

**BYLAW 34-2021
BREMNER COMMUNITY 4 SUB - AREA STRUCTURE PLAN**

Section 633 of the *Municipal Government Act*, RSA 2000, c M-26, as amended, enables council to adopt by bylaw an area structure plan for the purpose of providing a framework for subsequent subdivision and development of an area of land; and

It is advisable to adopt a new area structure plan for the Bremner Community 4 Sub - Area Structure Plan area;

Council enacts:

- | | |
|----------|--|
| Adoption | 1 The document entitled "Bremner Community 4 Sub - Area Structure Plan" attached to this bylaw as Schedule "A" is hereby adopted as an area structure plan pursuant to the <i>Municipal Government Act</i> , RSA 2000, c M-26, as amended. |
|----------|--|

FIRST READING: _____

SECOND READING: _____

THIRD READING: _____

SIGNED THIS ____ day of _____, 20____.

MAYOR

DIRECTOR, LEGISLATIVE AND LEGAL SERVICES

BREMNER COMMUNITY 4

**Sub - Area Structure Plan
Bylaw 34-2021**

July 2021

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Stantec Consulting Ltd.



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01 INTRODUCTION

1.1 Purpose

The purpose of the Bremner Community 4 Sub - Area Structure Plan (ASP) is to focus and refine the objectives, planning policies, and requirements outlined in the applicable statutory plans on a more detailed, fine grained, and local level for this portion of Bremner. Applicable statutory plans include the Edmonton Metropolitan Region Growth Plan, Strathcona County Municipal Development Plan Bylaw 20-2017, and the Bremner and Local Employment Area (LEA) Area Concept Plan (ACP). In order to realize this, the ASP creates a land use and planning framework for development, the provision of services, and amenities in Community 4.

1.2 Location

Community 4 is one of the five Sub-ASP's outline in the Bremner and LEA ACP and encompasses approximately 469 hectares (ha) of land. Community 4 is defined by the following general boundaries, as shown on Figure 1: Location Plan:

- North – North boundary of SW 29-53-22-4
- East – Range Road 224
- South – Oldman Creek
- West – Range Road 225

1.3 Vision and Principles

1.3.1 Vision

The vision for Community 4 is based on the vision from the Bremner and LEA ACP.

Green

- A network of natural features, parks, and open spaces connected to Pointe-Aux-Pins Creek and Oldman Creek supports development that allows for a range of recreation opportunities and ecological functions.
- Agriculture continues on urban and rural land, and innovative businesses serving agriculture are thriving.
- Development allows for best practices in environmental sustainability.
- Neighbourhood design encourages active and healthy lifestyles.

Connected

- Residents can easily walk to nearby services, amenities, and transit.
- The Town Centre and Regional Park act as a hub within the community.
- Convenient access is provided to destination points.
- Opportunities are available for citizens to feel welcome, participate, and have their needs met, while allowing for existing residents to remain in the community as their needs change.

Diverse

- A variety of employment, education, and service opportunities are supported and available.
- The Town Centre creates a distinct destination for shopping, dining, culture, and entertainment.
- A range of streets, pathways, and connections are available for pedestrians, cyclists, and drivers.

1.3.2 Principles

The principles in the ASP are based on those in the Bremner and LEA ACP, and have been created in consultation with the public, landowners, and community stakeholders.

1. Protect and Enhance the Natural Environment

Significant natural features, such as Pointe-Aux-Pins Creek, Oldman Creek, and key wetlands and tree stands, should be protected and enhanced for their environmental functions and as central elements of an interconnected, publicly accessible open space network. Development should allow for linkages between natural features and support public enjoyment, while minimizing adverse impacts and maintaining natural feature integrity. Opportunities for green infrastructure should be considered, as well as nature-based solutions for climate resiliency. Energy efficiency and waste minimization are encouraged.

2. Maintain and Support Agriculture

Agricultural uses should be maintained on lands planned for urban development until they are required to accommodate growth. The community provides opportunities for integrated forms of urban agriculture and urban gardens. The Pointe-aux-Pins Acres (ThePointe) is a key community agricultural amenity to the northwest of Community 4.

3. Reinforce and Diversify the Economy

The community should concentrate a range of employment opportunities within the Town Centre to meet the needs of residents and compliment the broader County economy.

4. Accommodate a Diversity of Housing

A range of housing types should be available within the community, including detached houses, semi-detached forms, row housing, street-oriented product, apartments, and secondary suites. The community will support unique and innovative forms as part of the housing mix. Housing options should be available to accommodate a variety of incomes, household sizes, tenures, styles and locational preferences to meet the needs of residents who work in or near the community. The housing mix will allow residents to remain in the neighbourhood as their requirements change throughout their lives. Density will vary across the neighbourhood, with higher densities in the Town Centre and next to community nodes.

5. Provide Transportation Options for Everyday Travel

The community will be highly connected, with complete streets design influences to encourage walking, cycling, and transit use for daily trips, while allowing for car travel. The road, transit, and complementary trail networks should provide efficient connections. Land uses should be strategically located to support walkability and include strong connections to the Town Centre and Regional Park.

6. Create Strong, Distinctive and Safe Neighbourhoods

Neighbourhoods within the community should have a mix of housing types and designs, and landscaped public areas. Street-oriented housing, tree-lined streets, and sidewalks will provide vibrant streetscapes that encourage interaction and play. Community nodes containing parks, schools, and open space amenities should act as accessible and visible focal points that contribute to the identity of the community. Safety and security for all residents should be provided through the design of the community.

7. Provide Mixed-Use Centres

The community should provide a centrally located and connected Town Centre, as well as opportunities for a mix of uses in or adjacent to Primary and Secondary Nodes. These places will bring together higher density residential, commercial, and/or community service uses to create vibrant, compact, walkable hubs that serve everyday needs and provide community uses. Public open space should provide year-round opportunities for gathering, recreation, and cultural programming.

8. Provide a Range of Recreational and Cultural Amenities

Local amenities should be available to contribute to a healthy community and a high quality of life. Open space, trails, and indoor and outdoor recreation facilities should be easily accessible by all residents. Parks should be distributed throughout the neighbourhoods for easy access and visibility. Trails and pathways should connect amenities and other land uses, providing year-round access. Facilities for producing and enjoying art, theatre, and other cultural activities should be available within the Town Centre and Community Nodes.



02 ADMINISTRATION

2.1 Planning Context

The Bremner Community 4 Sub - ASP should be read in conjunction with the Bremner and LEA ACP, Strathcona County’s Municipal Development Plan (MDP), supporting technical documents for the Bremner Community 4 Sub - ASP, as well as other Strathcona County policies and documents, such as the County’s Transit Master Plan, Environmental Framework, and Social Framework.

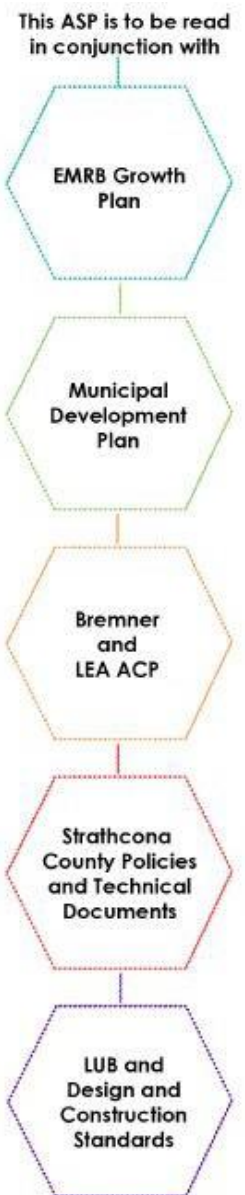
Additionally, regional plans as well as provincial acts and regulations will apply, such as the Municipal Government Act and the Edmonton Metropolitan Region Growth Plan. The Edmonton Metropolitan Region Growth Plan identifies regional-level components that need to be considered comprehensively with respect to the Bremner and LEA Area Concept Plan and the Bremner Community 4 Sub - Area Structure Plan.

2.2 Policy Structure

This document uses specific terminology within policies, as outlined in Table 1, to ensure that they have clear intentions that are designed to be achieved through actions. All policies must contain one of the following actions:

Require – these policies are compulsory and must be met in order to receive County administration support for a proposal. *Require* policies are always paired with *ensure*. *Require* is the compulsory obligation and *ensure* explains the result that is to be achieved.

Encourage – proposals should be consistent with all applicable *encourage* policies in order to be supported by County administration. Proposals which



do not meet an applicable *encourage* policy must provide justification to the satisfaction of County administration as to why the applicable *encourage* policy cannot be met. *Encourage* policies are always paired with *promote*. *Encourage* is what is expected and *promote* shows active County encouragement for the result that is to be achieved.

Consider – proposals that fall under a *consider* policy will be evaluated on a case-by-case basis and may or may not be supported or enacted by County administration based on the specifics of the proposal and how it aligns with the goals and objectives of this plan. *Consider* policies are always paired with *support*. *Consider* is followed by criteria for when an action may be suitable, and *support* shows passive County support through the conditional consideration of the result that is to be achieved.

Table 1: Policy Terms			
ACTION		INTENTION	
Require	Is a compulsory obligation	Ensure	To make sure of a result through a requirement
Encourage	Provides direction for what is expected	Promote	Shows active County encouragement
Consider	Provides criteria for when actions may be suitable	Support	Shows passive County support through conditional consideration

2.3 Interpretation

All map symbols, locations, and boundaries contained within the Bremner Community 4 Sub ASP shall be interpreted as approximate unless otherwise specified in the plan or coincide with clearly recognizable physical features (i.e., legal) boundaries.

Definitions

Terms not defined within Section 6 of the Bremner Community 4 Sub - ASP may be given their meaning from the following documents in order of priority:

- a. Municipal Government Act;
- b. Edmonton Metropolitan Region Growth Plan;
- c. Strathcona Municipal Development Plan Bylaw 20-2017; and
- d. Bremner and LEA Area Concept Plan.

Other terms shall be given their usual and customary meaning.



03 GENERAL

3.1 Community Framework

Goal

Community 4 will be the heart of the Bremner area as it encompasses the Bremner Town Centre and Regional Park. It has several complete neighbourhoods and contains a higher overall residential density in order to meet regional density targets. This complete community will be organized to foster connectivity to and from a vibrant centre of activity for residents in other Bremner communities to visit and enjoy. Environmentally sensitive areas will be conserved, and open space will be allocated to provide a Regional Park that will contain regional community services and amenities.

Objectives

Strathcona County's objectives are to ensure Community 4:

1. Is built to contain a higher residential **density** to meet regional residential density targets for the Bremner and LEA ACP area, with more dense development concentrated around the Town Centre;
2. Follows a pattern of **organization** that fosters access and connectivity;
3. Conserves environmentally sensitive areas through **Environmental Reserve** dedication; and
4. Allocates open space and areas for schools and community facilities through **Municipal Reserve** dedication.

Policies

3.1.1 Density

1. **Require** Community 4 to contain a minimum residential density of 45 du/nrha to **ensure** compliance with the Edmonton Metropolitan Region Growth Plan.
2. **Require** densities greater than 30 du/nrha for each neighbourhood to **ensure** the minimum residential density of 45 du/nrha is met when combined with the densities for the Town Centre.
3. **Require** densities greater than 100 du/nrha within the Town Centre to **ensure** the minimum residential density of 45 du/nrha is met and to provide a concentration of higher residential density within walking distance to commercial, community services, and employment.
4. **Encourage** low density type residential units (single detached and semi-detached) to be a maximum of 60% of the total number of units within Community 4 to **promote** meeting the density requirements under the Regional Growth Plan, providing a diverse range of residential forms, and creating multigenerational communities.
5. **Encourage** medium density type residential units (row housing, stacked row housing, apartments) to be a minimum of 35% of the total number of units within Community 4 to **promote** meeting the density requirements under the Regional Growth Plan, providing a diverse range of residential forms, and creating multigenerational communities.

3.1.2 Organization

6. **Require** contiguous phased development, as shown on Figure 4: Development Staging Concept, to **ensure** logical and efficient extension of services and access points.
7. **Require** the Town Centre within Community 4 to be centrally located to **ensure** most dwelling units are within 800 metres access to services and employment opportunities.
8. **Require** most dwelling units to be within 800 meters of a community node to **ensure** a walkable community.
9. **Require** a minimum of three community nodes to **ensure** access to local community services and schools for all neighbourhood residents.
10. **Encourage** community nodes to be located within close proximity to the Town Centre and Regional Park to **promote** walkable access to services.

11. **Require** community nodes to be located adjacent to collector roads, as opposed to arterial roads, to **ensure** safe, efficient access for users of all ages, incomes, and abilities.
12. **Encourage** primary community nodes to be dispersed throughout Community 4 to **promote** walkable access for all residents.
13. **Require** a Regional Park be located adjacent to the Town Centre and Oldman Creek to **ensure** the creation of a large central public open space for Bremner.
14. **Require** the secondary community node to be located adjacent to the Town Centre to **ensure** walkable access to services in all neighbourhoods.

3.1.3 Environmental Reserve

15. **Require** Pointe-Aux-Pins Creek to be dedicated as environmental reserve (ER) and the ER to include that area measured a minimum of 20 metres from the Top of Bank of the creek (unless otherwise informed through a detailed Biophysical Report completed in compliance with County policies) for the northeast corner of SW-29-53-22-W4M containing Pointe-Aux-Pins Creek to **ensure** an appropriate buffer from the oxbow at this location and conservation of this environmentally significant area as a primary wildlife corridor connecting the Beaver Hills Biosphere to the North Saskatchewan River.
16. **Require** additional site-specific studies to determine the boundaries of environmental reserve (ER) for Pointe-Aux-Pins Creek as outlined in the Bremner and LEA ACP for the SE-29-53-22-W4M area containing Pointe-Aux-Pins Creek to **ensure** an appropriate buffer from the creek and conservation of this environmentally significant area as a primary wildlife corridor connecting the Beaver Hills Biosphere to the North Saskatchewan River.
17. **Require** Oldman Creek to be dedicated as environmental reserve (ER) and additional site-specific studies to determine the boundaries of the environmental reserve (ER) as outlined in the Bremner and LEA ACP for the NE-17-53-22-W4M area containing Oldman Creek to **ensure** conservation of this environmentally significant area.
18. **Require** additional site-specific studies to determine the boundaries of the environmental reserve (ER) for the large centralized wetland adjacent to the Regional Park as outlined in the Bremner and LEA ACP to **ensure** conservation of this environmentally significant area and incorporation as a community amenity for the Regional Park.

19. **Require** the wetlands within neighborhood 1 (priority wetland WN2, WN3, and WN4 as identified in the Wetland Mitigation Plan), be dedicated as environmental reserve (ER) and the ER to include that area measured a minimum of 30 meters in width unless otherwise determined through a Wetland Buffer Analysis to **ensure** conservation of the natural landscape and open space for recreation.
20. **Require** additional site-specific Biophysical Assessments for the areas outlined in Figure 3 to determine any additional environmental reserve (ER) for priority wetlands within Community 4 to **ensure** conservation of the natural landscape.

3.1.4 Municipal Reserve

21. **Require** all Municipal Reserve owing within Community 4 to ultimately be dedicated as land to **ensure** the maximization of open space for residents.
22. **Consider** allocating lands over the 10% Municipal Reserve amount permitted under the Municipal Government Act where these lands are purchased by the County for community services, public services, or open space to **support** accessibility of public services and facilities for all residents.
23. **Require** Municipal Reserve (MR) dedication be utilized for three primary community nodes to **ensure** sufficient area is provided for potential school sites, community services, and community parks.
24. **Encourage** Municipal Reserve (MR) dedication be utilized for the creation of the Regional Park unless the area is otherwise allocated to the County, to **promote** sufficient area is provided for a centralized regional amenity area and community services.
25. **Require** Municipal Reserve (MR) dedication for neighborhood parks and trails to **ensure** convenient access to open space within 400 metres for all residents.
26. **Require** Municipal Reserve (MR) dedication for a portion of the Major Open Space Corridor to **ensure** the provision of a continuous open space network through Bremner.
27. **Require** Municipal Reserve (MR) dedication for park adjacent to the environmental reserve (ER) of Oldman Creek within neighbourhoods 3 to **ensure** public access points to the creek at regular intervals for all residents
28. **Require** Municipal Reserve (MR) dedication for park adjacent to the environmental reserve (ER) of Pointe-Aux-Pins Creek within neighbourhoods 1 to **ensure** public access points to the creek at regular intervals for all residents.

3.2 Transportation

Goal

The transportation network for Community 4 will be safe, convenient, accessible, and highly connected to the rest of the County's transportation system, and will provide multi-modal options for people to drive, cycle, walk, and take transit.

Figure 6: Street Concept shows major arterial and collector streets within Community 4.

Figure 7: Transit Concept, Figure 8: Active Transportation Concept, and Figure 9: Walkshed show other key components of the multimodal transportation network.

Objectives

Strathcona County's objectives are to ensure Community 4:

1. Prioritizes **access, connectivity, and mobility** in its transportation network;
2. Supports a variety of **mobility options** for residents and visitors;
3. Incorporates **safety** as a key consideration for pedestrian spaces;
4. Provides an **integrated** active transportation and transit network;
5. Is designed for safe and comfortable **all seasons** use;
6. Includes **green transportation infrastructure** throughout; and
7. Offers **smart** transit options that connect outside of the community.

Policies

3.2.1 Access, Connectivity, and Mobility

1. **Require** multi-modal transportation options, including active transportation infrastructure and vehicular connections along major routes such as Township Road 534, Range Road 225, and Range Road 224, to large commercial centres and major public community services (such as recreation centres) in areas of the Urban Service Area outside of Bremner, to **ensure** accessibility by multiple transportation modes.
2. **Require** the street network within Community 4 to be designed using grid or modified grid patterns, where appropriate, to ensure a highly connected street, modified grid patterns, where appropriate, to ensure a highly

connected street network, walkability, and efficient transit to **ensure** continuity of transportation routes and access to the rest of the County.

3. **Require** a highly connected street network within Community 4 to **ensure** continuity of transportation routes and access to the rest of the County.
4. **Require** a transportation impact assessment to **ensure** that new development in Community 4 aligns with the overall transit, active transportation, traffic, and goods movement goals and objectives of the Bremner and LEA ACP.
5. **Encourage** the provision of on-demand transit service in earlier stages of development to **promote** greater flexibility and transit usage for new residents.
6. **Encourage** implementation of regional transit service to **promote** access along routes to key employment areas in the region.
7. **Require** an active transportation infrastructure network including multi-use trails, cycle tracks, and sidewalks with connections between neighbourhoods to provide additional transportation options, as shown in Figure 8: Active Transportation Concept, to **ensure** access for people walking and cycling.
8. **Require** active transportation infrastructure to connect across neighbourhoods to **ensure** access across Bremner for people using active modes.
9. **Require** development within 400 metres of the Town Centre to include street and intersection designs that prioritize people walking, cycling, and taking transit as higher or equal priority to vehicular travel to **ensure** the use of active transportation and transit for trips within Bremner.
10. **Require** access for people walking and cycling at all highway crossings to **ensure** interregional active transportation.
11. **Require** that street cross sections be developed to a standard that aligns with the Bremner Design and Construction Standards to **ensure** all users are accommodated, and safe connections are provided for people walking, cycling, and taking transit.
12. **Require** that vehicular, transit, and active transportation infrastructure be developed in accordance with the Bremner Transportation Plan to **ensure** consistent implementation of the overall transportation plan for the Bremner area in Community 4.

3.2.2 Mobility Options

13. **Require** the transportation network to include various transportation mode options for all trips to **ensure** diverse access for users of all ages, abilities, and incomes.
14. **Require** separated facilities for walking and cycling within the right-of-way on all identified arterial and collector streets, as per the cross section standards in the Bremner Design and Construction Standards and as identified on Figure 8: Active Transportation Concept, to **ensure** access to key destinations such as the Town Centre, Regional Park, or Primary and Secondary Community Nodes.
15. **Require** facilities for walking and cycling within the right-of-way on all local streets as per the cross-section standards in the Bremner Design and Construction Standards to **ensure** mobility options for all ages, abilities, and incomes.
16. **Require** direct active transportation connections to the Town Centre, community nodes, parks, open space, stormwater management facilities, natural features, and transit stops, to **ensure** multi-modal connectivity options to key destinations in Community 4.
17. **Require** transit controlled locations to be located within approximately 400 metres of all residences to **ensure** transit as a viable and convenient transportation option.
18. **Encourage** transit controlled-locations within close proximity (within 250 metres) of schools, major community services, within the Town Centre and Regional Park and around community nodes to **promote** convenient transit access for higher volume areas.
19. **Require** transit stops to be located within 250 metres of seniors housing (with stops spaced at 300 metres) and community housing, and to be designed to accommodate users with mobility aids and visual impairments to **ensure** access to transit for users of all ages, abilities, and incomes. This may be achieved through the location of transit stops adjacent to the Town Centre where these uses may locate.

3.2.3 Safety

20. **Require** pedestrian-oriented lighting along the Main Street Collectors to **ensure** a safer pedestrian environment during dark hours.

