

Cambrian Crossing Area Structure Plan Bylaw 47-2013 Date of Adoption 2 April 2014

STRATHCONA COUNTY - Planning and Development Services



DRAWN: M.Fraser | DATE: 09/04/14 | SCALE: NTS

DWG NAME: DUAH0029

BYLAW 47-2013

A BYLAW OF STRATHCONA COUNTY IN THE PROVINCE OF ALBERTA, FOR THE PURPOSE OF ADOPTING THE CAMBRIAN CROSSING AREA STRUCTURE PLAN.

WHEREAS Council previously adopted the Cambrian Crossing Area Structure Plan, Bylaw 37-2010; and

WHEREAS it is deemed advisable to replace the Cambrian Crossing Area Structure Plan;

NOW THEREFORE, the Council of Strathcona County, duly assembled, pursuant to the authority conferred upon it by the *Municipal Government Act*, *R.S.A. 2000* c.*M-26* and amendments thereto, enacts as follows:

- 1. That Bylaw 47-2013 is to be cited as the "The Cambrian Crossing Area Structure Plan".
- 2. That Schedule "A" attached hereto is hereby adopted as part of this Bylaw.
- 3. That Bylaw 37-2010 is hearby repealed
- 4. This Bylaw comes into effect after third reading and upon being signed.

Read a first time this	26 day	of Nove	mles	_, 2013.
CAPITAL REGION BOARD A	APPROVAL this _	22 day o	January	_, 2014.
Read a second time this	<u>25</u> day	of Mari	ek	_, 2014.
Read a third time and finally p	passed this	Mayor Pauline A Director,	March Degenter d Legal Services	_, 2014.

Date Signed: April 2, 2014

Document: 5721615

Cambrian Crossing Area Structure Plan



August 2013





Document: 5721615

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1.0 INTRODUCTION

1.1 Overview

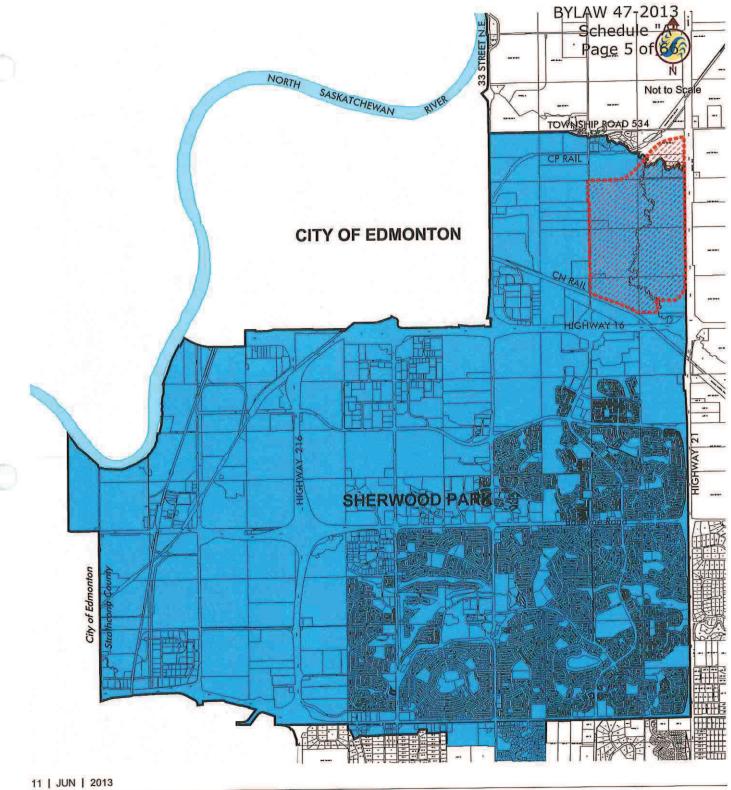
Strathcona County is part of Alberta's Capital Region. Growth in the Capital Region has steadily increased during the last decade, driven primarily by the oil and gas industry. However, the impending build out of Sherwood Park has placed additional pressures on the available land supply within the Urban Service Area. Located within the Urban Service Area, but also on the door step of Alberta's Industrial Heartland, Cambrian Crossing provides a logical choice for development to respond to these growth pressures. With the formation of the Capital Region Board in 2008, regional cooperation has influenced the type and direction of growth within the region. Cambrian Crossing is well suited to respond to these immediate pressures for business, industrial, commercial and residential development and provides a much needed transition to future development nodes beyond the current Urban Service Area boundaries. A unique opportunity also presents itself for the creation of a community developed around the principle of living, working, playing and learning all within a stone's throw of each other. Cambrian Crossing encompasses these attributes and will serve to foster a new sustainable way of living and valued sense of place for the coming generations.

1.2 Background

Cambrian Crossing is a planning initiative that aims to build on the concepts outlined in the North of Yellowhead Area Concept Plan (ACP) document and develop them in a more specific manner. The need for comprehensive planning to accommodate logical development is the basis for the preparation of this document. Currently, Strathcona County is preparing a Growth Management Strategy to guide the future development of the Urban Reserve which is proposed directly to the east of the plan area. Strathcona County began public consultation in April 2013 and is expected to complete the strategy by June 2014. The Cambrian Crossing ASP will provide a planning framework to transition to development of the Urban Reserve.

1.2.1 Location

Cambrian Crossing is located in a unique setting where major transportation routes intersect, providing an accessible site for future businesses and residents. In addition, the significant natural features of the site make it a visually attractive location. This Area Structure Plan encompasses approximately 365 hectares of land, located at the north-western corner of Highway 16 and Highway 21. The plan area abuts the C.N.R. railway line to the south. The Realigned Township Road 534forms the northern boundary. Range Road 231/Clover Bar Road forms the western boundary. The lands in question will be named Cambrian Crossing henceforth, and will be referred to as such in the text of this document (Figure 1).



Legend



Area Structure Plan Location



Urban Service Area Bounday



ROHIT GROUP CAMBRIAN CROSSING STRATHCONA COUNTY

Figure No. 1.0

Location Plan

1161101375

1.3 SuN LIVING Process

SuN LIVING is an approach, framework and work plan for planning, designing, and implementing the development of sustainable neighbourhoods (SuN) with a one planet footprint. Cambrian Group of Companies and Strathcona County have embraced the SuN LIVING process and are working in partnership to apply it to the Cambrian Strathcona Joint Planning Initiative as outlined in the Memorandum of Understanding between Cambrian Group of Companies and Strathcona County dated December 17, 2009.

Application of the SuN LIVING process results in sustainable neighbourhood development that:

 Systematically applies both sustainable neighbourhood principles and a sustainable living lens to all decision-making throughout planning, design and implementation;

 Provides planning and design decisions that balance local impacts on economic prosperity, social responsibility, environmental stewardship and cultural vitality with a global context;

 Creates opportunities that enable residents to live within the Earth's capacity while making sustainable living easy, attractive and affordable;

 Fosters sustainable living so all residents achieve a high quality of life without sacrificing a modern, urban and mobile lifestyle; and

 Gets all participants on the common path toward achieving a neighbourhood with a one planet footprint (Mayhew & Campbell, 2008).

The SuN LIVING process adheres to a framework that includes 5 distinct steps. Step 1 is to "Commit" to the process for the plan area. Step 2 is to "Initiate" the process by identifying stakeholders and including them in workshops. Step 3 is to "Explore" the plan area and the possible design implications associated with it. Step 4 is to "Synthesize" targets, goals and the design for the plan area. Finally, step 5 is to "Implement" the plan through the necessary planning processes and by producing the SuN Guidelines for the development area.

Following the commitment of both the Cambrian Group of Companies and Strathcona County to develop this site using the SuN LIVING model (Step 1), a series of next steps were taken to develop the plan. The following section highlights the important aspects of the next steps of the process.

1.3.1 Vision Statement

One of the key elements of step 2 "Initiate" of the SuN LIVING process is the development of a vision statement for the project. A vision statement outlines what the long-term outcome of the project should be. It is meant to be a source of inspiration for the project and focus the decisions made throughout the process on specific achievements. The following vision statement was developed for Cambrian Crossing:

This leading edge, sustainable community will be uniquely integrated for living, working, learning, playing and relaxing. Inspired by its rural roots, recognizable location and natural landscape features such as Oldman Creek, it will become a series of mixed uses that embrace sustainable development and sustainable living practices in an inclusive community where:

Diversity and choice of industry, business and housing are available;

 Residents, business owners, workers and visitors choose walking, biking, and transit as preferred means of mobility in the community;

3. A variety of employment options are integrated throughout the community; and

4. The health, well-being and culture of the community and the environment are respected and realized.

1.3.2 Workshop

Step 3 "Explore" of the SuN LIVING process includes a number of workshop activities that are meant to generate potential strategies and actions for the project. From November 2 to 5, 2009, a workshop was held in Strathcona County. Members of the team working on this plan assembled for a series of lectures and working group meetings about the principles of the SuN LIVING process, the particular details of the site, the principles of sustainability in general, and to develop a stakeholder engagement strategy. At the conclusion of the four day workshop a presentation was made to Strathcona County staff and landowners on the Cambrian Crossing plan area. As a result of this workshop, a charrette was determined as an appropriate course of action as part of the design process for the development. Additionally, next steps in the process were confirmed and tasks assigned to the design team and external players involved in the design of Cambrian Crossing.

1.3.3 Design Charrette

Strathcona County has incorporated a section on Sustainability and Growth Management in their Municipal Development Plan (1-2007). This section focuses on developing in a sustainable manner based on four principles which will be addressed in Section 3. In application of these four principles, the County has established twelve themes that need to be incorporated into all development to ensure its sustainability. These themes include: Land, Natural Habitat, Water, Carbon, Transport, Food, Materials, Economy, Waste, Well-Being, Culture and Equity. Each of these themes was examined during the design charrette to ensure that they were adequately incorporated into the development.

In Step 4 "Synthesize" of the SuN LIVING process, a design charrette is to be conducted, which is meant to result in a Master Concept and a Course of Action for the project. From January 24-28, 2010 a design charrette was held for Cambrian Crossing. At the charrette, members of the team worked on incorporating the twelve themes of sustainability into the design of the Cambrian Crossing site. A public workshop held during the charrette allowed stakeholders to be involved in the design process and to contribute their feedback as the design progressed in its early stages. Following the workshop, the team members discussed the public feedback that they had received. These comments were considered in the next stages of the design.

On the last night of the charrette a public presentation was made including an opportunity for those in attendance to ask questions and fill out a questionnaire. Fifteen questionnaires were received with results noted as follows:

Table 1.1 Statistical Summary of the Results of Public Consultation done at the Design Charette for Cambrian Crossing

Question	Strongly Support	Somewhat Support %	Total Strong Support & Somewhat Support %	Non Support %
1. Project Principles	64%	29%	93%	7%
2. Parks, Open Space & Wetland Amenities	64%	29%	93%	7%
	29%	57%	86%	14%
3. Land Use 4. Road Layout & Transportation Concept	14%	64%	78%	22%
5. Overall Development Concept Plan	29%	57%	86%	14%

A summary of the comments from the public consultation at the Design Charette has been compiled. The following chart outlines these comments in three general categories. It can be said that those that contributed their comments were generally supportive of the development.

Table 1.2 Summary of the Results of the Public Consultation at the Design Charette

Category	Key Issue	Have the comments been addressed by this plan (Y or N)
Environment and Surroundings	Minimize noise impacts	Y
Environment and carroundings	Preserve Oldman Creek	Υ
	Consider green or district energy	Y
	Maintain pre-development stormwater run-off volumes	Y
Design	Provide trail access	Υ
Design	Provide transitions and buffers	Y
	Provide appropriate traffic management	Y
	Ensure economic sustainability	Y
	Be innovative	Υ
	Provide access by rail	N
	Provide commercial amenities	Y
Implementation	Ensure servicing is progressive and accommodates future development	Y
	Utilize architectural controls	Υ

1.4 Public Open House

In addition to the charrette process, a public Open House was held for this development on May 5, 2010. At this meeting, information about the current design for the plan area was featured. Members of the public were invited to attend and provide comments and feedback on the design at that time. Stakeholders and landowners surrounding the plan area were contacted prior to the Open House to invite them to attend and provide their insight on the design.

A total of 40 landowners were in attendance at the public Open House. Out of those 40, a total of 14 people filled out a questionnaire regarding the development. Generally, disapproval with the proposed plan came from individuals who do not reside within the subject lands. A total of 9 individuals out of the 40 that attended the public consultation reported being unsupportive of the proposed development of Cambrian Crossing. Overall, there were three major themes that came out of the questionnaires that were returned: no additional written comments were made about the sustainability features of the proposed development, negative respondents would prefer industrial to residential development, and the proposed transportation plan caused some concerns. The following chart provides a statistical summary of the respondent's support of the project.

Table 1.3 Statistical Summary of the Results of Public Consultation from the Public Open House for Cambrian Crossing

Question	Yes	Somewhat	No	N/A
Do you feel the sustainable planning and design principles of the project are appropriate?	2	2	8	2
Do you feel the proposed land uses are appropriate?	3	1	9	1
Do you feel the proposed parks, open space and wetland amenities are sufficient?	4	3	3	4
Do you feel the transportation network, including roads and trails is adequate?	1	2	7	4
Overall, are you supportive of the proposed concept plan for Cambrian Crossing?	4	1	9	0

1.5 Amendment Consultation Process (2012 – 2013)

A third consultation process has been undertaken as part of the amendment to the Cambrian Crossing ASP for lands located between Range Road 231 and the Oldman Creek.

