BYLAW 33-2021 BREMNER COMMUNITY 1 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 1

Sub - Area Structure	e Plan	area;		
Council enacts:				
Adoption	1	The document entitled "Bremner Community 1 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 d	ay of $_$, 20		
		MAYOR		
		DIRECTOR, LE SERVICES	EGISLATIVE AND LEGAL	



BREMNER COMMUNITY 1

Sub - Area Structure Plan
Bylaw 33-2021











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01 INTRODUCTION

1.1 Purpose

The purpose of the Bremner Community 1 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 1.

1.2 Location

Community 1 is one of five Sub-ASPs outlined in the Bremner and LEA ACP and encompasses approximately 329 hectares (ha) of land. Community 1 is defined by the following general boundaries, as shown on Figure 1: Location Plan:

- North North boundary of Section 30-53-22-4
- East Range Road 225
- South Oldman Creek
- West Highway 21

1.3 Vision and Principles

1.3.1 *Vision*

The vision for Community 1 is based on the vision from the Bremer and LEA ACP.

Green

- A network of natural features, parks, and open spaces connected to 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.
- 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 Village 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 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 maximum public enjoyment, while minimizing adverse impacts and maintaining natural feature integrity. Opportunities for green infrastructure should be considered in all development, 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 (The Pointe) is a key community agricultural amenity to the north of Community 1.

3. Reinforce and Diversify the Economy

The community encourages a range of employment opportunities within the Village Centre to meet the needs of residents and compliment the broader County economy. Variety in site options are provided for retail, services, small businesses, and innovative enterprises.

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 Village Centre, Medium Density Sites, 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.

6. Create Strong, Distinctive and Safe Neighbourhoods

Neighbourhoods within the community should have distinct and attractive characteristics, including 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 though the design of the community.

7. Provide Mixed-Use Centres

The community should provide a centrally located and connected Village Centre and other opportunities for a mix of uses in and adjacent to Primary and Secondary Community Nodes. This will bring together higher density residential, commercial, open space 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 cultural activities should be available within the Village Centre and community nodes.



02 ADMINISTRATION

2.1 Planning Context

The Bremner Community 1 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 Community 1, as well as other Strathcona Countypolicies and documents, such as the County's Transit Master Plan, Environmental Framework, and Social Framework.

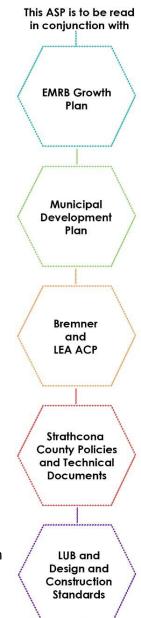
Additionally, regional plans as well as provincial acts and regulations will apply, such as the Municipal Government Act and the Edmonton Metropolitan Region Growth Plan. The Edmonton Metropolitan Region Growth Plan identifies regional-level components that need to be considered comprehensively with respect to the Bremner and LEA Area Concept Plan and the Bremner Community 1 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 1 Sub - ASP shall be interpreted as approximate unless otherwise specified in the plan or coincide with clearlyrecognizable physical features (i.e. legal) boundaries.

Definitions

Terms not defined within Section 6 of the Bremner Community 1 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 County 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 1 will have a unique urban character with a village centre and a series of complete neighbourhoods containing a range of residential housing options to meet regional density targets. It will be organized to foster connectivity and access to a range of services and amenities to meet residents' everyday needs. Environmentally sensitive areas will be conserved, and open space will be allocated to provide convenient access to community facilities and schools.

Objectives

Strathcona County's objectives are to ensure Community 1:

- 1. Is built out to meet regional residential **density** targets, with more dense development concentrated around the Village Centre;
- 2. Follows a pattern of organization that fosters access and connectivity;
- 3. Conserves environmentally sensitive areas through Environmental Reserve dedication;
- 4. Allocates open space and areas for schools and community facilities through **Municipal Reserve** dedication; and
- 5. Designs a gateway to establish the urban character of the community.

3.1.1 Density

- 1. **Require** Community 1 to contain a minimum residential density of 35 du/nrhato **ensure** compliance with the Edmonton Metropolitan Region Growth Plan.
- Require densities greater than 30 du/nrha for each neighbourhood to ensure the
 minimum residential density of 35 du/nrha is met when combined with the densities for
 the village centre.
- 3. **Require** densities greater than 40 du/nrha within the Village Centre to **ensure** the minimum residential density of 35 du/nrha is met and to provide higher density and population within proximity to services.
- 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 1 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 1 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.
- Require the Village Centre within Community 1 to be centrally located to ensuremost dwelling units are within 800 meters access to services and employment opportunities.
- 8. **Require** most dwelling units 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. **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.
- 11. **Encourage** primary community nodes to be dispersed throughout Community 1 to **promote** walkable access for all residents.

12. **Require** the secondary community node to be located adjacent to the Village Centre to **ensure** walkable access to services in all neighbourhoods.

3.1.3 Environmental Reserve

- 13. **Require** Oldman Creek to be dedicated as environmental reserve (ER) and the ER to include that area measured a minimum of 10.0 metres from the Top of Bank (as determined through technical study) of the creek to **ensure** an appropriate buffer from the creek and conservation of this environmentally significant area.
- 14. **Require** a site-specific geotechnical investigation prior to subdivision and additional ER dedication if warranted, for those areas identified in the Slope Stability Analysis and the Erosion and Mitigation Plan as having the potential for landslide and erosion issues beyond the 10 metres from Top of Bank to **ensure** conservation of Oldman Creek and safety adjacent to the Top of Bank where erosion and slope stability concerns have been identified.
- 15. **Require** wetland buffers surrounding crown claimed wetlands be dedicated as environmental reserve (ER) and the ER to include that area measured a minimum 20 meters in width (or greater in accordance with a Wetland Buffer Analysis) from the crown claimed wetland area to **ensure** conservation, improve water quality and reduce pollution for these environmental features.
- 16. **Require** the wetland within neighborhood 1 immediately north of Oldman Creek (priority wetland WCAR1 as identified in the Wetland Mitigation Plan), be dedicated as environmental reserve and the ER to include that area measured minimum 20 meters up to and including 33 metres in width (as per the Wetland Buffer Analysis) from the wetland area to **ensure** conservation of the natural landscape.

3.1.4 Municipal Reserve

- 17. **Require** all Municipal Reserve owing within Community 1 to ultimately be dedicated as land to **ensure** the maximization of open space for residents.
- 18. **Consider** allocating lands over the 10% Municipal Reserve amount permitted under the *Municipal Government Act* when these lands are purchased by the County for community services, open space or public services to **support** accessibility of public services and facilities for all residents.
- 19. **Require** the Forested Area within neighbourhood 1 immediately north of Oldman Creek (Forested Area FA2 as identified in the Biophysical Assessment) be dedicated as

- Municipal Reserve (MR) or Conservation Reserve (CR) to **ensure** conservation of habitat for wildlife, natural area linkages and provision of open space.
- 20. **Require** Municipal Reserve (MR) dedication be utilized for two primary community nodes and one secondary community node to **ensure** sufficient area is provided for potential school sites, community services and community parks.
- 21. **Require** Municipal Reserve (MR) dedication for neighborhood parks and trails to **ensure** convenient access to open space within 400 metres for all residents.
- 22. **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.
- 23. **Require** Municipal Reserve (MR) dedication for park adjacent to the environmental reserve (ER) of Oldman Creek within neighbourhoods 1 and 3 to **ensure** public access points to the creek at regular intervals for all residents.

3.1.5 Gateways

- 24. **Require** the entrance at Township Road 534 east of Highway 21, to include arrival features that incorporate prominent landscape elements, or public art to **ensure** a focal point that provides a sense of identity and desired urban aesthetic.
- 25. **Require** boulevards, centre medians with street trees, and any additional traffic calming infrastructure when transitioning from regional roads to an urban setting, such as coming off the 534/Highway 21 interchange to **ensure** that there are visual cues to support reduced speeds when entering the community.
- 26. **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.

3.2 Transportation

Goal

The transportation network for Community 1 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 and interchanges within Community 1. 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 1:

- 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.

3.2.1 Access, Connectivity, and Mobility

- Require multi-modal transportation options, including active transportation
 infrastructure along Township Road 534 and Range Road 225 to continue across
 Highway 21 and Highway 16 connecting Cambrian Crossing to the west and the Local
 Employment Area (LEA) to the south to ensure accessibility by multiple transportation
 modes.
- Require the street network within Community 1 to be designed using grid and modified grid patterns, where appropriate, to ensure a highly connected street network, walkability, efficient transit, continuity of transportation routes, and access to the rest of the County.
- 3. **Require** a transportation impact assessment to **ensure** that new development in

- Community 1 aligns with the overall transit, active transportation, traffic, and goods movement goals and objectives of the Bremner and LEA ACP.
- 4. **Encourage** the provision of on-demand transit service in earlier stages of development to **promote** greater flexibility and transit usage for new residents.
- 5. **Encourage** implementation of regional transit service to **promote** access along routes to key employment areas in the region.
- 6. 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.
- 7. **Require** active transportation infrastructure to connect across neighbourhoods to **ensure** access across Bremner for people using active modes.
- 8. **Require** access for people walking and cycling at all highway crossings to **ensure** interregional active transportation.
- 9. **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.
- 10. **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 1.

