



Executive Summary

The Royal Gardens Urban Design Analysis (UDA) is the product of a city led process that involved an extensive public engagement component. The UDA is a requirement of the City of Edmonton's Neighbourhood Renewal program led by the Building Great Neighbourhoods (BGN) Branch. Through walking tours, workshop sessions, online surveys, and interactive open house exercises, the community identified issues and opportunities and helped the City refine concepts for neighbourhood renewal consideration. Public knowledge and feedback, obtained throughout the project, influenced urban design concepts to maximize the financial investments of neighbourhood renewal and enhance quality of life for the public.

Residents and community stakeholders developed a vision statement and ten core values to inform the neighbourhood renewal process and the design of concepts. General themes highlighted within the vision and core values include the importance of pedestrian safety, accessibility, fostering social atmospheres, parks and green spaces, active transportation, and year-round recreational activities. Objectives of the recommended urban design concepts within this report are consistent with the community developed vision and core values.

This report uses overarching UDA themes to identify gaps within the existing conditions of the community and recommend urban design concepts that implement the vision and core values. Analysis themes used throughout the process included Open Spaces, Connectivity and Corridors, Traffic, and Placemaking. In addition, two themes - Safety and Lighting - were included in all of the other analysis themes.

Community identified issues and opportunities were classified by their associated overarching analysis theme. Focus areas were established around physical locations where issues and opportunities were concentrated. These focus areas materialized around a variety of neighbourhood assets including public parks and open spaces, prominent streets and avenues, and community facilities. Options detailing potential design elements were developed to address issues and opportunities of the focus areas.

Public feedback regarding the options was used to develop a series of draft concepts that were refined by the public and the project team to create final urban design concepts. An urban design framework was established to show the relationships between the urban design concepts and the core values of the community vision. Public input, city policies and programs, and technical considerations influenced the urban design concepts. The final public engagement event of the UDA had community members identify for each concept their 'level of importance' and 'timeline for construction'.

Ultimately, the realization of community prioritized concepts is dependent on the availability of neighbourhood renewal funding. Identified community enhancements unable to be included within neighbourhood renewal efforts may be explored as future opportunities. The UDA is intended to serve as a holistic community vision to inform current and future city processes to improve the quality of life for residents.

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1 Introduction

1.1 Background

Royal Gardens is a mature neighbourhood and attention to the condition of sidewalks, streets, and infrastructure within the neighbourhood is needed. Neighbourhood renewal reconstruction for Royal Gardens is scheduled from 2019 to 2020.

Building Great Neighbourhoods Branch

The direction for this UDA comes from the City of Edmonton's BGN Branch. The BGN Branch leads the process of integrating and leveraging a scope of work that maximizes the full potential for strong and sustainable neighbourhoods. The BGN Branch is at the heart of aligning and advancing multi-faceted neighbourhood renewal efforts and involves the collaboration of other City departments and programs.

BGN Neighbourhood Renewal Program

The purpose of the Neighbourhood Renewal Program is to outline cost-effective and long-term strategic approaches to renew and rebuild infrastructure within mature neighbourhoods. Work within the scope of the Neighbourhood Renewal Program involves above and below ground infrastructure such as:

- Road reconstruction and repaving;
- · Replacement of street lights;
- · Reconstruction of sidewalks; and
- Reconstruction of curb and gutter.

The Neighbourhood Renewal Program also offers the opportunity for two types of cost-sharing local improvements, sidewalk renewal and decorative street lights. The review of the redevelopment of other City owned areas, such as green spaces and parks, are also included in the Neighbourhood Renewal process. The intention is to identify opportunities and funding to make desired upgrades and enhancements in coordination with the Neighbourhood Renewal Program.

Urban Design Analysis and Public Engagement

In 2017, the scope of BGN was expanded to include the requirements of a UDA and enhanced public engagement as part of the BGN Neighbourhood Renewal Program. The UDA looks at the urban environment, its functionality, connectivity, aesthetics and the urban experience of the neighbourhood, and suggests improvements which will ultimately inform neighbourhood renewal initiatives. An extensive public engagement process was used to develop and refine the recommendations of this UDA. Public engagement efforts included a community walking tour, ideas workshop, open houses, and surveys.





1.2 Purpose

The UDA of Royal Gardens is a detailed study from an urban design/planning perspective. The study identifies concepts to inform neighbourhood renewal efforts and develops a community plan to inform future city processes. The UDA identifies gaps and opportunities within the neighbourhood. These identified opportunities will help guide future investment and redevelopment to help improve quality of life.

Conducting a UDA as part of neighbourhood renewal is beneficial with regards to ensuring that municipal infrastructure investments are efficiently utilized. Neighbourhood renewal efforts can both satisfy upgrades to infrastructure above and below ground while also improving aspects of the public realm such as safety, parks, pedestrian connectivity, and landscaping.

The UDA provides comprehensive solutions to community identified issues that can be addressed through neighbourhood renewal efforts, which could help bring people together and improve the quality of life of local residents and economic well-being of local business.

Concepts selected for implementation will require detailed engineering prior to construction, as well as consideration of appropriate funding sources. Funding could come from the public, private or community sectors. It is recognized that limited financial resources are available, so while some initiatives were prioritized, others will likely be developed over longer time frames or reassessed in time.

1.3 What is an Urban Design Analysis?

Urban design is an overarching city-building discipline that is concerned with how people experience the urban environment in their day-to-day activities. Urban design focuses on the public realm – the interconnected network of streets, parks, trails and open spaces - and how it is organized, how it functions, how it is built (design aesthetics), how it relates to the surrounding buildings, and how it is connected to the rest of the city (i.e. connectivity). Good urban design supports economic, environmental and social sustainability and sustainable growth - applicable at street-, neighbourhood- and city-wide levels.

The Way We Grow, Edmonton's Municipal Development Plan, identifies urban design as a major strategic goal that is interconnected and supportive of other strategic goals such as Complete, Healthy and Livable Communities, Sustainable Urban Form, Integrated Land Use and Transportation, Supporting Prosperity, and Natural Environment.

This UDA looks at Royal Gardens through an urban design lens in terms of the existing urban context, character areas, design aesthetics, access to day-to-day community destinations and connectivity with other parts of the city. The focus is on the human experience (i.e. people-centric design), aesthetics, convenience to residents and visitors, the uniqueness and familiarity of the urban form, with additional consideration of safety, inclusivity (e.g. for children, adults, elderly population), universal design, and design for all seasons. This UDA recommends urban design concepts to address issues and opportunities identified through the urban design lens and the public engagement process.

Given BGN's focus on infrastructure, this UDA focuses mostly on the physical environment and less on programming and organizational events.





1.4 How to Use This Document

The UDA outlines urban design concepts recommended for inclusion in the neighbourhood renewal of the neighbourhood. Proposed concepts address issues and opportunities identified by the community and findings of the UDA. Following is a summary of each Section within the UDA.

Section 1 provides a general introduction, project background information, the purpose and explanation of a UDA, and how to use the UDA.

Section 2 discusses the study area boundary, out of scope areas, neighbourhood history and context, the purpose of Neighbourhood Renewal, and the project approach and process.

Section 3 summarizes details of the public engagement process used to identify issues and opportunities within the neighbourhood and develop draft concepts to be included in neighbourhood renewal efforts.

Section 4 analyzes the neighbourhood from an urban design perspective which examines the surrounding context, key destinations, neighbourhood character areas, open spaces, connectivity and corridors, vehicular network, and placemaking. Recommendations of the UDA are derived from publicly identified issues and opportunities, and consideration of urban design and planning best practices.

Section 5 states the community vision and core values that were developed by the community. The urban design framework, which builds on the community vision and core values, is also presented within this section and provides an overview of how the recommended concepts within Section 6 are interrelated. Considerations of the UDA that are out of scope for neighbourhood renewal but may be championed by other city processes are listed within this section.

Section 6 presents the recommended concepts for incorporation into neighbourhood renewal efforts. Preliminary design plans for neighbourhood renewal will be informed by these concepts.

Section 7 outlines the next steps for neighbourhood renewal within Royal Gardens and how budgeting and funding decisions will determine the realization of the UDA recommendations.





Project Context and Process

2.1 Study Area

The UDA encompasses the area bounded by Whitemud Drive to the north, 111 Street to the east, 40 Avenue to the south, and 119/122 Street to the west as shown in Map 1. The analysis includes local roads, collector roads and City-owned spaces.

The analysis excludes these locations:

- Royal Road and Crown Road (these are privately owned roads);
- 119 Street, 111 Street, and Whitemud Drive: defined as arterial roadways and follows a different program for renewal, which is being coordinated separately by the City;
- 40 Avenue: defined as a collector residential roadway and follows a different program for renewal, which is being coordinated separately by the City; and
- Alleys (not part of the renewal program).

2.2 Neighbourhood Features

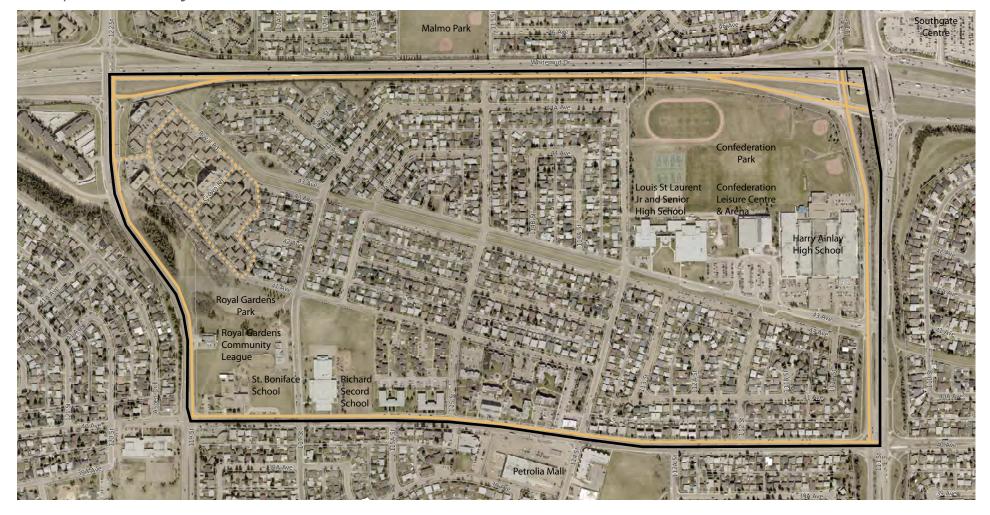
Royal Gardens is a mature neighbourhood, developed predominantly during the 1960s with a current population of around 3,400. The majority of residents reside in owned single detached dwellings¹. In general, the population has a high proportion of residents above the age of 50, as well as a large amount of new families¹. Several multi-family apartment and townhouse developments are found along the neighbourhood's western and southern edges.

Royal Gardens contains a number of amenities that serve both residents of the neighbourhood and draw in people to the community from the surrounding areas. These include four schools (St. Boniface School, Richard Secord School, Louis St. Laurent School, and Harry Ainlay School) and two parks (Confederation Park and Royal Gardens Park). Additionally, the Confederation Leisure Centre and the Royal Gardens Community League offer a wide range of sports and recreational facilities. The neighbourhood also includes a dedicated pedestrian connection along the grassed boulevard of 43 Avenue between 117 and 111 Street. This pedestrian connection bisects the neighbourhood from northwest to southeast, as well as across Whitemud Drive from the north end of 114 Street.





Map 1. Study Area



- Royal Gardens Neighbourhood Boundary
- Public roads not included within the scope of the neighbourhood renewal
- Private roads not included within the scope of the neighbourhood renewal

2.3 Neighbourhood Renewal

The BGN *Charter of Public Engagement* outlines four phases within the Road Map, see Figure 1, to BGN:

- 1 Concept Phase;
- 2 Design Phase;
- 3 Build Phase; and
- 4 Operate Phase.

The timeline for the build phase for Royal Gardens is anticipated to last approximately 2 years, from 2019 to 2020.

2.4 Project Approach and Process

The UDA is part of the Concept Phase set out in the BGN Public Engagement Charter.

The key steps in the Concept Phase are:

- Sharing information about BGN with the community;
- · Establishing a neighbourhood vision for livability and transportation;
- Analyzing neighbourhood urban design features to identify strengths and opportunities for renewal; and
- Developing a Concept Design identifying priority projects that respond to the opportunities.



Figure 1. BGN Road Map



3 Public Input

A variety of public engagement activities were hosted through the development of the UDA. Residents and property owners identified issues and opportunities, created solutions, and refined draft concepts for potential neighbourhood renewal projects. The following provides a high-level overview of each activity and how feedback informed and shaped the development of the UDA.

3.1 Public Engagement Activity #1: Community Walk and Ideas Workshop and Online Survey

The neighbourhood was invited to attend a walking tour and brainstorming session with project team members to identify various issues and opportunities within the neighbourhood. An online survey was available for residents unable to attend the walking tour and brainstorming session to provide their feedback. Public input informed the analysis of existing infrastructure, identified public realm improvement opportunities and helped to create the draft vision and core principles.