1.5.1 Workshop – December 11-12, 2012

A workshop was held to bring together stakeholders to review the existing Cambrian Crossing ASP and the proposed changes to the plan. A brief presentation was given, providing background information and the intent of the amendment. Stakeholders were then split into three groups where additional discussions and design work were completed. The workshop ended with a presentation on the conceptual design for submission to the County.

1.5.2 Public Meeting - April 18, 2013

A public meeting was held to present the amendment to the Cambrian Crossing ASP to the public. The open house was held concurrently with the proposed Municipal Development Plan and North of Yellowhead ACP amendments.

Approximately 40 landowners attended the open house along with representatives from Strathcona County, the developer, and consultants. A presentation was provided by the consultant and developer which was followed by a question and answer period. Display boards with the proposed concept were also provided to those who attended.

As the public meeting was held in conjunction with the amendment to the Cambrian Crossing ASP, comments received were in specific relation to that proposal. The majority of comments received were positive and in favour of the proposed changes.

2.0 DEVELOPMENT AREA

2.1 Location and Context

The subject site is located in the northeast corner of the urban services area of Sherwood Park (Figure 1). The site contains approximately 365 hectares of land. It is immediately north of Highway 16 (Yellowhead Trail); Highway 21 forms the eastern boundary and Range Road 231runs along the western boundary. The plan area abuts the C.N.R. railway line to the south and the realigned Township Road 534 will form the northern boundary. The land to the east of the site is proposed for future. Urban Growth for Strathcona County.

2.2 Topography and Vegetation

Oldman Creek bisects the plan area from north to south creating a significant riparian corridor through the middle of the site. The topography therefore drops significantly at the centre of the plan area as the stream cuts through the property. The remainder of the plan area consists of gently rolling terrain generally sloping down from the highest point at the northwest of the site.



Image 2.1 Existing Topography

Although much of the plan area has been cleared for agricultural uses, some of the natural features of the site have been retained, including a large poplar stand on the east side of the Creek and three significant wetland areas also east of the Creek. (Figure 2)



Image 2.2 Existing Vegetation

A biophysical assessment of the site was performed by Spencer Environmental Management Services Ltd. (December 2008) and updated by Stantec Consulting (December 2012). The biophysical assessment and

updated study identified a number of natural features of the site that have been recommended for preservation. These features include the Oldman Creek riparian corridor, the aspen/balsam poplar stand adjacent to the Top-of-Bank of the creek, and the three large deep marshes, one of which connects to Oldman Creek through trenches, as being the key features of the site.

The report provides recommendations for the conservation of Oldman Creek riparian corridor, along with some restoration and management strategies. The report describes a total of 49 wetlands within the subject site, of varying sizes and states of functionality, which total 8.42 ha of land. Spencer Environmental recommended that the wetlands at three sites noted on Figure 2 be protected. It was suggested by Spencer Environmental that the wetlands and the Oldman Creek riparian corridor should be provided with a protective buffer to maintain their integrity. A review by the Province pursuant to the Public Lands Act has determined that Oldman Creek and a wetland near Highway 21 are to be claimed by the province. The poplar stand adjacent to Oldman Creek has been recommended for conservation based on the size of the stand and its location adjacent to the riparian corridor.

The Biophysical Assessment in Support of North Yellowhead ASP in S ½ 24-53-23-W4M and N ½ 13-53-23-W4M conducted by Spencer Environmental (December 2008) has been submitted to Strathcona County with this ASP.

Hoggan Engineering and Testing Ltd. was retained in 2012 to complete additional geotechnical analysis in support of the amendment to Cambrian Crossing ASP. The study focused on the west side of the Cambrian Crossing plan area, specifically S.W. ¼ 24-53-23-W4M and N.W. ¼ 13-53-23-W4M.

2.3 Historical Resources Overview

A Historical Resources Overview was completed by Bison Historical Services in 2009. This report states that the Cambrian Crossing development occurs on cultivated lands and native vegetation in the Aspen Parkland ecoregion. A Historical Impact Assessment is not required for this site according to Alberta Culture and Community Spirit.

The Historical Resources Overview conducted by Bison Historical Services (January 2009) has been submitted to Strathcona County with this ASP.

2.4 Environmental Site Assessment

A Phase 1 Environmental Site Assessment completed by Focus Corporation in February, 2009 revealed no areas of potential environmental concern on the subject property based on historic documentation, employee interviews, and a site inspection. There is no recommendation for further inspection.

The Phase 1 Environmental Site Assessment for Cambrian Projects Corporation on Section: 13-053-23W4M NE & S1/2 24-053-23W4M conducted by Focus Corporation (February 2009) has been submitted to Strathcona County with this ASP.

2.5 Geotechnical Evaluation

A Geotechnical Evaluation from J.R. Paine & Associates Ltd. (October 2007) outlined the subsurface conditions found in the plan area. Field investigations found that topsoil was present at the surface of all 29 testhole locations. In addition to the presence of topsoil, clay soil with considerable organics was encountered below the topsoil of 5 of the 29 testholes. The locations of these testholes were adjacent to localized low lying areas of the development. Lacustrine deposits were encountered in most of the testholes and were typically silty with a clay silt seam. Out of the 29 testholes, 10 contained traces of coal and pebbles. Claytill and

Bedrock was also encountered within the site. The geotechnical evaluation should be consulted for details of construction practices and recommendations. However, the report has also recommended that a more detailed, separate geotechnical investigation should be performed prior to subdivision of the development.

There is land within the plan area that was not included in the October, 2007 Geotechnical Evaluation. A completed detailed Geotechnical Evaluation will be required for all land within the subject area prior to subdivision.

The Geotechnical Evaluation. Proposed Industrial Subdivision SE and SW 24-53-23 W4M <u>Strathcona County</u>, <u>Alberta</u> conducted by J.R. Paine & Associates (October 2007) has been submitted to Strathcona County with this ASP.

2.6 Ownership

The subject site is predominantly owned by Cambrian Group of Companies. These are identified on the Land Ownership Plan (Figure 2). The corresponding Ownership Table is located below.

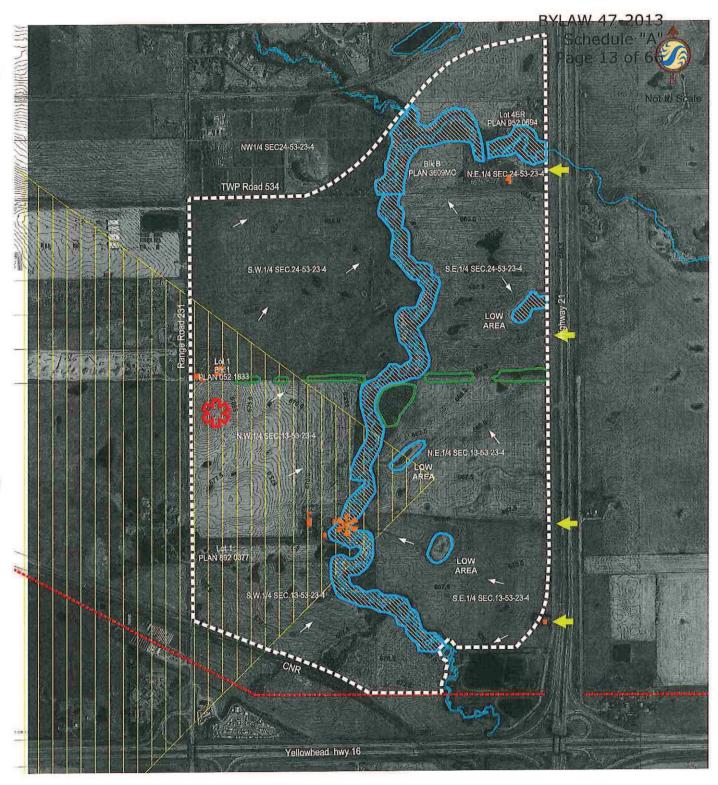
Area (ha) **Title Number** Owner **Legal Description** 072 213 865 58.4 Cambrian Strathcona Properties Corp. SW1/4 24-53-23-W4 1 4.1 052 138 406 Private Ownership Lot 1,Blk. 1,Plan 052 1833 2 61.85 062 565 182 Cambrian Strathcona Properties Corp. SE1/4 24-53-23-W4 3 62.85 072 213 865 Cambrian Strathcona Properties Corp. NW1/4 13-53-23-W4 4 61.96 082 261 782 Cambrian Strathcona Properties Corp. 5 NE1/4 13-53-23-W4 1.34 082 238 975 Cambrian Strathcona Properties Corp. Lot 1, Plan 892 0377 6 33.1 872 007 178 Private Ownership SW1/4 13-53-23-W4 7 34.5 082 240 372 Cambrian Strathcona Properties Corp. SE1/4 13-53-23-W4 8 318.1 Total

Table 2.1 Ownership Table

Note: Areas may differ from title and will be confirmed through legal survey as development proceeds

2.7 Existing Development

Currently there are some existing buildings on the ASP subject lands. These buildings consist of farmhouses and their associated outbuildings. These buildings will need to be removed from the plan area in order to develop Cambrian Crossing in general accordance with the development concept in this ASP.



25 | JUL | 2013

Legend



Surface Drainage





High Point (687.2m) **Existing Buildings**

Low Area



Existing Shelterbelt



Existing Tree Stand To Be Retained



Existing Gas Line



ASP Boundary

Client/Project

ROHIT GROUP CAMBRIAN CROSSING ASP STRATHCONA COUNTY

Figure No. 2.0

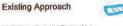
Title

Existing Conditions

1161101375



Existing Creek Crossing





Crown-Owned Lands/ Low Area

3.0 POLICY CONTEXT

3.1 Overview

The Cambrian Crossing ASP will direct the type of land use within the development area. It is essential that this development complies with the current policies that are in place within the Province of Alberta and Strathcona County. The following section outlines how the Cambrian Crossing ASP conforms to these policies as they apply.

Objective: to ensure Cambrian Crossing aligns with existing policy

Policy 3.1.1: All developments within Cambrian Crossing shall comply with Strathcona County policies current at the time of development.

3.2 Capital Region Board

The Capital Region Board (CRB) was formed in April, 2008. The CRB was mandated to prepare a Capital Region Growth Plan, among other tasks. This Growth Plan required specific components and needed to be a "comprehensive, integrated regional land use plan for the Capital Region," including:

- (i) Population and employment projections.
- (ii) The identification of:
 - (a) Priority growth areas;
 - (b) Land supply for residential, commercial and industrial purposes;
 - (c) Agricultural lands;
 - (d) Buffer areas;
 - (e) Density and development; and
 - (f) The development and location of infrastructure;
- (iii) The identification of corridors for recreation, transportation, utilities, and intermunicipal transit.
- (iv) Policies regarding environmentally sensitive areas.
- (v) Policies for the co-ordination of planning and development among participating municipalities.
- (vi) Specific actions to be taken by the participating municipalities to implement the land use plan.

Policies to concentrate new growth in the priority growth areas in the Capital Region have been written into the Land Use Plan:

- Most new growth shall occur within priority growth areas.
- (ii) Priority shall be given to accommodating growth in major employment areas and in locations that meet at least three of the following four criteria:
 - (a) Existing and proposed multi-mode movement corridors, including transit nodes;
 - (b) Adjacent to existing and proposed major employment areas;
 - (c) Redevelopment and intensification opportunities within existing urban areas; and
 - (d) Locations that utilize existing infrastructure and servicing capacity or logically and efficiently extend that infrastructure.

The land where Cambrian Crossing is located has been identified within Priority Growth Area B which has a residential density target of 30-45+ dwelling units per net residential hectare (nrha). The density targets in this area have a hierarchy, with the highest residential densities expected at the core of the region; moving outward from the core, the expectation for density decreases. These targets place an emphasis on vertical

growth rather than horizontal growth and efficiency-oriented approaches to land use and transportation planning. Cambrian Crossing complies with the requirements and intent of the CRB's Growth Plan.

3.2.1 Land Use Principles

The CRB defines land use principles and policies that apply to the Cambrian Crossing development in the Regional Growth Strategy. The following chart outlines how the Cambrian Crossing development complies with these principles and policies:

Capital Region Board Principles and Policies	Cambrian Crossing Development Concept
I: Protect the Environment and Resources Principles a. Preserve and Protect the Environment b. Minimize the Impact of Development on Regional Watersheds and Airsheds	 Cambrian Crossing will preserve Oldman Creek, existing wetlands, a tree stand and topographical features on the site. A development setback from the Oldman Creek will be maintained. The setback distance varies from between 10 m and 36 m and is based on recommendations from the geotechnical and biophysical studies.
II: Minimize the Regional Footprint Principles a. Identify, Protect, and Prioritize Lands for Regional Infrastructure b. Concentrate New Growth Within Priority Growth Areas c. Support Expansion of Medium and Higher Density Residential Housing Forms	 Cambrian Crossing has been defined within Priority Growth Area B by the Capital Region Board. The Cambrian Crossing development supports a variety of residential densities up to apartments which provide 90 units/nrha.
III: Strengthen Communities Principles a. Create Inclusive Communities b. Support Healthy Communities c. Support Public Transit d. Support Innovative and Affordable Housing Options	 Cambrian Crossing will provide opportunities for alternative transportation, social interaction, public transit, and a variety of housing types. Cambrian Crossing will be a walkable community with public transit options, multiple housing types and secondary suite possibilities which contribute to the affordability of living in this community.
IV: Increase Transportation Choice Principles a. Integrate Transportation Systems with Land Use b. Support the Expansion of Transit Service in Various Forms	 The Cambrian Crossing ASP has incorporated pedestrian, cyclist and automobile transportation systems and considered all necessary elements for local and regional transportation needs. The transportation system has been designed to accommodate public transit routes.
V: Ensure Efficient Provision of Services Principles a. Design Integrated Physical Infrastructure within the Region	 Water and sanitary servicing within Cambrian Crossing has been designed to tie into existing and future planned regional infrastructure taking into consideration the needs of future development possibilities in the area.
VI: Support Regional Economic Development Principles a. Ensure a Supply of Land to Sustain a Variety of Economic Development Activities b. Attract and Retain Individuals and Families with a Diverse Range of Skills to	Cambrian Crossing provides approximately 9 ha of industrial land and approximately 23 ha of business employment land within the plan area. It is anticipated that these land uses will attract highly skilled workers, and the additional businesses will provide for a variety of job opportunities.

the Ca	apital Region to Satisfy the Region's	THE RESERVE OF LAND	
Farms	mia Davidonment Coole		
ECONO	mic Development Goals		
0	of Danisard Decemberry		
c. Suppo	ort Regional Prosperity	here were the same of the same	
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3.3 Strathcona County Strategic Plan

The Strathcona County Strategic Plan is the County's principal guiding document for governance, community development and service delivery. The plan provides a "community development" perspective that is essential to understanding the direction that the Cambrian Crossing development is heading. The following chart outlines how the goals and strategies in Strathcona County's Strategic Plan are supported by the Cambrian Crossing development.