3.2.2 Mobility Options

- 11. **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
- 12. **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 Village Centre or Primary and Secondary Community Nodes.
- 13. **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.

- 14. **Require** direct active transportation connections to the Village 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 1.
- 15. **Require** transit controlled-locations to be located within approximately 400 metres of all residences to **ensure** transit as a viable and convenient transportation option.
- 16. **Require** transit controlled-locations 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.
- 17. **Encourage** transit controlled-locations within close proximity (within 250 metres) of schools, major community services, within the Village Centre, and around community nodes to **promote** convenient transit access for higher volume areas.

3.2.3 Safety

- 18. **Require** pedestrian-oriented lighting along the Main Street Collector within the Village Centre to **ensure** a safer pedestrian environment during dark hours.
- 19. **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.
- 20. **Encourage** neighbourhood design, building design, and street layouts to adhere to Crime Prevention Through Environmental Design (CPTED) principles, as set out in the Community 1 Design Guidelines, to **promote** a sense of surveillance and enhance safety in public and private spaces
- 21. 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.
- 22. **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.
- 23. 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.
- 24. **Consider** roundabouts as alternatives to signals where intersections require control greater than two-way stops to **support** traffic safety.
- 25. **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.
- 26. **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

- 27. **Encourage** a transit transfer facility to be located near the Village Centre and Township Road 534, 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.
- 28. **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.
- 29. **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.
- 30. **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.
- 31. **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.
- 32. **Require** development within 400 metres of the Village 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

- 33. **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.
- 34. **Encourage** planning snow removal for Main Streets to **promote** curb side parking and loading through all seasons.
- 35. **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.
- 36. **Require** transit terminals and transit transfer facilities within Community 1 to incorporate weather protected walking infrastructure and bicycle storage, where possible, to **ensure** transit is a safe and comfortable year-round option.
- 37. **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.

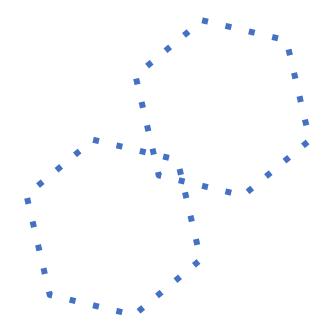
3.2.6 Green Transportation Infrastructure

- 38. **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.
- 39. **Consider** additional transportation infrastructure design that facilitates cleaner urban environments and energy efficiency to **support** healthy community living.

3.2.7 Smart

- 40. **Encourage** the public transportation system to include express transit service outside of the Community 1 boundary to **promote** transit as a competitive option for commuters to major local and regional destinations.
- 41. **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.
- 42. Encourage transit priority measures at interchanges near transit terminals and at all

- arterial/collector intersections to **promote** transit as a priority transportation mode.
- 43. **Consider** the implementation of shared mobility programs (bike and car share) where demand exists, to **support** improved mobility options for residents of Bremner.
- 44. **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 the Community 1 will be provided in accordance with Strathcona County Design and Construction Standards. 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 detail how the proposed servicing for the Bremner lands will be implemented, including any necessary interim or staged servicing utilized prior to ultimate infrastructure requirements.

Ultimate Wastewater servicing, as shown in Figure 11: Wastewater Servicing Concept, will be provided by a gravity trunk sewer system, lift station and force main system connecting to the existing SERTS line at Township Road 540.

Ultimate Water Servicing, as shown in Figure 12: Water Servicing Concept, will necessitate a new offsite water main and reservoir. The final requirements of the Community 1 water reservoir and feeder mains will be developed in conjunction with further studies being carried out by Strathcona County and EPCOR.

Stormwater Servicing, as shown in Figure 10: Stormwater Servicing Concept is generally consistent based on the conditions given in the Bremner ACP Utilities Master Plan and based on key criteria as outline in this section.

Goal

Responsible infrastructure delivery to ensure efficient, safe, reliable, utility systems and services for Community 1. 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 1:

- 1. Efficiently manages 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. Use low impact development techniques in the design of services where appropriate and,
- 7. Supports **energy** efficiency and alternative energy approaches over time.

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 phase of development.

3.3.2 Utility Services and Emergency Services

- 2. **Require** the protection of the existing public utility areas along the northwestern and western boundary, to **ensure** services are maintained.
- 3. **Require** waste plans for development of the Village Centre, Primary and Secondary Community Nodes to **ensure** waste servicing is provided efficiently.
- 4. **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.
- 5. **Encourage** opportunities for innovative and alternative servicing strategies, such as fibre, bioswales, rain gardens, where feasible to **promote** an adaptive and sustainable neighbourhood.
- 6. **Encourage** emergency services to locate in close proximity to the Village Centre, where possible, to **promote** the availability of emergency services in the area.

3.3.3 Wastewater

- 7. **Require** existing pipelines and natural systems to be designated to **ensure** servicing uses land efficiently and does not impact existing networks.
- 8. **Require** developments to connect to municipal wastewater services to **ensure** services are provided to an urban standard.
- 9. **Require** wastewater servicing to address any service constraints to **ensure** consistent services to all residents,
- 10. **Consider** the installation of a lift station for the low-lying areas on the north perimeter of Community 1 if deemed acceptable to the County, to **support** consistent services to all residents.

3.3.4 Water

- 11. **Require** water distribution design to a servicing standard with the required fire protection that will **ensure** safe and efficient development.
- 12. **Require** a Reservoir Strategy prior to rezoning and subdivision, to **ensure** water services are adequately provided.
- 13. **Require** a reservoir within Community 1, to **ensure** water service and fire pressure for the plan area.

3.3.5 Stormwater Management

- 14. **Require** designation of engineered and natural infrastructure to **ensure** efficient land use and limit impact to existing networks.
- 15. **Require** that stormwater management facilities be sufficiently sized for controlled release rates discharging to Oldman Creek and Pointe-aux-Pins Creeks to **ensure** stormwater drainage is accommodated and creek integrity is protected.
- 16. **Require** erosion assessments for Oldman Creek and Pointe-aux-Pins Creek to be completed to **ensure** confirmation of allowable stormwater release rates to the creeks.
- 17. **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 be managed appropriately within the plan area.
- 18. **Require** that the Surface Runoff Management Plan address Low Impact Development strategies to be used on site and the projected amount of run-off that will not be managed on-site to **ensure** that stormwater be managed appropriately within the plan area.
- 19. **Encourage** that the major drainage system follows the natural topography as much as possible to **promote** respect of the natural drainage basins draining to Oldman and Point-aux-Pins Creeks.
- 20. **Encourage** the retention of key wetlands and incorporate into the stormwater drainage system to **promote** the recharge of these wetlands for long-term viability.
- 21. **Require** appropriate flood mitigation measures as identified in the floodplain study, to be determined at detailed design, to **ensure** prevention of Oldman Creek from inundating on a portion of the development area along the creek in the southwest area of Community 1.

22. **Consider** climate adaptation and mitigation in the stormwater management system design to **support** system resiliency to climate change.

3.3.6 Low Impact Development

- 23. **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.
- 24. **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.
- 25. **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.
- 26. **Encourage** low impact development principles and standards in the design of the Village Centre to **promote** reduced environmental impacts of an area projected to have a higher population.

3.3.7 Energy

- 27. **Encourage** alternative energy systems and opportunities for alternative energy-efficient uses within the Village Centre and plan area to **promote** safe, reliable, and efficient utilities and a reduced carbon footprint for the community.
- 28. **Encourage** incorporating energy systems and lighting features into the design of the Village Centre and plan area to **promote** a unique and integrated development and create a sense of place.
- 29. 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 1:

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

3.4.1 Existing Agriculture

- 1. **Encourage** development that is staged, as outlined in Section 5: Development Staging, 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 to **ensure** local food production is incorporated into communities.
- 10. **Encourage** private urban agriculture, such as rooftop gardens or community gardens, to **promote** local food production.
- 11. **Require** that the Village 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 1 is designed to conserve and connect with its natural features and honour its agricultural heritage. A strong open space network is an integral part of the community, connecting the Village Centre, community nodes, stormwater management facilities, parks, natural areas, wetlands, and Oldman Creek among a diversity of housing types, commercial uses, and community services. Agricultural history is integrated into the theme of the community, in addition to urban agriculture opportunities included throughout.

Community 1 is divided into three Neighbourhood areas which surround the VillageCentre, as shown in Figure 2: Development Areas Concept.