3.2 Public Engagement Activity #2: Vision Confirmation and Community Options Public Event and Online Survey

Residents and business owners were invited to review and provide feedback on the draft vision, draft core values, and benefits and tradeoffs of potential Focus Areas to address issues and opportunities identified in the previous public engagement event. Participants indicated their level of comfort with the potential Focus Areas, suggested revisions, and provided additional feedback. An online survey was available for residents unable to attend the public event to provide their input. Feedback provided by the community was used by the project team to refine the vision and core values and to develop Focus Area Draft Concepts that balanced the benefits and tradeoffs discussion.

3.3 Public Engagement Activity #3: Draft Concepts Public Event

The refined vision and core values were shared with the community during the event. The neighbourhood was invited to comment on, identify their level of importance, and priority (short-, medium-, and long-term) for each potential Draft Concept. Letters were also sent to property owners that would live near a proposed concept to ensure we gathered their input. Draft Concepts were revised based on public feedback gathered, City policies and programs, and technical constraints.

Vision Confirmation and

Community Walk and Ideas Workshop including Online Survey

Community Options
Public Event including
Online Survey

Draft Concepts Public Event



24 2018 MAY 15 2018 JUNE **27** 2018









Public Engagement Activity #1: Community Walk and Ideas Workshop









Public Engagement Activity #2: Vision Confirmation and Community Options







Public Engagement Activity #3: Draft Concepts

City of Edmonton | Royal Gardens Urban Design Analysis

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4 Urban Design Analysis

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4.1 Urban Design Analysis Themes

Community input received throughout the project along with urban design best practices have informed the UDA. The UDA reviews the surroundings of Royal Gardens and the neighbourhood through urban design themes. Analyzing the surrounding context of the neighbourhood helps to develop an understanding of how the neighbourhood is connected to the city as a whole.

Gaps in the existing neighbourhood conditions are identified through the following six themes. For this analysis, lighting and safety are examined within the overarching analysis themes of open spaces, connectivity and corridors, traffic, and placemaking.



4.2 Surrounding Context and Destinations

Analyzing the surrounding context of a neighbourhood provides insight into relationships between the neighbourhood and the city as a whole. Gaps between Royal Gardens and the surrounding context are identified in Map 2.

Destinations

Surrounding Royal Gardens are a variety of key destinations such as the Southgate LRT Station, Southgate Centre, Petrolia Mall, and the Whitemud Creek Ravine. Within Royal Gardens are destinations that draw residents from across the city including Confederation Park, Confederation Leisure Centre and Arena, and four schools. The UDA examines the connectivity of Royal Gardens to key destinations within and surrounding the neighbourhood.

Bike Network

The bike route along 114 Street in Royal Gardens provides a direct bike route to the Southgate LRT station for the southern neighbourhoods of Greenfield and Sweet Grass. Additionally, the 114 Street bike route connects the neighbourhood with the broader city bike route network leading to destinations such as the University of Alberta and Downtown. The 114 Street bike route should be enhanced to further encourage active transportation and contribute to a functional bike network.

Southgate LRT Station



Whitemud Creek Ravine



Southgate Centre



Petrolia Mall



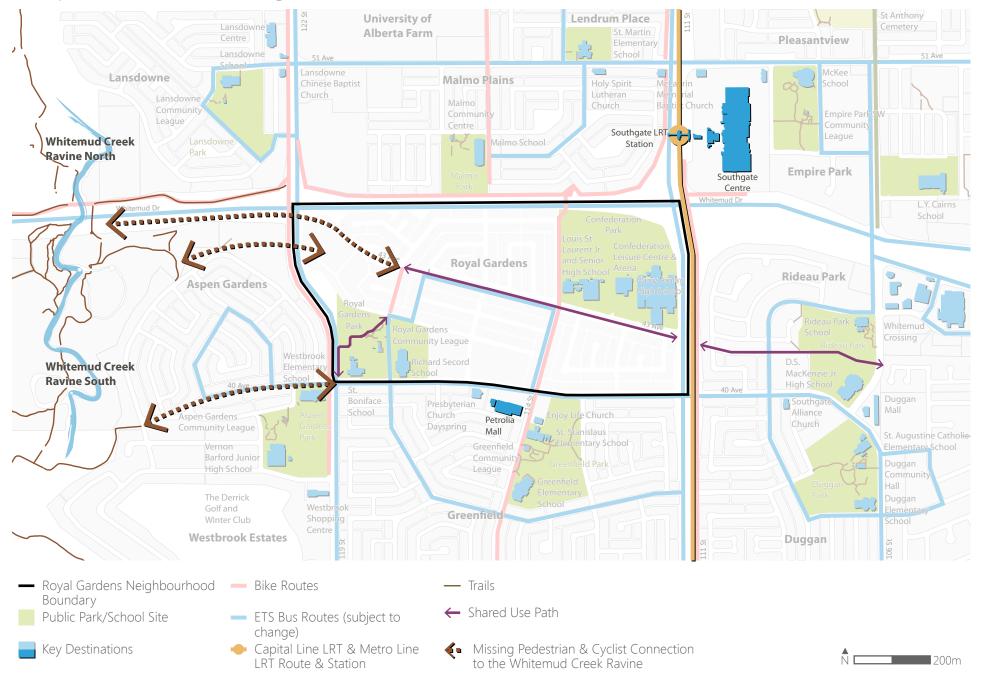
Whitemud Creek Ravine



Petrolia Mall



Map 2. Surrounding Context & Destinations



4.3 Key Community Destinations and Neighbourhood Character Areas

Neighbourhood Character Areas

Analyzing a neighbourhood from the perspective of character areas exposes the composure of the community. Neighbourhood character areas of Royal Gardens are identified on Map 3.

Single Detached Residential

The majority of the neighbourhood consists of single detached residential properties. Mature trees, typically on private properties, are scattered throughout this area reflecting the 'mature neighbourhood' classification. Garages for the majority of these properties are located along rear alleys creating a more pedestrian-friendly environment along the streets.

Multi-family Residential

Multi-family apartments and townhouse complexes are located along the western and southern edges of the neighbourhood. Roads within the multi-family development along the western edge of the neighbourhood are privately owned and operated. While the scope of neighbourhood renewal addresses publicly-owned roads, it is important to ensure that connectivity to and from these higher-density developments is seamlessly integrated with the neighbourhood.

Single Detached Residential



Multi Family Residential



43 Avenue Green Corridor



Institutional/Community

This character area is formed by the clustering of schools and community centres within the northeast and southwest corners of the neighbourhood. Institutional and community uses within this character area include Harry Ainlay School, Louis St. Laurent School, Confederation Park, and Confederation Leisure Centre and Arena. These uses serve the immediate neighbourhood as well as the surrounding region.

The southwest portion contains the Royal Gardens Community League, Royal Gardens Park, St. Boniface School, Richard Secord School, and the Edmonton Fire Station Number 13. These uses provide recreational, community, and educational resources for Royal Gardens and the surrounding neighbourhoods.

43 Avenue Green Corridor

The neighbourhood is tied together by a wide, grassy pipeline corridor along 43 Avenue that runs between the northwest and southeast corner of Royal Gardens. For a majority of the boulevard a shared use path provides access from 111 Street to 117 Street. The shared use path continues east of 111 Street into the adjacent neighbourhood of Rideau Park and southwest of 117 Street through Royal Gardens Park. The pipeline corridor is also dedicated as an off-leash dog area.

Key Destinations

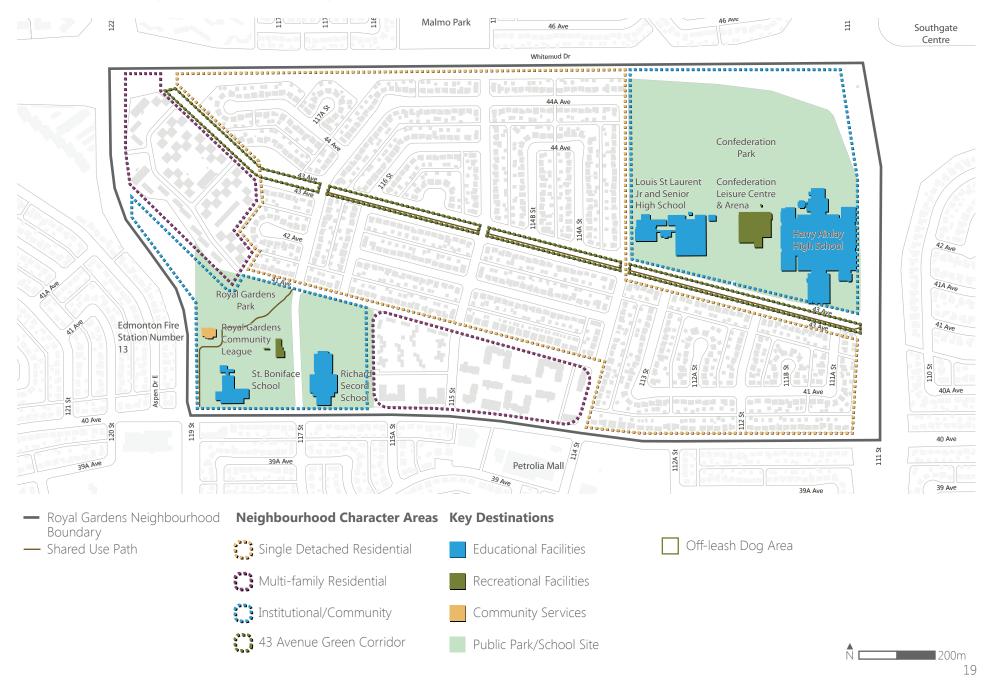
Identifying key community destinations can help provide an understanding of pedestrian and vehicular movement patterns. Within Royal Gardens there are a variety of key community destinations identified within Map 3.

- Educational Facilities:
- Recreational Facilities;
- · Community Services; and
- Public and School Parks.





Map 3. Key Community Destinations and Character Areas





4.4 Open Spaces

Open spaces within a community serve multiple purposes for all age groups. The physical design of open spaces can enable active and passive activities. Some open spaces may function as playgrounds and organized sports fields while other open spaces may function as social relaxation and gathering areas.

Royal Gardens benefits from various open spaces located throughout the neighbourhood. Types of open spaces within Royal Gardens range from neighbourhood public/school parks and open spaces to district recreational spaces. These parks provide venues for recreational and community activities. It is important that the open spaces within the neighbourhood meet the needs of a community.

General Gaps and Observations

Identifying gaps in the parks and open space amenities available can help to address the needs of residents. The following are site specific gaps and observations that were identified during the UDA:

43 Avenue Pipeline Corridor

The most unique open space within Royal Gardens is the grassed pipeline corridor transecting the length of the neighbourhood along 43 Avenue, as shown on Map 4. This feature provides a linear off-leash dog area and a shared use path connecting the western and northern edges of the community. This presents an opportunity for enhancements such as landscaping, seating, and lighting elements, which help to create a sense of character and foster a comfortable pedestrian environment.

Royal Gardens Park

Adjacent to the Royal Gardens Community League, Royal Gardens Park provides recreational amenities such as playground structures, a splash pad, and a toboggan hill. The park lacks amenities such as seating areas, public art and lighting.

Confederation Park

Recreational amenities and facilities within Confederation Park have a district level service range. District Activity Parks serve several neighbourhoods, with a catchment area of approximately 2.5km, and are important for health, wellness and quality of life. They are part of a city-wide park system and support a wide variety of facilities, programs and open space activities. The Confederation Park Master Plan establishes a long-term vision for the redevelopment of the park area to meet future recreational needs.

Road Right-of-way Maintained as Unofficial Park Space

Along the northern edge of the neighbourhood are three triangular pieces of road right-of-way that are maintained as unofficial park spaces. These spaces are underutilized and unknown by the community. The opportunity exists to dedicate these spaces as actual parks and include them within the off-leash dog boundary.

43 Avenue Pipeline Corridor



Royal Gardens Park



Confederation Park



Road Right-of-way Maintained as Park Space



Map 4. Open Spaces





4.5 Connectivity and Corridors

The concept of neighbourhood connectivity describes how well a neighbourhood provides a choice of routes and travel modes for getting from place to place. Good connectivity is based around a network of nodes and corridors. Nodes are community destinations (such as neighbourhood commercial, parks, and community centres), while corridors are the linear public spaces that connect them (such as streets and pathways). Corridors are focused on transportation but might also have destinations alongside them. Providing more corridors between nodes, and ensuring they are attractive and safe to use, can improve neighbourhood connectivity.

Good connectivity is also influenced by the orientation and size of street blocks. Shorter blocks tend to offer more route choices and a more visually appealing streetscape. Breaking up longer blocks through the use of mid-block crossings can also improve safety and connectivity for pedestrians.

Key corridors in Royal Gardens are shown on Map 5. Block typologies in the neighbourhood are illustrated on Map 6.