Strathcona County Strategic Plan Goals and Strategies	Cambrian Crossing Development Concept
Goal: Strathcona County is a safe community for residents and visitors. Strategies: • Maintain high quality, integrated police, fire and emergency medical services • Incorporate safety as a component of planning	 A location for an Emergency Services facility has been proposed within the development. CPTED Principles will be a requirement within the plan area as defined by the SuN Guidelines.
Goal: Strathcona County is a caring community. Strategies: Celebrate individual and community diversity Identify and address the needs and wants of the County's diverse population Engage the community by seeking advice in planning and decision-making	 Diversity and the needs of the community are being addressed through the design of a complete community with multiple housing types and tenure, transportation options, and various employment opportunities. Throughout the design process, many opportunities for public input and involvement were presented. The feedback that was provided by the community was considered in the design concept.
Goal: Strathcona County offers a broad range of opportunities for healthy lifestyles. Strategies: Invest in both indoor and outdoor facilities, in accordance with the Open Space and Recreational Facility Strategy Increase trail linkages throughout the County	The Cambrian Crossing development incorporates community recreation, an extensive open space network, trail linkages throughout the plan area and opportunities for multiple forms of transportation to be used.
Goal: Strathcona County reflects a natural environment balanced by healthy urban, suburban and rural communities. Strategies: Identify, preserve and protect natural features Encourage development initiatives that demonstrate the wise and best use of land Develop creative options to meet the changing environmental needs of the community Build a proactive planning process based on sustainable development policies and	 Natural features such as the hill, Oldman Creek, existing wetlands and a treestand are being retained within the plan area. Compact, small lots, townhouse and apartment options and mixed-use developments at neighbourhood nodes ensure efficient use of residential lands. The ASP document allows for flexibility in its implementation due to the possibility of a changing understanding of sustainability and the environmental needs that may arise. The development of this site included an extensive design charrette which incorporated

characterized by a strong sense of stewardship Increase community awareness about the impact of activity on the natural environment	the 4 principles and twelve themes of sustainability outlined in Strathcona County's MDP. The development proposes a site for a sustainability centre which could include an educational component.
Goal: Strathcona County supports a healthy economy. Strategies: Incorporate the principles of the economic sustainability framework into County decision-making processes Provide municipal services that support business Continue to invest in community infrastructure	 The development of industrial parks, a transitional industrial/business area and various types of commercial options within Cambrian Crossing provide for a more diversified economic base. The Cambrian Crossing development supports the development of municipal services and community infrastructure to support business and industry including community energy and eco-industrial infrastructure.

3.4 Municipal Development Plan, Bylaw 1-2007

The development concept in this ASP is in line with the MDP policy areas within the Cambrian Crossing plan area. Figure 3 outlines the MDP policy areas that affect the subject lands.

The area design and supportive policies for Cambrian Crossing acknowledge the following areas of MDP policy more specifically.

3.4.1 Sustainability & Growth Management

Cambrian Crossing aims to provide economic activity while respecting and enhancing its ecological value. This is in accordance with Strathcona County's use of the term sustainability, which is defined as:

"developing in a manner that meets the needs of the present without compromising the ability of future generations to meet their own needs, while striking a balance between economic prosperity, social responsibility and environmental stewardship"

The MDP identifies four broad principles to guide sustainable development in Strathcona County. Each will be discussed below identifying how Cambrian Crossing addresses their aims.

Principle 1 - Preserve, enhance, and regenerate nature and life-sustaining ecosystems

Cambrian Crossing will integrate much of the existing and vegetated and wetland areas into the design of the project. The entire Oldman Creek riparian corridor will be preserved and buffered from development. Further, this project will continue to provide wildlife connectivity through the protection of wildlife corridors. These corridors will connect the natural areas in the plan area to habitat in the surrounding area. Area developers will also be encouraged to use native species for landscaping where possible to provide additional habitat. Naturalized stormwater filtration systems and bio-swales will increase natural water filtration and reduce runoff.

Principle 2 - Reduce dependence on substances extracted from the earth's crust that accumulate in nature

Cambrian Crossing will promote conservation and reduction of resource demand throughout the design of the plan area. Sharing of amenities between businesses and industry will be encouraged as a method of

conservation. An emphasis will be placed on sustainable building material choices and an extended building material lifecycle, explored through the SuN Guidelines and associated guiding documents. Consideration for non-motorized forms of transportation will be provided for throughout the site and for trips to and from the site. Other methods of conservation and reduction of resource demand will also be explored within the plan area in support of this principle throughout the development stages.

Principle 3 – <u>Increase cradle-to-cradle solutions and activities in design, manufacturing and consumption such</u> that substances produced by society do not accumulate in nature

Cambrian Crossing encourages eco-industrial principles including by-product exchanges and combined resource uses. Recycling initiatives will also be encouraged at the development and building permit stages. The use of local, recyclable and renewable materials for use in all aspects of the plan area will be supported to the fullest extent possible.

Principle 4 – <u>Solutions that allow every person to meet basic human needs and achieve their potential in life, now and in the future</u>

Development in Cambrian Crossing will provide opportunities for affordable housing, access to public spaces, walkable design and long term employment within an easily accessible distance for local residents. This locational advantage will result in a sustained employee base into the future and a population base that will support viable public transit options. It will also provide the opportunity for future eco-industrial networking opportunities and maintain the site's ecological functions. The proper orientation of buildings and amenities will increase overall quality of life for employees at this site.

From these four broad principles a series of 12 sustainability themes are outlined in the MDP. One of the policies in Section 4.0 – Sustainability and Growth Management of the MDP calls for the consideration of each of these themes in all development within Strathcona County. This is supported by the following excerpt from the MDP:

Policies

Ensure the following theme topics are considered when evaluating sustainable development:

- a) Carbon reduce dependence upon fossil fuels;
- b) Transport use of alternative forms of transportation and a reduction in single car usage;
- c) Land use introduction of mixed use, higher density developments;
- d) Materials use of healthy building design and construction materials;
- e) Waste utilizing waste as a resource;
- f) Economy supporting locally based and eco-industrial businesses;
- Water conservation of water through reduced water consumption and retention of natural infrastructure;
- Food local food production and value added opportunities;
- i) Natural Habitat conservation of natural habitat;
- Well-Being design buildings and amenities to promote inter-generational interaction and cohesion;
- k) Equity access to affordable housing, amenities and every day needs for all residents; and
- Culture celebrate cultural heritage.

The detailed goals, indicators and targets for the 12 themes in Cambrian Crossing can be found in the SuN Guidelines associated with this development.

3.4.2 Industry and Energy

Under the Industry and Energy policy section, these excerpts from the MDP are supported by the development proposed in Cambrian Crossing:

Stra	thcona County MDP	Cambrian Crossing Development Concept (Figures 4 & 5)		
7.4	Promote synergistic relations between industries, such as those that make use of the waste products from neighbouring facilities	 Eco-industrial infrastructure Rights-of-Way will be provided in industrial parks throughout the development to provide for this opportunity. 		
7.6	Require industrial uses to have an adequate setback distance from lakes, drainage courses, environmentally significant and sensitive areas	 Industrial neighbourhoods within Cambrian Crossing are at the periphery of the plan area and are not near environmentally significant areas. 		
7.7	Ensure minimal impact on the natural and built environments in terms of wildlife habitat and water contamination/consumption due to industrial initiatives	 Wildlife corridors will be maintained in the plan area on the central and east portions of the site, avoiding industrial lands. Industrial areas are not adjacent to Oldman Creek, limiting the possibility of water contamination. Adhere to appropriate environmental setbacks. 		
7.8	Promote "eco-industrial" businesses as well as shared transportation, shipping, receiving, and the exchange of primary resources	 Eco-industrial infrastructure Rights-of-Way will be designated for businesses that are interested in developing eco-industrial networks. 		
7.9	Encourage existing and future industries to implement green initiatives which will maintain or enhance the quality of air, water and land resources, to reduce greenhouse gases	 The development of a sustainable living program for the residents and users of the plan area will encourage future sustainable behaviour. 		
10	Promote industries which utilize sustainable sources of energy such as solar power and community heating systems	 Community energy infrastructure Rights-of-Way will be made available through the plan area to encourage its future use (see SuN Guidelines). 		
7.20	Promote the development of industry of an appropriate nature, near, or adjacent to, major transportation routes to reduce the negative effects on local roadways	 Industrial development within Cambrian Crossing has major collector access and industrial standard internal circulation options (Figure 7). 		

3.4.3 Commercial

The Strathcona County MDP outlines goals pertaining to commercial development. The following excerpts particularly relate to Cambrian Crossing:

Strathcona County MDP	Cambrian Crossing Development Concept (Figures 4 & 5)
6.1 Encourage complementary commercial development which will enhance the County's commitment to maintain and enhance the environment for future generations	 Cambrian Crossing will provide neighbourhood commercial nodes within walking distance of residences for daily needs. The Village Core will provide commercial options in a centralized location in a mixed-use development.

		 The West Commercial Centre will provide retail and service options to serve the entire plan area
6.2	Encourage the development of a variety of commercial land uses to serve the County and generate employment opportunities	 The West Commercial Centre can serve as a supplementary commercial area for the greater Strathcona County population. The variety of businesses within the mixed-use, commercial, and transitional business park areas will provide a variety of employment opportunities.
6.4	Ensure future commercial uses in the Urban Service Area include the development of structures, buildings, and landscaped areas which, without limiting innovation and marketing attributes, are compatible with adjacent uses and ensure a high level of visual and aesthetic quality	 The SuN Guidelines and Architecture and Landscape Design Guidelines for Cambrian Crossing outline the aesthetic requirements for commercial development which includes compatibility and streetscape requirements.
6.5	Promote the design of aesthetically pleasing commercial developments by: a) Placing stores along the streets and parking in the rear or in the middle of commercial developments b) Requiring landscaping internally within the site as well as on the periphery	 The West Commercial Centre will provide parking behind storefronts. In mixed-use areas, parking will be allowable on the street. Landscaping requirements will be defined through the SuN Guidelines, Architecture and Landscape Design Guidelines for the development and Strathcona County Open Space Development Standards.
6.11	Promote Crime Prevention through Environmental Design (CPTED) principles in the creation of commercial developments	 CPTED principles will be required in all areas of the development. See the SuN Guidelines for these guidelines.

3.4.4 Residential

The Strathcona County MDP outlines goals pertaining to residential development. The following excerpts particularly relate to Cambrian Crossing:

Strathcona County MDP	Cambrian Crossing Development Concept
5.2 Encourage a mixture of housing types within all residential neighbourhoods to accommodate a broad range of housing needs, incomes and lifestyles	 Each residential neighbourhood shall have a variety of housing types (Section 4.0- Development Concept)
5.3 Ensure the density of any residential development is directly related to the following: a) The carrying capacity of the lands proposed for development having regard for site conditions, environmental considerations and impacts, and other factors that may be considered in the design of the proposal b) The suitability and availability of municipal services and infrastructure	 The character of the development has been defined in part by the density targets that have been set by the Capital Region Board (30-45+ units/nrha). As such, the community has been planned with adequate municipal services and infrastructure necessary to sustain this density. Efficient use of the land ensures that natural elements of the site such as Oldman Creek, natural wetlands, a large hill, and a significant treestand will be maintained while supporting a higher than traditional residential density.