- Neighbourhood 1, in the southwest portion of the ASP area, is bounded by Oldman
 Creek and an adjacent a wetland and natural area. Street oriented housing lines most
 of the primary collectors which access the Neighbourhood. A key feature of
 Neighbourhood 1 is the secondary node, which provides the central location of
 community services and secondary schooling within Community 1. The interface
 between the secondary node and Village Centre is an important design feature,
 providing a transition from the Community's dense urban core to its communityoriented uses.
- Neighbourhood 2 encompasses the area of the ASP north of Township Road 534. It is structured around three major wetlands and a linear open space that connects the Village Centre with stormwater management facilities, a central primary community node, and pocket parks. An area of existing residential development and a water reservoir are unique to the Neighbourhood. Blocks of medium density residential housing complement the primary community node that is centrally located. The

- Neighbourhood also provides strong connections to the agricultural area to the north, including Bremner House and Pointe-aux-Pins Acres.
- Neighbourhood 3, in the southeast portion of the ASP area, contains the greatest connections to natural areas. A centralized primary community node is connected to a forested area, further connected to Oldman Creek. Large plateau areas of Oldman Creek line the south edge of Neighbourhood 3, which include recreational trail access and ecological connectivity. The collector roadways which move through Neighbourhood 3 also provide strong multimodal connectivity to the Town Centre in Community 4.

Goal

Each neighbourhood area will be defined by unique natural and built elements, while all will include a variety of housing forms and access to services and open spaces to meet the needs of a diverse population.

Objectives

Strathcona County's objectives are to ensure Community 1:

- 1. Contains residential **housing diversity** throughout each neighbourhood;
- 2. Allows opportunities for **services** that meet the daily needs of the surrounding residential development;
- 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

- Require a mix of housing types, forms and densities including low and medium density residential housing forms within each neighbourhood, 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 stormwater management facility in the northeast area of neighbourhood 2, to create unique housing opportunities that **support** open space with active frontages.

4.1.2 Existing Country Residential

- 4. **Require** additional site-specific studies for any proposed re-subdivision of the area identified as existing country residential within the southwest corner of neighbourhood 1 to **ensure** conservation of Oldman Creek and site suitability for potential re-development.
- 5. **Require** that any proposed re-subdivision for residential use of the existing country residential within neighbourhood 1 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 Community1; and
 - d. aligns with the Mixed Residential land use requirements;
- 6. **Require** a physical buffer in the form of a stormwater management facility adjacent to Existing Country Residential within neighbourhood 1 to **ensure** that new development provides a transition from the existing country residential use.

4.1.3 Existing Residence

- 7. **Require** additional site-specific studies and technical reports for any proposed resubdivision of the areas in neighbourhoods 2 and 3 identified as Existing Residence prior to rezoning, subdivision or as part of an amendment to this plan (whichever comes first) to **ensure** technical considerations are addressed as necessary.
- 8. **Require** that any proposed future residential re-subdivision for the lands identified as Existing Residence in neighborhood 2 and 3 align with Figure 3 Land Use Concept and the following criteria to **ensure** sensitive integration with surrounding development and continuity with the neighborhood design:

- 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 1; and
- d. aligns with the Mixed Density Residential, Street Oriented Residential or Medium Density residential land use requirements.

4.1.4 Mixed Density Residential

- 9. **Require** Mixed Density Residential land uses 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.
- 10. **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.
- 11. **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.
- 12. **Encourage** a variety of lot sizes and lot types in for Mixed Density Residential in order to **promote** the various housing opportunities and unique built forms envisioned for the residential area.
- 13. **Encourage** higher density housing forms for Mixed Density Residential such as row housing, and stacked row housing adjacent to community nodes, in close proximity to the village centre, and along collector streets to **promote** increased population close to services and amenities and along transit routes.

4.1.5 Street Oriented Residential

- 14. **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.
- 15. **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.

- 16. **Require** smaller front yard setbacks and rear lane garage access for street oriented residential to **ensure** a walkable, safe, and visually appealing streetscape.
- 17. **Encourage** street-oriented residential to be located along collector streets, as shown on Figure 3: Land Use Concept, to **promote** attractive and walkable major streets in the community.
- 18. **Encourage** higher density street-oriented residential, such as row housing, and stacked row housing to be located at the southeast corner intersection of the two primary collectors within neighbourhood 1 to **promote** a visually appealing streetscape and higher density in close proximity to services and amenities.
- 19. **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 and secondary community nodes to **promote** increased population close to services and amenities and along transit routes.

4.1.6 Medium Density Residential

- 20. **Encourage** medium density residential to be developed at a net residential density of 90 units per net residential hectare (upnrha) to **promote** overall residential density targets.
- 21. **Require** medium density residential in the form of row housing to be located along the majority of the primary collector roadway running north/south through neighbourhood 1 to **ensure** higher density residential development is located along potential transit routes and in close proximity to the village centre.
- 22. **Require** medium density residential adjacent to the secondary community node in neighbourhood 1 to **ensure** an increased density close to the community centre.
- 23. **Require** medium density residential adjacent to the crown claimed wetland and primary community node in neighbourhood 2 to **ensure** increased population within walking distance to services and amenities.
- 24. **Require** medium density residential in close proximity to the primary community node in neighbourhood 3 to **ensure** increased population within walking distance to services and amenities.
- 25. Encourage medium density residential to be in close proximity to, or have connections to, the Village Centre and Primary and Secondary Nodes to promote a dense, walkable, and connected community centre.

- 26. **Encourage** medium density residential, where located adjacent to Mixed Residential housing, to be sensitive of and provide appropriate mass and scale transition to surrounding land uses to **promote** diverse forms of housing that are positively integrated.
- 27. **Encourage** medium density residential to be located along arterial and collector roads and transit routes, to **promote** convenient and walkable transportation and transit options and make efficient use of transit infrastructure.
- 28. **Encourage** medium density residential to include various built forms, such as row housing, stacked row housing, low- and medium-rise apartments, and other forms, within medium density residential lands to **promote** alternative housing options.

4.1.7 Services

- 29. **Consider** minor home-based businesses, where appropriate, to **support** a diverse local economy.
- 30. **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.

4.1.8 Transportation

- 31. **Require** a multi-modal transportation network, as shown on Figure 8: Active Transportation Concept, that **ensures** ample and active connections between land uses.
- 32. **Require** an arterial road connection through Community 1 along Township Road 534 from Highway 21 to Range Road 225, to **ensure** major access points are provided.
- 33. **Require** collector roadway connections from Community 1 into Community 4 and Community 2, to **ensure** major connections throughout Bremner.

- 34. **Encourage** a suitable balance between pedestrian and vehicular circulation throughout the residential areas to **promote** access for all modes.
- 35. **Encourage** pedestrian-oriented frontages, where appropriate, to **promote** walkability and active streetscapes within neighbourhoods.

4.1.9 Neighbourhood Open Space

- 36. **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.
- 37. **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.
- 38. **Require** open space connections within neighbourhood 2 that connect to the trail network north on the lands that contain Pointe-aux-Pins Acres and Bremner House to **ensure** continuous open space network connections outside the plan area and linkages to county amenities.
- 39. **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.
- 40. **Encourage** open space connections between Primary and Secondary Community Nodes, Village Centre open space, stormwater management facilitates, and environmental and municipal reserve, to **promote** a comprehensive active transportation network and provide an active interface between the land uses.
- 41. **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.
- 42. **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.

4.1.10 Urban Design

- 43. **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.
- 44. **Require** open space connections and walkways where street layouts may result in reduced connectively and accessibility to neighbourhood and community open space, amenities and services to **ensure** walking to these areas is direct and convenient.
- 45. **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.
- 46. **Encourage** detached garages to be accessed from a lane in order to **promote** neighbourhood walkability and street safety in the community.
- 47. **Require** mid-block access points where neighbourhood blocks exceed 300 metres to **ensure** walkability.
- 48. **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.
- 49. **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.
- 50. **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 nodes within each neighborhood that function as community activity, recreation, and service hubs that provide space for schools, high-quality open space, and complimentary community services and are connected and accessible by active transportation including cycling and walking.

Figure 5: Open Space Concept shows the Primary and Secondary community nodes.

Objectives

Strathcona County's objectives are to ensure that Community Nodes in the Community 1 ASP:

- 1. Provide a location for schools;
- 2. Provide opportunities for community services;
- 3. Contain public open space;
- 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 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 1.
- 2. **Require** that the primary community node within neighborhood 3 be designed in general alignment with Figure 5 to accommodate the opportunity for one primary school and a complimentary community service use to **ensure** opportunity for school and community partnerships.
- 3. **Require** that the secondary community node within neighbourhood 1 that is adjacent to the Village Centre, be designed in general alignment with Figure 5 to accommodate the opportunity for a secondary school and indoor recreation centre to **ensure** the creation of a community level recreation and activity hub for Community 1.