21. **Encourage** pedestrian-oriented lighting along the Major Open Space Corridor when and where needed in accordance with County policy to **promote** a safer pedestrian environment during dark hours.
22. **Encourage** neighbourhood design, building design, and street layouts to adhere to Crime Prevention Through Environmental Design (CPTED) principles, as set out in the Bremner Community 4 Town Center Design Guidelines, to **promote** a sense of surveillance and enhance safety in public and private spaces.
23. **Require** safe, efficient, unobstructed, and accessible active transportation infrastructure connections to transit service, in accordance with the Bremner Design and Construction Standards, to **ensure** that walking and cycling to transit is safe and convenient for residents.
24. **Require** the design and location of street crossings to include safety considerations such as small curb radii, pedestrian islands, raised intersections or crossings, protected intersections, and curb extensions to **ensure** short crossing distances and slow motor vehicle speeds.
25. **Require** design speeds to equal the posted speed and posted speed limits on streets to be aligned with the goals of Vision Zero to **ensure** safety for all users.
26. **Consider** roundabouts as alternatives to signals where intersections require control greater than two-way stops to **support** traffic safety.
27. **Require** roundabout design to prioritize safety for people walking and cycling to **ensure** that Bremner is safe and accessible for users of all ages and all modes.
28. **Encourage** intersection designs that include a separate signal phase (protected phase) for people walking to **promote** the goals of Vision Zero.

3.2.4 Integrated

29. **Encourage** a transit transfer facility to be located within the Town Centre, as shown on Figure 7: Transit Concept, to **promote** walking and cycling access to regional transit and to support local and regional connections to a prominent community centre.
30. **Encourage** transit routes to provide convenient connections between identified transit terminal(s) and transit transfer facilities to **promote** a highly connected and accessible public transit system.

31. **Require** that where vehicular parking is necessary at transit terminals, it is located underground or stacked and has a main entrance on and fronting a public street to **ensure** pedestrian-oriented design, active frontages, and improved access to transit terminals by active transportation.
32. **Encourage** that where vehicular parking is necessary for transit terminals, shared parking is used to **promote** transportation demand management and utilization of local transit to transit terminals.
33. **Encourage** on-street parking on collector streets, local streets, and main streets as shown on Figure 6: Street Concept and on the cross sections within the Bremner Design and Construction Standards, to **promote** businesses and create a buffer between street traffic and people within the public realm.
34. **Require** development within 400 metres of the Town Centre to include street and intersection designs that prioritize people walking, cycling, and taking transit as higher or equal priority to vehicular travel, per the cross sections within the Bremner Design and Construction Standards, to **ensure** the use of active transportation and transit for trips within Bremner.

3.2.5 All Seasons

35. **Consider** unique design solutions and practices that manage snow on-site or nearby where it is complementary to street design to **support** effective snow storage.
36. **Encourage** planning snow removal for Main Streets to **promote** curb side parking and loading through all seasons.
37. **Consider** year-round design principles in the design of public and private infrastructure projects (including roadways, public spaces, and building design) in order to maximize natural light and heat exposure and **support** projects that can be comfortably enjoyed year- round.
38. **Require** transit terminals and transit transfer facilities within Community 4 to incorporate weather protected walking infrastructure and bicycle storage, where possible, to **ensure** transit is a safe and comfortable year-round option.
39. **Require** design and maintenance of active transportation infrastructure (including streets, walkways, trails, and the Major Open Space Corridor) to be safe and accessible year-round to **ensure** there are opportunities for cycling and walking in Bremner in all seasons.

3.2.6 Green Transportation Infrastructure

40. **Require** street trees to be integrated into the design of the identified arterial, collector and local streets, per the cross sections within the Bremner Design and Construction Standards, to **ensure** pedestrian comfort, shelter, and safety.
41. **Consider** additional transportation infrastructure design that facilitates cleaner environmental and energy efficiency to **support** healthy community living.

3.2.7 Smart

42. **Encourage** the public transportation system to include express transit service outside of the Community 4 boundary to **promote** transit as a competitive option for commuters to major local and regional destinations.
43. **Consider** the use of High Occupancy Vehicle lanes as a precursor to higher order transit corridors on arterial streets in Bremner, where demand exists, to **support** competitive transit travel times.
44. **Encourage** transit priority measures at interchanges near transit terminals and at all arterial / collector intersections to **promote** transit as a priority transportation mode.
45. **Consider** the implementation of shared mobility programs (bike and car share) where demand exists, to **support** improved mobility options for residents of Bremner.
46. **Encourage** long-term network planning with regional partners to prepare for connected and autonomous vehicles to **promote** efficient use of infrastructure and the advancement of transit and shared mobility.

3.3 Servicing

Servicing for Community 4 will be provided in accordance with Strathcona County Design and Construction Standards and urban standards and requirements. The ASP Design brief generally follows the guidance from the 2019 Bremner and LEA Utilities Master Plan. The Design Brief submitted to Strathcona County in support of this ASP details how the proposed servicing for the Bremner lands will be implemented.

Figure 10: Stormwater Servicing Concept, Figure 11: Wastewater Servicing Concept, and Figure 12: Water Servicing Concept, show the servicing plans for Community 4.

Goal

Responsible infrastructure delivery to ensure efficient, safe, reliable, utility systems and services for Community 4 ASP1. Servicing will be staged to maximize available existing infrastructure to the fullest extent possible, while managing major investment in new infrastructure over and appropriate period of time.

Objectives

Strathcona County's objectives are to ensure Community 4:

1. Efficiently manages major **infrastructure investment** in both the short-term and long-term
2. Protects and integrates necessary **utility services and emergency services;**
3. Establishes efficient **wastewater** management systems;
4. Provides safe **water** service to all residents and establishments;
5. Integrates environmentally sensitive **stormwater management;**
6. Uses **low impact development** techniques in the design of services; and
7. Supports **energy** efficiency and alternative energy approaches over time.

Policies

3.3.1 Infrastructure Investment

1. **Encourage** utilization of existing infrastructure in the area to the fullest extent possible to **promote** initial servicing options for the first phases of development.

3.3.2 Utility and Emergency Services

2. **Require** waste plans for development of the Town Centre, and Primary and Secondary Community Nodes to **ensure** waste servicing is provided efficiently.
3. **Require** the extension of shallow utility services such as gas, electrical, and telecommunications lines, including franchise services provided by ATCO Gas, Fortis Alberta Inc., Telus Communications, and Shaw Cable Systems, to **ensure** services are provided to an urban standard.
4. **Encourage** emergency services to locate in close proximity to the Town Centre, where possible, to **promote** the availability of emergency services in the area.
5. **Encourage** opportunities for innovative and alternative servicing strategies, such as fibre, bioswales, rain gardens, where feasible to **promote** an adaptive and sustainable community.

3.3.3 Wastewater

6. **Require** existing pipelines and natural systems to be designated to **ensure** servicing uses land efficiently and does not impact existing networks.
7. **Require** developments to connect to municipal wastewater services to **ensure** services are provided to an urban standard.
8. **Require** wastewater servicing to address any service constraints to **ensure** consistent services to all residents.

3.3.4 Water

9. **Require** water distribution design to a servicing standard that will **ensure** safe and efficient development.
10. **Require** a Reservoir Strategy prior to rezoning and subdivision, to **ensure** water services are adequately provided.
11. **Require** a reservoir within Bremner, to **ensure** water service and fire pressure for the plan area.

3.3.5 Stormwater Management

12. **Require** designation of engineered and natural infrastructure to **ensure** efficient land use and limit impact to existing networks.
13. **Require** that stormwater management facilities be sufficiently sized for controlled release rates for stormwater management facilities that discharge to Pointe-aux-Pins Creek and Oldman Creek to **ensure** stormwater drainage is accommodated and creek integrity is protected.
14. **Require** erosion assessments for Pointe-aux-Pins Creek and Oldman Creek to be completed to **ensure** confirmation of allowable stormwater release rates to the creeks.
15. **Require** a Surface Runoff Management Plan to be developed to the satisfaction of the approving agency prior to issuance of a development permit, to **ensure** that stormwater is managed appropriately within the plan area.
16. **Require** that the Surface Runoff Management Plan address Low Impact Development strategies to be used on site and the projected amount of runoff that will not be managed on-site to **ensure** that stormwater be managed appropriately within the plan area.
17. **Encourage** the retention of key wetlands and incorporate into the stormwater drainage system to **promote** the recharge these wetlands for long-term viability.
18. **Require** appropriate flood mitigation measures as identified in the floodplain study, to be determined at detailed design, to **ensure** prevention of Pointe-aux-Pins creek from inundating a portion of the development area along the creek in the northeast area of Community 4.
19. **Consider** climate adaptation and mitigation in the stormwater management system design to **support** system resiliency to climate change.

3.3.6 Low Impact Development

20. **Encourage** low impact development principles for stormwater management to **promote** efficient use of land, biodiversity, and natural drainage system resiliency that mitigates the impacts of increased runoff rates and volumes.
21. **Encourage** the use of bioswales and naturalized stormwater management facilities, where feasible, to **promote** biodiversity and stormwater infiltration, filtering, storage, and evaporation in addition to detention.

22. **Consider** the use of soil retention in areas such as parks, open spaces, along swales and stormwater management facilities to **support** water infiltration and bioretention.
23. **Encourage** low impact development principles and standards in the design of the Town Centre to **promote** reduced environmental impacts of an area projected to have a higher population.

3.3.7 Energy

24. **Encourage** alternative energy systems and opportunities for alternative energy-efficient uses within the Town Centre and plan area to **promote** safe, reliable, and efficient utilities and a reduced carbon footprint for the community.
25. **Encourage** incorporating energy systems and lighting features into the design of the Town Centre and plan area to **promote** a unique and integrated development and create a sense of place.
26. **Encourage** landscaping to reduce energy demand, such as trees acting as wind breaks, to create canopies along active transportation infrastructure to **promote** sustainable design of public spaces.

3.4 Agriculture and Food

Goal

Development will be sensitive to existing agricultural uses and the area's vibrant agricultural culture will be integrated into the urban context where possible.

Objectives

Strathcona County's objectives are to ensure Community 4:

1. Provides for **existing agriculture** until the time of urban development;
2. Promotes opportunities for **urban agriculture** throughout the community;
and
3. Incorporates Bremner's **agricultural history**

Policies

3.4.1 Existing Agriculture

1. **Encourage** development that is staged, as outlined in Figure 4 Development Staging Concept, to **promote** continuation of any existing agricultural operations for as long as possible prior to urban development.
2. **Encourage** existing agricultural operations to continue until such time as urban development occurs on the parcel to **promote** logical development.
3. **Require** clubroot management plans on affected parcels to **ensure** that clubroot is not spread to other agricultural areas.
4. **Require** plant species that are not invasive to **ensure** existing agriculture is protected.
5. **Require** that where plant species are prone to disease or pests, measures are taken through County programming and operations, to **ensure** existing agricultural operations are protected.
6. **Require** the reuse of topsoil within Bremner to **ensure** the high class soils are retained within Bremner, with details to be determined further through later planning stages.
7. **Encourage** alternatives to removing or scraping off topsoil to **promote** the conservation of soil strata, with details to be determined further through later planning stages.

8. **Require** that new development integrates and provides transitions to adjacent agricultural areas, such as berms, fences, or tree stands where applicable, to **ensure** retained agricultural operations are appropriately buffered.

3.4.2 Urban Agriculture

9. **Require** the provision of public agriculture such as community gardens and edible landscapes in open spaces such as the Regional Park, to **ensure** local food production is incorporated into the communities.
10. **Encourage** private urban agriculture, such as rooftop gardens or community gardens, to **promote** local food production.
11. **Require** that the Town Centre accommodates space for community farmers markets to **ensure** convenient access to local food.
12. **Encourage** the development of community food hubs, such as within the Primary or Secondary Community Nodes, to **promote** local food culture.

3.4.3 Agricultural History

13. **Encourage** educational opportunities and the integration of Bremner's agricultural history in open spaces, such as through interpretative signage, public art, and park naming, to **promote** the continued importance of the agricultural industry in Strathcona County.
14. **Encourage** incorporation of the agricultural history of Bremner when naming streets and open spaces to promote the integration of Bremner's history within development



04 LAND USE CONCEPT

4.1 Neighbourhoods

Overall, Community 4 is the urban heart of the Bremner area. Centred around the Town Centre and Regional Park, the Community has a regional draw for its commercial amenities, major community services, and celebratory spaces that will host events and gatherings for residents of all of Bremner and beyond. Community 4 has a strong network of open spaces that provide recreational and ecological connectivity throughout the community, to Oldman Creek and Pointe-aux-Pins Creek, and to surrounding communities. It is also structured around a grid of major streets that provide efficient regional vehicular and transit connections.

Community 4 is divided into three Neighbourhood areas, with each interfacing one side of the Town Centre, as shown in Figure 2: Development Areas Concept.

- Neighbourhood 1, to the north of Township Road 534, features an area of Pointe-aux-Pins Creek as well as three natural areas, connected parks, greenways, and a stormwater management facility. A central primary community node is located with direct collector access to the Town Centre. The Neighbourhood also provides strong connections to the agricultural area to the north, including Bremner House and the Point.
- Neighbourhood 2 is located directly to the west of the Town Centre, providing major connections and transitions from this major urban centre. Street oriented housing lines most of the collectors which access the Neighbourhood. A primary community node located centrally to the Neighbourhood is connected to surrounding areas through greenways.
- Neighbourhood 3 is the largest of the Neighbourhoods in Community 4, encompassing the entire portion south of the Town Centre. Its primary feature is the large Regional Park that acts as a secondary community node and also serves as a regional destination

for recreation, gathering, and celebration. A significant natural area to the south of the Regional Park provides additional ecological connectivity through to Oldman Creek.

Goal

Each neighbourhood will contain a diversity of housing as well as natural and built elements that will contribute to their unique design. The neighborhoods will also be connected by a strong network of open space and multimodal transportation options that will facilitate access to services and amenities within the Town Centre and Regional Park.

Objectives

Strathcona County's objectives are to ensure Community 4:

1. Contains residential **housing diversity** throughout each neighbourhood;
2. Allows opportunities for **services** that meet the daily needs of the surrounding residential development;
3. Provides multimodal **transportation** connections within and between all neighbourhoods;
4. Provides convenient and accessible **open space** to all residents; and
5. Is **designed** to be walkable in all seasons.

Policies

4.1.1 Housing Diversity

1. **Require** a mix of low and medium density residential housing forms within neighbourhoods, as shown on Figure 3: Land Use Concept, to **ensure** a range of housing choices that build a strong community and attract a diverse population.
2. **Encourage** locating higher density residential land uses along the periphery of residential areas (near collector and arterial roadways) to **promote** efficient utilization of major roads and transit routes and provide an appropriate transition between land uses.
3. **Consider** innovative development forms, such as reverse housing along the linear open space west of the Regional Park within neighbourhood 3, to create unique housing opportunities that **support** open space with active frontages.

4.1.2 Existing Country Residential

4. **Require** additional site-specific studies and technical reports for any proposed re- subdivision of the area identified as existing country residential (Tidan Heights) within neighbourhood 3 prior to rezoning, subdivision or as part of an amendment to this plan (whichever comes first) to **ensure** technical considerations are addressed as necessary.
5. **Require** that any proposed re-subdivision for residential use of existing country residential within neighbourhood 3 align with the following criteria to **ensure** cohesive development:
 - a. is logical and does not unnecessarily restrict further development;
 - b. has legal and physical access from an internal road;
 - c. contributes to achieving the overall residential density required for Community 4; and
 - d. aligns with the Mixed Residential land use requirements;
6. **Require** that new development integrates and provides transitions from Existing Country Residential (Tidan Heights) within neighbourhood 3, such as larger lots, single family housing and/or physical buffers, such as storm ponds, where applicable, to **ensure** a cohesive community.

4.1.3 Mixed Density Residential

7. **Require** Mixed Density Residential to be developed at a minimum net residential density of 30 dwelling units per net residential hectare to **ensure** overall residential density targets are met.
8. **Encourage** various ground-oriented built forms for Mixed Density Residential, such as single-detached, semi-detached, row housing, and stacked row housing, to **promote** a diversity of housing options and appeal to a wide population spectrum.
9. **Encourage** the development of secondary suites for Mixed Density Residential, such as lane-oriented garage and garden suites to **promote** housing diversity and affordable housing opportunities.
10. **Encourage** a variety of lot sizes and lot types for Mixed Density Residential in order to **promote** various housing opportunities and unique built forms envisioned for the residential area.
11. **Encourage** higher density housing forms for Mixed Density Residential, such as row housing and stacked row housing, adjacent to primary

community nodes, the Town Centre, Regional Park and along collector streets to **promote** increased population close to services and amenities and along transit routes.

4.1.4 Street Oriented Residential

13. **Encourage** street oriented residential to be developed at a net residential density of 35 units per net residential hectare (upnrha) to **promote** overall residential density targets.
14. **Encourage** various built forms for street oriented residential, such as zero lot line single-detached, semi-detached, row housing, and stacked row housing, to **promote** alternative housing options.
15. **Require** smaller front yard setbacks and rear lane garage access for street oriented residential to **ensure** a walkable, safe, and visually appealing streetscape.
16. **Encourage** street oriented residential to be located along collector roadways, as shown on Figure 3: Land Use Concept, to **promote** attractive and walkable major streets in the community.
17. **Encourage** higher density street-oriented residential, such as row housing, and stacked row housing to be located along collector roadways in close proximity to the primary community nodes, Town Centre and Regional Park to **promote** a visually appealing streetscape and higher density in close proximity to services and amenities.

4.1.5 Services

18. **Consider** minor home-based businesses, where appropriate, to **support** a diverse local economy.
19. **Consider** live-work units in the following instances to **support** access to services and local business:
 - a. Generally, within the community, but more especially in areas that may be outside the 1km walkshed of the village centre as identified on Figure 9;
 - b. Where compatible with surrounding residential uses;
 - c. Where parking is limited to on-street; and
 - d. Where it can be accessed by active transportation.

4.1.6 Transportation

20. **Require** a multi-modal transportation network, as shown on Figure 8: Active Transportation Concept, that **ensures** ample and active connections between land uses.
21. **Require** an arterial road connection through Community 4 along Township Road 534 from Range Road 225 to Range Road 224, to **ensure** major access points are provided.
22. **Require** collector roadway connections from Community 4 into Community 1 and Community 5, to **ensure** major connections throughout Bremner.
23. **Encourage** a suitable balance between pedestrian and vehicular circulation throughout residential areas to **promote** access for all modes.
24. **Encourage** pedestrian-oriented frontages, where appropriate, to **promote** walkability and active streetscapes within neighbourhoods.

4.1.7 Neighbourhood Open Space

25. **Require** all neighbourhood parks to have street frontage and connection to the pedestrian network to **ensure** they are an accessible and visible open space for all residents.
26. **Require** a connected open space network, as shown on Figure 5: Open Space Concept, that provides connections through walkways, trails, open space, and street cross sections in alignment with the Bremner Design and Construction Standards to **ensure** recreation, culture, and access opportunities for residents as well as wildlife habitat and connectivity.
27. **Require** every residence to be within approximately 400 metres of a park or open space network access point to **ensure** convenient access to the open space network.
28. **Encourage** open space connections between Primary Community Nodes, the Town Centre, Regional Park, stormwater management facilitates, and environmental and municipal reserve, to **promote** a comprehensive active transportation network and provide an active interface between the land uses.
29. **Encourage** parks and public spaces to be designed to provide both active recreation opportunities (such as soccer fields, baseball diamonds, and playgrounds) and passive recreation opportunities (such as open fields, seating areas, and natural area trails) to **promote** access to a wide range of activities for residents of all ages and abilities.

30. **Require** parks and public spaces to be designed in accordance with Section 2.3 of Appendix B of the Bremner and LEA ACP to **ensure** open spaces are comfortable and safe year-round.

4.1.8 Urban Design

31. **Require** neighbourhood design and street layouts to be highly connected, including incorporating grid or modified grid streets, where appropriate, to **ensure** walkability in all seasons.
32. **Require** open space connections and walkways where street layouts may result in reduced connectivity and accessibility to neighbourhood and community open space, amenities and services to **ensure** walking to these areas are direct and convenient.
33. **Encourage** rear garage access, where the front lot line is across from or adjacent to a primary community node, to **promote** walkability, street safety, and reduced speeds in neighbourhoods.
34. **Encourage** detached garages to be accessed from a lane in order to **promote** neighbourhood walkability and street safety in the community.
35. **Require** mid-block access points where neighbourhood blocks exceed 300 metres to **ensure** walkability.
36. **Encourage** a mix of landscaping elements, plantings, urban agriculture opportunities, and edible landscapes within the neighbourhood design to **promote** biodiversity and an enhanced overall appearance of the community.
37. **Require** that parking for services and live-work units is designed as pedestrian-oriented in accordance with Section 1.2 of Appendix B of the Bremner and LEA ACP to **ensure** continuous, active streetscapes are provided.
38. **Encourage** garages to be designed as pedestrian-oriented in accordance with Section 1.2 of Appendix B of the Bremner and LEA ACP to **promote** walkability and lower speeds in residential areas.