Development within the plan area transitions

- necessary to support the proposal from contiguous uses outside the plan area to The compatibility of the proposed density integrate the residential development that is with that of the surrounding area and the proposed. Residential uses are buffered from character of the community industrial wherever necessary The development supports multiple housing Evaluate and promote innovative residential types including single-detached, semi-detached, housing concepts that result in high quality townhouses, apartments and opportunities for and higher density residential developments as a means of reducing the rate of agricultural secondary suites. The SuN Guidelines provides further guidance on allowable housing types. land consumption due to growth. This will aid in encouraging social, environmental and economic sustainability The Cambrian Crossing ASP supports the 5.43 Recognize the primarily low density development multiple housing types and residential character within the Sherwood secondary suites. See the SuN Guidelines for Park Urban Service Area, but work toward diversifying the range of residential forms and guidance. increasing densities by supporting the development of secondary suites, if approved through the adoption of an area redevelopment plan or area structure plan amendments Oldman Creek, natural wetlands, an existing Consider the following residential 5.44 treestand and a large hill are being retained neighbourhood design guidelines with respect within the plan area. to all new area redevelopment plans or amendments to area structure plans Cambrian Crossing is a complete community where residents can live, work, play and learn proposed within the Sherwood Park Urban within their own community. It includes multiple Service Area a) Ensure the design is sympathetic to residential housing types, commercial opportunities, industrial, retail and office amenities such as natural topography employment opportunities, schools, institutional and other environmental features sites, and outdoor recreation areas including including tree stands, ravines, streams and other wetlands parks and sports fields. The development will include a comprehensive Ensure communities contain a balanced mix of activities, housing forms, shopping network of streets, multi-use trails and opportunities, employment, schools, opportunities for public transit (Section 6.0places of worship which are scale Mobility Network) appropriate and recreation facilities Encourage the development of
 - Encourage a balanced distribution of multifamily, higher density residential and mixed use residential urban village developments, as identified in area structure plans. They should be situated along transit routes, arterial and major collector roadways, or adjacent to major services and amenities, such as schools and recreation facilities within the Urban Service Area, in order to encourage the development of more

neighbourhoods built with a comprehensive network of streets, walkways and public transit

· Medium density development is encouraged along major roadways and clustered around neighbourhood nodes, school sites and open spaces. See SuN Guidelines for guidance.

complete and diverse neighbourhoods

3.5 North of Yellowhead Area Concept Plan

The North of Yellowhead ACP covers the area of land north of Highway 16 between Range Road 232 (Sherwood Drive) to the west and Highway 21 along the eastern boundary. Township Road 534 bounds the plan area to the north. The document generally identifies the uses for the area, servicing requirements, location of transportation routes, public utilities and storm water management facilities, policy directions and development guidelines, and identifies environmental management issues.

The Cambrian Crossing Area Structure Plan has been developed to explore further into the subject site in a more detailed manner with reference and guidance from the existing ACP document. This ASP is in compliance with all current ACP policies and amendments within existing plans.

3.6 Land-Use Bylaw 8-2001

The general plan area is currently designated AD – Agriculture Future Development under Land Use Bylaw 8-2001, approved on July 10th, 2001. There is a parcel of land along the western boundary that is IM – Medium Industrial, and a north eastern parcel of land RA – Rural Residential/Agriculture. The AD district is intended for use as a holding district to allow use of the site for agricultural purposes without prejudicing the site for future urban development.

In order to develop Cambrian Crossing, a redistricting would be required for the site. It is anticipated that the proposed revised Land Use Bylaw will result in the creation of additional land use districts that will be appropriate for this development. In cases where an appropriate land use district does not exist, a new district or site specific zoning may be developed for areas within Cambrian Crossing.

3.7 Wetland Policy SER-009-036

Strathcona County recognizes wetlands as important municipal infrastructure components for environmental, economic and social sustainability and will conserve their value for present and future generations. Conservation of the wetlands in urban and rural development areas is a priority for environmental, economy and society.

Strathcona County has put in place specific procedures for landowners to realize the goal of no net loss of wetlands within the urban and rural areas of Strathcona County. The goal of no net loss of wetland functions is to balance the loss of wetland functions, through rehabilitation of former degraded wetlands or enhancement of healthy, functioning wetlands. As a last resort, compensation for lost functions will be sought through creation of wetlands where there were none before. No net loss requires proponents to work through a strict series of mitigation activities – avoidance, minimization, and compensation – with clear criteria and defined outcomes, as set out by the legislation (Water Act and Public Lands Act), the Federal Policy on Wetland Conservation (1991) and the Provincial Wetland Restoration/Compensation Guide (2007).

Mitigation is a process to reduce loss of wetlands by:

- · Avoidance of wetland damage or destruction
- Minimization of the impact and provision of applicable compensation
- · Compensation for wetland damage or destruction

Strathcona County shall ensure the conservation of wetlands during the process of developing land and constructing buildings and infrastructure, either through avoidance, minimization or compensation. All development initiated by a landowner or a third party, including Strathcona County, shall be subject to this

policy. In addition, all landowners must be compliant with the provincial Water Act and Public Lands Act as well as other provincial and federal laws and policies. All landowners are responsible for adherence to all relevant provincial and federal legislation/regulations.

3.7.1 Wetland Conservation Guide

The Wetland Conservation Guide is a supplementary document written by the Engineering and Environmental Planning Department of Strathcona County. It has been written to guide the actions of those whose activities within Strathcona County affect wetlands in any way. The following sections of that document apply to the design implications of Cambrian Crossing:

Compensation Ratio

Compensation is required when an approval to impact a wetland is issued under the Water Act. Alberta Environment has set out a number of compensation guidelines:

- Compensation will be provided through restoration of drained or altered naturally occurring wetlands.
- Compensation should take place within the same watershed as the impacted wetland, or in a watershed close by.
- Where wetland alteration or destruction takes place within a highly impacted watershed (urban or rural), it is not always practical to restore within the same watershed.

In addition to those compensation guidelines set out by Alberta Environment, Strathcona County will require the following:

- Compensation ratios will be a minimum 3:1 replacement to lost.
- Minimum compensation should take place within the development area (Area Structure Plan, Area Concept Plan or Conceptual Scheme development footprint).

Cambrian Crossing landowners will pay compensation for existing wetlands that will be disturbed as a result of development. The total area for compensation will be determined through a wetland assessment.

3.8 Edmonton Garrison Heliport Approach Zone

A large portion of the plan area is affected by the Edmonton Garrison Heliport Approach Zone, as shown on the Plan (Figure 2). In the interests of flight safety and air navigation, zoning regulations apply to the height of buildings, structures and natural growth and to land uses which would tend to attract birds and increase the bird hazard. The Department of National Defence requires notification of any plans for stormwater ponds in the affected area.

Objective: to recognize the Edmonton Garrison Heliport Approach Zone as a significant constraint to development

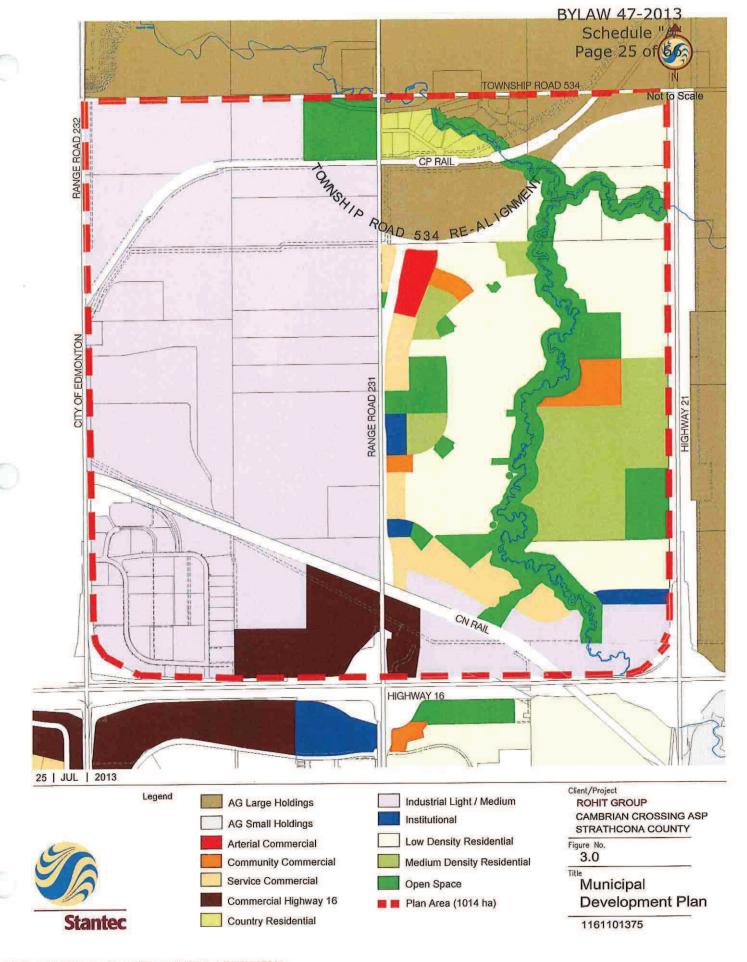
Policy 3.8.1: Stormwater Management facilities within the Edmonton Garrison Heliport Approach Zone in Cambrian Crossing shall not include bodies of standing water. Refer to the SuN Guidelines for guidance.

3.9 Light Efficient Community Policy (SER-009-038)

In July 2010, Strathcona County Council approved a Light Efficient Community Policy (SER-009-038). Designs, technologies and practices used for lighting public and private open space will be guided by the International Dark-Sky Association (IDA), the Illuminating Engineering Society of North America (IESNA) and

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the Transportation Association of Canada (TAC) regarding design, installation and operation of light sources. The Cambrian Crossing development will be designed and reviewed in accordance with above.



4.0 DEVELOPMENT CONCEPT

4.1 Overview

Cambrian Crossing is a comprehensive community that incorporates residential, commercial, industrial and institutional land uses (Section 4.5, Figure 5). To accommodate and organize these land uses, the Plan Area has been divided into seven distinct neighbourhoods (Section 4.6, Figure 4). This development is based on a Sustainable Neighbourhood (SuN) Development approach. As such, the design of the site has resulted in the creation of a walkable, mixed-use community with extensive open space connectivity. Within this community there are opportunities for residents to live, play, work and learn. The policies set forth in this ASP will define the development of this type of community.

Cambrian Crossing is designed to be sustainable; therefore, policies herein are designed to provide guidance for this type of development based on current understanding of sustainability principles. As sustainable technology and neighbourhood design continue to change, this ASP document must remain flexible in order to allow for change to be incorporated into the plan area in an increasingly rigorous or progressive manner.

4.2 Locational Advantage

Cambrian Crossing is located in Sherwood Park north of Highway 16. The plan area is located within Priority Growth Area B as defined by the Capital Region Board in the Capital Region Growth Plan (Growing Forward, 2009). It is recognized as being adjacent to the Urban Reserve Policy Area for Strathcona County. Cambrian Crossing is also within reasonable commuting distance from Alberta's Industrial Heartland and the City of Edmonton. This makes Cambrian Crossing an ideal location to access significant growth nodes within Alberta's capital region.

4.3 Live, Work, Play, Learn

The Cambrian Crossing development will be a place to live, work, play and learn within a compact design (Section 1.4.1). It will generate approximately 4,750 households which will accommodate approximately 11,450 residents. A number of industrial and commercial areas are available within Cambrian Crossing to provide residents with employment opportunities in close proximity to their homes. This increases the ability to choose alternative modes of transportation such as walking, cycling, and public transit. In total, it is estimated that up to 3,500 jobs may be created throughout the plan area in a variety of land uses including commercial, industrial and transitional business. If this estimated number is realized, it would create approximately 0.73 jobs per household within the plan area. Promoting a diversity of employment opportunities within the plan area will help to realize Strathcona County's sustainability objectives.

The design concept combines a mix of housing with work opportunities in an effort to provide options for many different lifestyles and an opportunity to grow and change within the same neighbourhood. The mixed-use style of development integrates commercial and public spaces throughout the community, increasing opportunities for social interaction and recreation within the plan area. Two schools have been anticipated for development in the plan area to provide opportunities for families to access educational opportunities within their own community, possibly further reducing vehicle trips. There are three institutional sites within the plan area which provide options for possible places of worship, aging in place opportunities, or any of a variety of other permitted uses.

4.4 Transitional Provisions

The Cambrian Crossing development is located directly to the west of the Urban Reserve Policy Area for Strathcona County, across Highway 21. As such, the development of Cambrian Crossing must take into

consideration the possible effects that it may have on the future Urban Reserve. Transitional provisions from one development area to the other will need to be considered when the land to the east is developed in the future.

To the west of the plan area, there are industrial lands that require transitional considerations. Business employment land uses will be located on the western edges of the plan area to accommodate for this.

Transitioning between all other land uses from industrial uses will be required. Consideration has been taken in providing transitions between land uses within the development area including transportation corridors, open spaces, residential, commercial and industrial land uses. This consideration ensures the most efficient use of land and the least negative effects on land users. The Transitional Business Employment neighbourhood is located adjacent to the West Village to provide a transition from industrial use to the west and residential use to the east. Consideration has been given in providing transitions between industrial and other land uses including Public Utility Lots, open space areas, commercial uses and the Transitional Business Employment neighbourhood.

4.5 Land Use Overviews

4.5.1 Industrial

The Cambrian Crossing development includes industrial area on the southwest side of the plan area that will provide employment opportunities for skilled workers. It is expected that the development of industrial uses will have a corresponding effect on the demand for residential housing.

The Light Industrial neighbourhood will be serviced to industrial standards and will provide opportunities for light industrial uses. It is located at the periphery of the plan area to provide a transition from the C.N.R. railroad track in the south, Range Road 231 and medium industrial uses to the west. In addition, it provides easy access to major arterial roadways which provide connectivity to the region and beyond.

Screening and buffering of all outdoor storage must be provided in industrial areas so that it is not visible outside of the lot. Associated nuisance factors will be limited to within the building.

Objective: to provide employment opportunities for residents of Cambrian Crossing within Cambrian Crossing

Policy 4.5.1: Cambrian Crossing will provide light industrial land within the Industrial Parks in the plan area in general accordance with the development concept (Figure 5)

Objective: to ensure an effective interface between industrial and other land uses in the plan area

Policy 4.5.2: Industrial uses in Cambrian Crossing shall be limited to light industrial and will not produce nuisance factors that extend beyond the building envelope.

Policy 4.5.3: All outdoor storage in industrial areas within Cambrian Crossing must be screened from view.

Policy 4.5.4: Industrial buildings that are visible to other land uses within Cambrian Crossing must maintain a high level of aesthetic appeal.