4. **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

- 5. **Encourage** the incorporation of a community service facility on the community node within neighbourhood 3 to **promote** community amenities within the neighbourhood.
- Consider the incorporation of a community service facility on the community node
 within neighbourhood 1 if space can be accommodated, to support shared resources
 between the school boards and the County.
- Encourage the incorporation of major community services including indoor and outdoor recreation facilities within the secondary community node to promote the joint use of major community services with secondary schools.
- 8. **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 Open Space

- Require each community node to contain park area for outdoor recreation to ensure opportunities for outdoor activity within each neighbourhood.
- 10. 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.
- 11. **Require** that open space functions for all ages and abilities to **ensure** recreational and cultural opportunity access.
- 12. **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

- 13. **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.
- 14. **Require** that all community nodes contain the following design aspects to **ensure** safe and convenient access by all modes of transportation:
 - 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.
- 15. **Require** that the primary community node within neighborhood 2 front onto two collector streets, or onto a curved segment of a collector street that joins two segments of a collector street from alternate directions, to **ensure** high visibility and adequate street frontage to accommodate the opportunity for two schools.
- 16. **Encourage** that the primary community node within neighborhood 2 incorporates a roundabout to **promote** traffic circulation, slow speeds and facilitate site access from east to west.
- 17. **Require** that the primary community node within neighborhood 2 incorporates open space connections south and east of the site to **ensure** mitigation of barriers due to the adjacent crown claimed wetland.
- 18. **Require** that the primary community node within neighborhood 3 front onto two collector streets to **ensure** high visibility and adequate street frontage to accommodate a school and community service use.
- 19. **Require** that the secondary community node within neighborhood 1 front onto at least two collector streets to **ensure** high visibility and adequate street frontage to accommodate a secondary school and major community services.
- 20. **Require** streets adjacent to community nodes to incorporate active transportation infrastructure for cycling to **ensure** bicycle access to services and facilities.
- 21. **Consider** integrating electric vehicle charging infrastructure at community nodes to **support** sustainable transportation options.

22. **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

- 23. **Encourage** visual connections, pathways, and active frontages where the secondary community node interfaces with the Village Centre, to **promote** an active interface between complementary land uses.
- 24. **Require** parking for public community services, be located underground, stacked or onstreet 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.
- 25. 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.
- 26. **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.
- 27. **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.
- 28. **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.
- 29. **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.
- 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** that open spaces are comfortable and safe year-round.

4.3 Village Centre

Goal

To create a distinct and vibrant mixed-use walkable destination within the community by providing medium to high density housing, a range of employment opportunities and community services to meet the daily needs of community residents.

Objectives

Strathcona County's objectives are to ensure that the Village Centre in the Community 1:

- 1. Provides opportunities for high-quality mixed-use development;
- 2. Provides a mix of **commercial** opportunities;
- 3. Contains medium to high density **residential** and housing diversity;
- 4. Provides community services for residents;
- 5. Contains and connects high-quality public **open spaces and plazas** for gathering and recreation;
- Connects to the transportation network to support transit and active transportation for daily trips; and
- 7. Is **designed** as compact and walkable in all seasons.

Policies

4.3.1 Mixed-Use

- 1. **Encourage** high-quality, street-oriented vertical or horizontal mixed-use development to **promote** a vibrant, activated, and attractive Village Centre that is higher density and allows for residents to meet their daily needs.
- 2. **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.
- 3. **Require** the Village Centre development area to consist of a mix of commercial, community services and medium to high-density residential development to **ensure** a

- central community hub where residents can meet their daily needs within a smaller geographic area.
- 4. **Encourage** residential development above ground floor commercial and community services to **promote** a vibrant, active, and attractive community centre.

4.3.2 Commercial

- 5. **Require** the Village Centre to provide sites for major commercial, community commercial, and business commercial to **ensure** the daily needs of residents can be met within a smaller geographic area.
- 6. **Encourage** local businesses to locate within the Village Centre to **promote** a vibrant local economy and competitive business environment.
- 7. **Encourage** developments to provide for a larger number of commercial retail units to **promote** a human scale and vibrant commercial space.
- 8. **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

- 9. **Encourage** an average density of 90 dwelling units per net residential hectare to **promote** a concentration of higher residential density within walking distance to commercial, community services and employment opportunities.
- 10. Require that the Village 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.
- 11. **Encourage** sites for seniors housing and community housing to **promote** affordable and accessible housing in proximity to community and commercial services.
- 12. **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 Service

- 13. **Require** sites which provide an opportunity for local community services and major community services to **ensure** access to community activities for the local population.
- 14. **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.
- 15. **Encourage** joint use of sites or buildings between community services, residential, or commercial to **promote** an integrated, accessible, and inviting community for all residents.

4.3.5 Open Space

- 16. **Require** open space and plazas within or adjacent to the Village Centre for public use to **ensure** public open space is provided for community gathering destinations in all seasons.
- 17. **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.
- 18. **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 Village Centre.
- 19. **Encourage** visual connections, pathways, and active frontages where the Village Centre interfaces with the secondary community node, to **promote** an active interface between complementary land uses.
- 20. **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.
- 21. **Encourage** active interfaces between the built form and open spaces and plazas to **promote** the creation of vibrant, activated, and attractive public spaces.
- 22. **Require** open spaces and plazas to be designed in accordance with Appendix C to **ensure** that open spaces are comfortable and safe year-round.
- 23. **Encourage** the development of community food hubs and spaces that accommodate farmer's markets within or near the Village Centre, to **promote** local food culture.

24. **Encourage** an air quality monitoring station to be located on County land in the Village Centre, to **promote** environmental health.

4.3.6 Transportation

- 25. **Require** a fine-grained grid network of streets to **ensure** connectivity and accessibility for all transportation modes.
- 26. **Encourage** higher density buildings to locate along transit routes to **promote** the use of and accessibility to transit.
- 27. **Encourage** the network of blocks and streets to have a maximum length and width of 150 metres to **promote** the Village Centre as walkable and transit supportive.
- 28. **Require** the main street along the east side of the Village 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.
- 29. **Require** low design speeds on streets in the Village Centre to **ensure** a Safe Systems Approach and prioritize the safety of people walking and cycling.
- 30. **Require** the main street along the east side of the Village Centre to connect to major roadways such as collector roads to the south and the arterial street to the north, as well as the active transportation network that extends from the main street through the Major Open Space Corridor, to **ensure** access for all modes to the commercial core.
- 31. **Require** the transportation network in the Village Centre to incorporate public or private laneways to accommodate loading, garbage, and rear parking areas to **ensure** consistent street-oriented buildings.
- 32. **Require** that only the following street types are permitted in the Village 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

- 33. **Require** all publicly dedicated streets within and adjacent to the Village Centre be designed to accommodate all season cycling to **ensure** accessible and active connections to destinations for all people on bikes.
- 34. **Require** bicycle parking for all developments to **ensure** that residents can choose to ride a bike for all trips.
- 35. **Require** street design on all streets within the Village 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.
- 36. **Require** main streets in the Village 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.
- 37. **Require** local and intermunicipal transit connections to **ensure** transit priority for bus service and potential future higher-order transit, such as bus rapid transit.
- 38. **Require** that only on-street parking is visible along main street(s) and is designed as pedestrian-oriented in accordance with Section 4.2 of Appendix C to **ensure** continuous, active streetscapes are provided.
- 39. **Consider** integrating electric vehicle charging infrastructure in the Village Centre to **support** sustainable transportation options.
- 40. **Require** that a street be designed within the Village Centre to accommodate an onstreet at-grade transit transfer facility or transit terminal to **ensure** that the Village Centre serves as a multi-modal hub with increased transit opportunities for medium and high density residential.

4.3.7 Urban Design

- 41. **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.
- 42. **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.

- 43. **Require** main streets to be designed in accordance with Section 1.4 of Appendix B of the Bremner ACP to **ensure** pedestrian-oriented streetscapes and high-quality character thatevokes a sense of place is provided.
- 44. **Require** the implementation of all-season design for built form in accordance with Section 2.1 of Appendix B of the Bremner ACP to **ensure** that building placement, aesthetics, and materials enhance the pedestrian experience year-round.
- 45. **Require** all season public realm design in accordance with Section 2.2 of Appendix B of theBremner ACP to **ensure** that pedestrian streetscapes are safe, vibrant, and accessible year-round.
- 46. **Require** that development adhere to the design standards within Appendix C of this ASP, to **ensure** a cohesive and functional outcome for the Village Centre.

4.4 Open Space Network

Goal

To conserve environmental features and provide a connected network of continuous open space that provides connections within the community to unique natural features and service areas, as well as to surrounding communities. The open space network within this ASP will facilitate and strengthen the residents' connection and access to open space and will serve as an active transportation network between community destinations as well as to the surrounding communities.

Figure 5: Open Space Concept shows the open space uses and connections in Community 1. 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 Oldman Creek;
- 2. Conserves and incorporates **priority wetlands** into open space and, where possible, into 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 Oldman Creek

- 1. **Require** delineation of land as public property by including a top of bank roadway or trail along the entire length of Oldman Creek, to **ensure** public access through active transportation linkages.
- 2. **Require** development setbacks for lots adjacent to the area established as Environmental Reserve (ER) for Oldman 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** Restrictive Covenants, where acceptable to the County, for lots adjacent to the area established as Environmental Reserve (ER) for Oldman Creek, as determined through a Geotechnical Report, to **promote** safety for lots developing next to the Creek.
- 4. **Encourage** public access points to the environmental reserve adjacent to 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

- 5. **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.
- 6. **Encourage** the enhancement of existing wetlands through features such as boulders and rocks, brush piles, native vegetation, and gentle constructed slopes, per the Wetland Mitigation Plan, to **promote** climate resilience, ecological health, and enhanced wildlife habitat.
- 7. **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.
- 8. **Consider** providing a less invasive type of infrastructure, such as a viewing deck, instead of the western trail connection along the southernmost crown-claimed wetland (at time of detailed design) to **support** minimizing disturbances to the wetland while still allowing safe and controlled access.