4.2 Community Nodes

Goal

To create vibrantly designed walkable, and connected nodes of activity within each neighborhood that provide space for schools, high-quality open space, and complimentary community services as well as a Regional Park that functions as a secondary community node and also acts as a destination within Strathcona County to serve the local population and sub-region.

Figure 5: Open Space Concept shows the community nodes and Regional Park.

Objectives

Strathcona County's objectives are to ensure that Community Nodes in Community 4:

1. Provide a location for **schools**;
2. Contain public **open space**;
3. Provide opportunities for **community services**;
4. Support accessible transit and active **transportation** for daily trips; and
5. Are **designed** to be compact and walkable in all seasons.

Policies

4.2.1 Schools

1. **Require** that the primary community node within neighborhood 1 be designed in general alignment with Figure 5, to accommodate the opportunity for either two primary schools or one primary school and a complimentary community service facility use to **ensure** opportunity for school and community partnerships.
2. **Require** that the primary community node within neighborhood 2 be designed in general alignment with Figure 5, to accommodate the opportunity for two primary schools to **ensure** adequate space for schools locating within Community 4.
3. **Require** the Regional Park located adjacent to the Town Centre, be designed in general alignment with Figure 5, to accommodate the opportunity for a secondary school and major community services such as indoor recreation and community event spaces to **ensure** shared resources and facilities in a centralized area.

4. **Encourage** the Regional Park to also be designed to accommodate a primary school in addition to the secondary school to **promote** adequate space for schools locating within Community 4.
5. **Encourage** collaboration with the school boards on the Park Master Plans for each community node to **promote** site design, configuration and layout that will accommodate school, open space and community uses.

4.2.2 Local or Major Community Services

6. **Consider** the incorporation of a community service facilities on the community nodes within neighbourhoods 1 and 2 if space can be accommodated, to **support** shared resources between the school boards and the County.
7. **Require** major community service in the form of indoor recreation within Community 4 to locate within the Regional Park to **ensure** the creation of a recreation hub in the urban centre of Bremner.
8. **Encourage** the Regional Park to include major community services in addition to indoor recreation such as government offices, healthcare services, and post-secondary institutions to **promote** sub-regional level services in the urban centre of Bremner that are centrally located adjacent to Town Centre resources and transit access.
9. **Consider** the incorporation of community or seniors housing in conjunction with community services on a community node if space can be accommodated, to **support** convenient access to services and multigenerational interactions.

4.2.3 Community Open Space

10. **Require** each community node to contain park area for outdoor recreation to **ensure** opportunities for outdoor activity within each neighbourhood.
11. **Require** the Regional Park be of sufficient size to include areas for outdoor recreation and gathering to accommodate regional events to **ensure** that the Regional Park can serve the local population and act as a destination within Strathcona.
12. **Require** a Park Master Plan for each community node be approved by the County prior to the subdivision of any community node, to **ensure** that all planned community services, schools, and open space features will be accommodated in accordance with County policy.
13. **Require** that open space functions for all ages and abilities to **ensure** recreational and cultural opportunity access.

14. **Encourage** urban agriculture to be integrated within open spaces, such as through community gardens, farmer’s markets, edible landscaping, habitat for pollinators, and/or tree orchards, to **promote** local food production.

4.2.4 Transportation

15. **Encourage** collaboration on the design of streets adjacent to the community nodes with the school boards to **promote** street design that will account for school needs with regards to student safety, busing, and increased traffic during school hours.
16. **Require** that all community nodes contain the following design aspects to **ensure** safe and convenient access by all modes of transportation:
 - a. Be accessible from all sides either by roadway or walkway access;
 - b. Be connected to active transportation infrastructure; and
 - c. Implement traffic calming at adjacent crossings.
17. **Require** that the primary community node within neighborhood 1 front onto two collector streets to **ensure** high visibility and adequate street frontage to accommodate two schools or a school and community service use.
18. **Require** that the primary community node within neighborhood 2 front onto two streets, including a minimum of one collector street, to **ensure** high visibility and adequate street frontage to accommodate two schools.
19. **Require** that the Regional Park within neighbourhood 3 front onto two streets, including a minimum of one collector street, to **ensure** high visibility and adequate street frontage to accommodate schools and major community service facilities.
20. **Require**, the Regional Park within neighbourhood 3 incorporates mitigation measures including open space connections south of the site as well as safe, efficient and unobstructed access across Range Road 224, to **ensure** walking and cycling to school and community services within the Regional Park is a safe and viable option.
21. **Require** streets adjacent to community nodes to incorporate active transportation infrastructure for cycling to **ensure** bicycle access to services and facilities.
22. **Consider** integrating electric vehicle charging infrastructure at community nodes to **support** sustainable transportation options.

23. **Encourage** transit stops in close proximity to community nodes to **promote** access to community nodes facilities and recreation by transit.

4.2.5 Urban Design

24. **Encourage** visual connections, pathways, and active frontages where the secondary community node interfaces with the Town Centre, to **promote** an active interface between complementary land uses.
25. **Require** parking for public community services, be located underground, stacked or on- street and designed as pedestrian-oriented in accordance with Section 1.1 of Appendix B of the Bremner and LEA ACP to **ensure** continuous, active streetscapes.
26. **Encourage** parking for community housing and seniors housing, be located underground, stacked or on-street and designed as pedestrian-oriented in accordance with Section 1.1 of Appendix B of the Bremner and LEA ACP to **promote** continuous, active streetscapes.
27. **Encourage** parking for schools to be designed as pedestrian-oriented in accordance with Section 1.1 of Appendix B of the Bremner and LEA ACP to **promote** pedestrian safety.
28. **Encourage** pedestrian-oriented active frontages to be implemented in accordance with Section 1.2 of Appendix B of the Bremner and LEA ACP to **promote** vibrant streetscapes with street level activity.
29. **Encourage** the implementation of all-season design for built form in accordance with Section 2.1 of Appendix B of the Bremner and LEA ACP to **promote** building placement, aesthetics, and materials which enhance the pedestrian experience year-round.
30. **Require** all season public realm design in accordance with Section 2.2 of Appendix B of the Bremner and LEA ACP to **ensure** that pedestrian streetscapes are safe, vibrant, and accessible year-round.
31. **Require** parks and public spaces to be designed in accordance with Section 2.3 of Appendix B of the Bremner and LEA ACP to **ensure** that open spaces are comfortable and safe year-round.

4.3 Town Centre

Goal

To create a vibrant and distinct Town Centre that will be the central destination within Community 4 and Bremner. It will provide a sub-regional level of service in conjunction with the Regional Park.

Objectives

Strathcona County's objectives are to ensure that the Town Centre in Community 4:

1. Contains **mixed-use** buildings and mixed-use development;
2. Provides **commercial** opportunities, including major commercial;
3. Contains high density **residential**, which includes community housing and seniors housing;
4. Provides **community services** for residents and the sub-region;
5. Contains public **open space and plazas** for gathering and recreation;
6. Provides a **transportation** network that supports transit and active transportation for daily trips; and
7. Is **designed** and built to be compact and highly walkable in all seasons.

Policies

4.3.1 Mixed-Use

1. **Encourage** 140 people plus jobs per gross hectare within the Town Centre to **promote** a concentration of employment opportunities and higher density residential.
2. **Encourage** high-quality, street-oriented vertical or horizontal mixed-use development to **promote** a vibrant, activated and attractive Town Centre that is higher density and allows for residents to meet their daily needs.
3. **Require** a mix of uses to be located along the main street(s) with ground floor oriented commercial and/or community services to **ensure** an activated and attractive pedestrian environment and public realm.

4. **Require** that the Town Centre consist of a mix of commercial, community service and higher density residential in a compact form to **ensure** the creation of an urban centre with a sub-regional level of service.
5. **Encourage** residential development above ground floor commercial and community services to **promote** a vibrant, active and compact centre.

4.3.2 Commercial

6. **Require** the Town Centre to provide sites for major commercial, community commercial, and business commercial to **ensure** access to services and employment for the local and sub-regional populations.
7. **Encourage** local businesses to locate within the Town Centre to **promote** a vibrant local economy and competitive business environment.
8. **Encourage** developments to provide for a larger number of commercial retail units to **promote** a human scale and vibrant commercial space.
9. **Encourage** the integration of commercial, residential, and office uses to **promote** the ability for residents to meet their daily needs within a smaller geographic area.
10. **Encourage** commercial development to be located and oriented toward the street, in a manner that is highly visible to pedestrians, to **promote** opportunities for convenient access.

4.3.3 Residential

11. **Encourage** an average density of 160 dwelling units per net residential hectare to **promote** a concentration of higher residential density within walking distance to commercial, community services and employment opportunities.
12. **Require** that the Town Centre contains sites for a wide-variety of housing, at varying price points, in the form of apartment housing, row housing, stacked row housing or mixed-use buildings to **ensure** a higher-density population that sustains local community services and commercial and is accessible to homebuyers with varying economic capacity.
13. **Encourage** sites for seniors housing and community housing to **promote** affordable and accessible housing in proximity to community and commercial services.
14. **Encourage** seniors housing and community housing to be in close proximity (250 metres) to community services such as health services, recreation centres, and transit to **promote** accessibility to these services.

4.3.4 Community Services

15. **Require** sites which provide an opportunity for local community services and major community services to **ensure** access to community activities for the local and sub-regional population.
16. **Require** the joint use of sites or buildings for public community services to **ensure** compact form as well as efficient use of land and resources.
17. **Encourage** joint use of sites or buildings between community services, residential, or commercial to **promote** an integrated, accessible and inviting community for all residents.
18. **Encourage** the following major community services to be included within the Town Centre or adjacent Regional Park to **promote** access to these services for the local and sub-regional population:
 - a. Library;
 - b. Spaces for arts and culture;
 - c. Community hall and events centre;
 - d. Transit terminal;
 - e. Health centre;
 - f. Government services; and
 - g. Indoor recreation.
19. **Encourage** public health services to locate in close proximity to the following amenities to **promote** convenient access to health services:
 - a. Transit corridors
 - b. On-street at grade transit transfer facility or transit terminal;
 - c. Seniors housing and community housing;
 - d. Major community services; and
 - e. Complementary health services.
20. **Encourage** post-secondary institutions to locate within the Town Centre or adjacent Regional Park to **promote** a walkable campus environment.

21. **Consider** major public services within the Town Centre where the following are applied to **support** land use compatibility:
- a. Provides an accessible service to the public such as a recycle station;
 - b. Provides an essential service for the local area such as emergency services;
 - c. Contains any nuisances within a building; and
 - d. Is built in a compact form.

4.3.5 Open Space and Plazas

22. **Require** open space connections from the Town Centre to the adjacent Regional Park to **ensure** access to the open space network and public amenities.
23. **Encourage** open space and plazas for public use to be incorporated within the built form and character of the Town Centre to **promote** a sense of place and interaction outdoors.
24. **Require** open spaces and plazas to be sized to accommodate uses such as gathering, recreation and cultural programming, and public urban agriculture to **ensure** active, vibrant, and attractive public spaces.
25. **Encourage** visual and physical connections to open spaces and plazas through medium and high density residential, mixed-use developments, and commercial sites to **promote** walkability and accessibility throughout the Town Centre.
26. **Encourage** open space and plazas to be located in close proximity to transit and the active transportation network to **promote** multi-modal accessibility to open space and high- quality public space.
27. **Encourage** active interfaces between the built form and open spaces and plazas to **promote** the creation of vibrant, activated and attractive public spaces.
28. **Require** open spaces and plazas to be designed in accordance with Appendix C to **ensure** that open spaces are comfortable and safe year-round.
29. **Encourage** the development of community food hubs and spaces that accommodate farmer's markets within or near the Town Centre, to **promote** local food culture.

4.3.6 Transportation

30. **Require** a fine-grained grid network of streets to **ensure** connectivity and accessibility for all transportation modes.
31. **Encourage** higher density buildings to locate along transit routes to **promote** the use of and accessibility to transit.
32. **Encourage** the network of blocks and streets to have a maximum length and width of 150 metres to **promote** the Town Centre as walkable and transit supportive.
33. **Require** the two main streets running north-south and east-west within the Town Centre to be designed as a safe pedestrian-oriented environment to **ensure** that high intensity commercial uses are supported by a high-quality public realm.
34. **Require** that the collector street running east-west between the Town Centre and Regional Park be designed to consider its context and prioritizes the safety of people walking and cycling between the Regional Park and Town Centre to **ensure** safe transportation infrastructure and reduce barriers in high pedestrian volume areas.
35. **Require** low design speeds on streets in the Town Centre to **ensure** a Safe Systems Approach and prioritize the safety of people walking and cycling.
36. **Require** the main streets to include transit routes to **ensure** multi-modal options are provided in the Town Centre.
37. **Require** the main streets to connect to major roadways such as the collectors to the west and south of the Town Centre and arterial streets to the north and east, as well as the active transportation network via collector roads to the Major Open Space Corridor, to **ensure** access for all modes to the commercial core.
38. **Require** the transportation network in the Town Centre to incorporate public or private laneways to accommodate loading, garbage, and rear parking areas to **ensure** consistent street-oriented buildings.

39. **Require** that only the following street types are permitted in the Town Centre, as per the Bremner Design and Construction Standards, to **ensure** the transportation network meets the needs of users:
- a. Main Street Collectors;
 - b. Local;
 - c. Laneways;
 - d. Collectors;
 - e. Shared Streets; and,
 - f. Off-Street Multi-Use Trails.
40. **Require** all streets within or adjacent to the Town Centre be designed to accommodate all season cycling to **ensure** accessible and active connections to destinations for all people on bikes.
41. **Require** bicycle parking for all developments to **ensure** that residents can choose to ride a bike for all trips.
42. **Require** street design on all streets within the Town Centre to accommodate a pedestrian- friendly environment with safe walking and/or active transportation infrastructure on both sides of the street to **ensure** a vibrant public realm and connections to businesses and transit.
43. **Require** main streets in the Town Centre to include a frontage zone, pedestrian through zone, furnishing zone, and ancillary zone on both sides of the street, as identified in the Bremner Design and Construction Standards, to **ensure** a vibrant and flexible street where placemaking and walkability are prioritized.
44. **Encourage** development of shared streets or pedestrian-only streets where people walking and cycling are expected to be the primary users to **promote** vibrant public spaces near central open space or major community services.
45. **Require** that a street be designed within the Town Centre to accommodate an on-street at-grade transit transfer facility or transit terminal to **ensure** that the Town Centre serves as a multi-modal hub with increased transit opportunities for medium and high density residential.
46. **Require** that the on-street at-grade transit transfer facility or transit terminal be centrally located with access to main streets to **ensure** it is easily accessible by transit users.

47. **Encourage** that the on-street at-grade transit transfer facility or transit terminal be located in close proximity to the secondary community node to **promote** easy access and transit ridership opportunities for students.
48. **Require** a minimum of one priority transit corridor to **ensure** transit priority for bus service and potential future higher-order transit, such as bus rapid transit.
49. **Require** local and intermunicipal transit connections to **ensure** connectivity to regional employers and educational institutions outside of the County.
50. **Encourage** express transit service from the Town Centre to broader destinations to **promote** transit as a transportation option throughout Bremner and the rest of Strathcona County.
51. **Require** on-street parking on all streets within the Town Centre to **ensure** reduced off- street parking and to provide a buffer between street traffic and pedestrians.
52. **Require** parking to be located underground, stacked, on the street, or at the rear of buildings or interior of sites and designed as pedestrian oriented in accordance with Section 4.2 of Appendix C to **ensure** continuous, active streetscapes and compact development.
53. **Consider** integrating electric vehicle charging infrastructure in the Town Centre to **support** sustainable transportation options.

4.3.7 Urban Design

54. **Require** pedestrian-oriented active frontages to be implemented in accordance with Section 1.2 of Appendix B of the Bremner and LEA ACP to **ensure** vibrant pedestrian-friendly streetscapes with street level activity are provided.
55. **Require** street wall and building height design as outlined in Section 1.3 of Appendix B of the Bremner and LEA ACP to **ensure** human scaled streetscapes and appropriate transitioning.
56. **Require** main streets to be designed in accordance with Section 1.4 of Appendix B of the Bremner and LEA ACP to **ensure** pedestrian-oriented streetscapes and high-quality character that evokes a sense of place is provided.
57. **Require** the implementation of all-season design for built form in accordance with Section 2.1 of Appendix B of the Bremner and LEA ACP to **ensure** that building placement, aesthetics, and materials enhance the pedestrian experience year-round.

58. **Require** all season public realm design in accordance with Section 2.2 of Appendix B of the Bremner and LEA ACP to **ensure** that pedestrian streetscapes are safe, vibrant, and accessible year-round.
59. **Require** that development adhere to the design standards within Appendix C of this ASP, to **ensure** a cohesive and functional outcome for the Town Centre.
60. **Require** that the design standards within Appendix C of this ASP be reviewed and approved by the County at the time of development of the Town Centre, to **ensure** the developer conforms to the Town Centre design vision and outcomes.

4.4 Open Space Network

Goal

To create a green and connected community by conserving environmental features and providing active transportation, and outdoor leisure within the community. The open space network in Community 4 is amplified by this area containing the Regional Park, Pointe-Aux-Pins Creek and Oldman Creek, all of which will contribute to the creation of the Major Open Space Corridor.

Figure 5: Open Space Concept shows the open space uses and connections in Community 4. Connections may be achieved through walkways, trails, open space, and/or street cross sections in alignment with the Bremner Design and Construction Standards.

Objectives

Strathcona County's objectives are to ensure that the Open Space Network in the ASP:

1. Conserves **Pointe-aux-Pins Creek and Oldman Creek**;
2. Conserves and incorporates **priority wetlands** into open space and, where possible, the stormwater management network;
3. Provides opportunities to incorporate **priority uplands** into the open space network; and
4. Contributes to the creation of a continuous **Major Open Space Corridor**.

Policies

4.4.1 Pointe-aux-Pins Creek and Oldman Creek

1. **Require** delineation of land as public property by including a top of bank roadway or walkway along the entire length of Oldman Creek and Pointe-Aux-Pins Creek to **ensure** public access to Pointe-Aux-Pins Creek and Oldman Creek through active transportation linkages.
2. **Require** development setbacks for lots adjacent to the area established as Environmental Reserve (ER) for Oldman Creek and Pointe-Aux-Pins Creek, as determined through a Geotechnical Report, and floodplain recommendations in the Erosion Study, to **ensure** safety for lots developing next to the Creek.
3. **Encourage** public access points to the environmental reserve adjacent to Pointe-Aux-Pins Creek and Oldman Creek at regular intervals, as shown on Figure 5: Open Space Concept, to **promote** public enjoyment of the areas for all residents.

4.4.2 Wetlands

4. **Encourage** the incorporation of natural or constructed wetlands as stormwater management facilities through cold-climate LID technology to **promote** climate resilience and the long-term health of the wetland system and natural drainage patterns.
5. **Encourage** the enhancement of existing wetlands through features such as boulders and rocks, brush piles, native vegetation, gentle constructed slopes, and altered lighting, per the Wetland Mitigation Plan, to **promote** climate resilience, ecological health, and enhanced wildlife habitat.
6. **Encourage** the inclusion of priority wetlands into the open space network to **promote** wildlife connectivity, viability of the ecological network, active transportation, and outdoor leisure.

4.4.3 Uplands

7. **Encourage** the conservation of upland habitat to **promote** the viability of the ecological network after development.
8. **Encourage** the inclusion of upland habitat into the open space network to **promote** wildlife connectivity, viability of the ecological network, active transportation, and outdoor leisure within the community.
9. **Consider** natural surface multi-use trails within upland habitat, where they propose minimal impact, to **support** engaging active transportation opportunities.

4.4.4 Major Open Space Corridor

10. **Require** a Major Open Space Corridor, as identified in the Bremner and LEA ACP, to be established in the community to **ensure** a continuous open space network that provides recreation opportunities and convenient access to open space for all residents.
11. **Encourage** the Major Open Space Corridor to accommodate wildlife to **promote** and facilitate their movement through and between natural areas.
12. **Encourage** the Major Open Space Corridor to connect various ecological features such as Oldman Creek and the Environmental Reserve area in the south portion of the community, Pointe-aux Pins Creek and nearby Environmental Reserve in the north portion of the community, the Regional Park and community nodes where possible, as shown on Figure 5: Open Space Concept, to **promote** a connected network of open spaces.
13. **Require** an Eco-trail within the Major Open Space Corridor to **ensure** leisure and use of active transportation between communities and community

destinations can occur, while maintaining an ecological link through the community for wildlife.