4.5.1.1 Eco-Industrial

An eco-industrial park is characterized by closely cooperating manufacturing and service businesses that work together to improve their environmental and economic performance by reducing waste and increasing resource efficiency. In the application of the SuN LIVING principles in this development, eco-industrial principles have been considered to increase opportunities for sustainability. As such, it is necessary that the Rights-of-Way requisite for future eco-industrial infrastructure be designed into Cambrian Crossing immediately, even if they are not immediately required. This will ensure that if eco-industrial infrastructure is desired for future use that it will be convenient to utilize it within the plan area. The Light Industrial Park has been identified as an appropriate location to accommodate this (Figure 5).

Resource sharing could be available for businesses in the Light Industrial Park to utilize. There is an opportunity for waste products from the industrial, commercial and residential land uses within the plan area to be used by the Light Industrial Park as feedstock. It will be the responsibility of Strathcona County to maintain a database system of eco-industrial networking opportunities.

Providing green infrastructure such as green roofs on industrial buildings in this plan area may provide opportunities to grow edible foods, increasing opportunities for urban agriculture within the plan area without utilizing additional land. Orientating buildings to maximize solar efficiencies for passive solar heating and utilizing thermal massing for heating and cooling can help to reduce energy requirements.

Other aspects of eco-industrial principles that are important to incorporate into the design of the Industrial Parks within Cambrian Crossing are social interaction and physical well-being. Providing opportunities for employees to improve their social and physical health during the work day is important for the long-term sustainability of a business and the longevity of its workforce.

Objective: to provide opportunities for eco-industrial principles to be incorporated into the Industrial Parks within the plan area

Policy 4.5.5: Industrial buildings within Cambrian Crossing shall be oriented to maximize solar efficiencies for passive and active applications and utilize thermal massing for heating and cooling with less energy requirements. Refer to the SuN Guidelines for development guidelines.

Policy 4.5.6: Industrial development throughout Cambrian Crossing shall encourage the use of green infrastructure. Refer to the SuN Guidelines for development guidelines.

Policy 4.5.7: A Right-of-Way intended for the piped distribution of liquid or gas resource sharing shall be designed into the Light Industrial Park within Cambrian Crossing.

Policy 4.5.8: Strathcona County shall maintain an eco-industrial database system for the purposes of resource sharing.

Objective: to provide increased opportunities for physical activity, access to nature and social interaction in Industrial Parks

Policy 4.5.9: Industrial development within Cambrian Crossing should provide accessible outdoor public spaces/amenities for socialization and enjoyment of nature. Refer to the SuN Guidelines for development guidelines.

4.5.2 Commercial

There are four types of commercial opportunities within the Cambrian Crossing plan area. The first is proposed in the West Commercial Centre. This neighbourhood provides a diversity of businesses with

convenient accessibility, for both motorized and non-motorized modes of transportation and has been designed to support the residents of Cambrian Crossing as well as residents of greater Strathcona County. The West Commercial Centre also includes the Main Street development which will support retail development at grade with residential development above. The West Commercial Centre's proximity to both the Transitional Business Employment and West Village neighbourhoods provides retail and service options for employees and residents in these areas.

A second type of commercial use within Cambrian Crossing is at the centre of the Village Core on the east side of the plan area. The Village Core, located between the North and South Villages, provides a location for a variety of services and retail to be situated around a gathering point for residents. This mixed-use core will provide ground-oriented commercial with residential opportunities on upper levels.

The third is the community commercial area within the Transitional Business Employment neighbourhood. The commercial area's proximity to the Light Industrial neighbourhood and the Transitional Business Employment neighbourhood provides retail and service options for employees working in these areas.

The final type of commercial use within Cambrian Crossing can be found within the North and South neighbourhoods on the east side of the plan area. These small scale mixed-use nodes will provide convenience commercial opportunities on the ground floor and residential units in upper floors. The provision of neighbourhood commercial nodes will provide opportunities for residents to access services required for day-to-day living within a walkable distance of their own community.

4.5.3 Residential

There are a variety of residential options available within Cambrian Crossing. With a target density of 30-45+ units/nrha, a mix of low and medium density housing types will be required. The residential areas within Cambrian Crossing may include single family lots with densities ranging from 12 units/nrha to 30 units/nrha, which would provide opportunities for secondary suitesMedium density residential options include multiple townhouse styles, low-rise apartments, some with commercial opportunities on the ground floor. Proposed medium density housing may range from 30 units/nrha to 90 units/nrha.

Densities are spread out throughout the plan area. Generally, medium densities are located around mixeduse nodes, commercial uses, proposed school sites and major transportation routes. Lower density housing will be dispersed between medium densities. Optimum distances from transit opportunities and commercial options were taken into consideration to ensure the walkability of all residential neighbourhoods within Cambrian Crossing. Transitions from other land uses have been taken into consideration throughout the development to ensure high quality of life for all residents.

The provision of medium density residential sites allows for the possible integration of assisted living, or affordable housing into residential areas. Proposed apartment sites in close proximity to commercial neighbourhood nodes and with collector road access could accommodate these without deterring from the intended character of the neighbourhood. The developer will work with Strathcona County to identify affordable housing opportunities within the plan area. A variety of options are being explored at this point, as housing affordability is a priority within this development.

Objective: to accommodate a variety of residential options in a compact design

Policy 4.5.10: Residential development in Cambrian Crossing shall meet a minimum average net residential density of 30 units/nrha.

Policy 4.5.11: Within Cambrian Crossing there shall be a range of housing types including single family, single family with secondary suites, townhouses and apartments.

Objective: to provide mixed-use residential design

Policy 4.5.12: Commercial nodes within Cambrian Crossing shall be mixed-use with service and retail opportunities on the ground floor and residential units on the upper levels.

4.5.4 Institutional

There are three institutional sites proposed within the plan area; two on the west side, and one on the east side of the plan area. The institutional sites on the west side are intended to be developed as a fire hall and potentially accommodate a religious assembly.

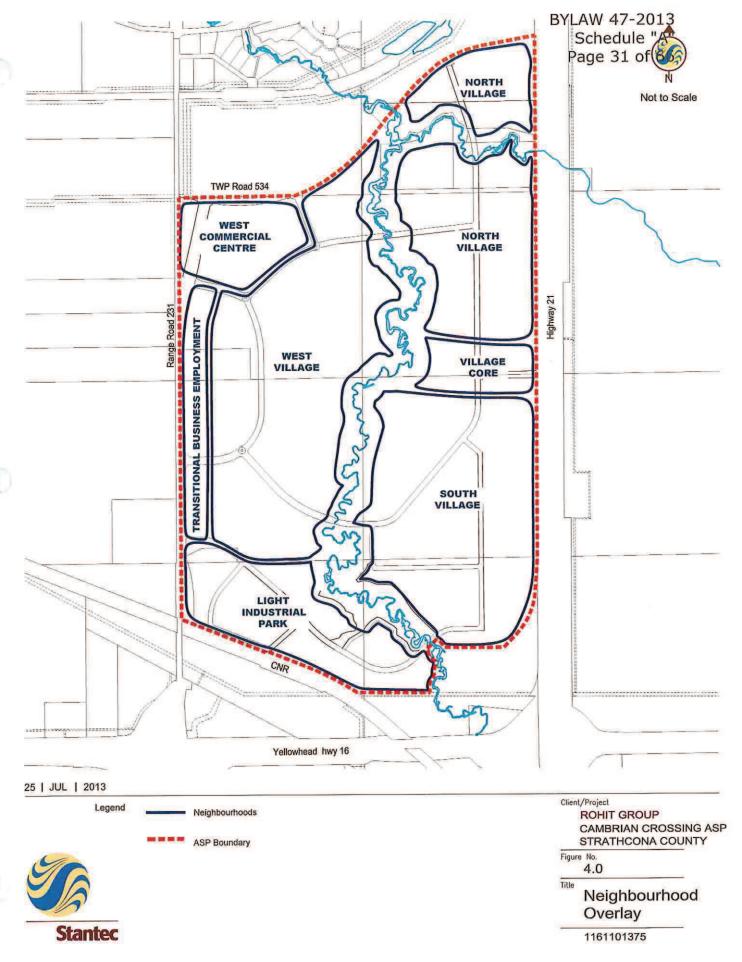
Institutional sites provide opportunities for a variety of functions including but not limited to: places of worship, care centres, health services, recreational facilities, and various types of housing. Institutional uses provide additional amenities to the residents within the plan area and the surrounding communities. They are an important component of a complete community.

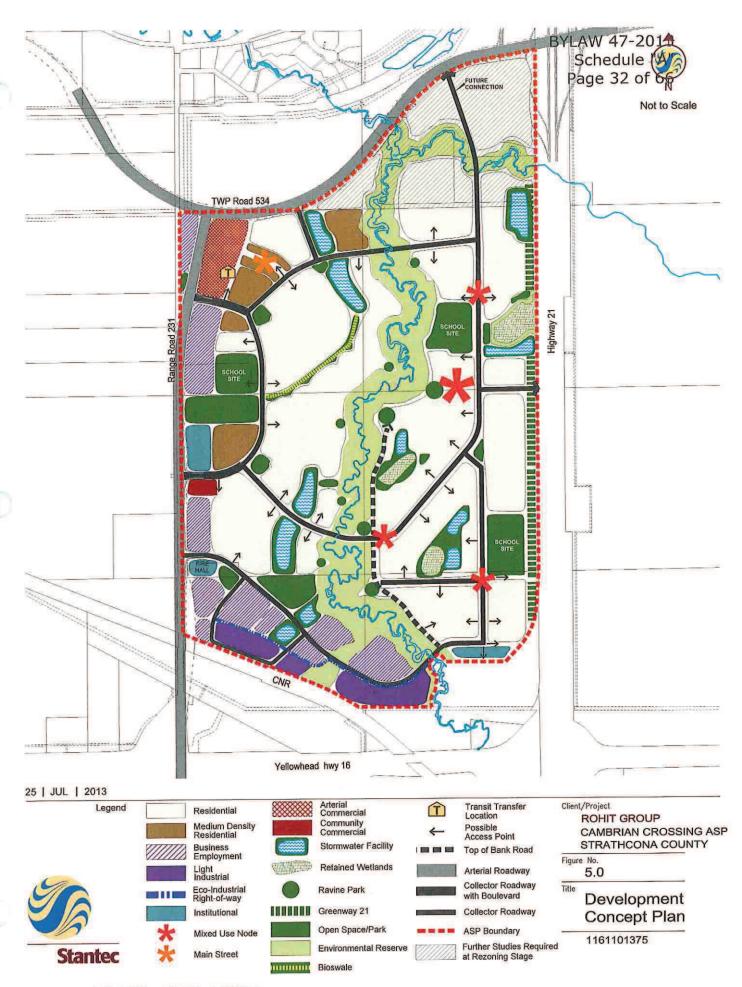
As demand for larger institutional sites increases, so does the associated traffic and congestion around these areas during times of peak use. The institutional sites within Cambrian Crossing are generally located along the edges of the plan area and in close proximity to business employment uses. These locations are optimal when use of these sites generates high volumes of traffic. Additionally, the placement of these uses provides buffering for the residential uses within the plan area from high traffic transportation corridors.

4.6 Neighbourhood Layout

The size of the plan area, coupled with the development goal of creating a comprehensive community, has resulted in the identification of seven distinct neighbourhoods, each with its own unique identity. Some neighbourhoods are intended for one specific use, such as residential or industrial. Other neighbourhoods, however, include a variety of land uses. The combination of all neighbourhoods within the plan area creates a complete community.

The SuN Guidelines will be integral for a complete understanding of the internal design of each of these communities. Figure 4 provides an overlay of the plan area that identifies these neighbourhoods. The following section provides an overview of the seven identified neighbourhoods and also refer to Table 8.1 Proposed Development Statistics.





4.7 Light Industrial Park (1)

The Light Industrial Park is located in the southwest corner of the plan area, bounded by the C.N.R. railroad to the south, Range Road 231 to the west, the West Village to the north and the Oldman Creek to the east. Its location in the southwest corner will provide a buffer from the high-traffic C.N.R. railroad to the south for the rest of the plan area. This Industrial Park provides an easy transition from industrial to residential uses. This location is surrounded mainly by Environmental Reserve to the east and park and green space to the north which will assist in buffering associated nuisance factors produced on the site.

The Light Industrial Park will accommodate primarily light industrial and business employment land uses. There is an expectation that this area may attract large truck traffic because of its close proximity to Highway 16 and Clover Bar Road. Quick and easy access and egress from this area will be provided to reduce impacts to the rest of the plan area.

In addition to the primary light industrial and business employment land uses, there is one institutional site in the Light Industrial Park. This site is intended to be developed as a fire hall to provide essential emergency services for Cambrian Crossing as well as Sherwood Park.

Objective: to provide opportunities for land intensive industrial users

Policy 4.7.1: Lot sizes within the Light Industrial Park of Cambrian Crossing shall be a minimum of 0.4 ha and a maximum of 4 ha.

Policy 4.7.2: Industrial uses in the Light Industrial Park within Cambrian Crossing shall meet a high standard of aesthetic appeal. Refer to the Architecture and Landscape Design Guidelines as set out by the developer's architectural controls, the Land Use Bylaw and the SuN Guidelines.

4.8 West Commercial Centre (2)

The West Commercial Centre is located in the northwest of the plan area and is the major commercial hub and focal point for the Cambrian Crossing area. The area incorporates commercial and residential uses to form a central node for retail, service and public amenities for use and enjoyment by the entire Cambrian Crossing community. The neighbourhood is centred around a main street with street-oriented retail on the main floor and medium-density residential above. The mixed use main street is the major connection through the neighbourhood and to the adjacent West Village. The main street promotes the development of a walkable commercial retail area and provides pedestrian connections to the Oldman Creek and further to the Village Core, North Village, and South Village.