4.5.1 Sidewalks and Bike Routes

43 Avenue

This corridor includes green space and a shared use path along a pipeline right-of-way, flanked by the 43 Avenue roadway on each side. It provides an important multi-modal connection between the northwest and southeast areas of the neighbourhood. It also offers linkages to other north-south corridors along 117, 115 and 114 streets. This corridor offers an opportunity for improved pathway and sidewalk connections at its eastern and western ends, and for enhanced landscaping and lighting to improve user comfort.

114 Street

The bike route along 114 Street provides a direct connection to the Southgate LRT station for the southern neighbourhoods of Greenfield and Sweet Grass. Additionally, the 114 Street bike route connects the neighbourhood with the broader city bike route network leading to destinations such as the University of Alberta and Downtown. It offers an opportunity to improve the safety and comfort of existing pedestrian and cycling connections to these facilities, as well as to nearby schools, parks, and shopping destinations.

117 Street

This north-south corridor helps provide access to Royal Gardens Community League and Park, Richard Secord School, and St. Boniface School from surrounding residential areas. It also provides a connection between the shared use paths along 43 Avenue and through Royal Gardens Park. It offers an opportunity at the southern end to enhance pedestrian facilities to improve safety near these community destinations.

As these corridors provide multi-modal access to all areas of the neighbourhood, including predominantly residential areas that are not specifically identified for improvements, enhancing them can help improve overall connectivity and public streetscapes within the Royal Gardens neighbourhood.

During community engagement activities for this project, pedestrian safety concerns were raised regarding the crosswalks at the 40 Avenue/112A Street and 40 Avenue/115 Street intersections. Although these intersections are outside of the scope of this UDA, they have been identified as areas of interest for traffic safety consideration.

43 Avenue



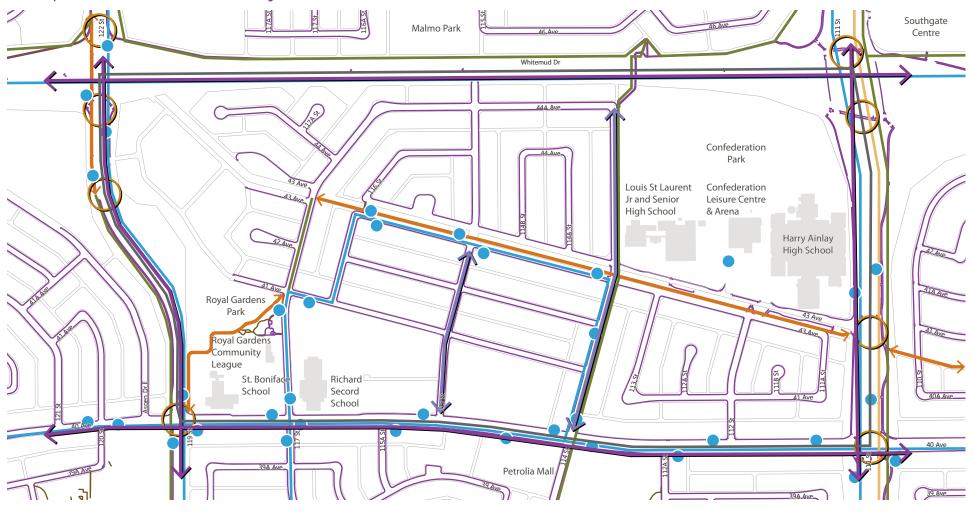
114 Street



117 Street



Map 5. Connectivity and Corridors



- Royal Gardens Neighbourhood Boundary
- ETS Bus Routes & Stops
- Capital Line LRT & Metro Line LRT Route
- Bike Routes
- Monowalks

- → Shared Use Path
- Crosswalks with Signals
- → City Level Corridors
- Neighbourhood Corridors



4.5.2 Urban Block Typologies

Analyzing the size and orientation of urban blocks helps to identify barriers and corridors for pedestrian and vehicular connectivity. Smaller blocks enable better connectivity by providing a higher level of permeability. From a pedestrian perspective, more engaging experiences typically exist along public roads with smaller block sizes due to more visual variety in the built form.

Larger blocks pose challenges for pedestrian and vehicular permeability within an urban fabric. Pedestrian connectivity is impacted by larger blocks often resulting in indirect or longer routes to surrounding destinations. Mid-block sidewalk connections through larger blocks increase pedestrian connectivity and support walkability within a neighbourhood.

Gaps/Observations

The street network within Royal Gardens was developed in the 1960s with a hybrid grid system design. The resulting block network has features such as curvilinear streets and cul-de-sacs throughout the neighbourhood. These features pose challenges for pedestrian connectivity through creating dead ends.

Urban blocks within the neighbourhood, as shown on Map 6 include two types:

- · Typical blocks; and
- Large blocks.

Typical blocks consist of predominantly single-detached dwellings. Large blocks include medium- and high-density residential built forms, public parks, and institutional uses. Land ownerships within these large blocks includes the City, School Divisions, and private landowners. The existing shared use path within Royal Gardens Park and the St. Boniface School lands provides pedestrian and cyclist connectivity through a large block. Partnerships between the City and private landowners within other large blocks should be explored to develop similar mid-block connections that enhance pedestrian and cyclist connectivity.

Map 6. Urban Block Typologies





4.6 Traffic

The vehicular network within the study area is framed by the arterial roads (111 Street, 119 Street, and Whitemud Drive) and collector residential road (40 Avenue) that form its boundaries. Within the neighbourhood itself, local and private roads in the northwest, central and southeast areas serve residential communities. These, in turn, are linked to community destinations and the broader City road network by a localized collector road network consisting of segments of 41 Avenue, 43 Avenue, 114 Street, and 117 Street.

The need for traffic calming was assessed as part of the scope of work for this project. Traffic calming is a combination of mainly physical traffic measures that address speeding traffic on local and collector roads within communities. Traffic calming measures can be incorporated into street design to enhance the safety and comfort of vulnerable road users such as pedestrians and cyclists.

Decisions about the location and type of traffic calming or related design measures to use must consider the objectives of the measures (for example, improving pedestrian visibility or reducing traffic speeds) and how they will work together as a system. It is often not feasible or necessary to install traffic calming measures at every location.

Engagement activities for this project provided an opportunity to highlight any traffic concerns residents may have, and sought feedback regarding their comfort level with various traffic calming measures. Residents did not raise widespread concerns with speeding and shortcutting within the neighbourhood. Two areas were identified as being congested and chaotic at school drop-off and pick-up times, with frequent and unpredictable jaywalking: 117 Street from 40 Avenue to 41 Avenue (in front of Richard Secord School) and 43 Avenue from 111 Street to 114 Street (in front of Louis St. Laurent and Harry Ainlay Schools and the Confederation Leisure Centre). It was also identified that cars shortcut over the pipeline and shared use path. Global traffic calming measures presented at engagement events, including curb extensions, raised crosswalks, raised intersections, and speed humps, were generally not highly supported.

Although arterial roads form the boundaries of the Royal Gardens neighbourhood, modifications to them are generally outside the scope of this project. The vehicular network concept for the study area is shown on Map 7. Key corridors and locations where design measures are recommended are discussed further below.

The design measures to be recommended for the neighbourhood will consider where concerns have been identified regarding congestion and pedestrian safety. They will also consider public level of comfort with various types of measures, as well as the design intent of specific measures. Finally, the measures consider the locations of pedestrian corridors, school sites, and playgrounds, as well as City road design standards and the urban design measures recommended in this UDA.

114 Street at 40 Avenue

This location provides important pedestrian and cycling access to other travel routes and community destinations. Measures such as textured crosswalks and landscaped curb extensions are recommended to shorten crossing distances and improve pedestrian visibility, and are described further in Section 6.10.

117 Street from 40 Avenue to 41 Avenue

This location is a high priority pedestrian route, as it provides access to nearby schools and parks. Congestion and safety concerns have been identified at peak school times. Measures such as textured crosswalks, curb extensions, and rectangular rapid flashing beacons are therefore recommended to shorten crossing distances and improve the visibility of pedestrians, and are described further in Section 6.6.

43 Avenue from 111 Street to 114 Street

This location provides important pedestrian access to adjacent schools and recreation facilities. It was identified as an area of congestion and pedestrian safety concerns at peak school times. Measures such as mid-block crosswalks with rectangular rapid flashing beacons are therefore recommended within this segment to improve pedestrian visibility, and are described further in Section 6.8

Intersection of 114 Street and 40 Avenue



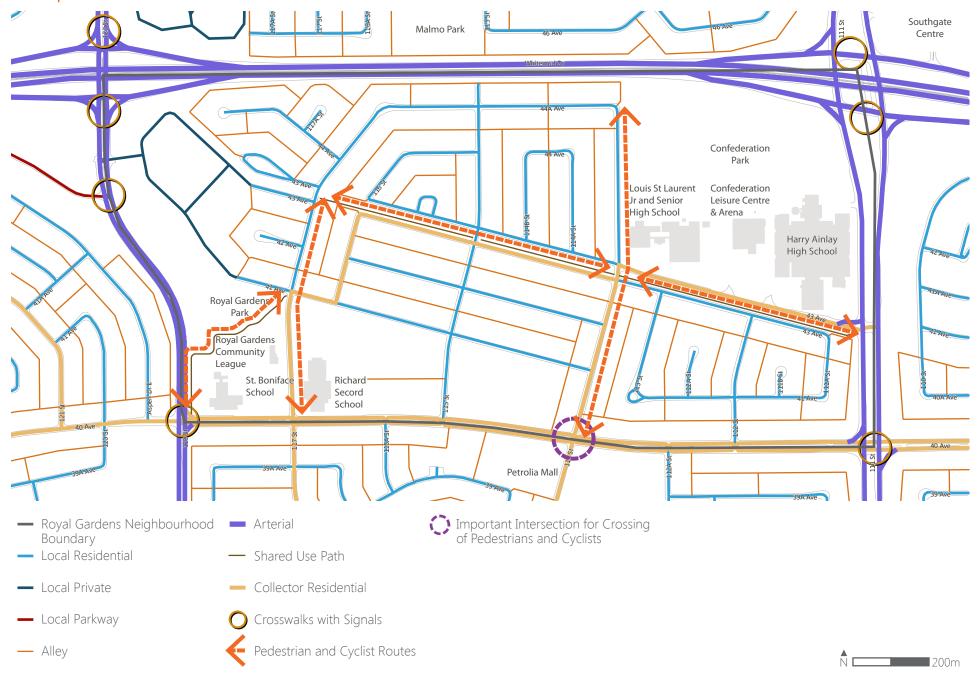
117 Street



43 Avenue in front of Louis St. Laurent School



Map 7. Vehicular Network





4.7 Placemaking

Placemaking refers to projects that can be used to reflect the character of the community as identified by the residents. These projects can help create a 'place' for enjoyment of all age groups to which people are attracted, where they feel safe and comfortable. Successful placemaking can be achieved in a variety of ways to address site-specific issues and challenges.

Dependant on the issues and challenges of a particular area, the objectives of placemaking interventions may include:

- Resolving safety concerns/perceptions;
- Expressing community identity;
- Beautifying an area;
- Increasing pedestrian activity; and
- Programming/maximizing the potential of a space.

The following are three approaches to placemaking²:

- Strategic placemaking;
- Tactical placemaking; and
- Creative placemaking.

Strategic Placemaking

Aims to create desirable locations for people through influencing land uses and physical forms. Attributes of strategic placemaking include:

- · Gathering spaces/seating areas;
- Parks and pathways;
- Mixed-uses:
- Pedestrian-friendly design; and
- · Access to public transit.

Tactical Placemaking

Involves guick and minimal cost projects that activate spaces through minor interventions. Examples of tactical placemaking projects include:

- Placing movable patio tables and chairs on sidewalks adjacent to businesses or within public areas;
- Hosting events/festivals and programming public park and plazas; and
- Providing pedestrian-oriented lighting features in public areas.

Creative Placemaking

Expresses arts and culture through partnerships between community stakeholders (residents, city representatives, and business owners) that alter social opportunities and physical forms of spaces. Examples of creative placemaking include:
28 2. Michigan State University's Placemaking Guidebook - Placemaking as an Economic Development Tool

- Public art installations (temporary or permanent);
- · Addition of music/instruments in public plazas; and
- · Interactive activities and events.

Gaps/Observations

Within Royal Gardens there are various opportunities for additional strategic, tactical, and creative placemaking projects within open spaces, gathering areas, along streets, and adjacent to businesses.

The character of Royal Gardens is predominantly residential consisting of singledetached family dwellings and a few clusters of multi-family buildings. However, the neighbourhood is home to four schools and a District Activity Park that are identifiable through institutional built forms, open spaces, and an influx of students, education leaders, and athletes. Placemaking initiatives within parks and open spaces, near schools, and around community uses can be used to express the energy, creativity, and imagination of the student population.