14. **Require** the inclusion of Pointe-aux-Pins Creek and Oldman Creek as part of the Major Open Space Corridor to **ensure** natural areas are integrated into the community.
15. **Encourage** open space connections to communities adjacent to Community 4, such as into Community 1 to the west across Range Road 225 and into Communities 2, 3, and 5 from the southeast, to **promote** the integration of the Major Open Space Corridor with the broader Bremner and LEA ACP area and Strathcona County paths and open space network.
16. **Encourage** open space connections to Bremner House and The Point to the north of Community 1, through the multimodal cross section of Range Road 225 and active connections in the north portion of the ASP, to **promote** access is provided to key historical and agricultural amenities near Bremner.
17. **Consider** opportunities for restoration, enhancement, and education on subjects such as biodiversity, within the Major Open Space Corridor, to **support** its role as a multifunctional open space.
18. **Encourage** the implementation of all-season design for built forms surrounding open spaces in accordance with Section 2.1 of Appendix B of the Bremner and LEA ACP to **promote** building placement, aesthetics, and materials which enhance the pedestrian experience year-round.
19. **Encourage** all season public realm design in accordance with Section 2.2 of Appendix B of the Bremner and LEA ACP to **promote** safe, vibrant, and accessible public spaces year- round.
20. **Require** parks and public spaces to be designed in accordance with Section 2.3 of Appendix B of the Bremner and LEA ACP to **ensure** that open spaces are comfortable and safe year-round and increase biodiversity in design.



05 IMPLEMENTATION

5.1 Development Staging

In order for Community 4 to be developed in accordance with the development concept in this ASP, a number of major infrastructure projects may be required. Community 4 will tie into infrastructure built with Community 1, as outlined in the Servicing Design Brief. Market forces will also play a role in determining final staging decisions. Staging will be in general accordance with the development pattern depicted in Figure 9.

5.2 Implementation Items

In order for Bremner Community 4 to be developed in accordance with the development concept in this ASP the following implementation items will need to be completed.

5.2.1 Servicing

1. **Require** a Reservoir Strategy prior to rezoning and subdivision, to **ensure** water services are adequately provided.
2. **Require** that the final servicing requirements for initial stages be accepted by the County prior to rezoning and subdivision to **ensure** utilities design for initial stages are to the satisfaction of the County.

5.2.2 Transportation

3. **Encourage** continued collaboration with Alberta Transportation to finalize ultimate access plans for the area to **promote** connectivity into to the area.
4. **Require** that that final Transportation requirements be accepted by the County prior to rezoning and subdivision to **ensure** transportation requirements are to the satisfaction of the County.

5.2.3 Environmental

5. **Require** additional technical studies and reports as outlined in Section 3.1 Community Framework, for proposed development adjacent to environmental features such as wetlands, forested areas, Oldman Creek and Pointe-aux-Pins Creek to **ensure** conservation of environmental features and environmentally significant areas.
6. **Require** clubroot management plans on affected parcels prior to development to **ensure** that clubroot is not spread to other agricultural areas.

5.2.4 Land Use

Planning policy items and design guidelines will be implemented through land use zones specifically for the Bremner area.

7. **Require** the creation of new zoning districts where applicable for the Bremner area that incorporate regulations to achieve the policies and design guidelines outlined in the Community 4 ASP and Bremner and LEA ACP, to **ensure** that land use regulations support higher level policy direction.
8. **Require** Phase 2 ESA's be completed, where required through Phase 1 ESA's prior to rezoning and subdivision to **ensure** site requirements are met.
9. **Require** Park Master Plans to be provided and approved by the County prior to the subdivision of any community node, to **ensure** that all planned community services, schools, and open space features will be accommodated in accordance with ASP policy and design guidelines. A Park Master Plan should ensure that the design coordinates indoor and outdoor recreation facilities, year-round uses, and the immediate and long- term needs of the development.
10. **Require** County land needs to be determined through subsequent stages of development to **ensure** that County needs are taken into consideration.

5.2.5 Non-Participating Landowners

11. **Require** non-participating landowners (as shown on Figure 3A: Further Study Area) to undergo an ASP Amendment prior to rezoning or subdivision, to **ensure** that appropriate planning and environmental considerations are considered for these lands.
12. **Require** completion of ASP-level technical studies for non-participating lands (as shown on Figure 3A: Further Study Area) as part of an ASP amendment, prior to rezoning and subdivision of the non-participating lands, to **ensure** all lands meet Strathcona County technical requirements.
13. **Require** County land needs to be determined through subsequent stages of development on non-participating lands, to **ensure** that County needs are taken into consideration.



06 DEFINITIONS

Terms indicated with an asterisk (*) are as defined in the Edmonton Metropolitan Region Growth Plan. Terms indicated with a double asterisk (**) are as defined in the Strathcona County Municipal Development Plan. Terms indicated with an obelisk (†) are as defined in the Bremner and LEA Area Concept Plan. Terms not defined below may be given their meaning from the following documents in order of priority:

- a. Municipal Government Act.
- b. Edmonton Metropolitan Region Growth Plan.
- c. Municipal Development Plan.
- d. Bremner and LEA Area Concept Plan

Active Transportation: Means human powered travel, including but not limited to: walking, cycling, inline skating and travel with the use of mobility aids, including motorized wheelchairs and other power assisted devices moving at a comparable speed.*

Adjacent Lands: Means the definition given within the Municipal Government Act summarized as land that is contiguous to a parcel of land and includes lands that would be contiguous if not for a highway, road, river or stream, and any other land identified in the Land Use Bylaw as adjacent land.**

Ancillary Zone: Means the area located between the Travelled Way and Furnishing Zone. The Ancillary Zone provides a flexible space with the opportunity for various permanent and temporary street uses depending on the context and characteristics of the street. The use of this flexible space can vary and can include motor vehicle parking, loading or delivery zones, parklets, bicycle parking, curb extensions, public art, and transit stops. This space also includes the concrete gutter along urban streets and can be used for snow storage.†

Bremner Sub-Area Structure Plan:

Means an Area Structure Plan that denotes a Community in Bremner that is a complete community and is subordinate to the Bremner and LEA Area Concept Plan.

Bremner Sub-Area Structure Plans are approximately the size of a section; however, the size may be reduced or reconfigured due to natural features and major arterial streets. Bremner Sub-Area Structure Plans contain a Village Centre or the Town Centre, multiple complete neighbourhoods, and at least two Primary Community Nodes.**

Buffer: Means a land use, feature or space that acts as a physical separation.**

Business Commercial: Means a commercial use mainly consisting of professional offices.**

Centres: Means a Village Centre or Town Centre.†

Close Proximity: Means 400 metres (unless otherwise stated) measured by the distance utilizing active transportation infrastructure as opposed to Euclidian distance.**

Community Commercial: Means a commercial use mainly consisting of personal, retail, and food services of a limited scale that primarily serves the day-to-day needs of a single neighbourhood.**

Community Food Hub: Means a publicly accessible and maintained food production space, such as community gardens and community kitchens, which contribute to local food production.†

Community Housing: Means a category of several types of non-market housing, including but not limited to affordable housing, that receive direct capital and/or operating subsidies from any order of government to enable short or long-term occupancy by a range of lower-income and/or special needs individuals and households.**

Community in Bremner: Means a Bremner Sub-Area Structure Plan.**

Community Node: Means a Primary Community Node or Secondary Community Node.**

Compact Development or Compact Form: Means a land use pattern that reflects efficient use of land, walkable neighbourhoods, mixed land uses (residential, retail, workplace and institutional), multimodal transportation access, and the efficient use of infrastructure. Compact development may include detached and semi-detached houses on small lots as well as townhouses and walk-up apartments, multi-storey commercial developments, and apartments or offices above retail.*

Complete Community: Means housing that is suitable for all ages and income levels, provides residents with easy access to jobs, local amenities, services, community facilities, and a multi-modal transportation system.*

Complete Neighbourhood: Means an area within a Bremner Sub-Area Structure Plan that is approximately the size of a quarter section; however, the size may be reduced or reconfigured due to centres, open space, or street networks. Complete Neighbourhoods will contain a mix of residential and open space. They may also contain commercial, community services, and Community Nodes.**

Crime Prevention Through Environmental Design (CPTED): Means the design, maintenance, and use of the built environment in order to enhance quality of life and to reduce both the incidence and fear of crime. The three basic principles of Crime Prevention Through Environmental Design are natural surveillance, territoriality, and access control.**

Cycle track: Means facilities that are exclusively for the use of people on bicycles. They are physically separated from motor traffic and separate from the sidewalk. Cycle tracks can be one-way or two-way, and can be at street level, sidewalk level, or in between. They can be separated from traffic by medians, on-street parking, or bollards.†

Eco-trail: Means the trail that runs through the Major Open Space Corridor and is intended primarily for recreational uses.†

Environmental Features: Means individual natural features which provide for biodiversity such as a wetland or a tree stand.**

Existing Country Residential: Means the existing Tidan Heights subdivision and similar lands within the Bremner area.

Forested Area: Are uplands dominated by tree species including trembling aspen, balsam poplar and white spruce, with a diverse understory of shrubs such as Saskatoon, prickly rose, and beaked hazelnut, various forbs and grasses.

Frontage Zone: Means the area immediately adjacent to buildings or private property. The Frontage Zone in street-oriented contexts (e.g., Main Streets) is a space used as a support and/or extension of the land uses along the street. Uses of the Frontage Zone can include ground floor retail displays, café seating, temporary signage, queuing areas, and other activities to support active use of the street by people and businesses.†

Furnishing Zone: Means the area located adjacent to the Pedestrian Through Zone. The Furnishing Zone provides an area for signs, streetlight poles, street trees or landscaping, transit stops, benches, bicycle parking, public art, underground and surface utilities, low impacted drainage, snow storage, and concrete curb along urban streets or overland drainage for rural cross sections.†

Laneway: Means the lane that provides a through zone for rear access to the Adjacent Lands for deliveries and parking and can also be a location for utilities. Laneways can also provide opportunities for public art, walking and cycling connections, and placemaking.†

Local Community Services: Means public and private facilities and/or services that support the needs of a neighbourhood including, but not limited to: libraries, recreation centres, social and cultural centres, medical offices, institutional facilities and religious services. This does not include schools.**

Main Street: Means a pedestrian priority street that acts as a destination and creates a sense of place through a mix of street-oriented land uses with high quality architectural design. The corridor of a Main Street will include separated facilities for people walking, cycling, and driving, as well as reduced speeds and boulevard trees.**

Major Commercial: Means a commercial use consisting of a broad range of services of a scale that serves a community or the municipality.**

Major Community Services: Means large public or private facilities and/or services that support the community or the municipality including, but not limited to: libraries, indoor and outdoor recreation facilities, social and cultural services, event facilities, transit terminals, health facility and government facilities. This does not include schools.**

Major Open Space Corridor: Means public lands that connect Pointe-Aux-Pins Creek to Oldman Creek as well as other priority wetlands, uplands, and open space areas to create a continuous open space network the loops through Bremner for people and wildlife. The Major Open Space Corridor contains an Eco-trail.**

Major Public Services: Means large public facilities and/or services that support the everyday needs of the community or the municipality including, but not limited to: emergency services, recycle stations and major community services which are public. This does not include schools.**

Mixed Density Residential: Means various ground-oriented built forms such as zero lot line development, single-detached, semi-detached, row housing, and stacked row housing.

Mixed-use Development: Means development that mixes compatible residential, commercial, institutional and/or recreational land uses within buildings or in close proximity in order to increase density, reduce development footprint through land use and improve public accessibility to amenities.*

Multi-use Trail: Means typically an asphalt path at least 3.0 m wide with paint delineating a two-way travel pattern. Multi-use trails are shared between users cycling and walking, as well as those using mobility aids or other recreational human powered vehicles (scooters, skateboards, and rollerblades for example).†

Off-Street Multi-use Trail: Means multi-use trails that are off-street, located through parks, utility corridors/rights of way, and storm water facilities. The environments in these public places shall be designed to allow safe and convenient access by all active transportation traffic, and shall accommodate appropriate maintenance vehicles as necessary.†

On-Street At-Grade Transit Transfer Facility: Means a pedestrian-oriented transit controlled location that accommodates multiple buses at one time. Does not accommodate vehicle parking.**

On-Street Parking: Means parking located along the curb of public roads, and includes parallel parking or angle parking on streets.†

Open Space: Means public lands that provide social and environmental benefit and may include outdoor infrastructure that provides an identity or sense of place for the community. Open space may include, but is not limited to, landscaped areas, natural areas, active and passive recreational areas and outdoor community gathering spaces.*

Open Space Connection: Means a range of potential connections between community nodes and the Major Open Space corridor or priority wetlands, uplands, and open space areas. This may include multi-use trails, greenways, and other active modes connections.†

Pedestrian Through Zone: Means the area located between the Frontage and Furnishing Zones. The Pedestrian Through Zone provides an area for active transportation mobility for people of all ages and abilities to access the land uses along the street and to interact with one another. This zone is typically used by people walking but, in the case of multi-use trails, can be shared by those cycling.†

Placemaking: Means a people centred approach to the planning, design, management and programming of public shared use spaces. It is rooted in community based participation, strengthening the connection between people and the places they share, and creating public spaces that contribute to people's health, happiness and wellbeing.†

Plaza: Means a public square or similar open space in a built-up area where people can walk, sit and congregate.**

Post-Secondary Institution: Means a university, technical college, or other form of higher education. This does not include primary or secondary school.†

Primary Community Node: Means a central area in a community that is inter-connected by active transportation infrastructure and contains a primary school and open space as well as at least one additional use such as a community service or an additional school site.**

Priority Uplands: Means environmentally significant areas that are contiguous to creek systems and wetlands and that contain significant tree stands. These uplands have been prioritized given their distinct connection with wetlands and biological diversity. †

Priority Wetlands: Means environmentally significant areas and features, including Pointe-Aux Pins Creek, Oldman Creek, and a number of additional wetlands consisting of marsh, swamp, and open water wetlands. These wetlands have been prioritized given their distinct landscape connections and biological diversity. †

Regional Park: Means parks servicing a specific use or need for the entire County or the region.**

Safe Systems Approach: Means a system of thinking that acknowledges that even responsible people make mistakes and the users and designers of the transportation network share the responsibility in minimizing the impacts of those mistakes. †

School: Means a primary or secondary school. This does not include post-secondary schools.**

Secondary Community Node: Means a central area in a community that is inter-connected by active transportation infrastructure and contains a Secondary School and open space as well as at least one additional use such as a community service or an additional school site.**

Stacked Row Housing: Means a housing development containing three or more dwellings, two units deep, either vertically or horizontally and each unit having its own individual access not necessarily at grade. †

Street: Means a public roadway in an urban area, typically with buildings on one or both sides. †

Street Oriented Residential: This designation allows for zero lot line development, single-detached, semi-detached, row housing, and stacked row housing. Lands developed under this designation will have reduced front yard setbacks (street oriented) and require vehicular access and egress via rear laneways, adding to the safety and visual appeal of the streetscape and pedestrian realm.

Sub-region: Means the Urban Service Area - Bremner and surrounding County. †

Town Centre: Means a central urban area within Bremner that provides a sub-regional level of service. It contains a series of main streets, a transit-oriented development design and compact form and is intended to accommodate mixed-use development at higher intensities and high density residential. It contains commercial, employment, educational, and community services that serve the entire Urban Service Area - Bremner.**

Transit Terminal: Means a station which is able to accommodate multiple buses at one time. This may include park and rides.**

Travelled Way: Means the area used for traveling along a street or to access land uses along a street for people traveling by motor vehicle, bicycle, and transit, and for the delivery of goods. The space can include exclusive or shared lanes for bicycles, transit, motorized vehicles (including high occupancy vehicle lanes), and goods. Medians or islands, concrete gutters, refuge areas for people walking or cycling, crosswalks and crossrides, and turning lanes are also located within the Travelled Way.†

Trip: Means to travel from an origin to a destination, which can be completed by any mode of transportation.†

Upland: Means areas of higher elevations, generally dry with soils that support plants and wildlife that are adapted to dry environments for all or a portion of their lifecycles.†

Upland Habitat: Means areas dominated by a community of plant and wildlife species within an area of high elevation and dry soils.†

Urban Agriculture: Means the practice of cultivating food in an urban area. This may include, but is not limited to, urban farming, rooftop gardens, urban chickens and bees and public agriculture.**

Utility Services: Means services to the public including transportation, energy, telecommunications, waste disposal, or water and any other public goods and services.†

Village Centre: Means a central urban area within a Community in Bremner that contains a main street and has a transit-oriented development design and compact form which contains medium residential density, and may contain high residential density as well as commercial, employment, and community services that serve the local community.**

Wetland: Means land saturated with water long enough to promote wetland or aquatic processes or as defined by the Alberta Wetland Policy.**

Woonerf Style: In a woonerf, the street is shared among pedestrians, bicyclists, and motor vehicles; however, the pedestrians have priority over cars. The street is designed without a clear division between pedestrian and auto space (i.e., no continuous curb), so motorists are forced to slow down and travel with caution.

APPENDIX A - STATISTICS TABLES




ASP Statistics	Area (ha)
Gross Land Area (GLA)	469
Estimated Environmental Reserve (ER)	53
Estimated Net Developable Area (NDA = GLA - ER)	415
Estimated Municipal Reserve (MR) Dedication	56
Estimated Residential Density (du/nrha)	45
Estimated Population	22,100
Estimated Jobs	2,600

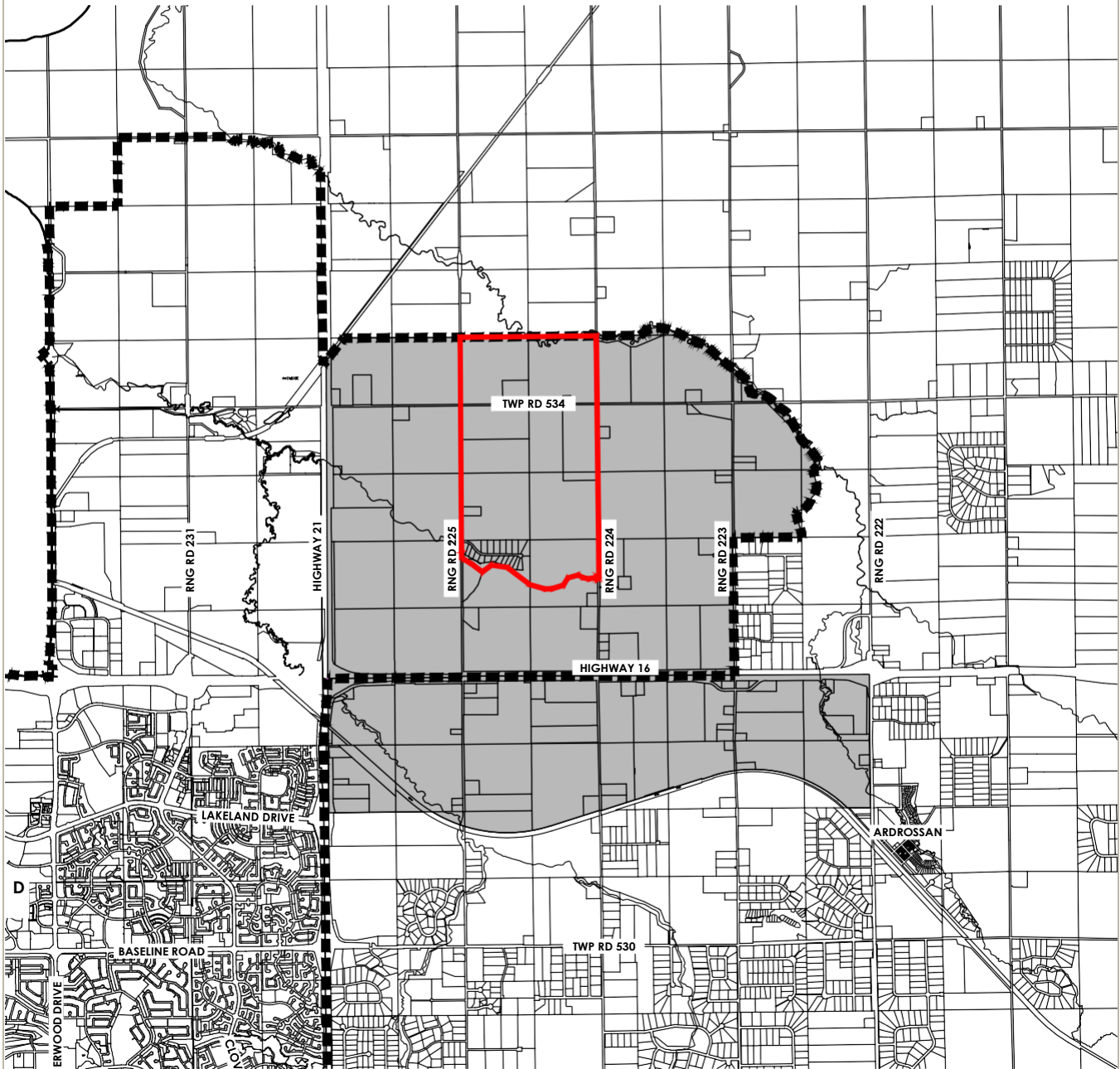
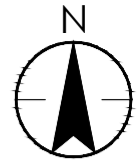
APPENDIX B - FIGURES

FIGURE 1

LOCATION PLAN

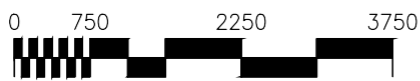
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-  Community 4 Area Structure Plan Boundary
-  Bremner and LEA Area Concept Plan Boundary
-  Urban Service Area Boundary