Larger format commercial land uses are located at the northwest boundary of the neighbourhood to improve visibility and benefit from regional traffic along Range Road 231. The SuN Guidelines will provide guidelines for the design of this neighbourhood to ensure that it is developed as an attractive entrance and appropriate gateway to the community.

Residential development within this neighbourhood supports a variety of housing types from single-family dwellings to low-rise apartments. The West Commercial Centre provides an opportunity for more intense residential uses to be concentrated around the commercial core, where accessible transit options are also available. This neighbourhood supports the possible integration of assisted living into the residential component.

Objective: to provide commercial opportunities for the plan area and surrounding region

Policy 4.8.1: A variety of commercial uses, such as a grocery store, shall be provided in the West Commercial Centre of Cambrian Crossing to satisfy local and regional demands.

Objective: to encourage pedestrian use of commercial areas

Policy 4.8.2: Parking shall be provided to the rear of commercial businesses in the West Commercial Centre of Cambrian Crossing.

Policy 4.8.3: Commercial buildings within the West Commercial Centre shall meet aesthetic standards as outlined in the SuN Guidelines for Cambrian Crossing.

Objective: to provide for a range of housing types and densities while clustering development around commercial nodes

Policy 4.8.4: Apartment development in the West Commercial Centre of Cambrian Crossing shall only be permitted adjacent to Commercial land uses at the centre of the neighbourhood or on institutional sites.

Policy 4.8.5: Retail space may be incorporated on the ground floor of apartment sites within the West Commercial Centre of Cambrian Crossing.

Policy 4.8.6: The West Commercial Centre within Cambrian Crossing shall achieve a minimum residential density of 55 units/nrha and maximum residential density of 70 units/nrha.

4.9 Transitional Business Employment (3)

The Transitional Business Employment neighbourhood is located west of the West Village neighbourhood. It will provide an aesthetically appealing corridor and provide a transition from industrial uses to the west of Range Road 231 and residential uses to the east in the West Village. Businesses in this area will be required to meet a high standard of aesthetic appeal as they frame the Cambrian Crossing gateway and will be highly visible by automobile and pedestrian traffic along Range Road 231. This area will offer additional retail options, services, office space, and employment opportunities within close proximity to area residents. The permitted uses in the Transitional Business Employment neighbourhood will be limited to professional office buildings, retail, wholesale suppliers, personal services, etc. Outdoor storage facilities and manufacturing will not be permitted.

Development in the Transitional Business Employment neighbourhood will be subject to high architectural standards, continuous with the West Commercial Centre. This area is located adjacent to residential areas and as such, must be sensitive to those land uses and sight lines from the east.

An Institutional parcel is located directly south of the hill park site. There are opportunities to integrate a use such as a religious assembly, with the hill park. This location provides a separation of institutional uses from residential uses within the plan area. It is on the periphery of the plan area which is more accessible for users that do not live within the community. Due to the nature of institutional uses, it is most likely that high traffic

volumes will occur at off-peak hours when compared to business employment uses. Locating institutional uses within business employment areas reduces traffic congestions, and allow for opportunities for shared parking.

Objective: to provide local employment opportunities for neighbourhood residents and assist in the transition between industrial uses to the west and residential uses to the east"

Policy 4.9.1: Businesses within the Transitional Business Employment neighbourhood in Cambrian Crossing shall not have associated nuisance factors.

Policy 4.9.2: Outdoor storage and manufacturing shall not be permitted in the Transitional Business Employment neighbourhood in Cambrian Crossing.

Policy 4.9.3: The Transitional Business Employment neighbourhood within Cambrian Crossing shall meet a high standard of aesthetic appeal and shall be considered contiguous in style with surrounding development. Refer to the Architecture and Landscape Design Guidelines as set out by the developer's architectural controls, the Land Use Bylaw and SuN Guidelines to provide an appropriate transition to residential land uses to the east.

Policy 4.9.4: A religious assembly may be developed in the Transitional Business Employment neighbourhood in the area south of the hill park.

4.10 West Village (4)

The West Village is solely a residential neighbourhood. Its proximity to the West Commercial Centre, the Transitional Business Employment neighbourhood and the Village Core precludes a need to include a mixed-use node in this neighbourhood.

A number of large lot single-family home areas have been provided in close proximity to Oldman Creek. The linear open space along the creek will remain open to the public. Pedestrian trails will provide connectivity between this neighbourhood, those to the south and east across the creek. Additional residential options including townhouses and small single-family lots will provide housing variety in this neighbourhood. Small parks have been included adjacent to the ravine area along the Top-of-Bank throughout the neighbourhood as part of the open space plan.

In the west central portion of the plan area, with portions in both the Transitional Business Employment and West Village neighbourhoods, is a large grassed hill area. The large grassed hill area will retain its natural topographic features to provide a public amenity.

A school park site is located abutting the northern edge of the hill park, providing opportunities for complementary uses. By combining multiple public uses in one area, increased public transit can provide more opportunities to access the site.

Objective: to provide opportunities for residential development within the plan area

Policy 4.10.1: Provide a range of residential land uses, including single-detached, semi-detached, town houses, and low-rise apartments.

Policy 4.10.2: The overall residential density within the West Village of Cambrian Crossing shall be a minimum of 30 units/nrha.

Policy 4.10.3: In the West Village of Cambrian Crossing the majority of residential development adjacent to the West Commercial Centre and Transitional Business Employment neighbourhoods shall be medium density residential.

Policy 4.10.4: Residential development adjacent to the Oldman Creek shall include low- and medium-density housing.

Objective: to preserve the natural integrity of the plan area

Policy 4.10.5: The hill located within the west central portion of both the Transitional Business Employment and West Village Neighbourhoods shall be retained in its natural state to be used as a public amenity.

4.11 North Village (5)

The North Village is in the northeast corner of the plan area, directly north of the Village Core. It is bounded by Oldman Creek on the west and Highway 21 to the east. This neighbourhood is mainly residential with one mixed-use node in the centre. A number of large lot single-family homes are located in close proximity to Oldman Creek. The Top-of-Bank area will be dedicated as Environmental Reserve along the creek and will remain open to the public.

A number of other residential densities can be found in this neighbourhood. Single family homes of various types and townhouses are located north of the school site proposed in this neighbourhood. There is one apartment site proposed for the neighbourhood, adjacent to the mixed-use node.

In addition to the large school site in this neighbourhood, a natural wetland, two stormwater management facilities, three parks and the greenway buffering Highway 21 contribute to a large amount of open space.

Objective: to provide a variety of housing types and densities

Policy 4.11.1: The North Village in Cambrian Crossing shall achieve a minimum residential density of 26 units/nrha and a maximum residential density of 32 units/nrha.

Policy 4.11.2: In the North Village of Cambrian Crossing single family residential shall be adjacent to Old Man Creek

Policy 4.11.3: In the North Village of Cambrian Crossing apartments shall be located adjacent to the mixed-use node.

4.12 Village Core (6)

The Village Core neighbourhood is located directly in between the North and South Villages on the east side of Oldman Creek. This neighbourhood provides a variety of local retail and service options as well as a number of medium density residential units. A mixed-use corridor is located on the "High Street" in the centre of this neighbourhood. It incorporates the community gathering place with a piazza creating a ground-oriented, vibrant, pedestrian-friendly commercial hub, and a centre for social interaction within walking distance for many residences in the North Village, South Village and Village Core. The piazza will be able to accommodate festivals, farmer's markets and other social events. A variety of community-oriented facilities may surround the piazza such as a Performing Arts Centre with residences above.

The "High Street" is connected by a pedestrian greenway to a Top-of-Bank road along the southern part of the creek. The Village Core is accessible to all residents within the plan area due to its central location and the connectivity of the mobility network.

The Village Core neighbourhood includes medium and high density residential uses. The centre of the Village Core is a mixed use area which provides retail and service opportunities on the ground floor with residences above. Mixed use areas can lower vehicle dependence, and provide viable opportunities for senior's housing.

Objective: to provide appealing residential options to individuals without automobiles

Policy 4.12.1: All commercial areas within the Village Core of Cambrian Crossing shall be part of a mixed use development.

Policy 4.12.2: The Village Core of Cambrian Crossing shall have a minimum residential density of 65 units/nrha and a maximum residential density of 90 units/nrha.

4.13 South Village (7)

The South Village is in the southeast corner of the plan area. It is bounded by Oldman Creek to the west, Highway 21 to the east, the Village Core neighbourhood to the north and the plan area boundary to the south. The South Village is a residential neighbourhood with two mixed use nodes. Residential densities are spread throughout this mixed-use development, with emphasis on higher densities close to major transportation routes for transit accessibility. Generally, the residential density in the South Village is intended to be higher than the North Village as no large-lot single-family homes will be developed in this neighbourhood.

An institutional use has been proposed on the southern edge of the plan area. This site could possibly include a residential component in association with a place of worship. An institutional site could also possibly be developed as a healthcare facility if the need arises for this community. This could include long-term care or an assisted-living facility.

Objective: to provide a compact residential neighbourhood with attached and detached housing options

Policy 4.13.1: The South Village in Cambrian Crossing shall achieve a minimum average residential density of 30 units/nrha and a maximum residential density of 40 units/nrha.

5.0 OPEN SPACE AND NATURAL AREAS

5.1 Overview

The Cambrian Crossing development includes an integrated open space plan that incorporates a pedestrian network which provides connectivity between Oldman Creek, parks, wetlands, stormwater management facilities (SWMF) and school sites throughout all neighbourhoods. Components of the open space plan have a variety of functions (Figure 6). Greenway 21 is an open space corridor and provides a buffer to Highway 21 and connectivity along the edge of the development from a stormwater management facility in the northeast corner of the plan area past the school site in the southeast. Additional wetlands and stormwater management facilities are integrated into the open space plan as public amenities and to provide connectivity to park spaces.

There are a variety of park spaces within Cambrian Crossing including small neighbourhood parks both internally associated with activity nodes and abutting the Creek setback. This provides user-friendly access to the creek corridor, which extends through the entire plan area from north to south. On the west side of the development, two larger park areas provide playfields and retain a large hill which is a natural topographical feature, currently utilized by surrounding residents for recreational purposes. The placement of school sites as well as a number of neighbourhood parks throughout the plan area provide for resident accessibility to open spaces within a reasonable distance from their home or place of work. Park spaces within the plan area may provide opportunities for urban agriculture to be integrated into all neighbourhoods within Cambrian Crossing.

The preservation of features such as the Oldman Creek and existing wetlands contributes to the natural amenities provided by this design. The retention of all natural vegetation in open spaces throughout the plan area is encouraged where possible to support biodiversity and to prevent the need for landscaping irrigation in the future. A poplar tree stand has been proposed for retention in an area adjacent to the creek.

Objective: to retain natural vegetation in open spaces

Policy 5.1.1: Strathcona County policies with respect to tree conservation and tree management shall be followed to encourage the preservation of existing natural vegetation within open spaces throughout Cambrian Crossing.

Policy 5.1.2: The poplar stand adjacent to Oldman Creek within the Cambrian Crossing plan area shall be conserved.

5.2 Stormwater Management Facilities

The stormwater management facilities that are required for proper drainage of the plan area have been incorporated into the open space plan throughout Cambrian Crossing as public amenities. These facilities will include both dry and wet ponds, wet meadows, as well as retained wetlands that already exist naturally within the development. In the western portion of the plan, there are areas which are located within the Edmonton Garrison Heliport Approach Zone. The Edmonton Garrison Heliport Zoning Regulations state that "no owner or lessee of any lands described in Part 7 of the Schedule shall modify or improve the lands or any part of them in a manner that increases their attractiveness to birds". Therefore, the proposed SWMFs located within the plan area will be designed such that they will not increase the attractiveness of the area to waterbirds and thus maintaining the level of safety for aviation in the Edmonton Garrison Heliport Zoning Area. Details of the SWMF are further explored in the associated engineering documents. Detail of the SWMF designs and characteristics within the Heliport Approach Zone will be determined through further detailed analysis.

Outside of the Edmonton Garrison Heliport Approach Zone, constructed wetlands will be encouraged whenever possible. Figure 6 identifies the areas where stormwater management facilities should be located in the development area.

Objective: to incorporate stormwater management facilities as public amenities

Policy 5.2.1: Stormwater management facilities should be publicly accessible throughout the Cambrian Crossing plan area.

Objective: to develop naturalized stormwater management facilities

Policy 5.2.2: Stormwater management facilities shall be constructed wetlands whenever feasible throughout the Cambrian Crossing plan area.

5.2.1 Wetlands

Strathcona County requires that existing wetlands in new developments are retained whenever possible. Disturbed wetlands in a development are to be compensated for by a ratio in accordance with the Alberta Wetland Policy and Strathcona County policies with any compensation allocations being provided for within Cambrian Crossing. As per the recommendations of the Biophysical Assessment and the addendum, some existing wetlands within the plan area will be maintained in their original state. Figure 6 identifies the three wetlands on the plan area that will be retained. These wetlands will be incorporated into the open space plan and contribute to the public amenities and connectivity within the development.

Objective: to mitigate disturbed wetlands through retention and compensation.

Policy 5.2.3: Compensation for disturbed wetlands within Cambrian Crossing shall occur within the plan area at a ratio in accordance with the Alberta Wetland Policy and applicable Strathcona County policies.