Nodes

Nodes are areas of concentrated activities and uses that are distinctly different than their surroundings. Typical nodes may include school zones, parks, community centres, places of assembly, and similar community amenities. Placemaking opportunities exist within nodes throughout Royal Gardens as shown in Map 8. The addition of placemaking elements to nodes creates desirable, attractive, and community-oriented spaces.

1 Public Art within the Pipeline Corridor Near Schools

The opportunity exists to develop public art within the pipeline corridor in front of Harry Ainlay and Louis St. Laurent Schools. Local students could create the public art and have it interchanged.

2 Public Art within the Pipeline Corridor Adjacent to Residential Areas

It was identified by the community to include a public art element within the pipeline corridor. A public art element could be incorporated at a seating area along the existing shared use path.

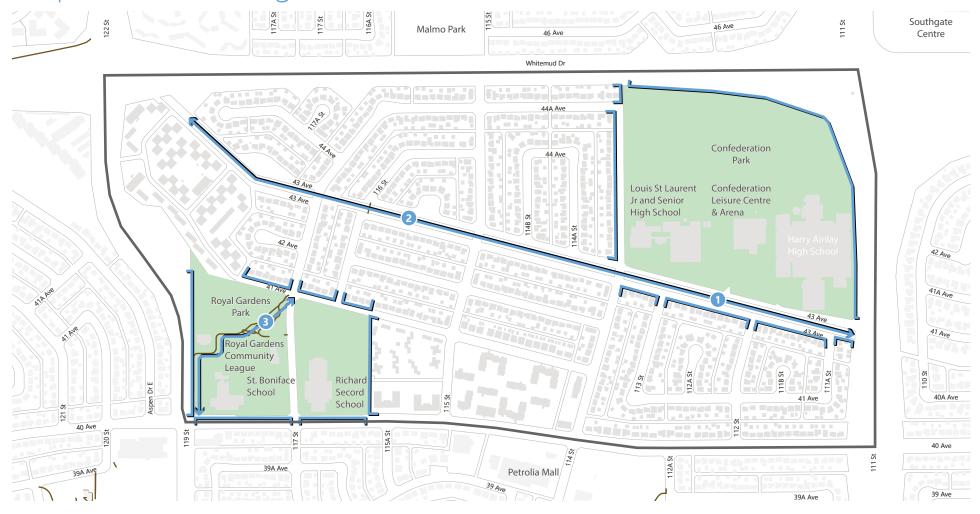
3 Public Art within Royal Gardens Park

The opportunity exists to include a public art element in Royal Gardens Park near the proposed community garden location. The addition of public art would add visual interest to the park. It would also present the opportunity to express the identity of the community through art.

4 Seating Areas and Plantings Along the Pipeline Corridor

The opportunity exists to add multiple seating areas and plantings along the pipeline corridor. Seating areas could also be added along the existing shared use path through Royal Gardens Park. The addition of these features would help to beautify the neighbourhood and create unique meeting areas.

Map 8. Placemaking



- Royal Gardens Neighbourhood Boundary
- Nodes Nodes
- Public Park/School Site
- # Public Art
- Seating Areas and Plantings



City of Edmonton | Royal Gardens Urban Design Analysis

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5 Community Vision, Core Values and Urban Design Framework

The following Community Vision and Core Values were developed through the public engagement process. The Vision provides a short description that sets the direction for the community's future livability. The Core Values provide ideas which inform how the Vision is applied to neighbourhood design.

Public knowledge on issues and opportunities for Royal Gardens was received at the Community Walk and Ideas Workshop Event held in February 2018 and through the survey following. This feedback informed the development of the Draft Community Vision and Core Values. At the Vision Confirmation and Community Options Event held in May 2018, the Draft Community Vision and Core Values were shared with the public. During this event and within the survey following, residents were asked what they liked about the Draft Community Vision and Core Values and what needed to be changed. This feedback was used to refine the Community Vision and Core Values. The following Community Vision and Core Values were shared with the public at the Draft Concepts Event held in June 2018.

5.1 Community Vision

"Neighbourhood Renewal in Royal Gardens will support a safe, accessible, and family-friendly community. As a neighbourhood with many schools, activities, and green spaces, Royal Gardens is a community that is easy for people to walk, bike and drive. The design of the neighbourhood enables residents to visit, play and enjoy local destinations together."



5.2 Core Values

Getting to know your neighbours in a friendly atmosphere.



Getting out and enjoying vibrant green space and playgrounds.



Gatherings and block parties that bring people together.



Year-round opportunities for family-friendly activities.



Feeling safe and having well-lit spaces.



Having viable options to walk, bike, and use transit.



Visiting local amenities, shops, and schools.



Enjoying quietness and proximity to nearby destinations.



Walking, accessibly and pedestrian safety.



Wayfinding and signage that is easy to understand.



The core values are not ranked in any particular order.

5.3 Urban Design Framework

Building on the Community Vision and Core Values, the Urban Design Framework (UDF), illustrated in Map 9, shows the interrelationships between all recommended urban design concepts. Issues and opportunities identified by the public and gaps identified through this UDA are balanced in the overall UDF. Recommended urban design concepts of the UDF are explained in detail within Section 6.

Urban Design Principles

The following urban design principles were informed by the Core Values. The UDF implements these urban design principles to achieve the Community Vision.

1. Improve walkability and accessibility throughout the neighbourhood by prioritizing pedestrian safety and convenience. (Core Values 5, 6, & 9)

Pedestrian-oriented lighting proposed along the existing shared use path would increase pedestrian visibility and safety during evenings. Proposed curb extensions and rectangular rapid flashing beacons at crosswalks adjacent to schools throughout the neighbourhood would improve the presence of pedestrians to motorists. Textured crosswalks would delineate the pedestrian environment and provide a sense of character. Wider sidewalks adjacent - and leading to - schools will help to enhance pedestrian connectivity. These enhancements will be in addition to the base level urban renewal improvements of sidewalk replacements and curb ramps at all intersections across the neighbourhood.

2. Strengthen access to public parks through enhanced pedestrian and active transportation connections to existing and future public parks. (Core Values 2, 6, 7, 9, & 10)

The recommended shared use path extending west of the existing shared use path along 43 Avenue would provide pedestrian and cyclist access to the northwest. Wayfinding signage throughout the neighbourhood would improve pedestrian and cyclist access to parks and destinations within and around the community.

3. Enhance the bike network connectivity within and surrounding the neighbourhood. (Core Value 6)

The recommended shared use path, along 114 Street north of 43 Avenue, and the shared roadway, along 114 Street south of 43 Avenue, would enhance the existing bike route connection through the community by providing facility types supportive of active transportation. The 114 Street bike facilities would reinforce the surrounding bike network by facilitating north-south connectivity from southern neighbourhoods, of Greenfield and Sweet Grass, north over the Whitemud Drive to Downtown and broader connections. Additionally, the recommended bike facilities would enhance access to the existing 43 Avenue shared use path providing east-west connectivity.

4. Ensure public park spaces meet current and future recreational needs of the community. (Core Values 1, 2, 3, 4, & 8)

Expanding the existing off-leash dog area into the open spaces within the northwest corner of the community would create an additional recreational amenity for the community. Benches and landscaped areas along the existing shared use path would provide resting and social gathering areas for pedestrians.









Map 9. Urban Design Framework



5. Support opportunities for placemaking initiatives to express community identity and create active public spaces. (Core Values 1 & 5)

Art installations along the shared use path, within the pipeline corridor, and within Royal Gardens Park would create visual interest and contribute to the character of the neighbourhood. Pedestrian-oriented lighting, benches, and landscaping along the pipeline corridor would also contribute to the character of the neighbourhood and create a unique sense of place.

5.4 Additional Community Enhancements

The following is a list of considerations that were identified through the UDA but are outside the neighbourhood renewal scope. These considerations are not within the scope of neigbourhood renewal because they either involve arterial roads or non-infrastructure related enhancements. Additional community enhancements below may be further pursued through applicable City programs or community led initiatives.

- Establishing a direct pedestrian and cyclist connection to the Whitemud Creek Ravine.
- Develop a partnership with the multi-family development in the northwest corner of the neighbourhood to explore connectivity options for extending the proposed shared use path west connecting to 122 Street NW.
- Improvements to existing pedestrian crossings along 40 Avenue.





6 Urban Design Concepts

6.1 Overview

Urban Design Analysis Themes

Concepts were developed during the UDA and associated public engagement to address identified gaps and issues for the following analysis themes. Identified issues and opportunities relating to themes of vehicular network, placemaking, lighting, and safety are addressed through elements of the concepts proposed under the themes of open space and connectivity and corridors.

The below icons will be used within in the recommended urban design concepts to identify what UDA themes were addressed.







Connectivity & Corridors



Traffic



Placemaking



Lighting



Safety

Urban Design Concepts

Below is a list of the recommended urban design concepts, identified by analysis theme, that will be explained in more detail within the following pages:

- Concept 1: Pipeline Corridor Improvements
- Concept 2: New Pocket Parks/Off-leash Dog Boundary Expansion
- Concept 3: Wayfinding Signage
- Concept 4: Royal Gardens Park Improvements
- Concept 5: Traffic and Pedestrian Safety Improvements Near Richard Secord School
- Concept 6: 114 Street Enhanced Walking and Biking Connection (40 Ave 44A Ave)
- Concept 7: Traffic and Pedestrian Safety Improvements Near Harry Ainlay and Louis St. Laurent Schools
- Concept 8: Bus Stop Improvements
- Concept 9: Improvements to the Intersection of 40 Avenue and 114 Street

Each urban design concept contains a description, list of key features, and conceptual graphics that help explain design details. Concepts proposed are the result of the City of Edmonton's Decision-Making process as shown in the Figure 2. Ultimately, each recommended concept strives to represent a balance between public input, city policies and programs, and technical requirements. Appendix A contains excerpts of city policies and programs that the urban design concepts accomplish.

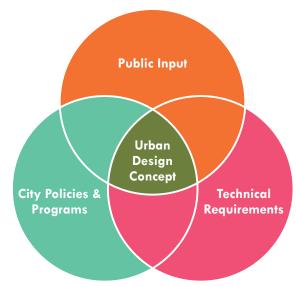


Figure 2. City of Edmonton's Decision-Making

Level of Importance and Construction Timeline

During the final public engagement event of the UDA in June 2018, participants identified the 'Level of Importance' and preferred 'Construction Timeline' for each draft concept. These draft concepts were refined to develop the proposed concepts within this report. The below scales are used within this report to identified the community 'Level of Importance' and 'Construction Timeline' for each concept.

Level of Importance





6.2 Concept 1: Pipeline Corridor Improvements

This concept would improve connectivity in Royal Gardens by providing safe, family-friendly options for walking and biking in the community. It would also create a sense of place through the addition of new seating, pedestrian-oriented lights, and landscaping along the existing shared use path, from 111 to 117 Street, and along a new shared use path segment extending northwest from 117 Street to the Whitemud Drive sound barrier wall.

Urban Design Concept

- New benches and plantings would create areas for residents to gather and enjoy the improved open space. Providing benches along the shared use path would encourage seniors to walk by providing places to rest.
- New pedestrian-oriented lights, within the public right-of-way, along the pipeline corridor would improve safety for users of the shared use path and seating areas during evenings.
- Expansion of the existing shared use path northwest from 117 Street to the Whitemud Drive sound barrier wall would provide better access to the west end of the off-leash dog area and improve connections to and from the northwest end of the neighbourhood.
- Public art at two locations along the existing shared use path would create visual interest and contribute to creating a sense of place. A partnership with local schools should be considered to help develop public art. Installations could be mounted on permanent foundations and changed over time.

Public Input

The public identified opportunities for beautification improvements along the existing shared use path within the pipeline corridor. Improvements identified included the addition of seating areas, trees, landscaping, pedestrian-oriented lights, off-leash dog park amenities, and public art. It was mentioned by the public that the addition of benches along the shared use path would encourage seniors to walk more by providing places to rest. During the public engagement process the public suggested adding garbage receptacles with lids near the proposed seating areas. The recommended concept has been updated to include garbage receptacles with lids.

Additionally, the community identified that a partnership with students of local schools should be considered for developing public art. The mounting platform of public art should be designed so art can be changed over time. The public suggested the extension of the existing shared use path from 117 to 122 Street. The right-of-way width between the Whitemud Drive sound barrier wall and the adjacent multi-family development is too narrow to accommodate a shared use path or sidewalk connection to 122 Street. The recommended concept proposes extending the existing shared use path from 117 Street northwest terminating before the Whitemud Drive sound barrier wall.

Concern was raised by the public regarding the safety of the existing off-leash areas along the pipeline corridor. Potential conflicts exist between dogs, users of the shared use path, and vehicles along 43 Avenue. It was suggested to develop a fenced off-leash dog park. Concept 2 of this UDA recommends expanding the existing off-leash dog area into underutilized right-of-way space within the northwest corner and along northern boundary of the neighbourhood. The expanded off-leash dog area would be setback a considerable distance from nearby roads and offer a safer environment for an off-leash dog area.









