents and visitors and that they are safe, accessible and well connected.*

5.6.1.2 *Encourage new development to locate and organize vehicle parking, vehicle access, service areas and utilities to minimize their impact on the property and surrounding properties and to improve the safety and attractiveness of adjacent streets and other public spaces.*

5.6.1.3 *Encourage new development and redevelopment to locate and design safe and adequate vehicle access for emergency services vehicles.*

7.3.2 *Protect, preserve, promote and improve the North Saskatchewan River Valley and Ravine System as an accessible year round place for recreation and activity for people of all ages.*

7.3.2.2 *Ensure that the North Saskatchewan River Valley and Ravine System remains integrated and connected with other natural areas across the city.*

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7.3.3 *Mitigate the impact of development upon the natural functions and character of the North Saskatchewan River Valley and Ravine System.*

7.3.3.1 *New development within the North Saskatchewan River Valley and Ravine System will be planned according to, and will demonstrate that it embodies, the following priorities:*

- Conservation and protection of natural areas and the connections that link them, from and within the North Saskatchewan River Valley and Ravine System.
- Public utilities installations, services and facilities.

7.4.2 *Expand and enhance Edmonton's inventory of parks and open spaces for the ecological, health, recreation and educational benefits they provide.*

The proposed project meets the requirements of this bylaw in the following ways:

- Constructing the Project on a previously disturbed site will protect surrounding undisturbed areas by limiting construction to the disturbed area, where possible.

2.4.4 **Way We Green, City of Edmonton Environmental Strategic Plan (City of Edmonton 2011)**

The Way We Green (2011) is the City of Edmonton's Environmental Strategic Plan and is designed to move the City down a sustainable path. The Plan outlines the City's strategies regarding environmental sustainability and preservation as determined by the objectives laid out in The Way We Grow report. The Plan outlines a number of objectives that work toward the goal of becoming a city with a strong connection to nature. For future development, Objectives 3.3 to 3.6 define the strategies proposed by the City of Edmonton in regards to Environmental Reserve (ER) land claims, environmental connectivity and wetland sustainability. The objectives include, but are not limited to:

- The City of Edmonton protects, preserves and enhances a system of preserved Natural Areas within a functioning and interconnected ecological network.
- The City restores ecologically degraded and / or damaged ecological systems and linkages to protect, expand and enhance biodiversity.
- The City protects, manages and integrates natural wetlands into new and existing developments as key components of Edmonton's ecological network.
- The City protects, preserves and enhances its natural forests.

2.4.5 **The Way We Move, Transportation Master Plan (City of Edmonton 2010)**

The Way We Move, Transportation Master Plan (City of Edmonton 2010) outlines seven strategic goals for the City of Edmonton's 2040 City Vision. These include transportation and land use

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integration, access and mobility, sustainability, health and safety, transportation mode shift, well maintained infrastructure, and economic vitality. Specifically, Chapter 6 of this Master Plan focuses on Active Transportation, or transportation powered by an individual's own energy. This Project will follow the City's encouragement of developing a more walkable environment. This will require year round maintenance of the trail in order to provide yearly access for all citizens.

2.4.6 City Policy C456A: Corporate Tree Management (City of Edmonton 2010)

The purpose of the Corporate Tree Management Policy (City of Edmonton 2010) is to ensure that all trees on City owned property are adequately protected from destruction, loss or damage. Where damage to or loss of City trees occurs, as a result of not complying with the City Guidelines, equitable compensation for that loss will be recovered from the civic or private entity causing the damage or loss and applied to future tree replacements.

If tree removal is required for the proposed Project, an assessment of the tree value will be required and compensation will be provided to the City.

- Some permanent tree removal will be required for the construction of the Project in Terwillegar Park and in the adjacent vacant lands. Tree removal for the construction footprint will require some subsequent mitigation, compensation and tree planting, but will follow the City Policy C456A.

2.4.7 City Policy C531: Natural Area Systems (City of Edmonton 2007)

The Natural Area Systems Policy (City of Edmonton 2007) was developed to help conserve, protect, and restore the natural wetlands, uplands, water bodies and riparian areas within the City of Edmonton to safeguard the City's natural capital and associated ecological services. As per this policy, the City of Edmonton will balance ecological and environmental considerations with economic and social considerations in its decision making and demonstrate that it has done so.