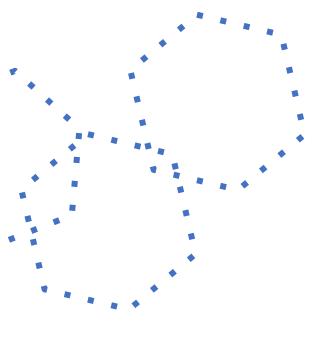
4.4.3 Uplands

- 9. **Encourage** the conservation of upland habitat to **promote** the viability of the ecological network after development.
- 10. **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.
- 11. **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

- 12. **Require** a Major Open Space Corridor, as identified in the Bremner 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.
- 13. **Encourage** the Major Open Space Corridor to accommodate wildlife to **promote** and facilitate their movement through and between natural areas.
- 14. **Encourage** the Major Open Space Corridor to connect various ecological features such as Oldman Creek and the tree stand in the south portion of the community, wetlands, the three community nodes, and linear stormwater amenities north of the Village Centre, as shown on Figure 5: Open Space Concept, to **promote** a connected network of open spaces.
- 15. **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.
- 16. **Encourage** open space connections to communities adjacent to Community 1, such as into Community 4 to the east across Range Road 225 and into Community 2 to the south across Oldman Creek, 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.

- 17. **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.
- 18. **Consider** opportunities for restoration, enhancement, and education within the Major Open Space Corridor, to **support** its role as a multifunctional open space.
- 19. **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 experienceyear-round.
- 20. **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.
- 21. **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 safeyear-round and increase biodiversity in design.





05 IMPLEMENTATION

5.1 Development Staging

In order for Community 1 to be developed in accordance with the development concept in this ASP, a number of major infrastructure projects must be undertaken. Staging of the development will be dependent on the delivery of the major infrastructure required before development can start. Market forces may 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 Community 1 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.
- 3. **Encourage** regular development team collaboration with Strathcona County staff and regional utility service providers to **promote** effective planning and delivery of essential services to the Community 1 area.

4. **Require** the dedication of land to **ensure** that appropriate County owned servicing infrastructure and lands is in place to facilitate development.

5.2.2 Transportation

- 5. **Encourage** continued collaboration with Alberta Transportation to **promote** finalization of near term access plans from Highway 21 for the initial stages of Community 1.
- 6. **Encourage** continued collaboration with Alberta Transportation to **promote** finalization of ultimate access plans for the area.
- Require 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

- 8. **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, and Oldman Creek to **ensure** conservation of environmentalfeatures and environmentally significant areas.
- 9. **Require** clubroot management plans on affected parcels prior to development to **ensure** that clubroot is not spread to other agricultural areas.

5.3.4 Land Use

Planning policy items and design guidelines will be implemented through zoning districts and subdivision design specifically for the Bremner area.

- 10.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 Community 1 and Bremner and LEA ACP, to ensure that land use regulations support higher level policy direction.
- 11. **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.
- 12. **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.
- 13. **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

- 14. **Require** non-participating landowners to provide associated technical studies and reports prior to rezoning or subdivision of these lands to **ensure** that appropriate planning and environmental considerations are taken into account for these lands.
- 15. **Require** County land needs to be determined through subsequent stages of development on non-participating lands, to **ensure** that County needs are takeninto 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, onstreet 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 Areas: 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, and semi-detached, row housing, and stacked row housing.

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

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 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 interconnected 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, semidetached, 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.**

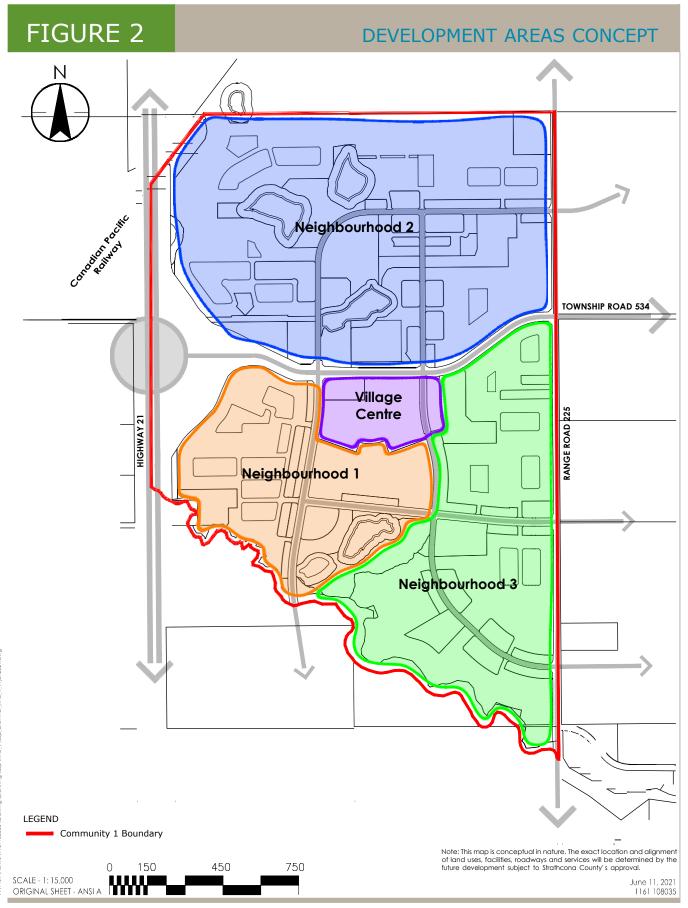
Woonerf Style: In a woonerf, the street is shared among pedestrians, bicyclists, and motor vehicles; however, pedestrians have priority over cars. The street is designed without a clear division between pedestrians and auto space (i.e., no continuous curb), so motorists are forced to slow down and travel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

FIGURE 1 LOCATION PLAN LEGEND Community 1 Area Structure Plan Boundary Bremner and LEA Area Concept Plan Boundary Urban Service Area Boundary TWP RD 534 RNG RD 225 RNG RD 224 HIGHWAY 16 НЩ 3750 750 2250