Technical Requirements

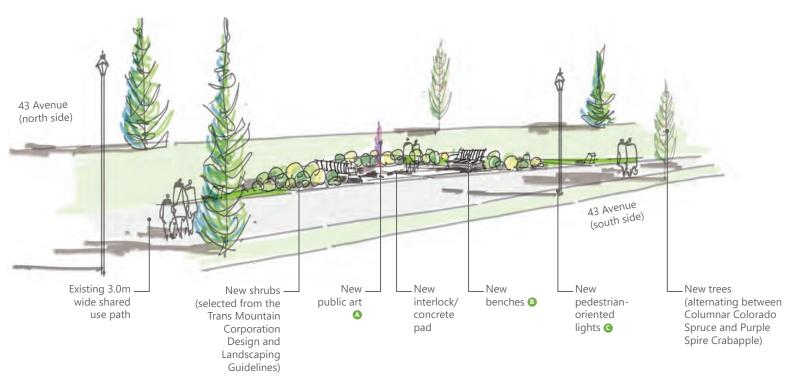
The following site constraints were considered when developing this concept:

- Proposed trees and shrubs planted within and adjacent to the pipeline right-of-way should fulfill the requirements of the Trans Mountain Corporation's Design and Landscaping Guidelines. Please see page 44 for additional planting details.
- Pedestrian-oriented lights and the associated electrical line should be within the public right-of-way and connected to the street light network. The electrical line should be 0.5m south of the shared use path. Pedestrianoriented lights should be 1.0m south of the shared use path.

City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

- The addition of seating areas and public art would accomplish the The Way We Grow Policy 7.4.2, The Way We Live Objectives 1.1 and 5.2, Breathe - Green Network Strategy Policy 4.2.2, and Winter City Design Guideline 2.4.7.
- The addition of pedestrian-oriented lighting would achieve Breathe - Green Network Strategy Strategic Directions 4.1 and 4.6 and Policies 4.1.1 and 4.2.1, and Winter City Design Guidelines 2.4.1 and 2.4.6.











Level of Importance

Construction Timeline



Existing Conditions



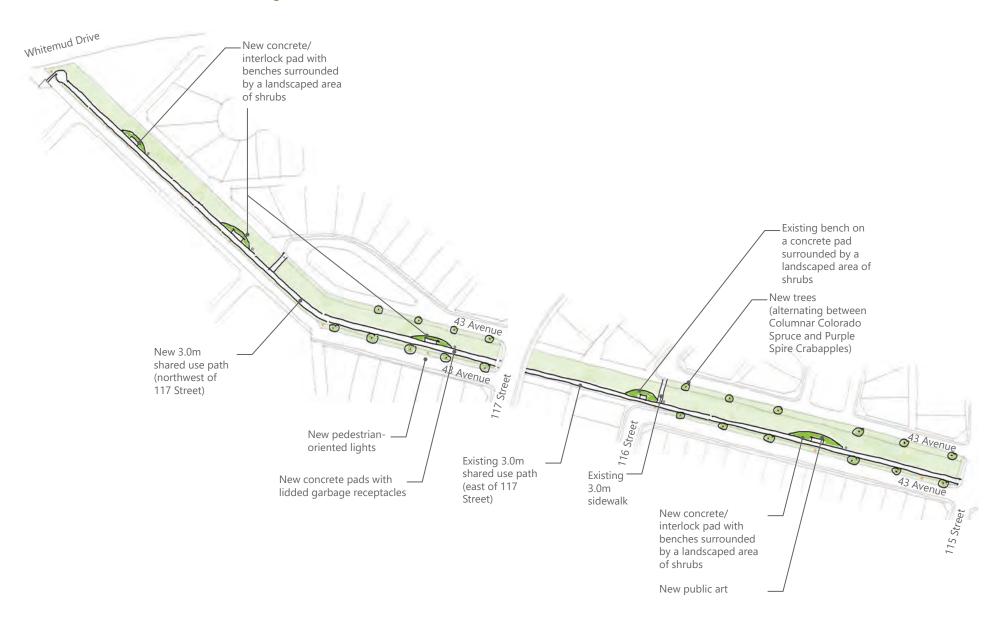
Precedent Images







Location of Improvements Along the Pipeline Corridor (Between the Northwest Corner of the Neighbourhood and 115 Street)



Location of Improvements Along the Pipeline Corridor (Between 111 Street and 115 Street)



Proposed Trees and Shrubs

The recommended concept proposes the addition of shrubs and trees along the pipeline corridor of 43 Avenue. This pipeline corridor is comprised of two types of right-of-ways being the pipeline right-of-way (the majority of the corridor) and the road right-of-way (grassed boulevards and public roads adjacent to the pipeline right-of-way). The pipeline running through this corridor is owned by a private pipeline utility operator. Landscaping within both the pipeline right-of-way and road right-of-way is subject to the owner's design and landscaping guidelines. These guidelines divide the pipeline right-of-way and adjacent lands into three Growth Areas being Low Growth, Mid Growth, and Tall Growth as shown in Figure 3.

The guidelines establish permitted types of landscaping within each Growth Area. In the Low Growth Area, the mature plant height restriction is 1.0m (3.0ft). Within the Mid Growth Area, the mature plant height restriction is 1.0-1.8m (3.0-6.0ft). In the Tall Growth Area, no mature plant height restriction exists. However, plants within the Tall Growth Area cannot overhang into the pipeline corridor. Additionally, the guidelines provide a list of appropriate ground covers, shrubs, and hedges for within the Low and Mid Growth Areas.

This concept proposes no trees or shrubs within the Low Growth Area. Shrubs are proposed within the Mid Growth Area adjacent to the to proposed seating areas. Proposed shrub species in the Mid Growth Area should have a maximum mature height of 1.8m (6.0ft) and be selected from the list of appropriate Mid Growth Area shrubs in the owner of the pipeline utility right-of-way's guidelines. The recommended tree species within the Tall Growth Area include Columnar Colorado Spruce and Purple Spire Crabapples with mature growth spreads of 2.4m (8.0ft) and 1.8m (6.0ft) respectively. These mature growth spreads would be contained within the north and south grass boulevards of the road right-of-way with respective widths of 4.27m (14.0ft) and 3.05m (10.0ft) and not overhang into the pipeline right-of-way as restricted by the right-of-way owner.

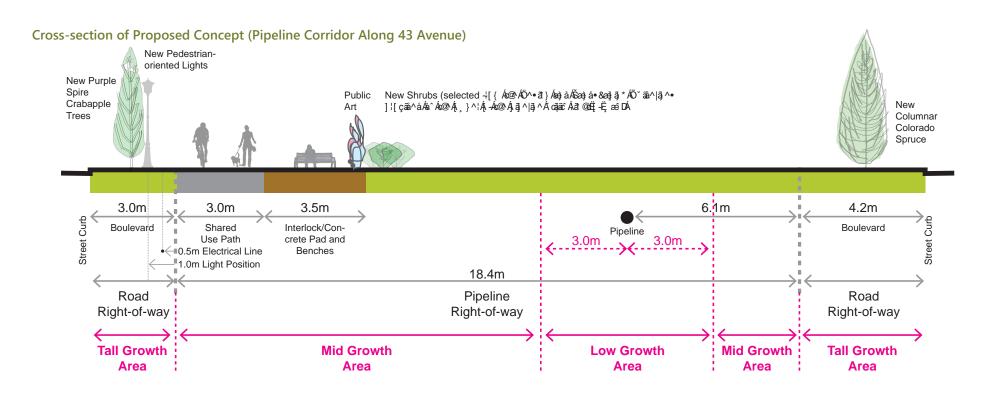
Design Confirmation with Pipeline Utility Partners

The owner of the pipeline utility right-of-way was contacted to review the following design aspects of this concept:

- · Concrete/interlock pads for seating areas within the pipeline right-of-way;
- Sidewalk connections across the pipeline right-of-way; and
- Pedestrian-oriented lights and associated underground electrical lines, within the pipeline right-of-way, along the north edge of the existing shared use path.

The owner of the pipeline utility right-of-way expressed acceptance of the concrete interlock pads and sidewalk connections. However, they expressed non-support of pedestrian-oriented lights and associated underground electrical lines within the pipeline right-of-way. As an alternative, they recommended and would support the installation of pedestrian-oriented lights and associated underground electrical lines within the road right-of-way grass boulevard south of the existing shared use path. The electrical line and pedestrian-oriented lights would be setback 0.5m (1.6ft) and 1.0m (3.28ft) south of the existing shared use path respectively.

This concept would require an agreement/permit between the City and the owner of the pipeline utility right-of-way. The agreement/permit should address design (e.g. minimum horizontal/vertical offset), construction (e.g. certain restriction on construction equipment), and operating/maintenance (e.g. it is the City's responsibility) requirements.



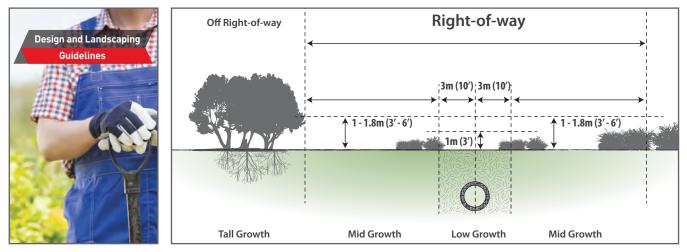


Figure 3. Design and Landscaping Guidelines provided by the owner of the pipeline utility right-of-way, Suitable Plants on Right-of-way

6.3 Concept 2: New Pocket Parks/Off-leash Dog Boundary Expansion

This concept would expand the existing off-leash dog boundary to include three triangular pieces of road right-of-way and include amenities to enhance the experience of using off-leash areas.

Urban Design Concept

- Off-leash dog boundary expansions would provide additional dog park amenity areas to the residents of Royal Gardens and surrounding communities.
- The new shared use path would connect the existing shared use path to the pocket park area in the northwest corner of the neighbourhood.
- The new natural barrier would act as an informal fence delineating the off-leash areas from the adjacent alley and residential properties.
- New benches would provide opportunities for pedestrians to rest and foster social interaction.
- New dog bag stations, and garbage cans would ensure that the off-leash areas stay clean and enjoyable to use.
- New pedestrian-oriented lighting within proposed pocket parks would increase safety and use of the park during evenings. Additionally, Concept 1 of this UDA recommends pedestrian-oriented lighting along the proposed shared use path extension to provide access to the proposed pocket park 1.

Public Input

The public identified that the existing maintained right-of-way spaces are underutilized and unknown by most residents. Improvements to lighting and access into the maintained right-of-way spaces was suggested. Additional signage identifying the off-leash dog boundary and direction to the proposed pocket parks was also identified by the public. It was noted that the natural barrier should be maintained to ensure visibility throughout the park for safety. The public also suggested developing a walkway to each pocket park from the pipeline corridor. The UDA recommends, as part of Concept 1, a shared use path extension from 117 Street to the Whitemud Drive sound barrier wall. This extension would provide access to the proposed pocket park 1. The UDA does not recommend developing internal walkways from pocket park 1 to the proposed pocket parks 2 and 3 because of existing vegetation and associated CPTED concerns. Use of rear alleys to access the proposed pocket parks 2 and 3 is considered appropriate from an accessibility point of view. Further public input is needed to decide whether or not to expand the existing off-leash dog boundary.

Technical Requirements

The following site constraints were considered when developing this concept:

• The proposed pocket parks are currently within the public road right-of-way. The spaces contain mature trees and are regularly maintained. It is recommended to subdivide these areas from the public road right-of-way and zone the spaces to the Public Parks Zone (AP). This would add these parks to the City's inventory of parks.

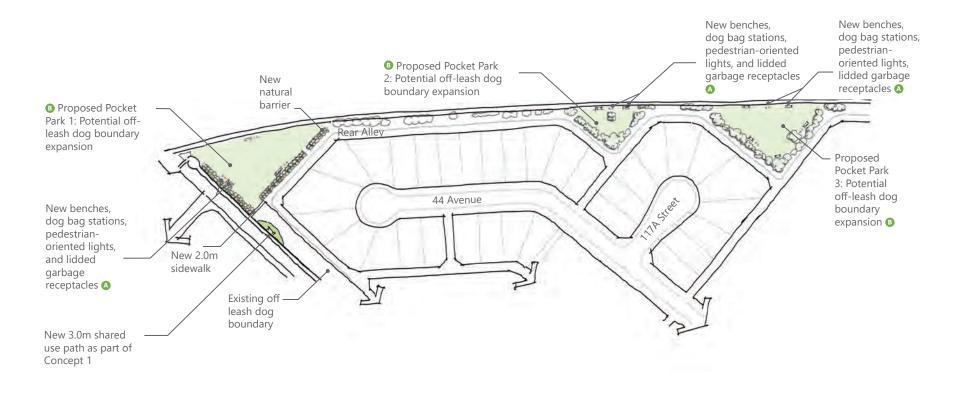
City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

- Expansion of the off-leash dog boundary into the proposed three pocket parks would accomplish Dogs in the Open Spaces Strategy Rationale Statement, The Way We Grow Policy 7.4.2, and The Way We Live Objective 1.1.
- The addition of pedestrian-oriented lighting would achieve Breathe Green Network Strategy Strategic Direction 4.1 and Policies 4.5.2, 4.5.4, and 4.6.1.