5.3 Oldman Creek and Top-of-Bank Interface

The corridor surrounding Oldman Creek is protected by a development setback determined through geotechnical and biophysical studies. This setback varies from 36 m to 10 m along the Top of Bank. This area will be designated Environmental Reserve in accordance with Strathcona County's MDP to protect its natural integrity. It will remain accessible to residents and visitors in the community through the proposed trail system. The natural landscape shall remain untouched and therefore the biodiversity of the area should be protected. The proposed adjustment to the set-back line allows for efficient use of the land in this area, while respecting the geotechnical set-backs required for bank stability. On the east side of the creek, the set-back change is proposed on the southern portion of the creek where a TOB roadway will increase public accessibility to the creek, and will not infringe upon geotechnical set-back recommendations for the area, nor contribute to pollution of the creek. Adjustment of the Top-of-Bank set-back policy statement in the MDP will have no negative effect on the intended purpose of the Environmental Reserve dedication as the area remains publicly accessibly, pollution is prevented, and geotechnical requirements are met.

Objective: to preserve the natural environment surrounding Oldman Creek

Policy 5.3.1: A development setback from the Oldman Creek shall be established through geotechnical and biophysical evaluation.

5.4 School Sites

Three school sites have been identified within Cambrian Crossing; two on the east side of Oldman Creek and one on the west side. The school sites are approximately 4.5 ha to 5.5 ha in size. A determination of public vs. private school district allocation of these sites will be made when the need arises. Before the construction of these schools is required in these neighbourhoods, the Municipal Reserve areas can be utilized as public amenities for the plan area. After construction, the associated sports fields, playgrounds, etc. on the school sites can be utilized by the community when they are not being used for school purposes. The schools' locations along prominent streets within their neighbourhoods provide a visually appealing open space which is visible from many parts of the neighbourhood.

The school sites' locations ensure that they are a walkable distance for most residents in their neighbourhoods. They are located on collector roadways for convenient access and provide opportunities for school and public transit vehicles to easily service the sites. The schools' proximity to multi-use trails and sidewalks may contribute to a higher likelihood of students walking or cycling to school rather than parents driving them. School locations are adjacent to the highest density residential areas of their neighbourhoods, further contributing to the likelihood of students cycling or walking to school. Opportunities for the integration of community facilities with the school sites will be explored.

Objective: to encourage alternative modes of transportation to access school sites

Policy 5.4.1: School sites within Cambrian Crossing shall be located on collector roadways in locations that are accessible by school buses, public transit, automobile, cyclists and pedestrians.

Palicy 5.4.2: School sites within Cambrian Crossing shall be integrated into a continuous pedestrian network.

Policy 5.4.3: School sites within Cambrian Crossing shall be located to minimize travel distance from residences within their respective neighbourhoods.

5.5 Parks

A variety of parks have been defined throughout most of the neighbourhoods in the plan area for residents to use as recreational amenities. They provide connectivity through the plan area as part of the mobility network. These parks are primarily neighbourhood parks a minimum 0.4 hectares in size for use by neighbourhood residents. In addition there are opportunities to effectively utilize areas adjacent to the Oldman Creek ravine as trail heads and rest areas. These small parks are generally 0.2 hectares and smaller, but will provide convenient gathering places for all trail users.

The large park space spanning the Transitional Business Employment and West Village neighbourhoods maintains the natural topography and serves as a focal point for the entire Cambrian Crossing area. The hill provides vistas across the neighbourhood of the creek and opportunities for activities such as tobogganing during the winter. The park space below the hill provides additional active and passive recreational opportunities for neighbourhood residents, including walking, and cycling, and gardening. A school park site is also integrated with the large park providing opportunities for complementary uses.

Objective: to provide public amenities throughout the plan area

Policy 5.5.1: Municipal Reserve lands within Cambrian Crossing shall be available for public use.

5.6 Connectivity and Noise Attenuation

A strip of greenway running north-south on the east side of the plan area will provide a buffer from Highway 21 as it provides a physical separation of land uses. Greenway 21 will also provide connectivity between stormwater management facilities on the east side of the plan area. It will function as a wildlife corridor and include planted berms. The location of Greenway 21 along the Highway provides opportunities to incorporate noise attenuation strategies in accordance with Strathcona County and Alberta Transportation standards. Noise attenuation requirements along transportation corridors, highways and arterial roads will be determined prior to development approvals.

Connectivity between open spaces is provided whenever possible. In an effort to encourage pedestrian use of these spaces, a network has been created which will provide opportunities for individuals to access the open spaces by foot including sidewalks, paved and unpaved trails. Section 6 provides a comprehensive description of the pedestrian and cyclist network for the development. Figure 6 shows these proposed connections between open spaces in the plan area.



6.0 MOBILITY NETWORK

6.1 Overview

The mobility network for the Cambrian Crossing development area incorporates public transit service considerations, pedestrian and bicycle linkages as well as a road network that considers regional connectivity and efficient transportation within the plan area. Cambrian Crossing is designed to reduce automobile trips, therefore attention was paid to the provision of other convenient modes of transportation. The mobility network attempts to integrate all transportation options seamlessly. All facets of the mobility network in Cambrian Crossing will comply with and support Strathcona County's Integrated Transportation Master Plan.

6.2 Modal Split & Trip Reduction

Cambrian Crossing is designed to encourage individuals to utilize methods of travel other than personal automobiles. As such, the proximity of residential areas to employment is crucial in promoting pedestrian travel within the area. It is estimated that 10 percent of all commuting trips from residents within Cambrian Crossing will be as pedestrians or cyclists to businesses within Cambrian Crossing due to the close proximity of employment areas and the available pedestrian transportation network within the plan area. A transit transfer station is planned for Cambrian Crossing the northwest area in the West Commercial Centre neighbourhood.

Additional assumptions about modal split in Cambrian Crossing include 7 percent of residents using transit to move around within the plan area, and 7 percent of residents using transit to get to other areas within Strathcona County, which will reduce peak time automobile trips from this area by 14 percent. Due to these assumptions, residential neighbourhoods should be permitted where appropriate to incorporate reduced on-site parking requirements and as such, there may be less land required for off-street parking in the plan area. Details of these reductions will be dependent on the intended uses and will be determined as development proceeds.

Objective: to reduce vehicle trips within, to, and from the plan area

Policy 6.2.1: Cambrian Crossing will provide contiguous, user-friendly transit, pedestrian, and cyclist networks to encourage a modal shift away from the personal automobile.

Objective: to reduce personal automobile infrastructure requirements within the development

Policy 6.2.2: Cambrian Crossing will have reduced on-site parking availability to levels below what is expected in traditional development in order to encourage alternative modes of transportation.

6.2.1 Public Transit

Strathcona County is committed to providing accessible, user-friendly public transit to Cambrian Crossing. It is understood that bus services will be necessary and will serve to reduce the amount of private intra- and interneighbourhood automobile trips. The service will include both local routes within the community and local routes to bus terminals and transfer points within Strathcona County that will connect people to the service beyond Strathcona County, some of which is already provided by Strathcona County. With increased densities in this and other future growth areas, public transit accessibility will increase which will result in a corresponding increase in public transit ridership. A transit transfer station is planned for Cambrian Crossing in the northwest area in the West Commercial Centre neighbourhood. The station will consist of a lay-by that can accommodate three buses initially and six buses at full build out. Additional details about the transit transfer

station will be determined in consultation with Strathcona County Transit and Planning and Development Services.

Inter-neighbourhood trips are currently almost non-existent within Strathcona County. In an effort to promote sustainability and transit ridership, Cambrian Crossing has set a target goal of 7% reduction of intraneighbourhood peak hour work trips by automobile in favor of transit, plus an additional 7% of interneighbourhood peak hour trips by automobile to other destinations within Strathcona County. Transit stops will be conveniently located within 400m of all residences and detailed routing analysis will be required as development proceeds to further encourage regular transit use. Transportation assessments within Cambrian Crossing reflect this target reduction.

Objective: to provide user-friendly public transit opportunities within Cambrian Crossing

Policy 6.2.3: The Cambrian Crossing development shall provide bus stops to be within a 400 metre walking distance of all residences.

6.2.2 Pedestrian and Bicycle Linkages

Connectivity is an important part of the open space plan in the Cambrian Crossing development. A combination of multi-use trails and unpaved trails that meet the intent of the Intensive Urban trail classification has been included providing connectivity throughout the plan area. Connectivity in the development area also includes sidewalks along streets and creek crossings. Future upgrades to Clover Bar Road will meet Strathcona County standards which will incorporate pedestrian and cyclist trails, providing connectivity across the C.N.R. Railroad and Highway 16. The Cambrian Crossing trail system has been developed in a pattern that can be extended to meet regional trail systems and the proposed extension of the Trans Canada Trail near to the plan area. The pedestrian and bicycle network connection to the Trans-Canada Trail will provide active transportation linkages with Sherwood Park as well as regional linkages with Edmonton and Fort Saskatchewan.

Multi-use trails have been incorporated parallel to most major collector roadways including the Civic Parkway providing a north-south connection, the east-west road which bisects the plan area, and the collector roadway that provides a loop around the entire development. Along the Top-of-Bank of the creek a multi-use trail has been proposed to follow the length of the Creek which runs north-south through the entire development. Where sidewalks do not provide adequate connectivity, additional paved trails may be necessary. Figure 6 outlines the location of all proposed trails in Cambrian Crossing.

Objective: to provide connectivity throughout the plan area

Policy 6.2.4: The Cambrian Crossing development will provide multi-use trails along all major roadways and adjacent to Oldman Creek for pedestrian and cyclist use throughout the plan area.

Objective: to provide connectivity to regional trail systems

Policy 6.2.5: Trail linkages from the Cambrian Crossing development area shall connect to and comply with Strathcona County's Trails Strategy.

Policy 6.2.6: The trails developed within Cambrian Crossing shall comply with Strathcona County's Trails Strategy and accommodate connectivity to the Trans Canada Trailand Sherwood Park via Range Road 231.

Objective: to encourage travel by pedestrians

Policy 6.2.7: All roadways within Cambrian Crossing shall incorporate separate sidewalks on both sides of the street.

6.3 Road Network

6.3.1 Regional Connections

A logical and efficient transportation system is imperative for the functionality and connectivity of any development. All-directional access to the plan area will be possible along Range Road 231 at three locations as shown on Figure 7 – Mobility Plan. In addition, several 'right-in right-out' intersections will provide access to the business employment and commercial uses along Range Road 231. The location of the 'right-in right-out' access points will be determined through consultation with the Planning and Development Services. This right-in only design will serve to allow safe, easy and efficient access into the neighborhood off Clover Bar Road without the requirement for stopping or traffic control devices. Details of the exact locations of all of these access points will be further determined at the subdivision stage and in accordance with Strathcona County standards and good engineering practices.

Township Road 534 will be realigned and one all-directional access provided, generally as shown on Figure 7. Additional access points may be determined with the future development immediately north of Cambrian Crossing, however, do not form part of this ASP. The Clover Bar Road connection to the proposed Township Road 534 alignment will be examined in detail given the potential for geometric design challenges. Highway 21 and Highway 16 will not be directly accessible from the plan area.

6.3.1.1 Future East Neighbourhood Connection

Strathcona County has experienced significant growth in the past decade and land absorption within the current urban service area is nearing completion. Cambrian Crossing will provide a much needed source of additional development lands for the immediate future. However, following the development of Cambrian Crossing, new growth areas are expected. An Urban Reserve area has recently been identified by County Council to the east of Cambrian Crossing as a possible site of Strathcona County's next growth efforts. To that end, Cambrian Crossing has recognized that future development possibility and has provided for a connection point. It is anticipated that if a new neighbourhood is developed, that some connectivity to that neighbourhood might benefit both the Cambrian Crossing community and the Urban Reserve Policy Area. Details of the development and requirements of the crossing will be explored in the years to come.

6.3.2 Local Road Network

Within the development, a functional roadway hierarchy will ensure appropriate circulation opportunities. The transportation system within Cambrian Crossing will consist of a series of major and minor collector roads providing connectivity from surrounding areas and through the development. Figure 7 outlines connectivity to the arterial roads surrounding the development site.

Objective: to provide connectivity to surrounding transportation routes

Policy 6.3.1: The mobility network within the Cambrian Crossing development shall link the plan area to greater Strathcona County through an integrated trail network and hierarchical circulation system for vehicles, pedestrians, cyclists and transit to connect to.

Objective: to provide a gateway to the community and distinguish major collector roadways

Policy 6.3.2: Guidance on cross sections of all new roadways within Cambrian Crossing shall follow the development guidelines provided in the SuN Guidelines, Strathcona County Engineering Standards, and the Alternative Development Engineering Standards.

6.3.2.1 Urban Collector

The urban collector network will accommodate a landscaped median in the centre of the roadway, generous sidewalks and grassed boulevards on both sides and a multi-use trail. The urban collector network may allow for on street parking during off-peak hours and will provide natural traffic calming measures with the introduction of parking in off-peak hours. Figure 7 outlines this road pattern and the associated trails throughout the development. Details of the cross-sections for the collector roads are included in the Design Brief.

6.3.2.2 Roundabouts

Due to the safety benefits and traffic accommodation, roundabouts are experiencing a resurgence of popularity in many North American cities. They provide many traffic management and traffic calming benefits, work well with pedestrian/vehicle conflicts, and are aesthetically pleasing. Roundabouts will be incorporated into the traffic design, primarily at the community nodes within Cambrian Crossing, the details of which will be determined as the neighbourhood develops.