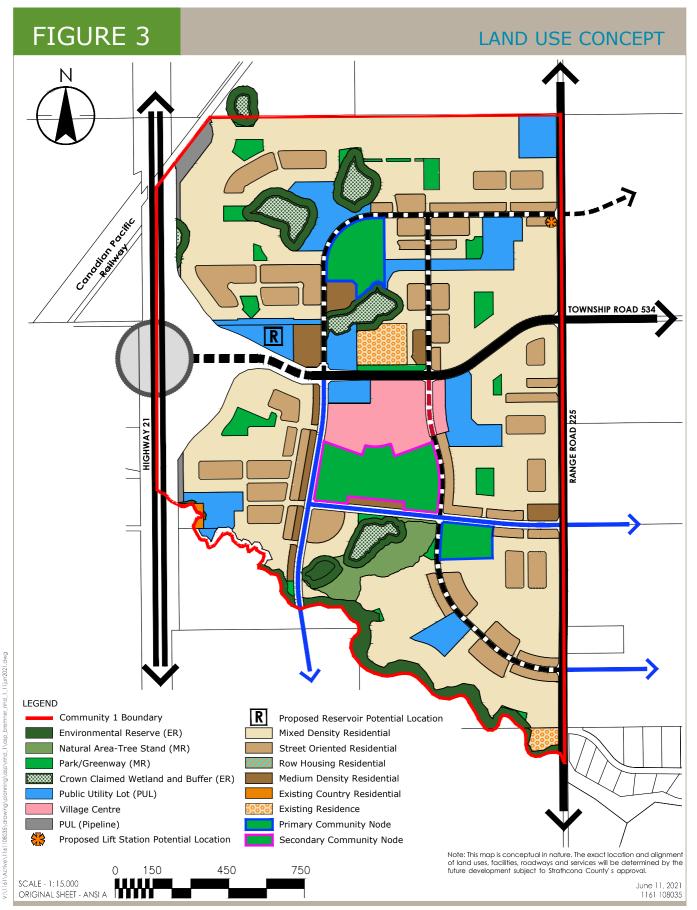


SCALE - 1:75,000
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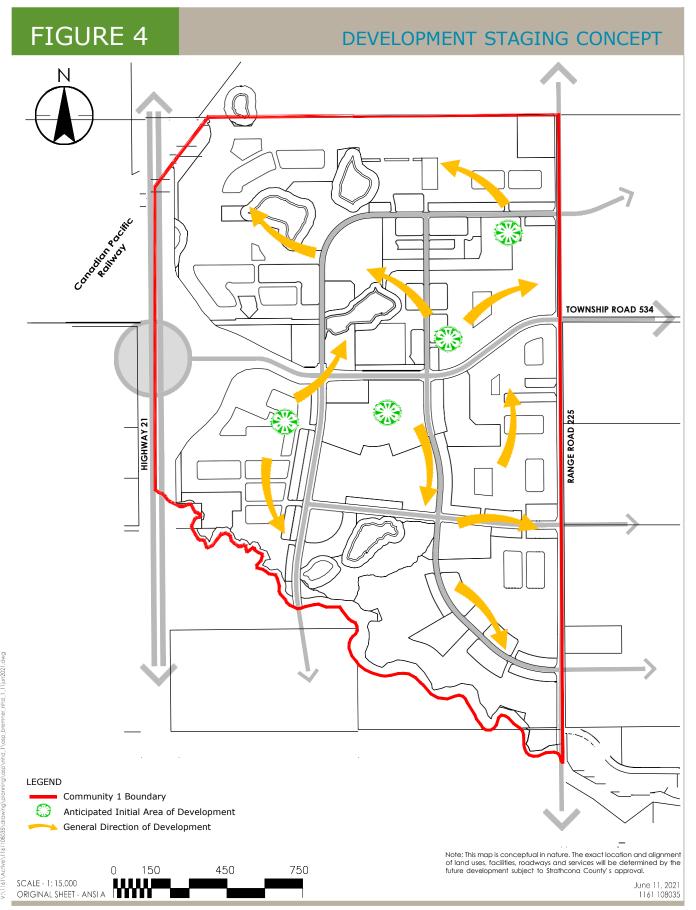
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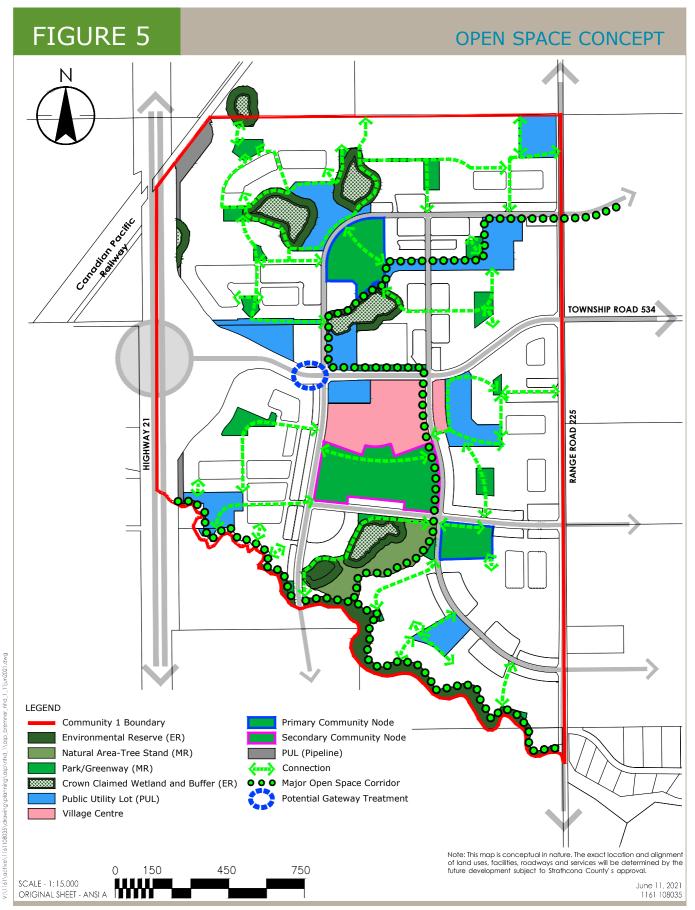