Level of Importance





Existing Conditions



Precedent Images









Concept 3: Wayfinding Signage

This concept recommends developing wayfinding signage throughout Royal Gardens to improve navigation for those walking and biking within and through the neighbourhood, and encourages people to visit nearby destinations

Urban Design Concept

- Fingerpost wayfinding signage throughout the neighbourhood at identified locations on Map 10.
- Signs would provide distance information to various destinations.

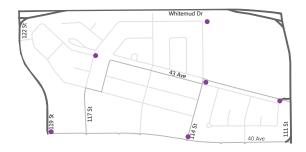
Public Input

The public identified the lack of wayfinding signage throughout the neighbourhood. It was suggested to develop wayfinding signage directing pedestrians and cyclists to the Whitemud Creek Ravine and Southgate LRT Station. The public identified a high comfort level with the addition of wayfinding signage throughout the neighbourhood. However, it was noted that most residents are already familiar with getting around in their neighbourhood and that wavfinding efforts should consider city-wide bike network/multi-use path details.

Technical Requirements

The following site constraints were considered when developing this concept:

- The City has developed the Pedestrian Wayfinding Design Standards document, which provides direction for wayfinding within Edmonton as a whole including downtown and civic centre areas. The document does not include detailed direction for neighbourhood level wayfinding/signage approach. The City of Edmonton's current approach for wayfinding and signage within river valley park areas is guided by Edmonton River Valley Park Signage and Wayfinding document. The City could explore developing a neighbourhood wayfinding standard in order to design a series of neighbourhood appropriate signs and support the implementation of a coherent wayfinding system across neighbourhoods.
- The recommended sign design uses the Pedestrian Fingerpost style from the City of Edmonton Pedestrian Wayfinding Design Standards.





City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

 Developing wayfinding signage would achieve Breathe - Green Network Strategy Strategic Direction 4.4 and Winter City Design Guidelines 2.2.6 and 2.4.1.

The below outlines destinations to be identified on signs corresponding with the locations on Map 10.

Sign 1

East Facing

- ← Royal Gardens Park
- ← St. Boniface School
- ← Richard Secord School

West Facing

- ↑ Confederation Park
- ↑ Whitemud Pedestrian Bridae
- ↑ Southgate LRT Station

Sign 2

- ↑ Petrolia Mall
- → Royal Gardens Park

South Facing

- Bridge
- ↑ Confederation Park

North Facing

- 1 Greenfield Park
- → Whitemud Creek
- ← Rideau Park

- ↑ Whitemud Pedestrian
- ↑ Southgate LRT Station
- ← Royal Gardens Park

← Whitemud Creek

→ Rideau Park

East Facing

- → Whitemud Pedestrian Bridge
- → Confederation Park
- → Southgate LRT Station
- ← Petrolia Mall
- 1 Royal Gardens Park 1 Whitemud Creek

West Facing

- ← Whitemud Pedestrian Bridae
- ← Confederation Park

← Southgate LRT Station

- → Petrolia Mall
- ↑ Rideau Park

Sign 3

South Facing

- 1 Royal Gardens Park
- 1 43 Ave Shared Use Path
- ↑ Confederation Park ↑ Whitemud Pedestrian
- Bridge ↑ Southgate LRT Station

Sign 4

East Facing

- 1 Royal Gardens Park
- 1 Whitemud Creek ↑ Whitemud Pedestrian Bridge
- ↑ Confederation Park
- ↑ Petrolia Mall
- → Southgate LRT Station

West Facing

- ↑ Rideau Park
- ← Southgate LRT Station

Sign 5

South Facing

- 1 Southgate LRT Station
- → Confederation Park

North Facing

- 1 Petrolia Mall
- ↑ Greenfield Park
- ↑ Roval Gardens Park
- ↑ Whitemud Creek
- ↑ Rideau Park

Sign 6

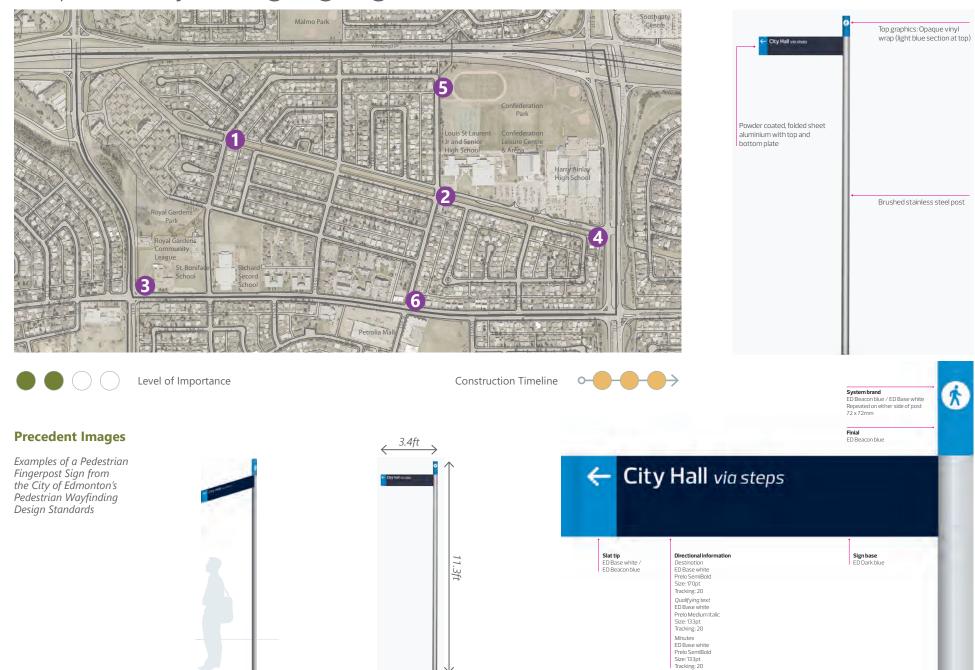
North Facing

1 Petrolia Mall ↑ Greenfield Park

South Facing

- 1 Whitemud Pedestrian Bridge
- ↑ Southgate LRT Station
- 1 Confederation Park

Map 10. Wayfinding Signage Locations



6.5 Concept 4: Royal Gardens Park Improvements

This concept would enhance accessibility and safety in Royal Gardens Park, while making it easy for people to walk, gather, rest and play.

Urban Design Concept

- Benches along the shared use path would provide spaces for pedestrians to meet and rest while enjoying the park and path.
- Pedestrian-oriented lighting would create a safe environment and encourage the use of the shared use path and park space during evenings.
- Benches and pedestrian-oriented lighting adjacent to the potential location of a community garden would serve as an amenity for members of the garden and create a gathering space.
- Public art installation would create a unique feature and sense of place.

Public Input

Improvements to Royal Gardens Park such as enhanced lighting, seating areas, and public art were identified by the community. It was suggested to place improvement amenities near the future community garden location. The recommended Concept proposes a seating area and pedestrian-oriented lights adjacent to the future community garden. It was identified that a north-south path through the park should be considered along an existing goat trail connecting 41 Avenue with the shared use path. Such a trail is not recommended in this Concept because the grade is too steep.

Technical Requirements

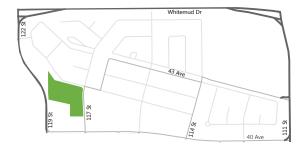
The following site constraints were considered when developing this concept:

• Electrical line for the pedestrian-oriented lights would run across the properties of the City (Royal Gardens Park) and the Catholic School Board. Establishing a maintenance agreement or a utility right-of-way with the Catholic School Board should be established to operate and maintain the pedestrian-oriented lights.

City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

• The addition of seating areas, pedestrian-oriented lights, and public art would achieve The Way We Grow Policy 7.4.2, The Way We Live Objective 1.1, Breathe - Green Network Strategy Strategic Directions 4.1 and 4.6 and Policies 4.1.1, 4.2.1, 4.2.2, and 4.6.1, and Winter City Guidelines 2.4.1, 2.4.6, and 2.4.7.

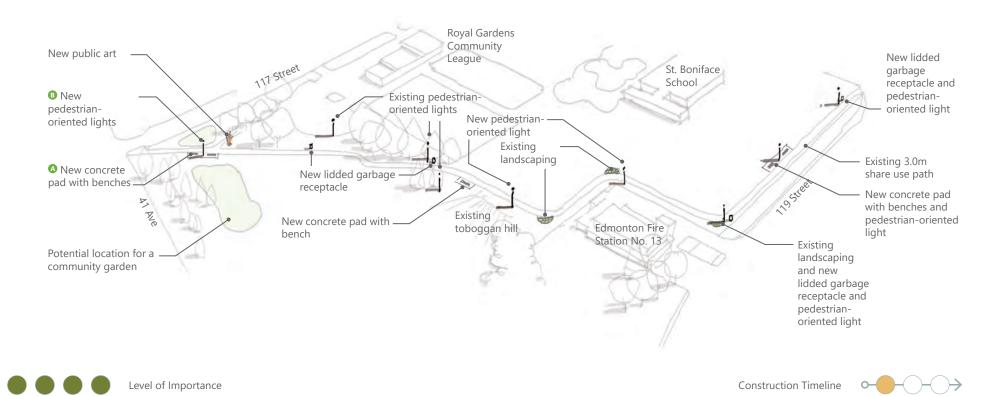












Existing Conditions



Precedent Images





6.6 Concept 5: Traffic and Pedestrian Safety Improvements near Richard Secord School

This concept would incorporate improved pedestrian facilities along 117 Street between 40 and 41 Avenues, in front of Richard Second School.

Urban Design Concept

- New 2.5m sidewalk (monowalk) on both sides of the street would improve safety and connectivity for people walking to nearby schools, parks, and community league.
- New textured crosswalks across 117 Street at 40 and 41 Avenues, and conversion of the existing mid-block crosswalk from painted to textured, would improve visibility and safety for people walking. Textured pavement would improve the visibility of the crosswalks to drivers and encourage their use by pedestrians.
- New curb extensions at 40 Avenue, the existing mid-block crosswalk, and 41 Avenue would reduce crossing distances by approximately 4.0m and improve the visibility of pedestrians at the crossings near Richard Secord School, St. Boniface School and Royal Gardens Park. Pedestrians will gain better sightlines of the vehicles. They would also improve the aesthetics of the corridor by providing an opportunity for low shrub landscaping. ETS and school bus turning requirements can be accommodated in the design of the extension at the southeast corner of 41 Avenue and 117 Street and the northeast corner of 40 Avenue and 117 Street (see Appendix C).
- New rectangular rapid flashing beacons at the mid-block crosswalk, on both sides of the road and in both directions, would improve the visibility and safety of people using the crosswalk.
- One vehicle travel lane and one parking lane would be retained in each direction (four lanes in total), including a school bus parking lane on the east side of the street north of the mid-block crosswalk, to provide an appropriate level of access and service for vehicles.
- Existing streetlights on the west side of the street would be retained.

Public Input

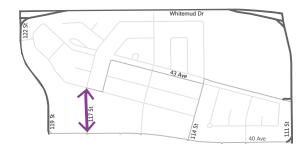
The community identified a need to manage high levels of traffic and congestion during school drop-off/pick-up hours, and identified safe walking as a core value for the UDA as a whole. Street lighting concerns at 117 Street and 41 Avenue were also identified. During engagement activities, there was interest in developing a drop-off loop within the school grounds, as well as a high level of comfort with rectangular rapid flashing beacons. Lower levels of comfort were expressed with raised crosswalks, speed humps, wide sidewalks, and curb extensions at this location.

As the City lacks jurisdiction to develop a drop-off loop on school property, this request was shared with Edmonton Public Schools for consideration.

Technical Requirements

The following site constraints were considered when developing this concept:

- The curb extensions at the southeast corner of 41 Avenue and 117 Street and the northeast corner of 40 Avenue and 117 Street can be designed to accommodate an ETS bus (see Appendix B). Because an ETS bus has larger turning space requirements than a school bus, school buses can also be accommodated in this design.
- Existing fences on both sides of the street may require temporary removal during construction.