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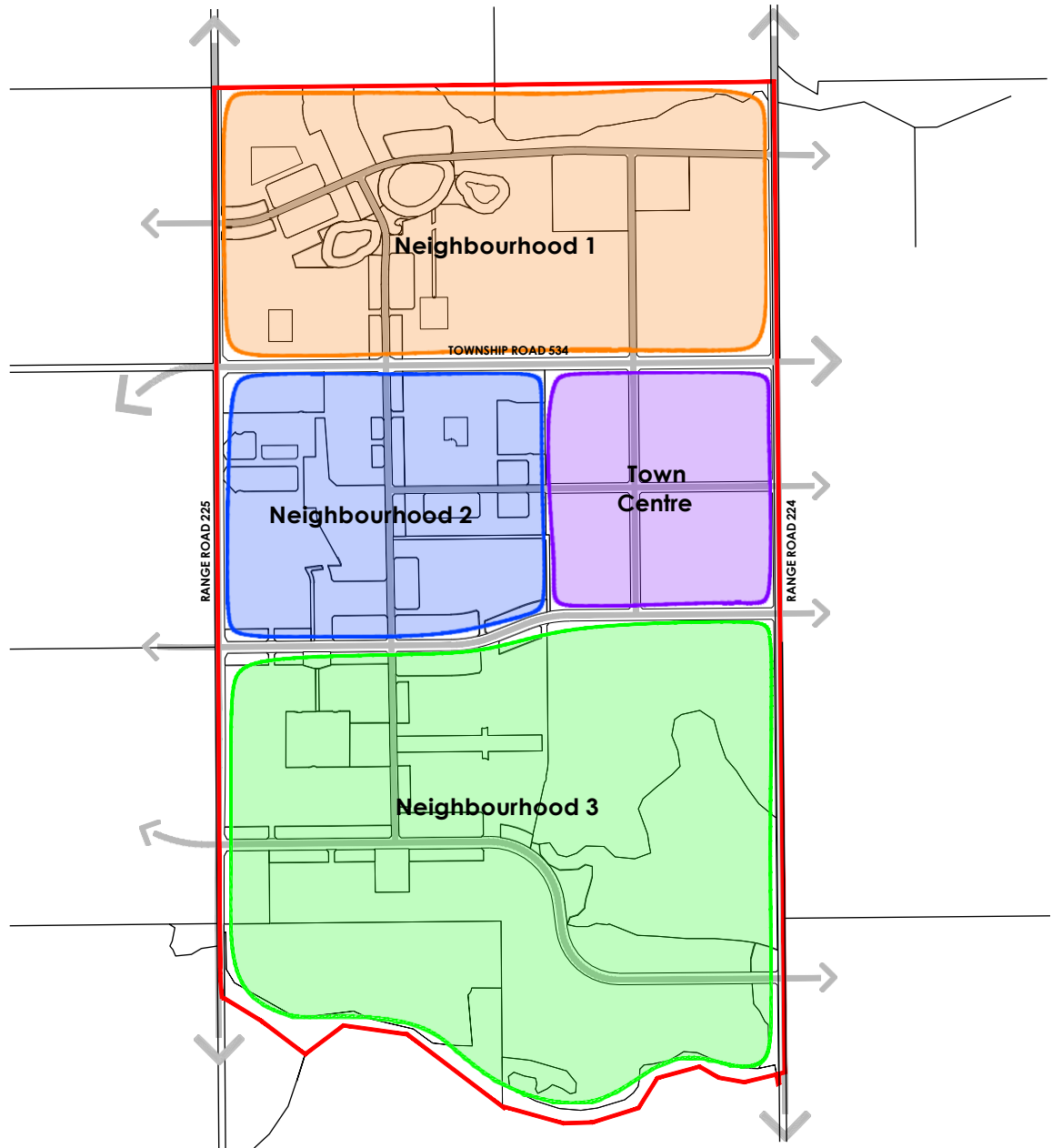
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FIGURE 2

DEVELOPMENT AREAS CONCEPT



LEGEND

Community 4 Boundary



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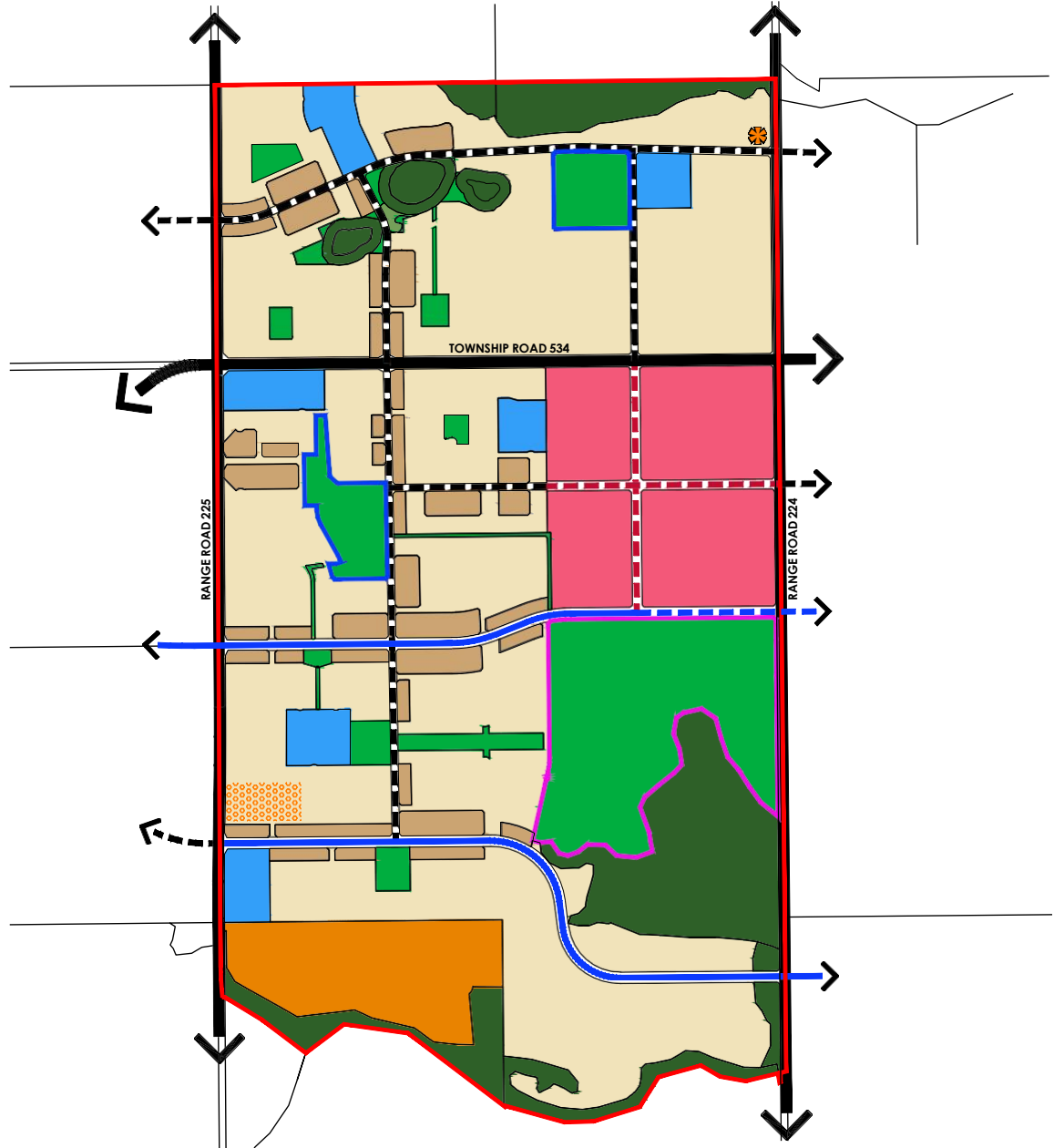
Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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FIGURE 3

LAND USE CONCEPT



LEGEND

- Community 4 Boundary
- Environmental Reserve (ER)
- Natural Area-Tree Stand (MR)
- Park/Greenway (MR)
- Public Utility Lot (PUL)
- Proposed Lift Station Potential Location
- Town Centre
- Mixed Density Residential
- Street Oriented Residential
- Existing Country Residential
- Existing Residence
- Primary Community Node
- Regional Park/Secondary Community Node

Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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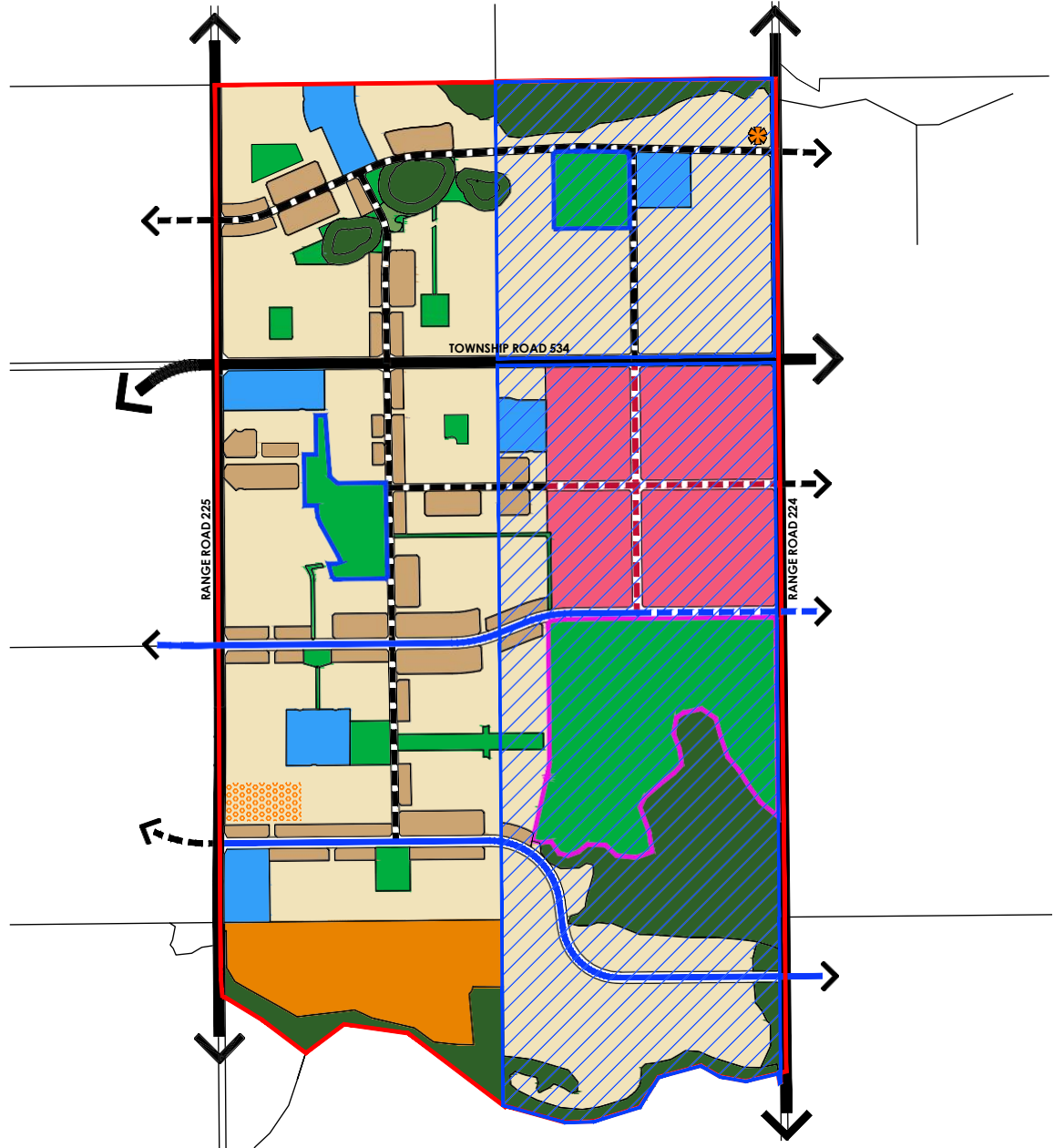
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FIGURE 3A

LAND USE CONCEPT- FURTHER STUDY AREA



LEGEND

- Community 4 Boundary
- Environmental Reserve (ER)
- Natural Area-Tree Stand (MR)
- Park/Greenway (MR)
- Public Utility Lot (PUL)
- Proposed Lift Station Potential Location
- Town Centre
- Mixed Density Residential
- Street Oriented Residential
- Existing Country Residential
- Existing Residence
- Primary Community Node
- Regional Park/Secondary Community Node
- Further Study Required

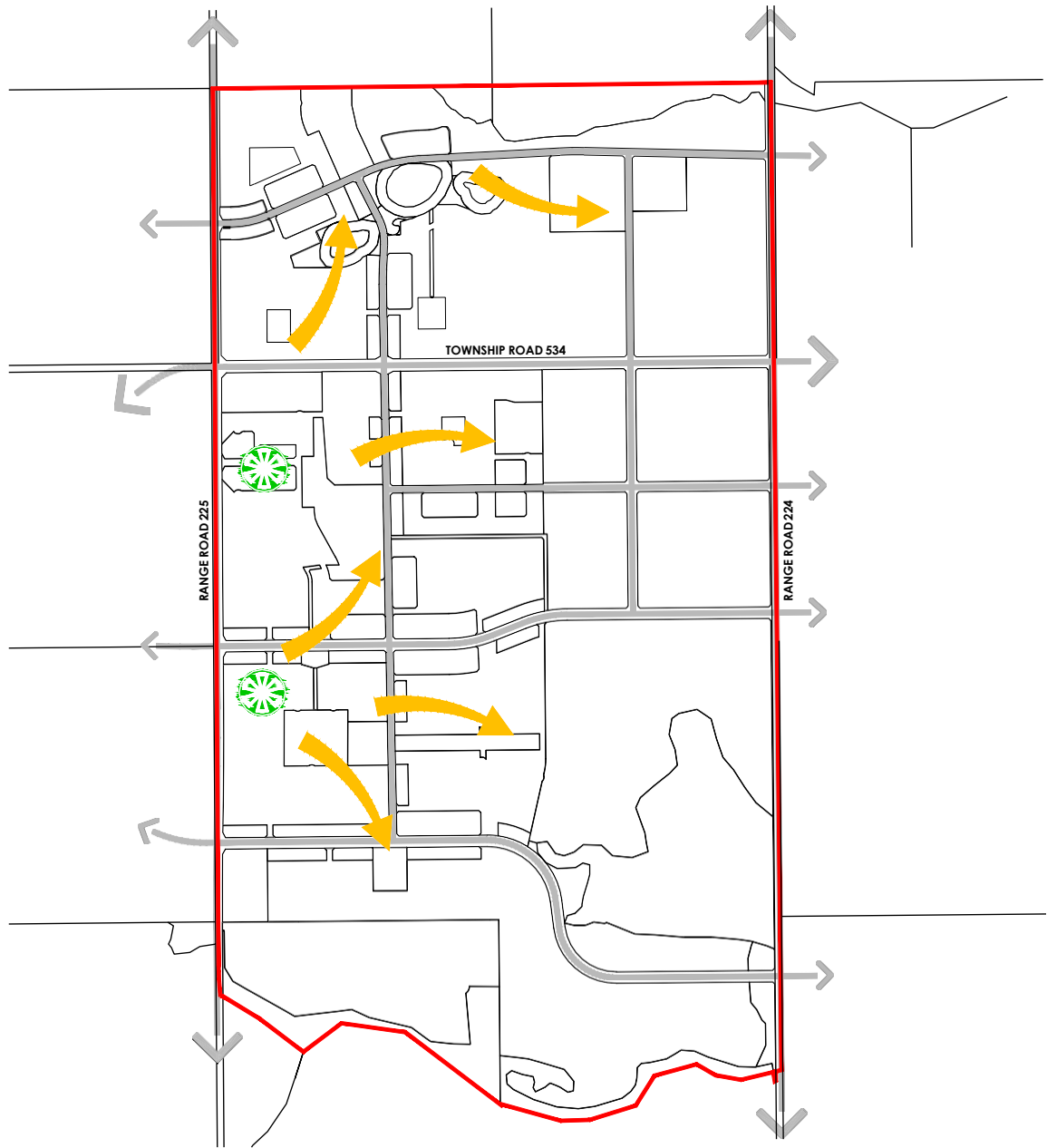
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Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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LEGEND

- Community 4 Boundary
- Anticipated Initial Area of Development
- General Direction of Development

Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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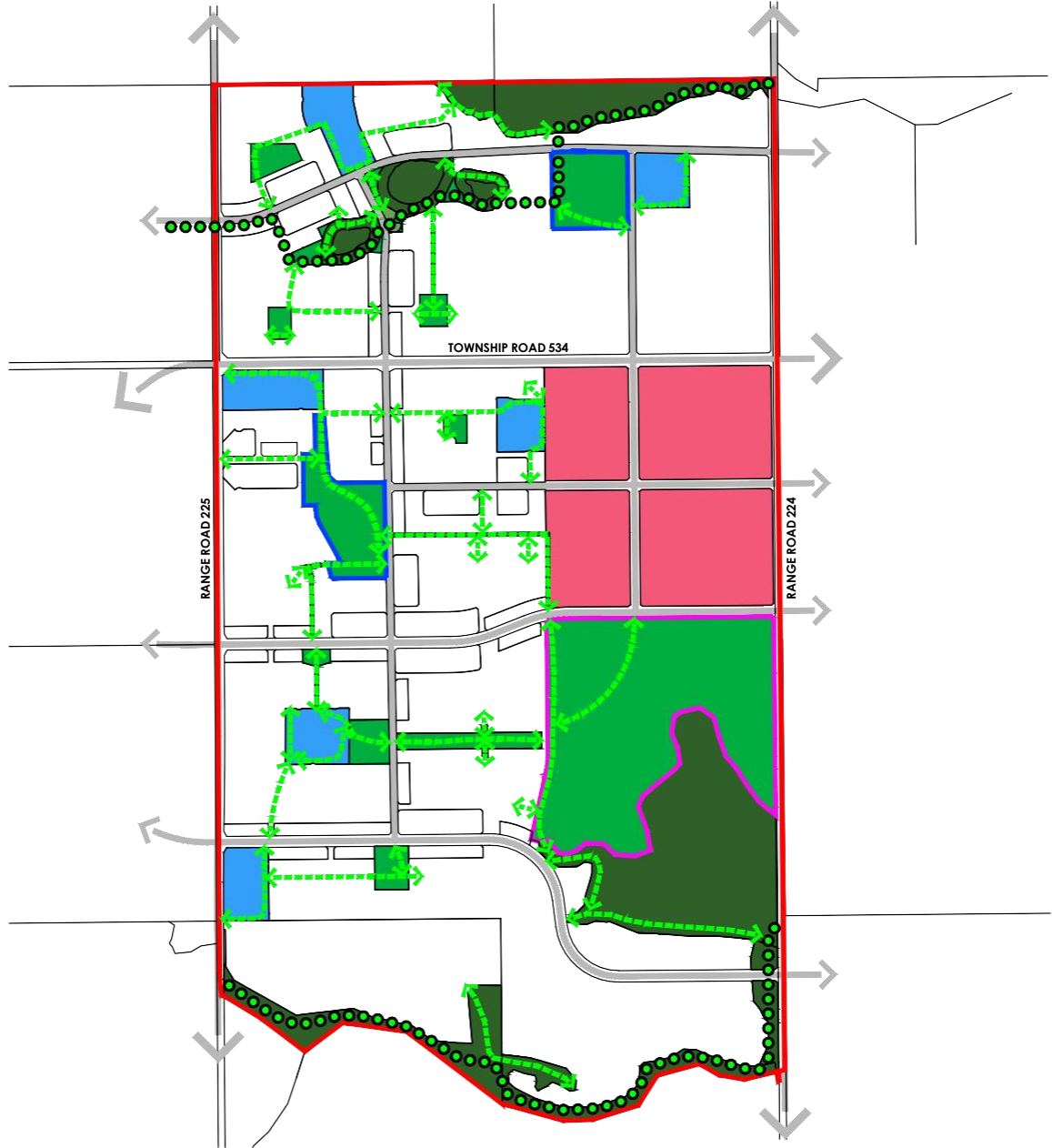
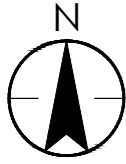
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FIGURE 5