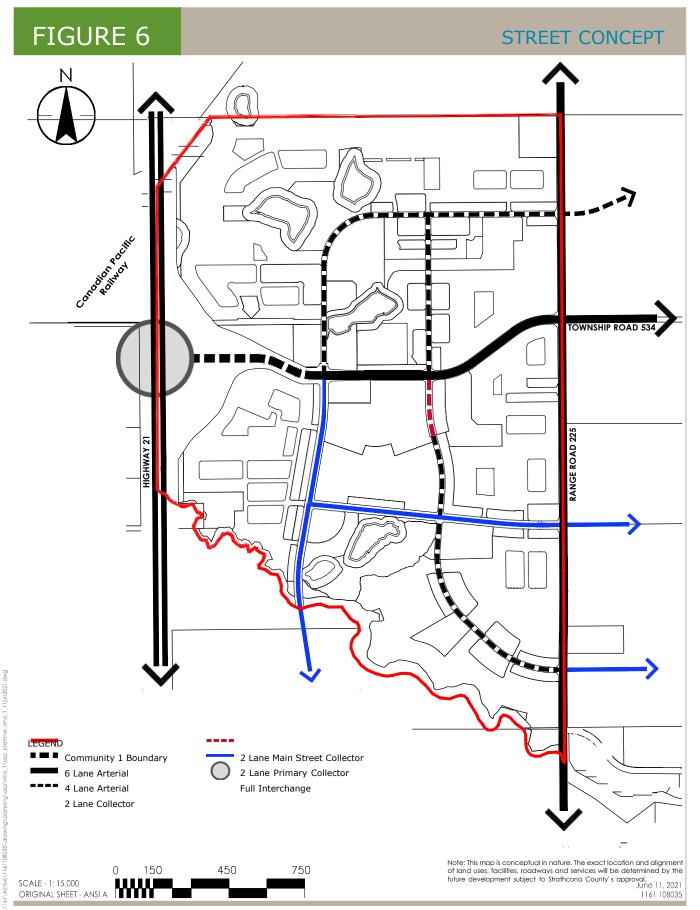




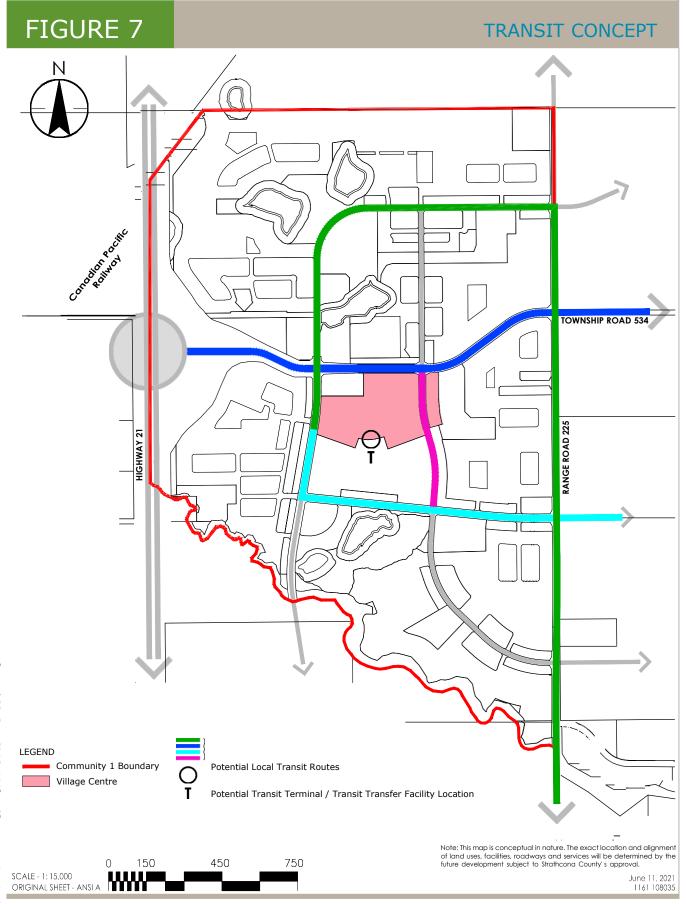




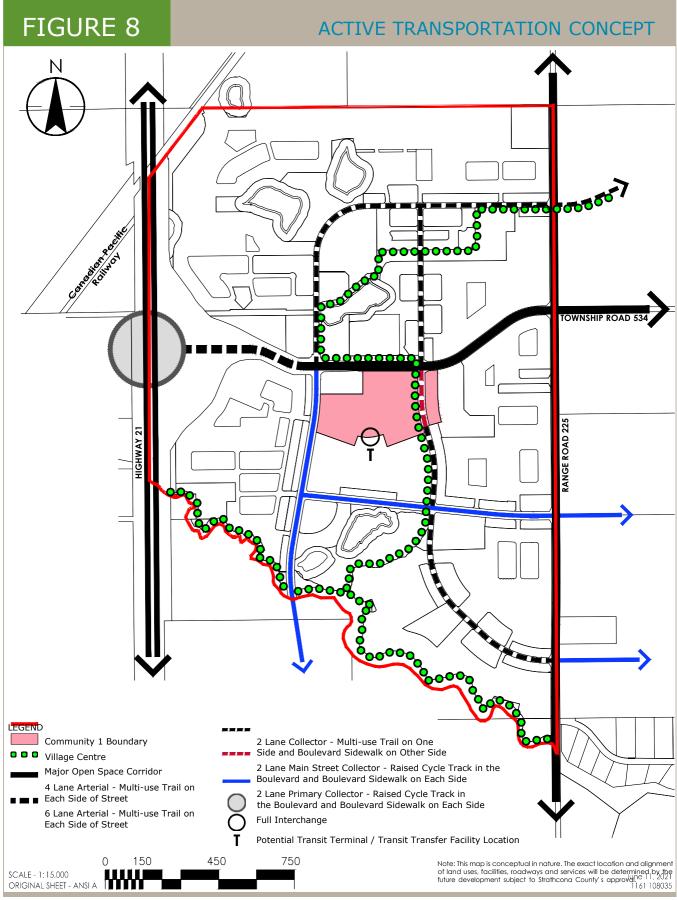














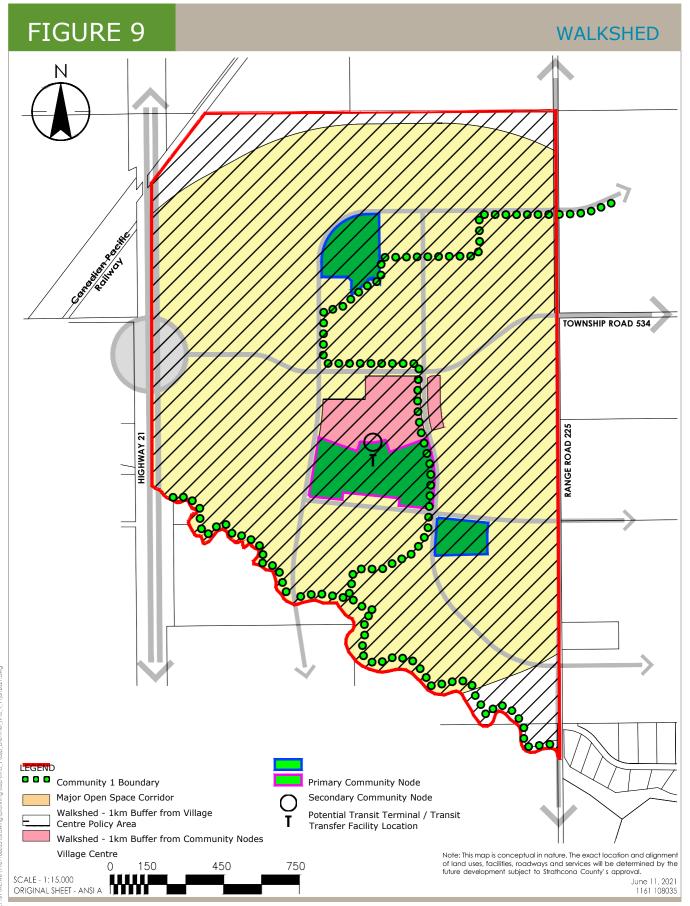




FIGURE 10

STORMWATER SERVICING CONCEPT

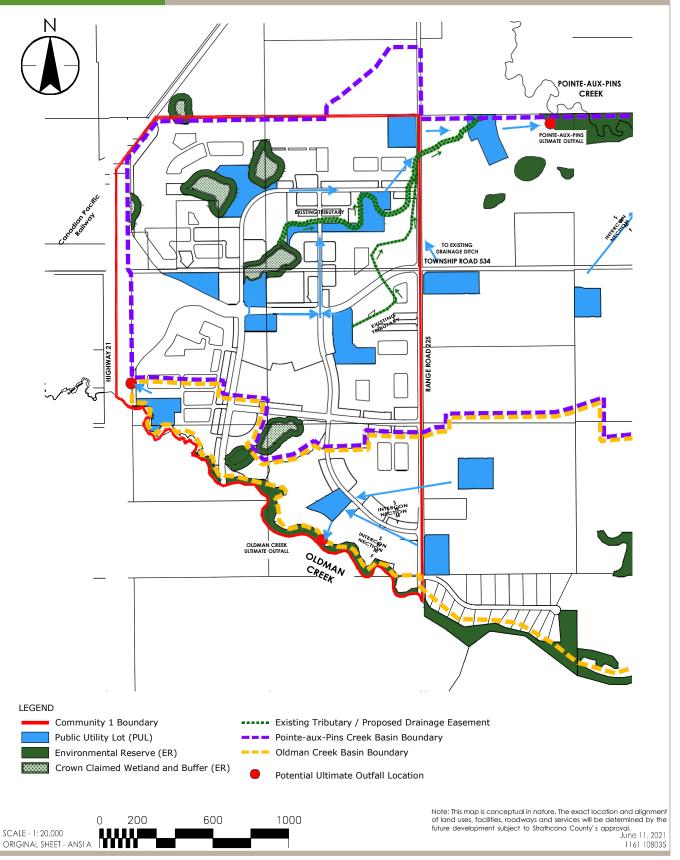
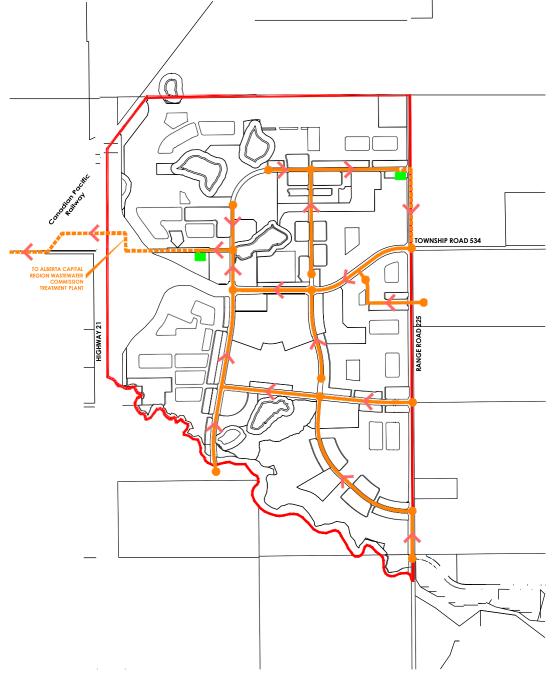




FIGURE 11

WASTEWATER SERVICING CONCEPT





LEGEND

Community 1 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.

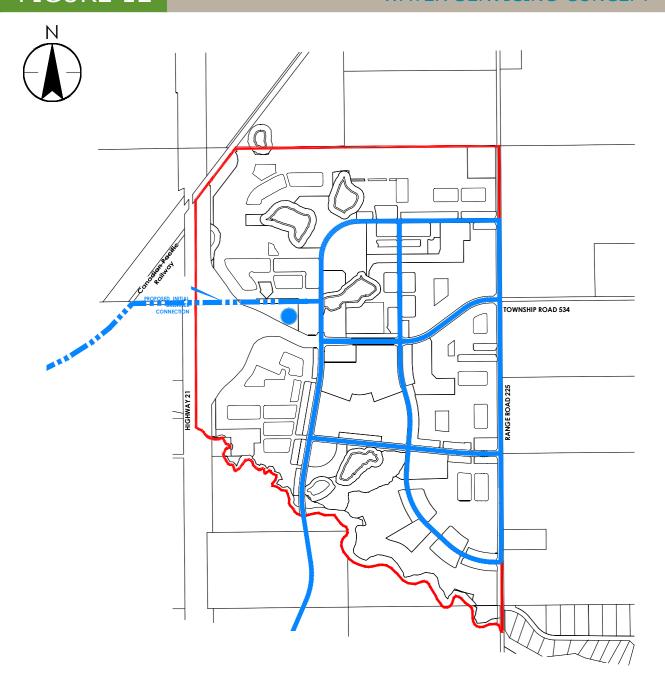
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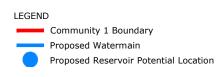
STRATHCONA COUNTY



FIGURE 12

WATER SERVICING CONCEPT







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



SCALE - 1:20,000

APPENDIX A. STATISTICS TABLE

Table 2: Land Use and Population Statistics

ASP Statistics		Area (ha)	
Gross Land Area (GLA)		328.76	
Estimated Environmental Reserve (ER)		23.92	
Estimated Net Developable Area (NDA = GLA - ER)		305	
Estimated Municipal Reserve (MR) Dedication		31	
Estimated Residential Density (du/nrha)		35	
Estimated Population		14,600	
Estimated Jobs			940

APPENDIX B. SITE SPECIFICS

Bremner Community 1 Sub – ASP Context

Community 1 falls within the Urban Service area of Strathcona County. The lands to the south and east of Community 1 are planned under the Bremner and LEA ACP and subordinate Bremner Community 2 Sub - ASP (south) and Bremner Community 4 Sub - ASP (east). The lands to the west are planned under the West of 21 Area Concept Plan and subordinate Horizons North Area Structure Plan as well as the North of Yellowhead Area Concept Plan and subordinate Cambrian Crossing Area Structure Plan. 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, just outside the boundary of Community 1. Within the Community 1 ASP area there are also a handful of existing farmhouses and associated outbuildings.

Transportation Infrastructure

Highway 21 is a major four-lane north-south provincial highway that runs along the west edge of Community 1. This provides a good connection to Alberta's Industrial Heartland to the north as well as ultimately to the Fort McMurray region. Highway 21 is designated as an "Expressway" but is under consideration by Alberta Transportation as a "Freeway".

Currently, access to Community 1 from surrounding roadways is via at-gradeintersections on Highway 16 at Range Road 225 and on Highway 21 at Township Road 534.