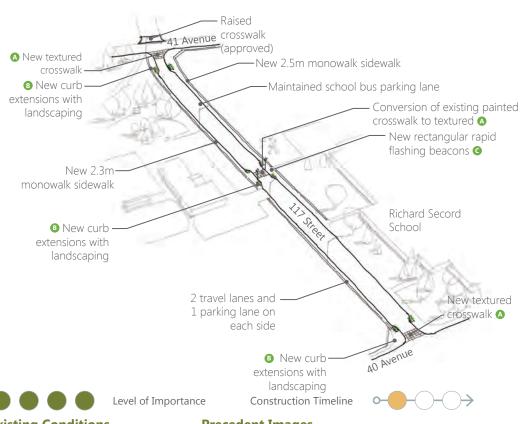




City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

 The provision of pedestrian safety improvements meets The Way We Grow Active Transportation Objective 4.6.1 and Streets, Sidewalks and Boulevards Objective 5.7.1; the Strategic Objectives of The Way We Move Section 6, Active Transportation and Section 7, Roads; the Active Transportation Policy C544; the Urban Design Framework Objective 2; Breathe - Green Network Strategy policy action 4.6.3, Connection & Mobility; Winter Design Guidelines Streetscape Outcome 2; and Vision Zero Initiative Engineering Goals.



Existing Conditions



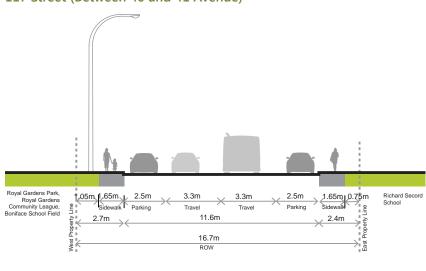
Precedent Images





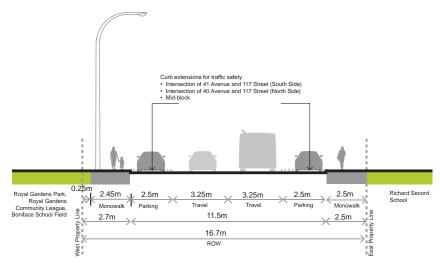


Existing 117 Street (Between 40 and 41 Avenue)



Proposed

117 Street (Between 40 and 41 Avenue)



6.7 Concept 6: 114 Street Enhanced Walking and Biking Connection (40 Avenue - 44A Avenue)

This concept would incorporate improved walking and biking facilities along 114 Street between 40 Avenue and 44A Avenue. The bike route along 114 Street in Royal Gardens provides a direct bike route to the Southgate LRT station for the southern neighbourhoods of Greenfield and Sweet Grass. Additionally, the 114 Street bike route connects the neighbourhood with the broader city bike route network leading to destinations such as the University of Alberta and Downtown.

Urban Design Concept

40 Avenue to 43 Avenue

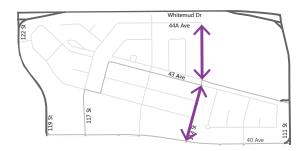
- The existing shared roadway in each direction would be maintained to provide cyclist connectivity along 114 Street and offer a transition to the proposed shared use path north of 43 Avenue.
- A new raised and textured crosswalk at the intersection of 41 Avenue and 114 Street, along the north side, would increase the visibility of pedestrians crossing 114 Street and promote vehicle traffic speeds suitable for a shared bike facility.
- The existing monowalk sidewalk along the east side of 114 Street would be maintained.
- Widening the monowalk sidewalk along the west side of 114 Street would provide an enhanced pedestrian connection from 40 Avenue to 43 Avenue.
- Preserving two-way vehicle travel and one parking lane on each side would maintain appropriate vehicle
 access.

43 Avenue to 44A Avenue

- New 3.0m shared use path along the east side of street would provide dedicated space for people walking and cycling, and will improve connectivity along 114 Street and to the adjacent schools and recreation centre. Impacts to existing mature trees along 114 Street are not anticipated, although existing manholes and fire hydrant may require relocation for construction.
- Retention of existing two-way vehicle travel and one parking lane on each side would maintain appropriate vehicle access.
- Integration with trails proposed in Confederation District Park Concept Plan would improve connectivity to parks and provide additional route choices.
- Existing fence along the western edge of Confederation Park would be removed in accordance with the recommendations established in the Confederation Park Master Plan.

Public Input

Community members identified the opportunity for an enhanced walking and cycling connection from 40 Avenue, along 114 Street, to the Whitemud Drive pedestrian bridge. Comments received during public engagement indicated a preference for maintaining the existing shared roadway or implementing a shared use path, rather than bike lanes. Public engagement also indicated that residents have a low level of comfort with curb extensions, raised crosswalks, raised intersections, and speed humps within the neighbourhood as a whole.







Technical Requirements

The following site constraints were considered when developing this concept:

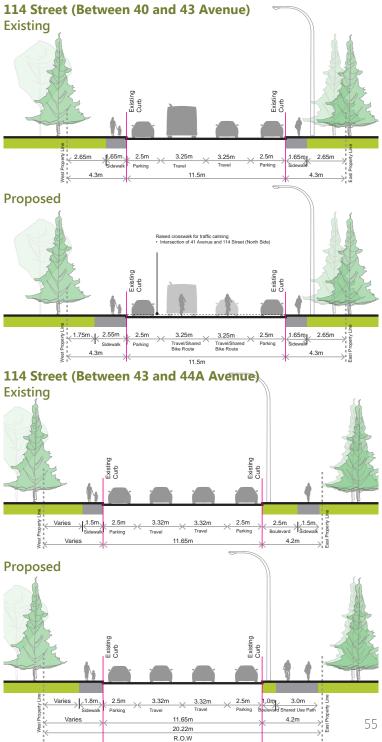
- Presence of mature trees, existing public infrastructure, and private landscaping features in the City right-of-way along 114 Street.
- The City's Complete Streets Design and Construction Standards recommend that traffic calming measures should be implemented as part of the development of a shared roadway.

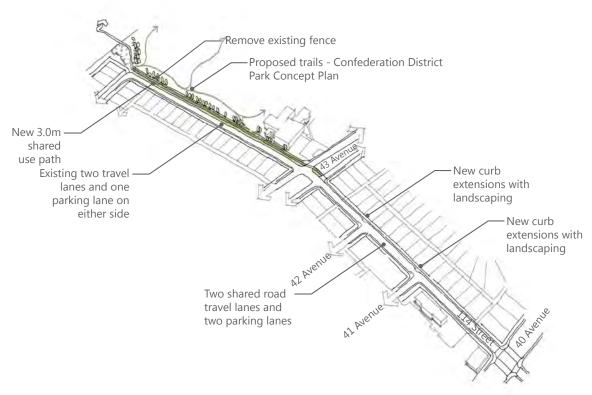
City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

The provision of pedestrian and cycling safety improvements meets The Way We Grow Active Transportation Objective 4.6.1 and Streets, Sidewalks and Boulevards Objective 5.7.1; the Strategic Objectives of The Way We Move Section 6, Active Transportation and Section 7, Roads; the Active Transportation Policy C544; the Urban Design Framework Objective 2; Breathe - Green Network Strategy Policy Action 4.6.3, Connection & Mobility; and Winter Design Guidelines Streetscape Outcome 2.



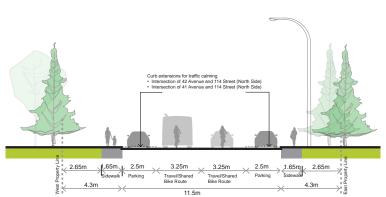


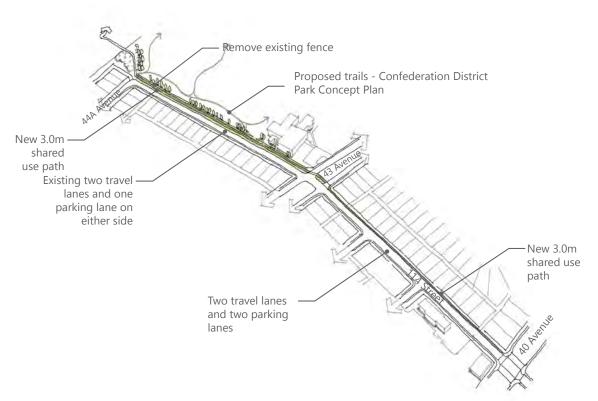


Alternative Concept 1

114 Street Shared Roadway with Curb Extensions (Between 40 and 43 Avenue)

This concept would incorporate a shared roadway in each direction, with curb extensions on both sides of the street at 41 Avenue and 42 Avenue. The curb extensions would increase the visibility of pedestrians wishing to cross 114 Street and visually narrow the roadway, promoting traffic speeds that are suitable for a shared bike route. On-street parking would be retained on both sides of the street, and reconstructed sidewalks would enhance pedestrian safety and comfort.





Alternative Concept 2

114 Street Shared Use Path (Between 40 and 43 Avenue)

This concept would incorporate a shared use path along the east side of the street to provide a dedicated space for people walking and cycling. Positioning the shared use path along the east side of the street would create a smooth transition to the proposed shared use path north of 43 Avenue, and minimize road crossing points at the 41 and 42 Avenue intersections. The roadway would be shifted west by 1.0m in an effort to minimize impacts to existing mature trees, and private driveways and walkways along the east side of 114 Street.



6.8 Concept 7: Traffic and Pedestrian Safety Improvements near Harry Ainlay and Louis St. Laurent Schools

This concept would improve pedestrian accessibility and safety by establishing clear connections from the shared use path to crosswalks across 43 Avenue.

Urban Design Concept

- Rectangular rapid flashing beacons, at the two existing crosswalk locations, would improve pedestrian safety and visibility of pedestrians to motorists.
- Removal of sidewalks segments not leading to crosswalks would encourage pedestrians to use the existing
 crosswalks.
- The addition of 2.3m sidewalk connections from the shared use path to existing crosswalks and drop-off areas would provide a clear route for pedestrians.
- The landscaped area with benches, shrubs and pedestrian-oriented lighting would help create a sense of place and provide a resting space for pedestrians.

Public Input

The public identified the opportunity for enhanced crosswalks connecting the shared use path to Harry Ainlay and Louis St. Laurent Schools. The community expressed a high level of comfort with rapid rectangular flashing beacons. Low levels of comfort were expressed for curb extensions, speed humps, and raised crosswalks. It was suggested by the public to maintain the existing sidewalks segments that do not lead to crosswalks and develop a crosswalk in front of the Confederation Leisure Centre.

Technical Requirements

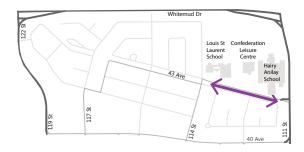
The following site constraint was considered when developing this concept:

- The recommended concept removes misleading sidewalk segments in order to direct individuals to use the existing shared use path to navigate to an existing crosswalk.
- City standards require crosswalks to be separated by a minimum of 100.0m.

City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

• The provision of pedestrian safety improvements meets The Way We Grow Active Transportation Objective 4.6.1 and Streets, Sidewalks and Boulevards Objective 5.7.1; the Strategic Objectives of The Way We Move Section 6, Active Transportation and Section 7, Roads; the Active Transportation Policy C544; the Urban Design Framework Objective 2; Breathe - Green Network Strategy policy action 4.6.3, Connection & Mobility; Winter Design Guidelines Streetscape Outcome 2; and Vision Zero Initiative Engineering Goals.

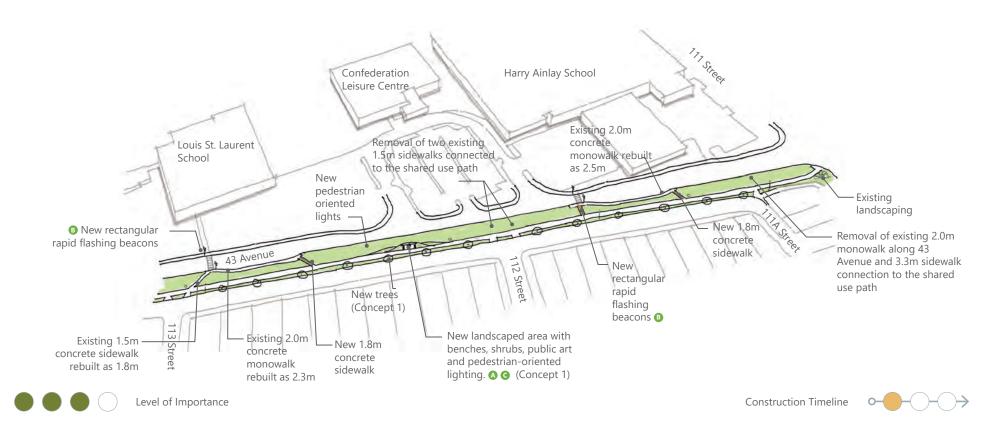












Existing Conditions



Precedent Images







6.9 Concept 8: Bus Stop Improvements

This concept would support the use of public transit through exploring the addition of concrete bus stop pads at identified bus stop wherever technically feasible. This would possibly enable the placement of amenities such as shelters, benches, and garbage receptacles.

Urban Design Concept:

- Construction of concrete bus stop pads, at technically feasible locations, during neighbourhood renewal would be an efficient use of resources.
- Developing concrete bus stop pads would enable the future placement of shelters, benches, and garbage receptacles that enhance the experience of public transit riders.

Public Input

The public identified the need for amenity improvements at bus stops throughout the neighbourhood. Desired upgrades to bus stops include the addition of bus shelters, benches, and garbage receptacles.