OPEN SPACE CONCEPT



LEGEND

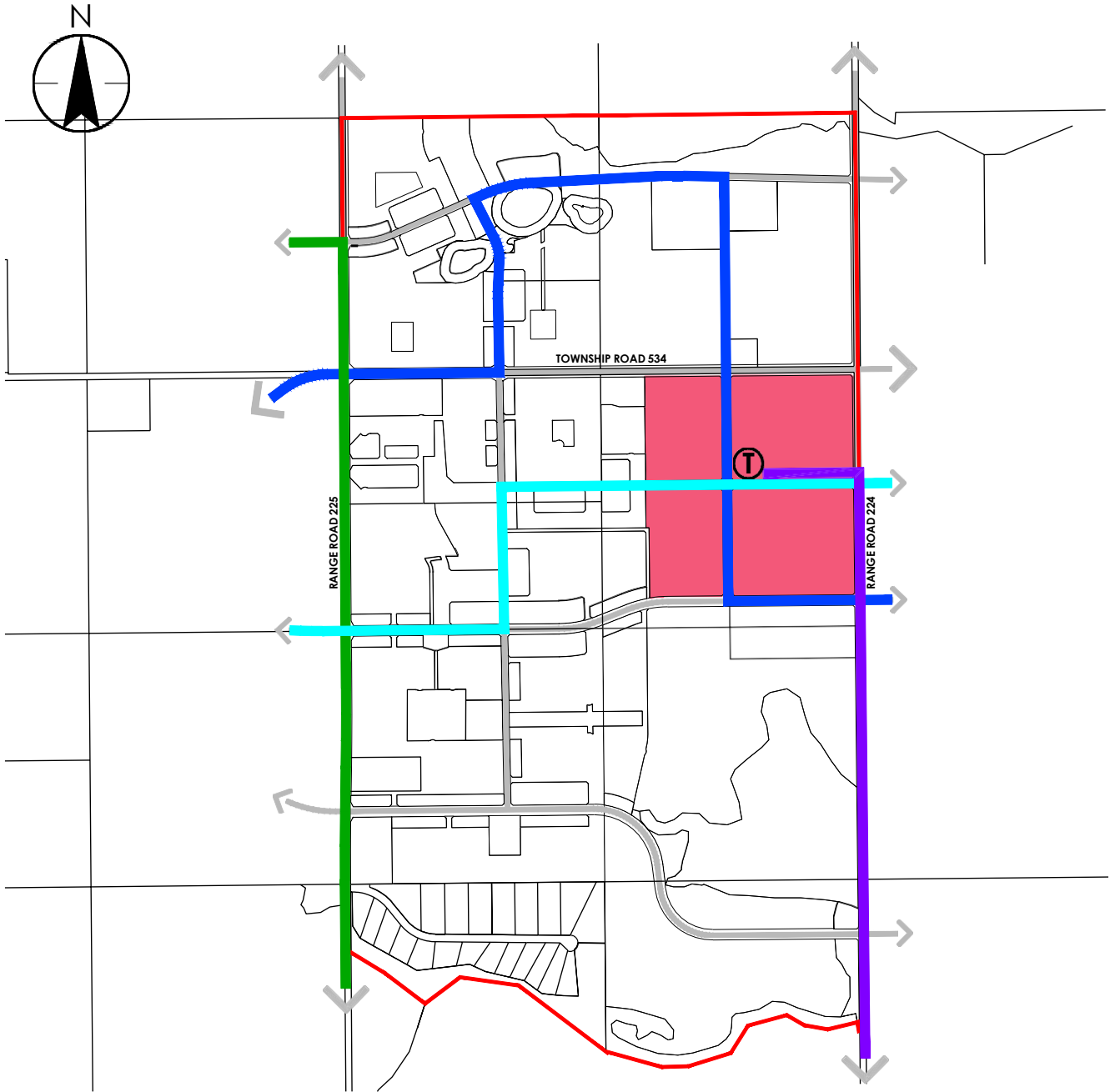
- Community 4 Boundary
- Environmental Reserve (ER)
- Natural Area-Tree Stand (MR)
- Park/Greenway (MR)
- Public Utility Lot (PUL)
- Town Centre
- Regional Park/Secondary Community Node
- Connection
- Major Open Space Corridor

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Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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LEGEND

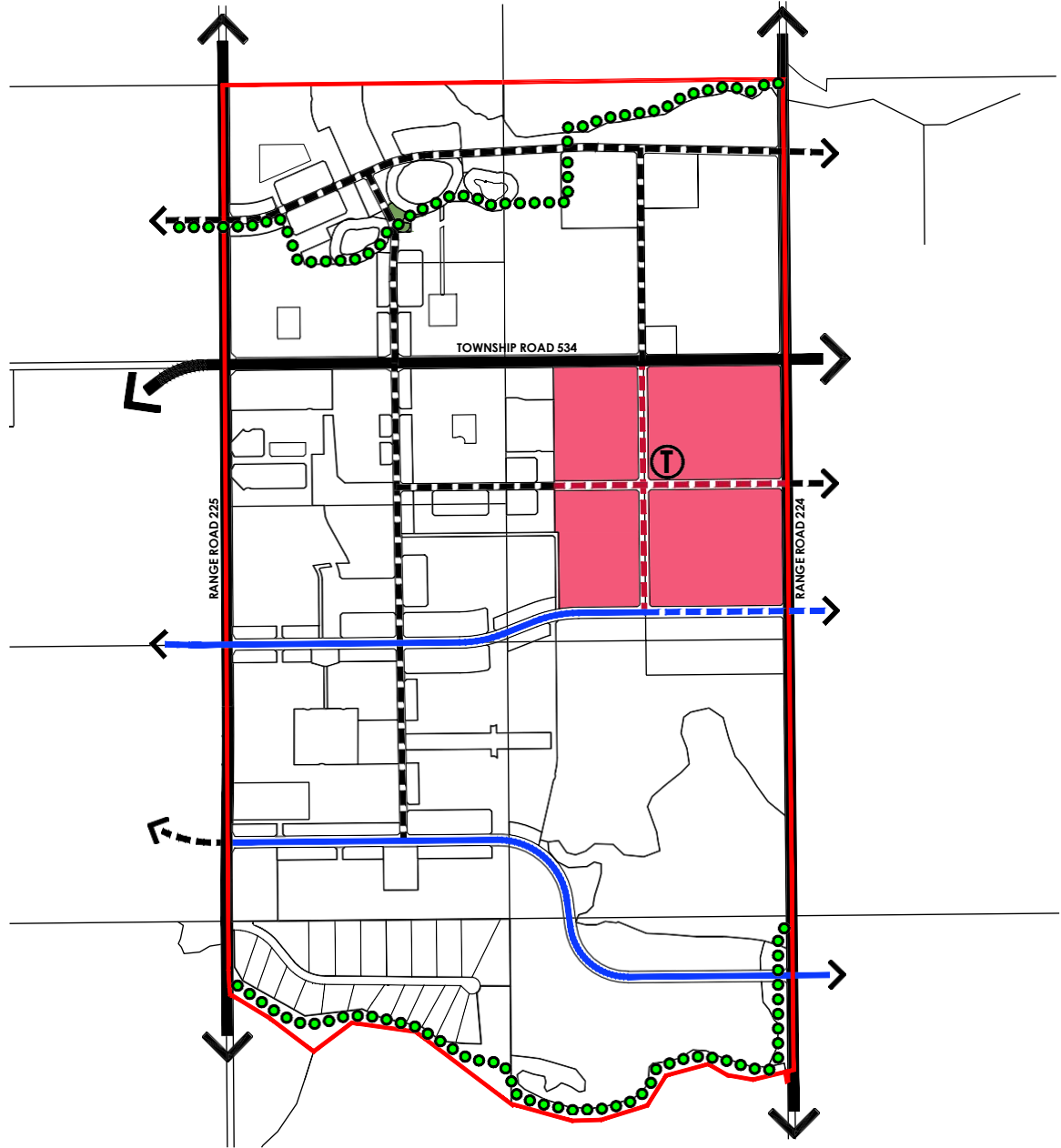
- Community 4 Boundary
- Town Centre
- Local Transit Routes
- Sherwood Park Express Route
- T Potential Transit Terminal / Transit Transfer Facility Location

SCALE - 1:20,000
 ORIGINAL SHEET - ANSI A

Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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LEGEND

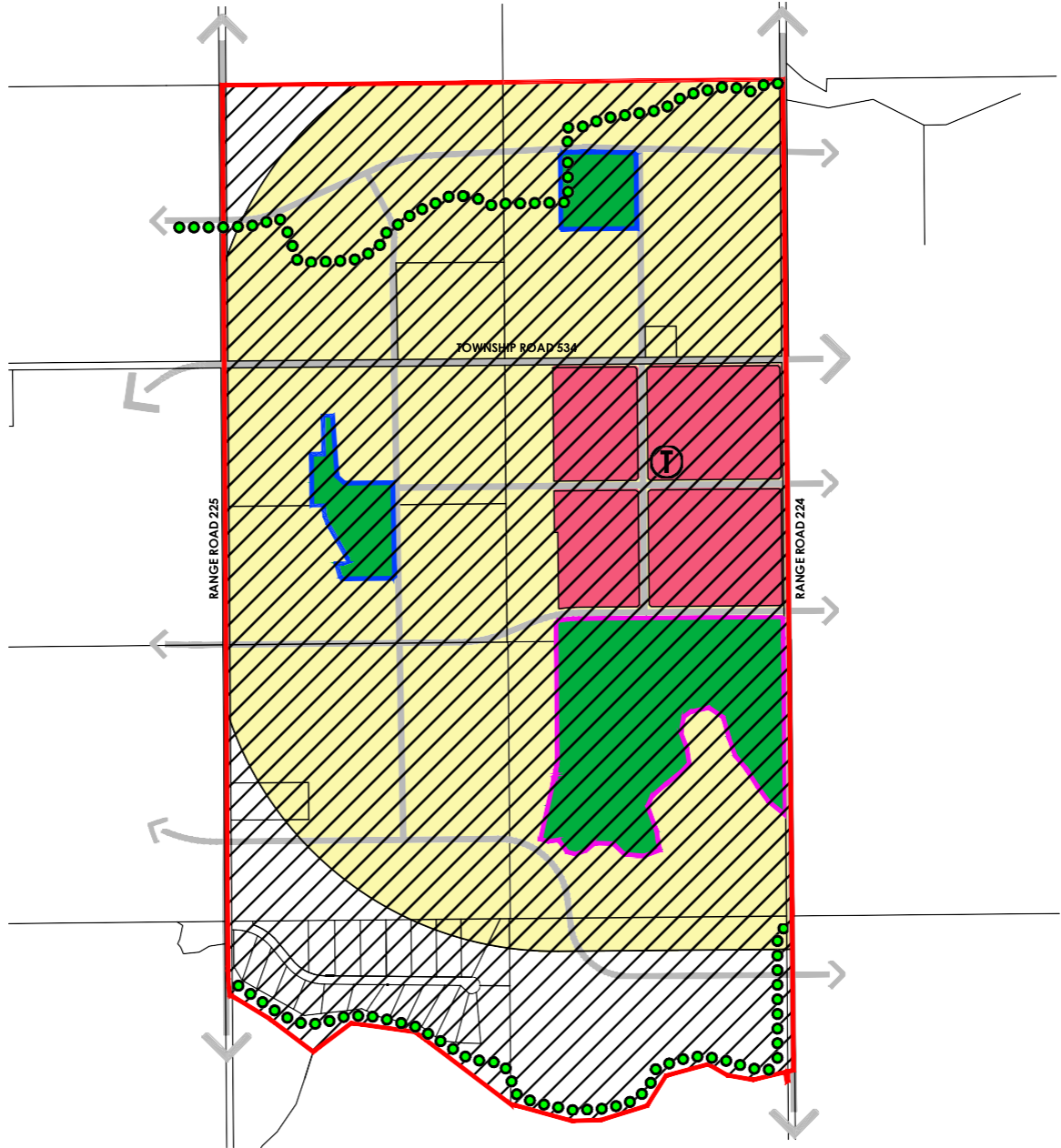
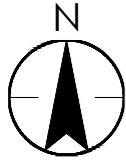
- Community 4 Boundary
- Town Centre
- Major Open Space Corridor
- Arterial - Multi-use Trail on Each Side of Street
- 2 Lane Collector - Multi-use Trail on One Side and Boulevard Sidewalk on Other Side
- 2 Lane Main Street Collector - Raised Cycle Track in the Boulevard and Boulevard Sidewalk on Each Side
- 2 Lane Primary Collector - Raised Cycle Track in the Boulevard and Boulevard Sidewalk on Each Side
- 4 Lane Primary Collector - Raised Cycle Track in the Boulevard and Boulevard Sidewalk on Each Side
- T Potential Transit Terminal / Transit Transfer Facility Location



Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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LEGEND

- Community 4 Boundary
- Major Open Space Corridor
- Walkshed - 1km Buffer from Town Centre Policy Area
- Walkshed - 1km Buffer from Community Nodes
- Town Centre
- Primary Community Node
- Regional Park/Secondary Community Node
- T Potential Transit Terminal / Transit Transfer Facility Location

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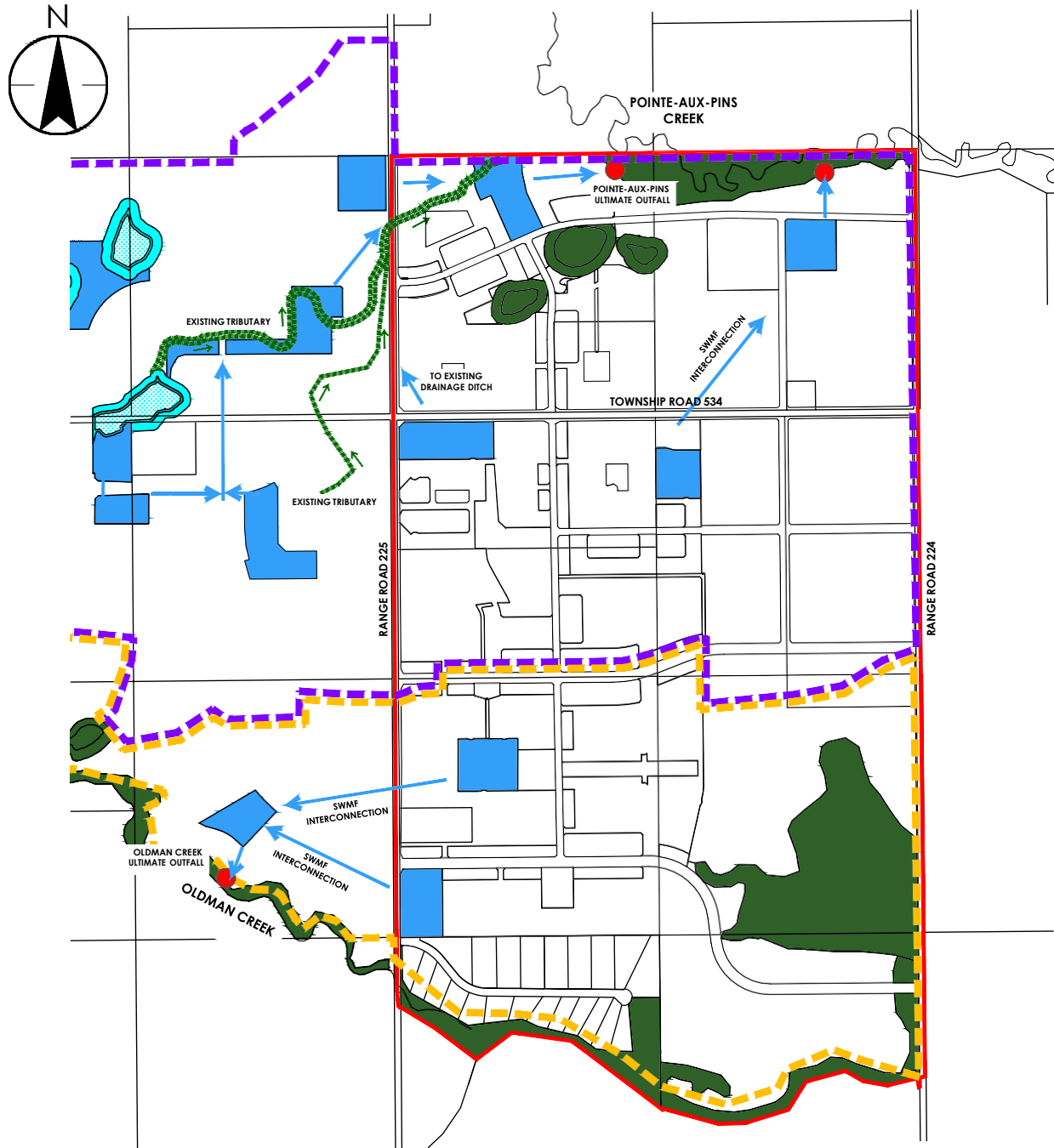


Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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FIGURE 10

STORMWATER SERVICING CONCEPT



LEGEND

- Community 4 Boundary
- Public Utility Lot (PUL)
- Environmental Reserve (ER)
- ▨ Crown Claimed Wetland and Buffer (ER)
- - - Existing Tributary / Proposed Drainage Easement
- - - Pointe-aux-Pins Creek Basin Boundary
- - - Oldman Creek Basin Boundary
- Potential Ultimate Outfall Location

Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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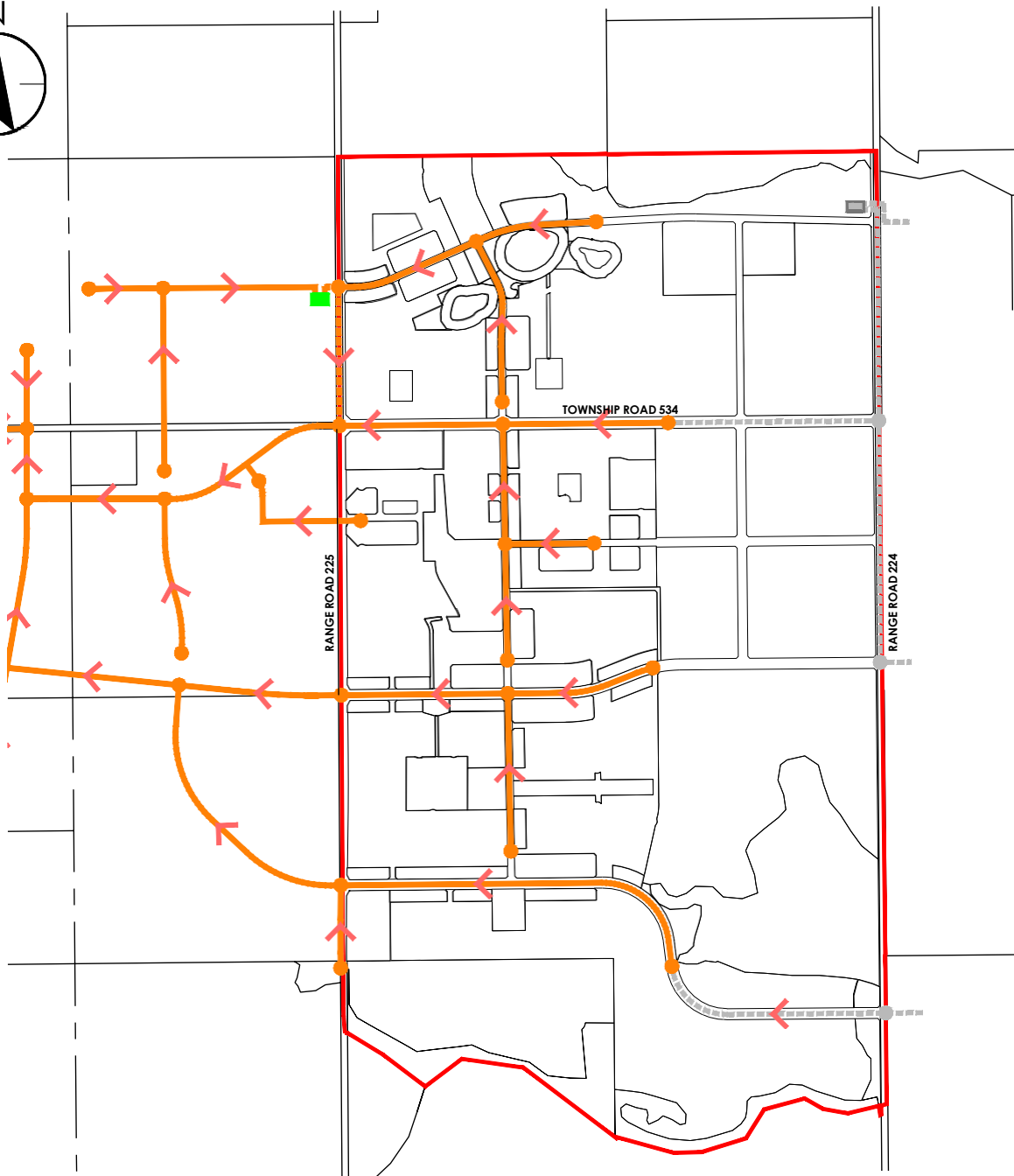
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FIGURE 11

WASTEWATER SERVICING CONCEPT



LEGEND

- Community 4 Boundary
- Wastewater Trunk
- Proposed Lift Station Potential Location
- Proposed Forcemain