The main purposes of this policy that are relevant to the proposed project include the following:

- *Enhance and sustain the quality of life for Edmontonians.*
- *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.*
- *Ensure consistent, uniform and equitable conservation practices that are based on the best available science.*
- *Direct Administration to plan our city so that our ecological systems will function effectively at neighborhood, city and regional scales.*

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The location for the proposed Project was chosen to minimize environmental disturbance. Any adverse impacts to the native communities in proximity the Project will be mitigated for. Please see the Environmental Impact Assessment (Stantec 2014) for details (Appendix B). Adhering to this policy will guide developers to sustainably create an amenity that will be used by Edmontonians and will ensure conservation practices are based on best available science.

2.4.8 The Way We Live, Edmonton's People Plan (City of Edmonton 2010)

The Way We Live document (City of Edmonton 2010) was developed to improve the livability of Edmonton over the next ten years. Its primary six goals are Edmonton is a vibrant, connected, engaged and welcoming city, it celebrates life, it is caring, inclusive and affordable, it is safe, it is attractive, and Edmonton is sustainable. Through this plan, Edmonton has enacted municipal bylaws that protect Edmonton's natural spaces, improves active transportation, and promotes the use of environmental planning. This plan's vision will be a part of this Project by giving guidance to its development, environmental standards, and planning.

2.4.9 Terwillegar Park Concept Plan

The *Terwillegar Park Concept Plan* was developed to define a strategy on how to expand Terwillegar Park over the next ten years from present day (ISL Engineering and Land Services 2009). Four concept plan options were initially prepared, of which two were further reviewed and discussed. The final concept plan was chosen based on public input received during open houses and through the project website. The *Terwillegar Park Concept Plan* includes a recommended implementation strategy, which outlined park management guidelines, resource management strategies, a breakdown of the estimated capital costs, and a breakdown of each development phase of the project. The *Terwillegar Park Concept Plan* includes the construction of the footbridge and the trail system.

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Conclusions
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3.0 Conclusions

In summary, placing the proposed major facility, Terwillegar Park Footbridge, within the North Saskatchewan River Valley is deemed essential and provides the following benefits for the City of Edmonton:

- Contributes to the goals of the City of Edmonton's Ribbon of Green Master Plan policies concerning the continuous park in the river valley by linking two sides of the North Saskatchewan River
- Allows for a potential increase in visitors to Terwillegar Park by providing a new amenity to the area
- Development of further public attractions, such as festivals, are possible with increased access
- Minimizes disturbance to the environment and environmentally sensitive areas around Terwillegar Park by restricting development to one central trail and choosing a minimalist design for the footbridge
- Provides the public with a continuous recreational path linking both sides of the river for the purposes of recreation, leisure, and connections to nature

There are numerous reasons to support the construction of the Project within Terwillegar Park and River Valley Oleskiw. Further to significantly contributing to the vision outlined in the Ribbon of Green Master Plan, it will result in increased use of the area and create a unique experience for visitors by providing an extended trail system for play, leisure and recreation.

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Limitations and Qualifications
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4.0 Limitations and Qualifications

In conducting the investigation and rendering our conclusions, Stantec gives the benefit of its best judgment based on its experience and in accordance with generally accepted professional standards for this type of investigation. This report was submitted with the best information to date and on the information provided. The conclusions made within this report are a professional opinion, not a certification of the site's environmental condition, no other warranty, expressed or implied is made. This report has been prepared for the exclusive use of the City of Edmonton for the purposes of assessing the suitability of the proposed development at the proposed location. Any use which any third party makes of this report, or any reliance on or decisions to be made on it, are the responsibility of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any other third party as a result of decisions made or actions based on this report. Our conclusions are limited by the following:

- The information contained within this report is based on the information provided to date by various agencies and the design figures available at the time of report preparation. Should the figures be amended in the future, revisions to the report may be required.
- The investigation was limited to those parameters specifically outlined in this report.
- The findings of this report were based off a desktop review of current information. No fieldwork was conducted.

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References
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5.0 References

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**TERWILLEGAR FOOTBRIDGE SITE LOCATION STUDY LOCATED WITHIN 10-52-25 W4M,
EDMONTON, ALBERTA**

Appendix A Engineering Drawing
February 2014

Appendix A Engineering Drawing

Appendix A

Engineering Drawing