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. Upgrades at the intersection of Highway 21 and Township Road 534 are planned to support the initial stages of Bremner. Other intersection upgrades in the area will occur with the development of other communities in Bremner.

A Canadian Pacific Railway line serves as the boundary of the northwest corner of Bremner Community 1 and crosses Highway 21 via an underpass. The orientation of the active railway serves as a significant edge that limits further development to the northwest.

Natural Features

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

Oldman Creek, which runs along the south boundary of the Community 1 ASP area, contains diverse valley vegetation and is an important wildlife corridor and wetland habitat.

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.

The Wetland Mitigation Plan completed for Community 1 and Community 4 found that the Land Use Concepts effectively balanced the loss of wetland function through restoration of wetlands, the creation of naturalized storm water management facilities, green park spaces adjacent to wetlands, and through enhancement to wetland and creek buffers, the ravines, and small park areas adjacent to wetlands and wetland buffers.

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.

Hydrology

Surface water drainage is generally directed towards Pointe-Aux-Pins Creek (northeast of the Community 1 ASP area) 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

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.

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-ongrade 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.



BREMNER COMMUNITY 1

Village Centre Design Guidelines





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1 INTRODUCTION

1.1 Purpose

The Bremner Community 1 Village Centre design guidelines are intended to operationalize the vision for development within the district. The Bremner and LEA Area Concept Plan (ACP) established a framework for future land use planning and development of the area.

The 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, which are intended to operationalize the vision and principles of the ACP, are closely aligned with existing policy direction and the Centres and Nodes Policy Area. They are specific to the Village Centre Policy Area (ACP Section 4.1.2) and are intended to support development of community nodes which will be mixed-use walkable destinations within a community. The Bremner Community 1 Village Centre will provide medium to high density housing, employment, and services to meet the daily needs of community residents.

COMMUNITY CONTEXT

2.1 Bremner Village Centres

Village Centres throughout Bremner are service areas within a community that contain a main street and a mix of complementary land uses and activities in a compact form where the needs of daily life can be met within a convenient walking distance. They are characterized by a mix of uses including medium to high density residential housing, commercial services, major community services, and local community services. Village Centres focus on the provision of public transit opportunities and an active public realm.

2.2 Objectives

Strathcona County's objectives are to ensure that the Village Centre Policy Area in Bremner:

- 1. Provides opportunities for **mixed-use** development;
- 2. Provides commercial opportunities;
- 3. Contains medium and high density residential and housing diversity;
- 4. Provides community services for residents;
- 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** as compact and walkable in all seasons.

2.3 Bremner Community 1 Village Centre

Within the Bremner Community 1 Sub - Area Structure Plan (ASP) development concept, the Village Centre islocated centrally with access from a major arterial road and two collector roadways. A portion of one of these collectors is designated as a main street, which runs through the Village Centre. Adjacent to the Village Centre is a central park space which will serve as the secondary node with a school, recreation centre, 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 Village 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:

Built Form and Public Realm

Goal: Bremner Community 1 Village Centre will be a mixed-use walkable destination within the community. The built form will be high-quality, timeless, and establish a distinct and attractive urban character that supports a compact population, local community services, and commercial uses.

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

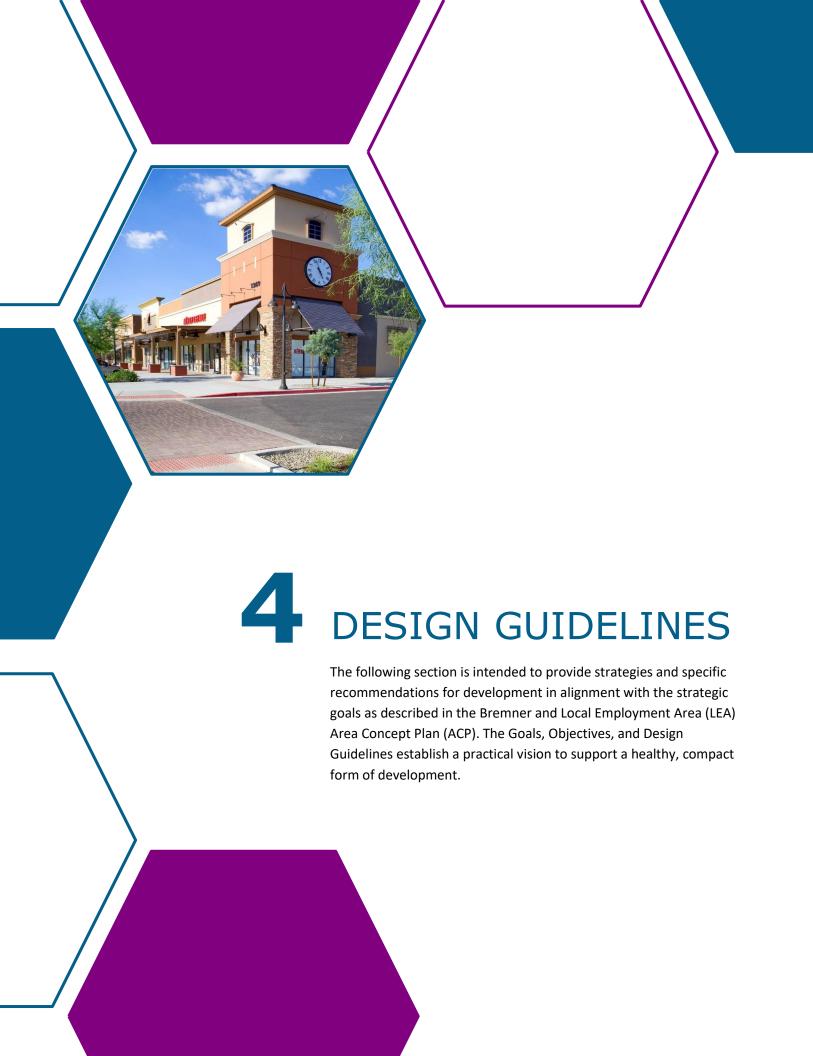
Design Guidelines

Height, Massing and Articulation

A. Design buildings to be compatible with adjacent uses through articulation, step backs, compatible roof forms, and appropriate materials.

These guidelines establish a common language for architects, designers, and builders engaged in or proposing development within the Village Centre. The goals and outcomes in the guidelines are highly important in describing the nuance and character of the Village 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.



4.1 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 Community 1 Village 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 Village Centre reflects a prioritization of public transit opportunities and an active public realm.

Goal

Bremner Community 1 Village Centre will be a mixed-use walkable destination within the community. The built form will be high-quality, timeless, and establish a distinct and attractive urban character that supports a compact population, local 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.



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Design Guidelines

Height, Massing, and Articulation

- **A.** Design buildings to be compatible with adjacent uses through articulation, step backs, compatible roof forms, and appropriate materials.
- **B.** Large scale uses should be designed with a façade articulated in regular intervals.
- C. 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.
- **D.** Consider wind and microclimatic impacts for all structures, particularly those exceeding six storeys in height.
- **E.** Accommodate taller structures on the north side of streets to avoid excess shadow-casting over sidewalks, patios, and outdoor spaces
- F. 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 village 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 Village 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 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.

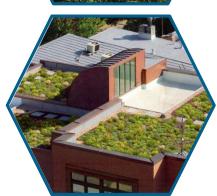




- **F.** Consider integrating electric vehicle charging infrastructure in public spaces and EV-ready parking in buildings to support sustainable transportation options.
- **G.** Incorporate tree planting that supports emissions reductions.

Landscaping and Vegetation

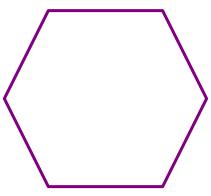
- **A.** Where possible use plants, grasses, shrubs, and trees that are colourful and/or look attractive covered with snow.
- **B.** Where possible incorporate edible landscaping such as fruit trees/bushes into plazas, parks, and along trails, to increase accessibility to food while contributing to attractive landscape design.
- **C.** Locate mid-block plazas at sunny locations along the north sides of eastwest 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 Community 1 Village 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 Community 1 Village 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 Village 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. Material improvements such as stone and brick should be considered for areas such as sidewalks and crosswalks to enhance visibility for pedestrian crossings.
- **B.** Select paving materials that are durable enough to withstand the harsh impacts of winter snow.
- **C.** Design sidewalks to provide a clear, barrier-free pedestrian through zone.
- **D.** 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.
- **E.** Furniture in the furnishing zone should accommodate all users and be designed with snow storage and removal in mind.
- **F.** 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.
- **G.** 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 be 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 Village Centre require a reduction to traffic speeds to between 30-50 km/h to ensure improved safety outcomes.









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- 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 Village 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.

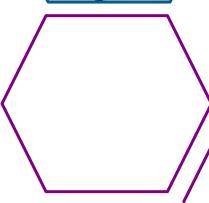
Bicycle Routes and Storage

- **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 Village 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 Village 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 Village 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, pedestrians have priority over cars. The street is designed without a clear division between pedestrians and auto space (i.e., no continuous curb), so motorists are forced to slow down and travel with caution.

APPENDIX D. 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:

- 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.