SCALE - 1:20,000
ORIGINAL SHEET - ANSI A



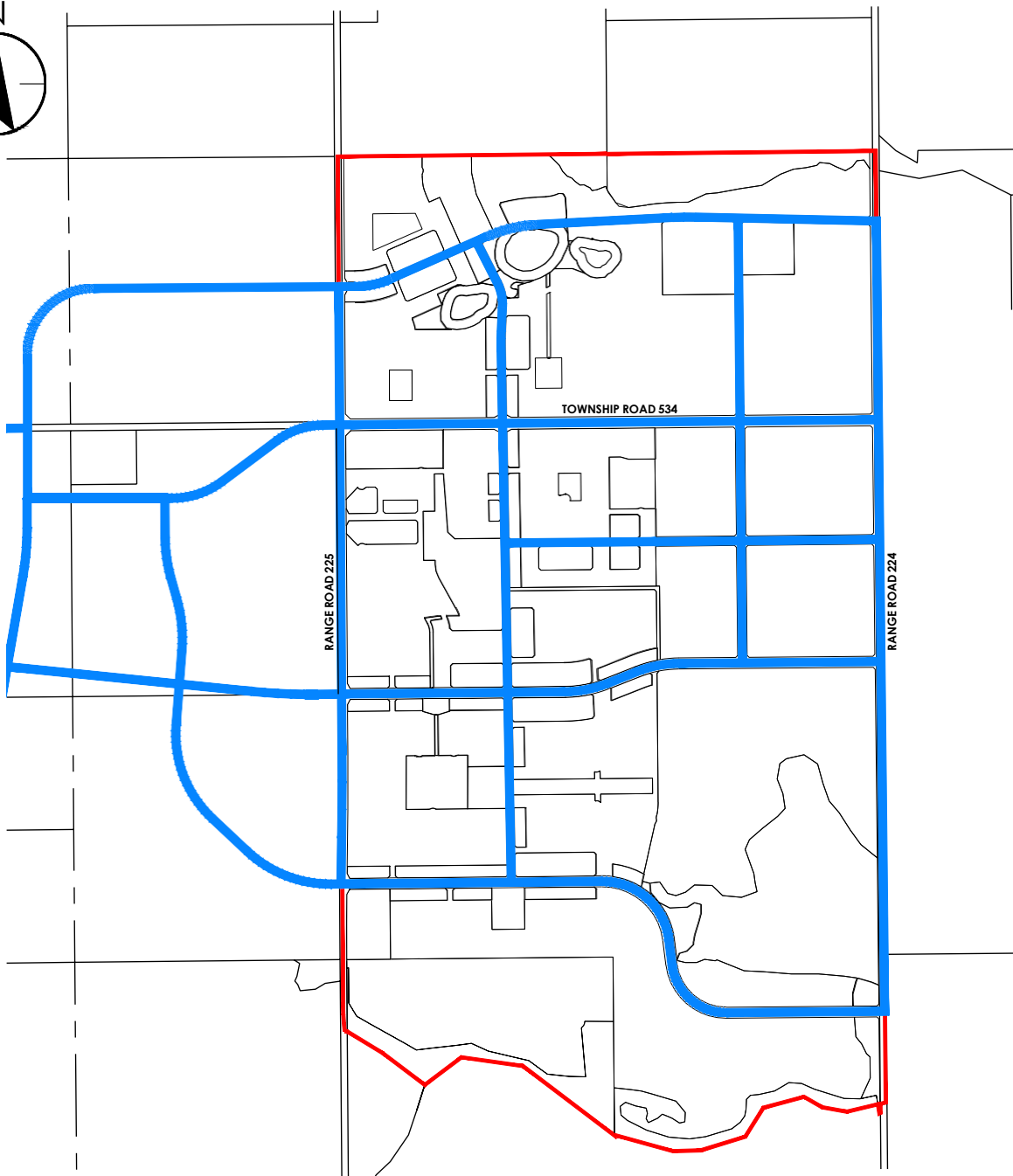
Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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FIGURE 12

WATER SERVICING CONCEPT



LEGEND

- Community 4 Boundary
- Proposed Watermain

SCALE - 1:20,000
ORIGINAL SHEET - ANSI A



Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined by the future development subject to Strathcona County's approval.

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STRATHCONA COUNTY

BREMNER COMMUNITY 4 AREA STRUCTURE PLAN



APPENDIX C – SITE SPECIFICS

Community 4 Context

Community 4 falls within the Urban Service area of Strathcona County. The lands to the west, south, and east of the Community 4 Area Structure Plan (ASP) area are planned under the Bremner and LEA Area Concept Plan, with subordinate areas to be planned through future ASPs. Community 1 lies to the west, Community 2 to the south, and Community 5 to the east. Lands to the north are classified under the Agriculture Large Holdings Policy Area of the Strathcona County Municipal Development Plan (MDP).

The Bremner area currently consists of largely agricultural lands with sporadic existing residential homestead development. The country residential subdivision of Tidan Heights exists just off Range Road 225, within the boundary of Community 4. It contains over 20 properties. Within the Community 4 ASP area there are also several existing farmhouses and associated outbuildings.

Transportation Infrastructure

Currently, access to the Community 4 area from surrounding roadways is via at-grade intersections on Highway 16 at Range Road 224 and 225 and on Highway 21 at Township Road 534. Highway 16 and 21 provide major access to surrounding municipalities and Alberta's Industrial Heartland. There are existing Freeway Intersection Removal Agreements in place for the intersections of Range Roads 224 and 225 and Highway 16, with predetermined closure dates for at-grade road access. Intersection upgrades will occur with the development of other communities of Bremner.

Natural Features

Strathcona County completed a Biophysical Assessment in October 2018 for the Bremner Area Concept Plan (ACP) area. The assessment included a site survey, a desktop study of previous environmental reports, a review of historical air photos and site visits.

Pointe-aux-Pins Creek is a locally-significant feature within the county that runs along the northeast edge of the Community 4 ASP area. It contains diverse valley vegetation, is an important wildlife corridor and wetland habitat, and is considered the best example of ravine habitat in the county. Ungulates use Pointe-Aux-Pins Creek and the areas adjacent to the creek to travel to the North Saskatchewan River and beyond into their overwintering grounds.

Oldman Creek, which runs along the south boundary of the Community 4 ASP area, is similar in form and function to Pointe-Aux-Pins. Oldman Creek also supports a regionally important wildlife corridor.

Wetlands are a significant landscape feature across the Bremner area. According to Alberta's wetland inventory, there are marsh, open water, and swamp wetlands within the Bremner area. A Wetland Study completed for the Community 1 and 4 ASP areas (Associated Engineering,

2018) found 41 wetlands within the study area, of which 7 wetlands covering an area of 3.0 hectares are classified as high value.

Topography

The undulating and hummocky landscape of the Bremner area creates a diverse landscape with low to high relief land forms of varying elevations. A Geotechnical Report (J.R. Paine & Associates Ltd., 2020) of the Community 1 and 4 ASP areas found that the area generally dips toward the northwest, matching the direction of the creek flow. The terrain away from the creeks was considered flat to rolling, with around 40 metres of elevation difference across the site. The ravine at the Oldman Creek tributary along the southwest boundary was estimated to be approximately 9 metres deep. The ravine at the Pointe-Aux-Pins Creek along the northeast boundary was estimated to be approximately 4 metres deep.

Hydrology

Surface water drainage is generally directed towards Pointe-Aux-Pins Creek and its tributaries, or the Oldman Creek tributary. From the Bremner area, both creeks then flow northwesterly into the North Saskatchewan River. Within the Bremner area there are also wetlands that do not appear to have surface water connections to the creeks or other water bodies, these wetlands likely serve as localized groundwater recharge points. Groundwater flows west northwest towards the North Saskatchewan River.

Erosion and Mitigation

Oldman Creek

Stantec conducted an erosion and mitigation assessment for the section of the Tributary to Oldman Creek adjacent to Qualico's proposed Bremner development site. It was based on a desktop review, a site visit by Stantec personnel in November 2019, and a hydrotechnical assessment. The desktop review showed that the main channel of the Tributary to Oldman Creek is often ill-defined with abundant beaver activity, but its position has remained relatively consistent since 1950. A few landslides and erosion areas along the tributary's valley walls were observed during both the desktop assessment and site visit and four of these sites are recommended for an additional geotechnical investigation if 10 m setbacks are implemented from the top of the valley slope. If 25 m setbacks are implemented, only one potential landslide at KP 1+600 (on the right bank) is recommended for an additional geotechnical investigation. Based on the hydrotechnical assessment, for much of the study area, Stantec recommends a "room for the river" approach to allow the creek channel and floodplain to evolve through natural fluvial processes which can facilitate the watercourse's ability to adapt to changes, such as increased flood flows due to adjacent development. Six regions were identified that would benefit from constructed erosion mitigation measures. Refer to the Northwest Bremner Erosion and Mitigation Plan – Tributary of Oldman Creek for additional information.

Pointe-aux-Pins Creek

Stantec conducted an erosion and mitigation assessment for Pointe-aux-Pins Creek adjacent to Qualico's proposed Bremner development site. It was based on a desktop review, a site visit by Stantec personnel in October 2020, and a hydrotechnical assessment. The desktop review showed that the main channel of Pointe-aux-Pins Creek meanders irregularly through both thickly vegetated regions impacted by beaver dams and shallow, gravelly sections flanked by short-grassed pasture lands, with both minor and major changes to the main channel's position over time due to natural and anthropogenic changes. Multiple landslides along the creek valley walls were also observed during both the desktop assessment and site visit. A 10 m setback distance from the top of the valley slope is recommended by J.R. Paine and Associates Ltd. (2020). The Bremner Area Concept Plan (ACP) encourages a 50 m minimum setback distance. Based on the hydrotechnical assessment, Stantec recommends a "room for the river" approach to allow the stream channel and floodplain to evolve through natural fluvial processes which can facilitate the watercourse's ability to adapt to changes, such as increased flood flows due to adjacent development. Stantec identified seven areas that would benefit from constructed erosion mitigation measures to reduce bank erosion or limit the risk of slope instabilities adjacent to the watercourse. Refer to the Northwest Bremner Erosion and Mitigation Plan – Pointe-aux-Pins Creek for additional information.

Soils

Bremner contains primarily Class 1, 2 and 3 soils under the Canadian Land Inventory classification system which was developed in 1967. Under the Land Suitability Rating System, created in 1995, the land is classified as mostly Class 2 and 3. The 1995 Land Suitability Rating System includes the soil capability from the 1967 Canadian Land Inventory but it is crop specific and takes into account factors like climate and landforms which were not included in the older Canadian Land Inventory mapping.

A Geotechnical Report (J.R. Paine & Associates Ltd., 2020) of the Community 1 and 4 ASP areas found that the soil and groundwater conditions at this site are considered feasible for urban residential neighbourhood development. The native soil should be adequate to support typical footing foundation and slabs for houses, as well as roads and sidewalks, from the strength and settlement view-points. However, all topsoil encountered on site is considered unsuitable for footing and basement slab-on-grade support or road subgrade. All topsoil should be completely stripped away, stockpiled, and reused for landscaping purposes only.

The Geotechnical Report also found that the main concern for this site will be the presence of a high water table, which can be difficult to overcome in the design and construction of this neighbourhood. Trenching in high water table areas may encounter groundwater seepage, where some dewatering effort and delays should be expected. Increased pavement structures should also be expected in a high water table area. The Geotechnical Report has been submitted with this ASP and should be referenced for further details on soil and underground conditions as well as associated construction recommendations.

APPENDIX D - URBAN DESIGN STANDARDS



BREMNER COMMUNITY 4

TOWN CENTRE
DESIGN GUIDELINES



CONTENTS

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1 INTRODUCTION

1.1 Purpose

The Bremner Community Town Centre design guidelines are intended to help implement the vision for development within the Town Centre of Bremner. The Bremner and LEA Area Concept Plan (ACP) established a framework for future land use planning and development of the broader area.

The ACP vision was created in consultation with the public, landowners, and community stakeholders. The vision was reconfirmed for Bremner and the Local Employment Area in the first phase of the Area Concept Plan consultation process. This vision set out a number of high-level policy directions. These included a statement of intent for Bremner to be a green, connected, and diverse community.



These guidelines are closely aligned with existing policy direction and the Centres and Nodes Policy Area. They are specific to the Town Centre Policy Area (ACP Section 4.1.1). The Bremner Town Centre will contain high density residential, community housing, and seniors housing, as well as a transit terminal that will connect Bremner to the rest of the County and surrounding areas.

2 COMMUNITY CONTEXT

2.1 Bremner Town Centre

The Town Centre is Bremner’s Urban Centre that provides a sub-regional level of service for the plan area, and is centrally located within Bremner. The Town Centre will contain a diverse mix of uses including major commercial, major community services, local community services, open space, and educational uses that serve the entire plan area and the sub-region, in conjunction with the adjacent Regional Park.

2.2 Objectives

Strathcona County’s objectives are to ensure that the Town Centre Policy Area in Bremner:

1. Contains **mixed-use** buildings and mixed-use development;
2. Provides **commercial** opportunities, including major commercial;
3. Contains high density **residential**, which includes community housing and seniors housing;
4. Provides **community services** for residents and the sub-region;
5. Contains public **open space and plazas** for gathering and recreation;
6. Provides a **transportation** network that supports transit and active transportation for daily trips; and
7. Is **designed** and built to be compact and highly walkable in all seasons.

2.3 Bremner Community 4 Context

Within the Bremner Community 4 Area Structure Plan (ASP) development concept, the Town Centre is located centrally with access from two major arterial roads and several collector roadways. Two collector roadways cross through the Town Centre and are designated as main streets. Adjacent to the Town Centre to the south is a park space which will serve as both a primary and secondary node with schools and other amenities.

3 DOCUMENT FRAMEWORK

3.1 How to Use the Guidelines

The design guidelines themselves have been organized into three areas. The first area focuses on Built Form and the Public Realm, which are the buildings and structures of the Town Centre. The second is the Streetscape and Mobility network, and the third are the Parks and Open Spaces. Each area has a goal and desired objectives which are each further described with concrete actions and guidelines for planning and development, as per the example below:

Streetscape and Mobility

Goal: The Bremner Town Centre will be highly connected and support an active, attractive streetscape that links pedestrians, transit users, cyclists, and vehicles in all seasons.

Objective: Street Network safely accommodates users of all modes of transportation.

Design Guidelines

Street Network

- A.** Where possible use planted medians to break up the street cross section and as an opportunity to further define the Town Centre character.

These guidelines establish a common language those engaged in or proposing development within the Town Centre. The goals and outcomes in the guidelines are highly important in describing the nuance and character of the Town Centre vision. All other points and ideas are intended to serve as a resource, providing recommendations to consider, and possibly balance, with other priorities.

The guidelines are intended to be used by all contributors: landowners, developers, planners, architects, designers, engineers, future community groups, consultants, County Council, and Administration. The guidelines should be applied through subdivision design, zoning, design and construction standards, and developer architectural controls.

4 DESIGN GUIDELINES

The following section is intended to provide strategies and specific recommendations for development in alignment with the strategic goals as described in the Bremner and Local Employment Area (LEA) Area Concept Plan (ACP). The Goals, Objectives, and Design Guidelines establish a practical vision to support a healthy, compact form of development.

4.1 Built Form and Public Realm

There is an important and nuanced relationship between buildings and the public realm. Building design, massing, and interaction with surrounding structures and open spaces impacts the success and vibrancy of urban spaces and the character of a district.

The Bremner Town Centre will be a unique and engaging mixed-use district with a diversity of complementary land uses and activities, arranged in a compact form where the needs of daily life can be met within a convenient walking distance. Development will be characterized by interwoven uses including medium to high density residential housing, commercial services, major community services, and local community services.

Design of the built form and public realm within the Town Centre reflects a prioritization of public transit opportunities and an active public realm.

Goal

Bremner Town Centre will be the major mixed-use walkable destination within Bremner. The built form will be high-quality, timeless, and establish a distinct and attractive urban character that supports a compact population, local and regional community services, and commercial uses.

Objectives

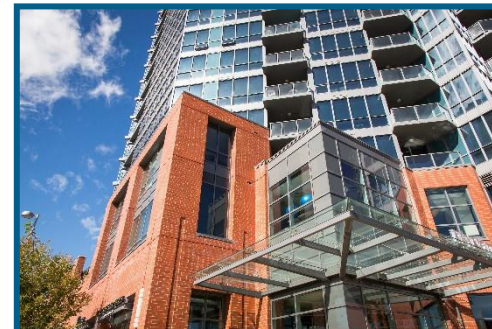
- **Height, Massing, and Articulation** support a unique mixed-use district with streets framed by visually interesting buildings.

- **Materials** are durable, timeless, and contribute to a vibrant and inviting urban environment year-round.
- **Setbacks and Building Entrances** are used to create comfortable, pedestrian-oriented building interfaces that encourage activity and gathering in the public realm.
- **Placemaking and Character Elements** contribute to the distinct identity of the district.
- **Signage** is high-quality and provides clear identification of destinations.
- **Lighting** is creative, brings vibrancy year-round, and enhances safety around buildings.
- **Sustainable Design** elements are incorporated to contribute to climate resilience.
- **Landscaping and Vegetation** are incorporated in innovative ways to enhance beauty, amenities, and environmental benefits.
- **Public Realm and Street Interface** foster activity at all times of day and a comfortable pedestrian streetscape adjacent to buildings.

Design Guidelines

Height, Massing, and Articulation

- Design buildings to be compatible with adjacent uses through articulation, step backs, compatible roof forms, and appropriate materials.
- Large scale uses should be designed with a façade articulated in regular intervals.
- A street wall should be designed to be no higher than the width of the road, ideally creating a 1:1 ratio to provide for a sense of enclosure and definition. A podium or step back should be used on medium to tall buildings.
- Consider wind and microclimatic impacts for all structures, particularly those exceeding six storeys in height.
- Accommodate taller structures on the north side of streets to avoid excess shadow-casting over sidewalks, patios, and outdoor spaces
- Preserve and enhance landmarks and view corridors.

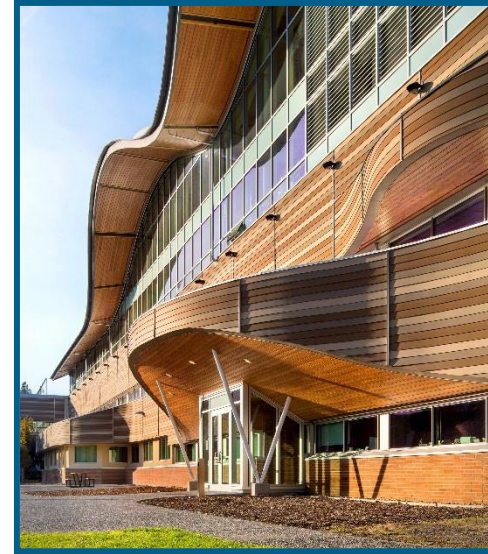


Materials

- A.** Vary architectural details to encourage a sense of pedestrian scale and to distinguish between different building volumes and uses.
- B.** Use colourful, warm and/or tactile materials, such as wood and brick, to promote enlivened building design for winter.
- C.** Include glazing on building facades that allows for visibility, passive surveillance, and illumination between outdoor spaces and building users.
- D.** Reinforce the intended street wall and pedestrian through zone by wrapping the façade treatment around corners on sites fronting onto street and lane intersections
- E.** Materials used in all development within the Town Centre should be long-lasting, durable, and timeless.
- F.** Encourage design and materials that reflect a contemporary design and detail.

Setbacks and Building Entrances

- A.** Primary entrances to multiple-unit residential buildings should be clearly defined through elements such as but not limited to entrance colonnade structures, awnings, canopies, marquees, and other architectural elements.
- B.** Where possible, implement a minimal setback for buildings along a sidewalk to create active frontage with a continuous and engaging street wall.
- C.** Engaging uses such as patios, plazas, or architectural features should be encouraged through application of setbacks of up to a maximum of 5 meters.
- D.** A minimum floor-to-floor height of 4.5m at the ground floor should be encouraged to accommodate the possibility of multiple uses through the lifespan of a building in the Town Centre.



- E.** Encourage fine-grained development, e.g. buildings with narrow frontages and frequent storefronts.
- F.** For building frontages that exceed 40.0m in length, introduce elements such as vertical breaks and/or step backs to break up the building façade.



Placemaking and Character Elements

- A.** Apply consistent treatments, such as paving, public realm improvements, and sidewalk widths along main streets and other streets with unique character to facilitate a sense of place and legibility.
- B.** Provide strong architectural corner design treatment at all street intersections. Where possible, place main entrance features at prominent corners and incorporate design elements that encourage a sense of identity.
- C.** Provide outdoor dining and retail opportunities to create and animate pedestrian-oriented streets.
- D.** Incorporate a mix of uses and diversity of tenancies to ensure all-day and all-season animation of streets and open spaces.
- E.** Embellish outdoor spaces and entryways with decorative elements to animate and activate the public realm.
- F.** Encourage restaurants and cafés to clear the snow from their patios and clean off their outdoor furniture for use throughout the year.
- G.** Mark gateways and landmarks with distinctive structures, architecture, and site design elements.
- H.** For large scale and institutional uses, incorporate public art to complement facade articulation and enhance pedestrian experience at the street level.



Signage

- A.** Integrate building or tenant signage into building facades rather than as stand-alone structures.
- B.** Encourage use of small scale and high-quality temporary signage for businesses at ground level to acknowledge a pedestrian scale and develop the character of retail and mixed-use streets.



- C.** Use color and light to add presence and vibrancy to main streets at night and through winter months.

Lighting

- A.** Use creative lighting to animate civic infrastructure and bare walls to create visual interest and to contrast muted colors during winter months.
- B.** Building lighting should be used to enhance visibility, define architectural details, and improve safety for building users and pedestrians. Lighting choices should minimize glare, up lighting, and over illumination.
- C.** Preserve dark skies and reduce light pollution through use of downward lighting.