Technical Requirements

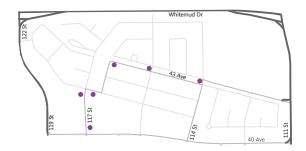
The following site constraints were considered when developing this concept:

- The bus network is currently being redesigned and stop locations are subject to change.
- Land ownership, property lines, and sidewalk widths.

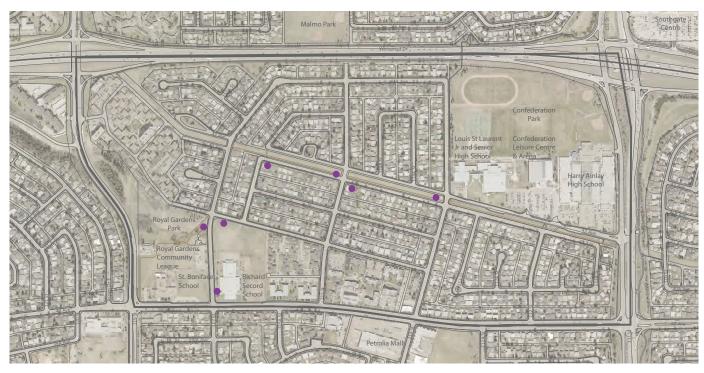
City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

• The addition of bus stop shelters would achieve Winter City Design Guidelines 2.2.7; The Way We Grow Active Transportation Objective 4.6.1; the Strategic Objectives of The Way We Move Section 6, Active Transportation and Section 7, Roads; the Active Transportation Policy C544; and the Urban Design Framework Objective 2.







Potential Bus Stop Improvements

Level of Importance

Construction Timeline



Existing Conditions





Precedent Image



6.10 Concept 9: Improvements to the Intersection of 40 Avenue and 114 Street

This concept would promote pedestrian safety and accessibility by making it easier for pedestrians to cross the intersection of 40 Avenue and 114 Street to access neighbourhood destinations.

Urban Design Concept

- Curb extensions would reduce pedestrian crossing distances and increase pedestrian safety by improving the visibility of pedestrians to motorists.
- Stamped asphalt and coloured crosswalks would heighten the visibility of pedestrians using the intersection.
- Concrete/interlock pads with benches and landscaping would provide resting opportunities for pedestrians and enhance the aesthetics of the intersection.

Public Input

The public expressed concern over the current intersection operation and pedestrian safety. It was identified by the public to add signals at the intersection and make improvements to enhance pedestrian safety.

Technical Requirements

The following site constraints were considered when developing this concept:

- An assessment should be completed to analyze the potential impacts of signalization.
- 40 Avenue is not currently scheduled for renewal.
- Further analysis of the 40 Avenue corridor and intersection operation is recommended at the time it is renewed.

City Policies and Programs

The recommended concept accomplishes the following City policies and/or programs:

• Prioritizing pedestrian movement would achieve the Vision Zero Initiative Engineering Goals; the Active Transportation Policy C544; Connection & Mobility; The Way We Grow Street, Sidewalks and Boulevard Objective 5.7.1; and The Way We Move Section 6, Active Transportation and Section 7, Roads.



















Level of Importance





Existing Conditions



Precedent Images







City of Edmonton | Royal Gardens Urban Design Analysis

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Next Steps

Neighbourhood Renewal Construction Budget

Ultimately, the completion of the UDA recommendations is subject to the availability of funding. Base level neighbourhood renewal improvements such as the rebuilding of roads, sidewalks, curbs and gutters, and street lights may assume the majority of the allocated neighbourhood renewal budget. The remaining funding would be available for the completion of select UDA recommendations.

Other funding sources will also be reviewed for coordination with neighbourhood renewal. UDA recommendations that do not get coordinated for completion with this project can be championed through other City or community initiatives.

Selection of UDA Recommendations for Neighbourhood Renewal Inclusion

The estimated construction cost of each UDA recommendation will be established. The publicly identified 'level of importance' and 'construction timeline' for each UDA recommendation should be compared against the estimated construction costs. The number of UDA recommendations selected for neighbourhood renewal will depend on available funds as well as technical requirements and City policies/programs.

Additional Public Engagement and Preliminary Plans

Additional consultation will be completed to further refine the recommended urban design concepts. UDA recommendations selected, based on available funds, will be included in engineering preliminary plans for implementation with neighbourhood renewal. Construction details will be provided within the preliminary plans.



Appendix A

City Policies and Programs

CITY POLICIES AND PROGRAMS

ACTIVE TRANSPORTATION POLICY C544

Policy Statement 1

Enhance accessibility, safety, security, and convenience through strategic improvement, expansion, and maintenance of the infrastructure and facilities that support Active Transportation, including sidewalks, curb ramps, shared pathways, marked bicycle and shared use lanes, and end-of-trip facilities.

Policy Statement 4

Enact bylaws, policies, procedures, directives, strategic plans, processes, programs, and guidelines to support and encourage Active Transportation modes.

Policy Statement 5

Share the responsibility for the provision of infrastructure, facilities, programs, and initiatives to support and encourage Active Transportation through collaboration, cooperation, and partnerships.

BREATHE - Edmonton's Green Network Strategy

Strategic Directions:

4.1 - Safe + Inclusive

Ensure that the green network is safe, accessible and inclusive for all.

4.4 - Education + Awareness

Improve awareness of open space opportunities and appropriate use.

4.6 - Public Access + Connectivity

Improve open space access for residents and visitors.

Policies:

4.1.1 - Crime Reduction

a) Incorporate Crime Prevention Through Environmental Design (CPTED) principles in the (re)design and programming of open spaces and the facilities within them, including efforts to encourage passive surveillance and a sense of ownership over open spaces through animation, active uses and community building initiatives.

4.2.1 - Landscape + Urban Design

- g) Encourage year-round usage of open spaces by employing siting and design that promotes sheltering from winter climate impacts, and incorporating well-designed artificial lighting to extend winter hours of operation
- m) Where appropriate, incorporate elements into open space design that encourage people to gather and linger, such as seating, public art, lighting and shade structures

4.2.2 - Programming

b) Use public art to enhance visual interest, cultural expression and social interaction in open spaces. Embrace opportunities for public art to function as recreational or play equipment, and for community facilities to function as public art.

4.5.2 - Use of Open Spaces

a) Provide a multifunctional network of open spaces that responds to the recreational, social and environmental needs of communities through a variety of active and passive experiences. While a diverse range of functions may be supplied across a neighbourhood or community, individual open spaces should be designed and programmed to supply functions that are compatible with one another.

4.5.4 - Improving Quality + Functionality

a) Prioritize neighbourhoods currently underserved by dog off leash areas for acquisition/development of new or expanded parks, and provide dog walking amenities in high demand.

4.6.1 - Trails and Pathways

- a) Improve and expand the trail and pathway network to improve pedestrian and cyclist friendly environments within open spaces and promote connectivity citywide. Expand active transportation circuits and loops within open spaces and throughout neighbourhoods.
- e) Ensure that appropriate amenities (e.g. refuse containers, benches, dog litter containers, etc.) are provided alongside well-used trails and pathways.

4.6.3 - Connection + Mobility

- b) Develop a minimum grid of year-round active transportation routes (pedestrian, cyclist and other) to connect open spaces and other destinations throughout the city. Encourage complete streets that incorporate high quality pedestrian and cyclist infrastructure to promote safety and visual interest along identified active transportation routes, incorporating natural landscaping elements, green infrastructure treatments and/or associated plazas or parkettes.
- d) Create safe, walkable and barrier-free environments within parks and open spaces, including accessible internal circulation routes and entrance points, to promote active mobility and pedestrian connectivity year-round.
- e) Provide bicycle infrastructure within parks and open spaces, including bicycle parking structures, maintenance equipment, and cycling paths.
- f) Provide transit access to open spaces, prioritizing larger, destination and high functioning open spaces or significant open spaces in socially vulnerable neighbourhoods.
- h) Provide well integrated transitions among sidewalks, cycling infrastructure, the shared-use pathway network, other pedestrian networks, transit facilities and open spaces (particularly those in the River Valley and Ravine System). Open spaces should be connected to surrounding areas by sidewalks and pathways to increase pedestrian and cyclist mobility and access.

DOGS IN OPEN SPACES STRATEGY

Rationale Statement

With an increasing population of dogs in cities, and with more Canadian households having dogs than children, there is growing demand for cities to accommodate residents and their dogs in public places. Many municipalities are recognizing dog Off Leash Areas as legitimate uses of public parks with potential benefits to dog owners and to the city more broadly. For example, Off Leash Areas can foster healthy activity and social well being, can provide increased "eyes on the park" to deter crime, and can reduce unsanctioned off leash activity in more sensitive sites. At the same time, problems with dog waste, noise, and conflicts with other park uses need to be mitigated at Off Leash Areas. Careful planning, design and management is critical to ensure that the benefits of Off Leash Areas outweigh their drawbacks.

THE WAY WE GROW

4.6.1 - Active Transportation

Support the provision of a variety of transportation modes for Edmontonians.

5.7.1 - Streets, Sidewalks and Boulevards

Ensure that streets, sidewalks and boulevards are designed to perform their diverse roles and to enable safe access for all users.

7.4.2 - Park and Open Spaces

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

THE WAY WE LIVE

Objective 1.1 - Opportunities to Connect People

The City of Edmonton provides opportunities in neighbourhood, community and public spaces to connect people and build vibrant communities.

Goal 5 - Edmonton as an Attractive City

5.2 The City of Edmonton showcases its vibrant arts, culture, entertainment, sports and retail districts.

THE WAY WE MOVE

Section 6 - Active Transportation

Strategic Objective 6.1 - The City will create a walkable environment.

Strategic Objective 6.2 - The City will create a cycle-friendly city.

Strategic Objective 6.3 - The City will create an integrated network of multi-use trail facilities.

Section 7 - Roads

Strategic Objective 7.1 - The City will develop a comprehensive program to continually optimize the efficiency of the existing roadway system using traffic management and transportation supply measures.

Strategic Objective 7.2 - The City will initiate and support comprehensive programs for Transportation Demand Management to encourage a reduction in single-occupant vehicle use.

Strategic Objective 7.3 - The City will focus major roadway improvements on the efficient movement of goods, services and transit vehicles.

Strategic Objective 7.4 - The City will develop a parking management strategy through a combination of Bylaws and Policies to ensure the livability and economic vitality of the City and to promote appropriate land use and public transit initiatives.

Strategic Objective 7.5 - The City will promote and undertake the safe planning, design and operation of the transportation system.

Strategic Objective 7.6 - The City will appropriately mitigate the impacts of the transportation network on existing and future residential communities.

URBAN DESIGN FRAMEWORK

Objective 2

Plan and design a functional and attractive street system seamlessly integrated with the public transit system and other linkages.

WINTER DESIGN GUIDELINES

Streetscape Outcome 2

Streets are vibrant and attractive people-places in all seasons.

Policies

2.2.6 - Wayfinding

- a) Incorporate a signage and wayfinding system as part of the planning process, with design considerations for winter conditions. For example, approximate walking, cycling or cross-country skiing times, in addition to distances.
- b) Design adaptable and seasonal wayfinding strategies to support changing uses and functions throughout the year; digital or automated systems are preferred.
- d) Provide signage along cycling routes that are prioritized for snow removal or grooming in winter. This could be as simple as a snowflake logo added to existing wayfinding elements to let users know that the routes will be maintained and/or cleared of snow on a regular basis throughout the winter.

2.2.7 - Bus Stops

- b) Retrofit existing high-use bus stops to improve winter weather protection.
- d) Consider provision of heated shelters. Ensure design does not obstruct sightlines for oncoming vehicular traffic.
- e) Design bus shelters for ease of snow-clearing and to minimize ice hazards.

2.4.1 - Shared-Use Paths and Open Space Connections

f) Provide lighting and clear wayfinding signage along priority trails

2.4.6 - Lighting

b) Establish and prioritize possible lighting of high-use parks and trails for nighttime use.

2.4.7 - Public Art in Public Spaces

- a) Provide opportunities for the installation of outdoor public art to provide colour and illumination in public spaces.
- b) Support and encourage the incorporation of functional public art in high pedestrian traffic areas that may provide seating and weather protection.

VISION ZERO

Vision Zero is a global initiative to eliminate fatalities and major injuries from motor vehicle collisions.

The City of Edmonton Road Safety Strategy for 2016-2020 provides a strategic plan to continue reducing the prevalence of fatalities, major injuries, injuries and property damage from motor-vehicle collisions. This strategy incorporates Edmonton's strategic plan -The Way Ahead, and aligns with two of its strategic goals, The Way We Live, and The Way We Move. This strategic plan builds on the previous road-safety initiatives, incorporates leading global road-safety practices, identifies targets, and supports a long-term commitment to road safety.

Engineering Goals

Improvements to traffic safety include the installation of:

• Pedestrian signals, crosswalk markings, and pedestrian amber flashers at pedestrian crossings to improve pedestrian safety