Sustainable Design

- A.** Encourage building orientation to facilitate solar warming and optimize energy efficiency to promote sustainable building development and reduced energy consumption.
- B.** Encourage landscaping to reduce energy demand, such as trees acting as wind breaks, to create canopies along active transportation infrastructure to promote sustainable design of public spaces.
- C.** Encourage opportunities for energy efficient (e.g. LED) street lighting systems in neighbourhoods to promote the long-term health of neighbourhoods.
- D.** Encourage high efficiency building design and lighting to reduce energy usage.
- E.** Consider opportunities for micro-generation such as solar and wind to be incorporated into building and public space design.
- F.** Consider integrating electric vehicle charging infrastructure in public spaces and EV-ready parking in buildings to support sustainable transportation options.
- G.** Incorporate tree planting that supports emissions reductions.



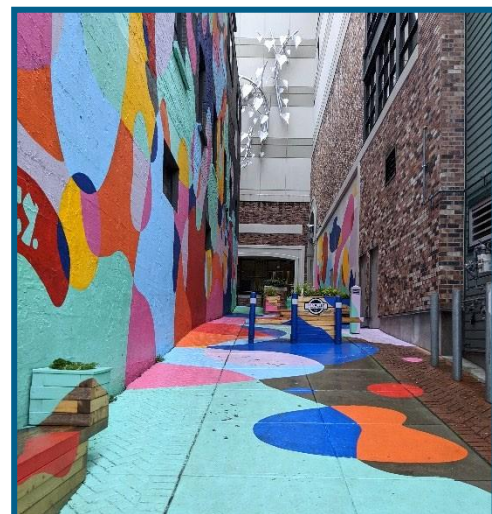
Landscaping and Vegetation

- A.** Where possible use plants, grasses, shrubs, and trees that are colourful and/or look attractive covered with snow.
- B.** Where possible incorporate edible landscaping such as fruit trees/bushes into plazas, parks, and along trails, to increase accessibility to food while contributing to attractive landscape design.
- C.** Locate mid-block plazas at sunny locations along the north sides of east-west avenues, where possible.
- D.** Incorporate native and/or locally adapted diverse vegetation to promote climate resilience, prevent monoculture, and reduce pest vulnerability.
- E.** Encourage development of green roofs to improve sightlines from taller buildings and to provide for a variety of environmental benefits, urban wildlife habitat, and opportunities for urban agriculture like rooftop gardens and edible landscaping.

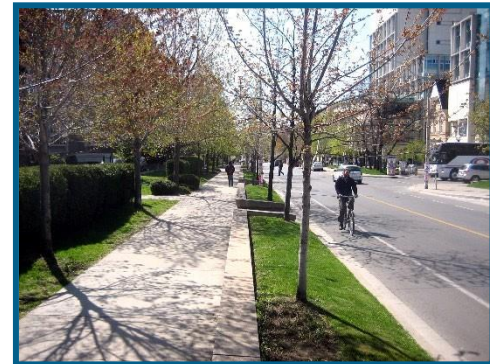


Public Realm and Street Interface

- A.** Orient medium and high density residential entrances onto public streets or alternatively, a private internal drive aisle that looks and functions like a public street.
- B.** Where buildings are adjacent to public places such as parks and amenity areas, entrances or secondary accesses should be oriented towards them.
- C.** Garbage, mechanical, and storage should be concealed and located away from public view. Innovative solutions such as a “Molok” system could be also be used for waste collection.
- D.** Encourage opportunities for mid-block accessways, plazas, and/or block-breaking with pedestrian alleyways. Small shops and restaurants that front along the alleyways should be encouraged.
- E.** Design vehicle parking so that only on-street parking is visible along main streets.
- F.** Require pedestrian weather protection along building frontages, such as canopies, arcades and overhangs on key retail streets, where possible, to enhance pedestrian comfort.



- G.** Encourage street level retail wherever possible.
- H.** Incorporate the following key principles of Crime Prevention Through Environmental Design (CPTED) to promote a safe and comfortable built environment:
 - a. Clear distinction between the public and private realms;
 - b. Clear sight lines along public pathways and in public spaces;
 - c. Opportunities for natural surveillance of lanes, sidewalks, streets, and other public spaces;
 - d. Provision of adequate pedestrian lighting on cycling routes, vehicle parking areas, and other public spaces to enhance security; to promote improved visibility and conservation of the night-time environment;
 - e. Clear views from streets to pathways and open spaces are maintained; and
 - f. Buildings are oriented towards transit controlled locations to improve safety.



4.2 Streetscape and Mobility

The following section addresses the streetscape and the interrelations between built form and public realm interface, streetscape elements, and mobility networks in the Bremner Town Centre. The design of our public spaces and in particular our streets is an opportunity for place-making and is a critical element in determining the livability, vibrancy, and function of a central district.

Our streets, sidewalks, and pathways are important in defining character and crucial elements in determining social and commercial interaction. The physical elements of the streetscape – sidewalks, furnishings, landscaping, and utilities – all perform important functions, helping to create an outdoor living room, even during the cold months.

Goal

The Bremner Town Centre will be highly connected and support an active, attractive streetscape that links pedestrians, transit users, cyclists, and vehicles in all seasons.

Objectives

- **Sidewalks and Boulevards** are designed to be accessible, durable through the winter, and prioritize safety and comfort for pedestrians.
- **Street Lighting** adds vibrancy, safety, and beauty to the public realm.
- **Wayfinding** is implemented to provide clear and character-enhancing direction to destinations and routes within and near the Town Centre.
- **Street Furnishings and Landscaping** provide amenities, environmental benefits, and weather protection to the pedestrian environment.
- **Parking, Access, and Loading** are sensitively implemented to minimize visual and physical impact on the pedestrian environment while offering efficient functionality.
- **Street Network** safely accommodates users of all modes of transportation.
- **Bus Stops** are designed to prioritize safety, connectivity, and weather protection.
- **Bicycle Routes and Storage** facilitate comfortable and safe experiences for cyclists.

Design Guidelines

Sidewalks and Boulevards

- A.** Require main streets in the Town Centre to include a frontage zone, pedestrian through zone, furnishing zone, and ancillary zone on both sides of the street as identified in the Bremner Design and Construction Standards to ensure a vibrant and flexible street where placemaking and walkability are prioritized.
- B.** Require open space connections from the Town Centre to the adjacent Regional Park to ensure access to the open space network and public amenities.
- C.** Material improvements such as stone and brick should be considered for areas such as sidewalks and crosswalks to enhance visibility for pedestrian crossings.
- D.** Select paving materials that are durable enough to withstand the harsh impacts of winter snow.
- E.** Design sidewalks to provide a clear, barrier-free pedestrian through zone.
- F.** Where possible design street cross-sections to include boulevards that can act as a buffer to protect pedestrians from vehicles. Use of monowalks must be justified.
- G.** Furniture in the furnishing zone should accommodate all users and be designed with snow storage and removal in mind.
- H.** Signal pedestrian priority and acceptable vehicle speeds through built form. Encourage curb extensions, tree canopies, bollards, pedestrian scale lighting, and rolled curb of flush curbed design.
- I.** Where possible explore pedestrian-only or woonerf style street design to create special character areas and to create a safe, distinct, and enjoyable public realm.

Street Lighting

- A.** Provide contemporary decorative, pedestrian-scaled lighting where possible.



- B.** Focus illumination towards the ground to reduce light pollution.

Wayfinding

- A.** Consider a signage and wayfinding system as part of the planning process. Consistent, well designed, and highly legible graphic systems are important in developing an areas character and allow for universal accessibility.
- B.** Encourage the continued expansion of pedestrian wayfinding features within the area to promote usability.
- C.** Consider the size, scale and orientation of signage needed for active modes of transportation including walking and biking.
- D.** Identify and capitalize on focal points and landmarks that aid in orientation and help people find their way.
- E.** Wayfinding signage should be clear, durable, and high-quality.



Street Furnishings and Landscaping

- A.** Street trees should be used where possible to provide a sense of definition and enclosure.
- B.** Street furnishings should be sheltered from the wind, promoting active and passive use year-round.
- C.** Where possible, use durable permeable surfaces on or near roadways to provide a natural filter for snowmelt and heavy rainfall.
- D.** Landscaped features should be used as design opportunities to introduce traffic calming to a street and to improve crosswalks on wide streets.

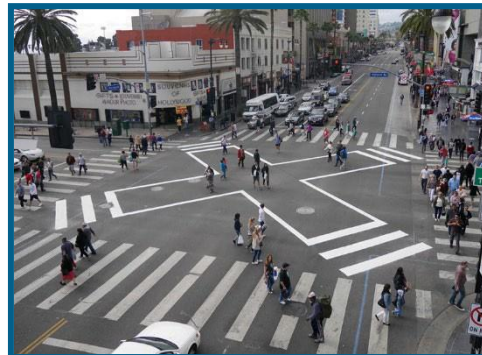


Parking, Access, and Loading

- A.** Integrate parkade entrances into buildings and locate to minimize impact to pedestrians. Vehicle access points should be screened with attractive garage doors and/or gates that contribute positively to the street and/or lane character and the public realm.



- B.** Where on-site parking is developed, safely and efficiently connect users to off-site active transportation infrastructure.
- C.** Where possible shield on-site surface parking and stacked parking from street level view, except at vehicular access and egress points, by utilizing buildings, landscaping, fencing, etc. divide large parking lots into smaller areas, separated by planted islands.
- D.** Promote compact development and reduced on-site parking.
- E.** Where curbside parking lanes exist provide curb extensions to minimize pedestrian crossing distances.
- F.** Accommodate parking on-street to support required vehicle use and to act as a visual cue for slower traffic speeds.
- G.** Locate loading and waste storage areas at the rear of buildings and screened from view using fencing, landscaping, and structured enclosures to ensure a positive pedestrian experience.
- H.** Garbage, mechanical, and storage should be concealed and located away from public view. Innovative solutions such as a “Molok” system could also be used for waste collection.



Street Network

- A.** Require that streets be designed to accommodate all users to ensure opportunities for transportation choice.
- B.** Where possible within the Town Centre require a reduction to traffic speeds to between 30-50 km/h to ensure improved safety outcomes.
- C.** Provide “scramble” crossings, all walk phase design, or other alternative intersection operating controls at main intersections and high pedestrian locations that ensure barriers are minimized and pedestrian-vehicle conflict is reduced.
- D.** Design private internal streets to include pedestrian infrastructure on both sides to ensure connectivity for active modes.
- E.** Encourage midblock crosswalks be used to facilitate the movement of pedestrians along high volume pedestrian routes to promote walkability.

- F.** Where possible use planted medians to break up the street cross section and as an opportunity to further define the Town Centre character.

Bus Stops

- A.** Design barrier-free shelters with snow clearance and year-round use in mind.
- B.** Where possible use shelters, roofs, canopies and overhangs to provide maximum weather protection.
- C.** Ensure design does not obstruct sightlines for oncoming vehicular traffic.
- D.** Consider CPTED principles in the location and design of bus stops. Place in highly visible locations to allow for passive surveillance.
- E.** Bus stops should be highly connected to pedestrian infrastructure and placed at desirable locations to encourage trip-chaining and ease of use.



Bicycle Routes and Storage

- A.** Prioritize development of separated bicycle lanes and dedicated routes to provide a safer environment for cyclists year-round.
- B.** Where possible development should provide safe, secure, and weather protected bicycle storage.
- C.** Provide clear, legible, and mode specific signage along cycling routes.
- D.** Provide opportunities and infrastructure for multimodal trips, such as secure and covered bicycle parking at bus stops and central parking areas.
- E.** Connect new bicycle routes through community hubs and higher volume corridors.
- F.** Provide for short term bicycle storage in highly visible locations along mixed-use streets and in open spaces.



4.3 All Season Design

We live in a northern climate and as such designing for winter rather than designing to accommodate winter is an important distinction and strategy in establishing a culture of activity and vibrancy in all seasons. While these guidelines consider winter throughout, the following section provides more specific guidelines and recommendations for winterized outdoor spaces, site design, and amenities.

Goal

The Town Centre will be a community hub with a robust sense of shared identity rooted in place. It will provide a venue for active and passive recreation, social connection and gathering throughout the year.

Objectives

- **Parks and Open Spaces** offer active and passive amenities, incorporate weather protection, and are designed to enhance safety through environmental design.
- **Pathways and Open Connections** are accessible and safely usable year-round.
- **Lighting** brings colour, liveliness, and definition to spaces in the public realm.
- **Shelter and Structures** are designed for comfort year-round.
- **Public Art** is located throughout the Town Centre, contributing to its identity, animation, and character.
- **Active and Passive Recreation** opportunities are incorporated in public spaces, with flexibility for a variety of activities year-round.

Design Guidelines

Parks and Open Spaces

- A.** Design open spaces, sidewalks, and patios strategically to avoid areas shaded by tall buildings.
- B.** Include design features that protect users from the wind, such as evergreen trees planted along edges to reduce wind speed and small shelters blocking prevailing winds.
- C.** Incorporate CPTED best practices in the design of public spaces to support the safety of all users.
- D.** Use grass mounds and vegetation to define spaces.
- E.** When hardscaping is required, maximize permeable paving to increase on-site natural infiltration of storm-water run-off.
- F.** Consider permanent programming, examples include but are not limited to, outdoor fitness equipment, a natural Amphitheatre, a fenced dog run, or interactive public art.



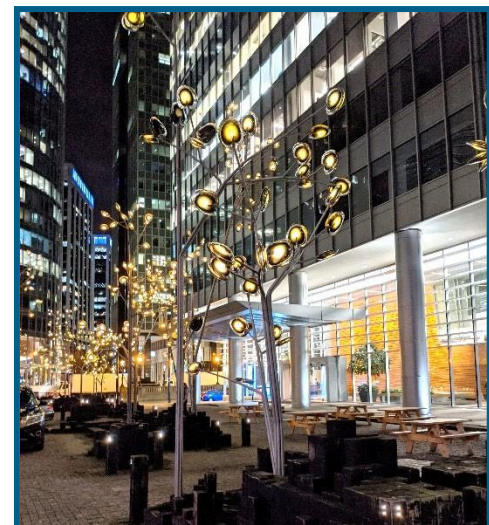
Pathways and Open Connections

- A.** Cover ramps and stairs from ice and snow to ensure safe movement for all pedestrians.
- B.** Require public space to be completely accessible and barrier-free. Provide seamless-grade transitions wherever possible.
- C.** Provide secondary entrances along open public spaces to increase permeability and active edges while improving natural surveillance.



Lighting

- A.** Implement engaging, colourful lighting to promote enlivened spaces, while minimizing light pollution by avoiding bright flood lighting.
- B.** Use small scale or pooled lighting to identify and mark the edges of a park or plaza. This will draw attention to the larger district and provide for a feeling of safety and occupancy.



- C.** Space lighting more closely to create for a stronger edge or pathway condition. Similarly, use of “bee” lights on trees can enliven a space and provide for ambient illumination of open spaces.

Shelter and Structures

- A.** Orient seating and gathering places in public spaces to maximize sunlight and offer some wind protection. Consider comfort in all four seasons.
- B.** Consider the day and evening functions of the area where the shelter will be located, as well as any specific needs, such as lighting or electricity.
- C.** Structures both permanent and temporary should be designed at a pedestrian scale.
- D.** Structures including decorative gates, barriers, weather protection and other built or natural elements such as trees or water features should provide for a high degree of enclosure, to define the space.



Public Art

- A.** Where possible require public art to be contextually sensitive and completed by artists within the Edmonton Metropolitan Region.
- B.** Identify opportunities to incorporate public art in Town Centre streets and plazas, early in the planning process.
- C.** In addition to beauty, interest, and animation, support and encourage the incorporation of functional public art that may provide an opportunity for interaction, seating, or weather protection.
- D.** Strategically place public art to create a unique sense of place and identity.



Active and Passive Recreation

- A.** Incorporate small scale urban agriculture such as community gardens and edible landscapes in parks and public spaces.
- B.** Provide a variety of styles of both fixed and flexible street furniture in outdoor activity areas so people may choose to group with other or sit alone.
- C.** Design public and open space features with flexibility for winter activities, such as ice skating, skiing, tobogganing, and snow tubing.
- D.** Provide for “quiet zones” which are safe, highly visible spaces, sheltered but with sightlines to active uses.
- E.** Design for ease of snow-clearing maintenance and usability in inclement conditions.



5 GLOSSARY

Active Frontage: Refers to active engagement between pedestrians and the ground floor of buildings.

Active Mode Connections: Means connections in pedestrian or bike networks.

Amenity Space: Active or passive spaces with opportunities for built amenities such as playgrounds, trails and seating areas.

Crime Prevention Through Environmental Design (CPTED): Means the design, maintenance, and use of the built environment in order to enhance quality of life and to reduce both the incidence and fear of crime. The three basic principles of Crime Prevention Through Environmental Design are natural surveillance, territoriality, and access control.

Furnishing Zone: A portion of the public realm along a roadway that may include signs, streetlight poles, street trees or landscaping, transit stops, benches, bicycle parking, public art, underground and surface utilities, low impacted drainage, snow storage, and the concrete curb.

Gateway: A major entryway into the proposed project area that is enhanced through design of activities surrounding it.

Human Scaled Development: Refers to development that are developed to relate to people in terms of scale and size.

Internal Site: A site which does not front onto a public street.

Landmark Feature: Unique or recognizable element located within the plan area.

Main Street: A street corridor that supports a diversity of land uses as well as contributes to a positive pedestrian realm

On-Street Parking: Means parking located along the curb of public roads and includes parallel parking or angle parking on streets.

Open Space Connection: Means walkways, greenways and other connections through open space for pedestrians and cyclists.

Open Space Network: Refers to a system which includes the different types of open space and the connections between them through trails and paths.

Parking Lot: An area where cars and other vehicles are temporarily parked.

Pedestrian Facility: Refers to infrastructure and equipment that create a walkable environment, this could include sidewalks, curb ramps, trails, walkways, crosswalks, shared use paths and others.

Pedestrian Street: Refers to a street that is accessible only by pedestrians.

Placemaking: Means a people centred approach to the planning, design, management and programming of public shared use spaces. It is rooted in community-based participation, strengthening the connection between people and the places they share, and creating public spaces that contribute to people's health, happiness and wellbeing

Plaza: Means a public square or similar open space in a built-up area where people can walk, sit, and congregate.

Private Internal Street: Refers to a street located within a development that is not maintained by the municipality and does not have to follow the same requirements as a public street.

Recess: The space created by building part of the façade further back from the rest of the building.

Stacked Parking Structure: A building where car parking takes place in one or more floors above grade.

Step back: The distance of the building wall on upper levels that is recessed from the building wall on lower levels. Tall buildings should typically have a podium base and a step back of upper levels to create a human scaled streetscape.

Street Wall: A consistent façade of buildings facing the street that create enclosure, define human scaled space, and may have multiple storefronts or entrances.

Transition Zone: Refers to an intermediate zone between two different zones of different height or densities.

Urban Character: Refers to the character of a place defined by the type of building uses, population, streetscape, and public space.

Woonerf Style: In a woonerf, the street is shared among pedestrians, bicyclists, and motor vehicles; however, the pedestrians have priority over cars. The street is designed without a clear division between pedestrian and auto space (i.e., no continuous curb), so motorists are forced to slow down and travel with caution.

APPENDIX E. PUBLIC ENGAGEMENT

ENGAGEMENT SUMMARY

SUMMARY

Engagement Event 1 began October 28, 2020, Event 2 began on May 19, 2021. The following activities were completed for Engagement Event 1 and 2:

1. Newspaper advertisements were run in the Sherwood Park / Strathcona County News
2. Mailed notification packages sent to landowners in and within 200 metres of the boundaries of the two proposed ASPs
3. An online platform with surveys and information
4. Two online surveys conducted, with the opportunity to mail in surveys
5. Phone calls and written correspondence from residents and landowners

ADVERTISEMENTS

The engagement events were advertised through newspaper advertisements posted in the Sherwood Park / Strathcona County News, through mailed notification packages, and on Qualico's website.

MAILED NOTIFICATION PACKAGES

A printed package containing a notification letter, presentation, maps, and survey was mailed to 71 landowners in and within 200 metres of the boundaries of the two proposed ASPs on October 28, 2020 and May 19, 2021. The packages contained all information that would be available on the online platform, to ensure that those without web access could be fully informed and provide feedback. The survey included several options to return it: pre-paid postage, fax, email, or filling it out on the website instead. The package is available in the full What We Heard reports.

ONLINE PLATFORM AND SURVEY

An online platform at www.BremnerASP.com was live through the engagement periods. The online platform included all information that would be presented at an open house, including contextual information, an aerial photo of the development area, presentation boards on the ASP process and development concepts, mapping related to technical studies, and an online survey. The online survey was consistent with the mailed-out survey. The online platform also included contact information for further inquiries and feedback.

NEXT STEPS

The feedback received from this pre-application engagement event was considered and incorporated where appropriate as Qualico finalized the ASP documents and technical studies. All feedback received and consultation materials used were summarized into two separate What We Heard Reports provided to the County. These documents can be referenced for more detailed information on the Engagement process for the Bremner Community 1 and Bremner Community 4 Sub - ASPs.