6.3.3 Top-of-Bank Roadway

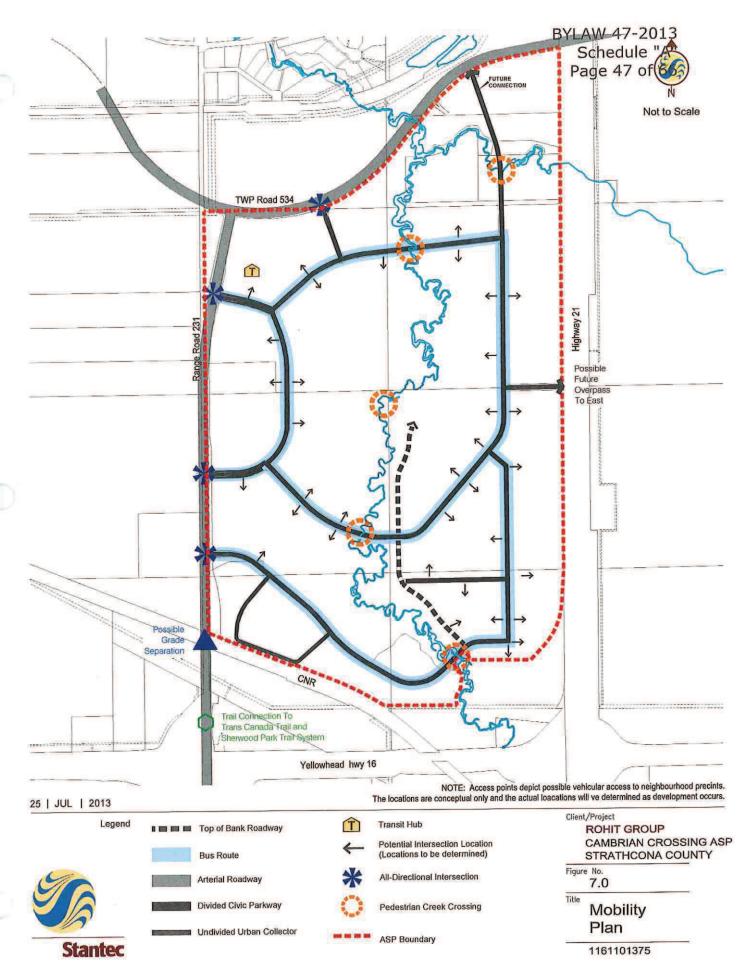
The South Village incorporates a Top-of-Bank roadway that runs from the Village Core southward along the east side of Oldman Creek. This road is located adjacent to the Top-of-Bank setback from the Creek. The Top-of-Bank (TOB) roadway provides physical separation of the housing from the ravine corridor while providing an opportunity for unlimited access to the ravine by all residents. Townhouse units are intended to front onto Oldman Creek along the TOB roadway. This design will allow those residents excellent opportunities for creek views and vistas. This separation will also allow for the Creek amenity to be shared by the public without infringement on private property. By connecting this roadway from the Village Core to the south of the plan area, a loop is created through the South Village providing additional connectivity through the east side of the plan area.

In some areas, additional dedication of Municipal Reserve for parks provides a protected area in addition to the setback from the Oldman Creek recommended by geotechnical and biophysical analysis, creating greater access to the Creek. This set-back may be reduced where geotechnical and topographical circumstances allow, thereby increasing public access to the Creek and maximizing efficiency of land use while not compromising the intentions of the *Municipal Government Act* to protect environmentally sensitive lands. In some areas, additional dedication of Municipal Reserve for parks provides a protected area of more than 36 metres from the Creek creating greater access to the Creek. In combination, these measures create the most efficient land use pattern in this area, while preserving the ecological integrity of the Creek.

Objective: to provide access to the Top-of-Bank area of Oldman Creek.

Policy 6.3.3: A Top-of-Bank roadway shall be provided adjacent to Oldman Creek within the South Village of Cambrian Crossing.

Policy 6.3.4: The Top-of-Bank roadway may be developed within the 36m Strathcona County recommended MDP Top-of-Bank setback, provided that it can be confirmed through geotechnical investigation that the setback reduction will not affect the slope stability of the ravine banks.



7.0 SERVICING

7.1 Overview

Servicing for the Cambrian Crossing plan area will be provided in accordance with Strathcona County urban standards and requirements unless it can be demonstrated that alternative methods of servicing better meet the requirements for sustainability as set out in this ASP.

The Design Brief submitted to Strathcona County in association with this ASP details how the proposed servicing for Cambrian Crossing will be implemented.

Policy 7.1.1: Servicing for the Cambrian Crossing plan area will be provided in accordance with Strathcona County urban standards and requirements unless it can be demonstrated that alternative methods of servicing better meet the requirements for sustainability as set out in this ASP.

7.2 Stormwater Management

There are six areas that need to be addressed regarding stormwater management within this development. The proposed stormwater management facility locations are based on the implications of these six principles. Proposed Stormwater Management Facilities are shown on Figure 9.

 The major drainage system for the Cambrian Crossing plan area will follow the natural topography as much as possible in order to minimize earth-moving requirements.

Stormwater management facilities within new developments in the Oldman Creek drainage basin must provide storage to hold all the runoff with no discharge to the creek during rainfall events.

Three wetlands will be retained within the Cambrian lands. These wetlands will be incorporated into the stormwater drainage system in order to provide water to the wetlands and ensure their long-term viability.

- 4. Part of the western side of the plan area is located in the Edmonton Garrison Heliport Approach Zone. As such, no stormwater management facilities with standing water will be permitted in this area. In the Heliport Approach Zone, stormwater management facilities must be developed as either dry ponds or wet meadows.
- 5. Stormwater management facilities will be developed as natural treatment facilities whenever possible with the intention of improving stormwater runoff water quality through biological processes. The location of the southern-most stormwater management facility respects the natural drainage patterns of the site's existing topography and will provide amenity spaces to surrounding businesses. Consideration should also be given to the integration of bio-swales into the roadway network to transport flows and further promote infiltration, rather than incorporating all stormwater into underground piping systems.
- 6. The plan area is divided into seven basins which drain generally to the north and toward Oldman Creek. Within each basin, stormwater management facilities have been located for retention and storage of stormwater. This will ensure that stormwater does not flow directly into the creek and is filtered prior to its release into the Creek.

Objective: to ensure that stormwater will be managed appropriately within the plan area

Policy 7.2.1: Prior to issuance of a development permit, a Surface Runoff Management Plan shall be developed to the satisfaction of the approving agency. The Plan shall address Low Impact Development strategies to be used on site and the projected amount of run-off that will not be managed on-site.

7.3 Sanitary Sewer

The sanitary servicing for the plan area can be generally divided into two basins, one on the east side and one on the east side of the creek. Wastewater collected from the development is to be conveyed from south to north within each of the basins along either side of the creek. The sanitary collection system on the east side conveys waste water to a lift station located on the east side of Oldman Creek. Figure 8 shows the proposed trunk sanitary sewer alignment to service the Cambrian Crossing plan area.

Wastewater is then conveyed west to the Southeast Regional Trunk System (SERTS), via a sanitary sewer forcemain. A gravity trunk sewer is required from the development aligned north and west to the regional system.

7.4 Water Service

Potable water supply for the development will be provided by a connection to an existing 400 mm water main that is located south of Highway 16. A water supply pipe will be extended north to service the development, continuing north along Range Road 231 to Township Road 534. The North of Yellowhead Engineering Design Brief (2006) identified the preliminary water distribution main sizing which will be used as a guide for trunk main sizing. Figure 10 shows the proposed alignment of the trunk mains for the plan area, along with future extensions outside the development, to the north and east.

The construction of the water distribution system will take into consideration the ultimate development on the land North of Yellowhead with connections being provided for future extension of the distribution system beyond the limits of the Cambrian Crossing plan area.

7.5 Franchise Services

Franchise Services are provided by ATCO Gas, Fortis Alberta Inc., Telus Communications and Shaw Cable Systems. According to the North of Yellowhead Engineering Design Brief (2006), upgrades to services along Range Road 232 (Sherwood Drive) are required to meet the demand of development within the plan area. Significant improvements may be required in natural gas servicing infrastructure. Shaw Cable has plans to expand their fibre optics network to service the plan area with costs recovered from respective developers. Fortis has three phase power lines in the area and needs to evaluate projected demand before identifying their infrastructure plans. A plan for upgrading this infrastructure to properly provide services to Cambrian Crossing is outside the scope of this plan.

7.6 Light Efficient Community Policy (SER-009-038)

In July 2010, Strathcona County Council approved a Light Efficient Community Policy for the designs, technologies and practices used for lighting public and private open space. It will be necessary for development within Cambrian Crossing to meet Strathcona County's requirements regarding the Light Efficient Community Policy and applicable Transportation Association of Canada Standards.

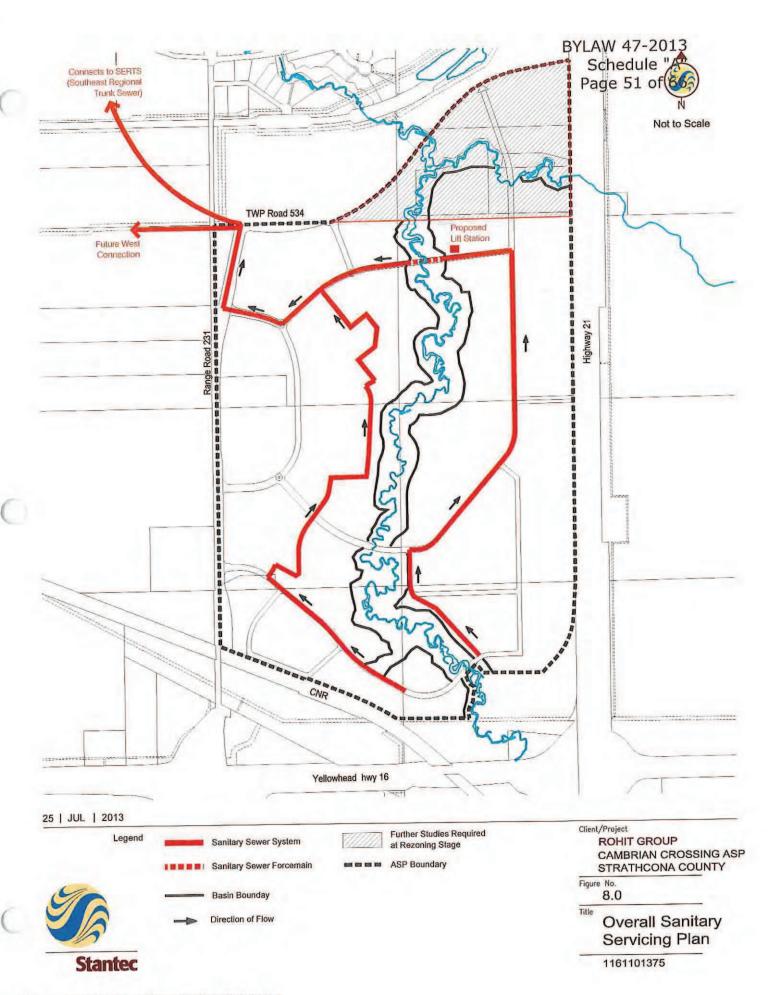
7.7 Community Energy Systems

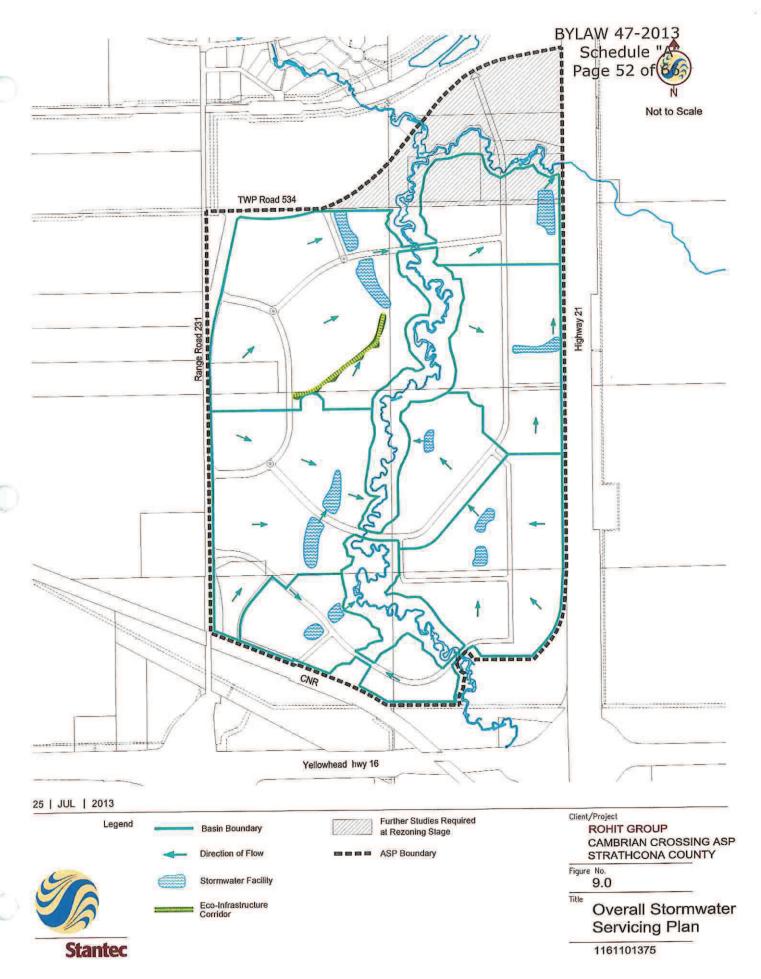
When providing servicing to Cambrian Crossing, consideration should be made for the provision of community energy systems throughout the plan area. Rights-of-Way for standard utility servicing should accommodate for the needs of community energy servicing, therefore no additional ROW provision will be required. Consultations have been ongoing between the developer, the City of Edmonton, and Strathcona County regarding the integration of community energy systems in accordance with the North of Yellowhead Area Concept Plan.

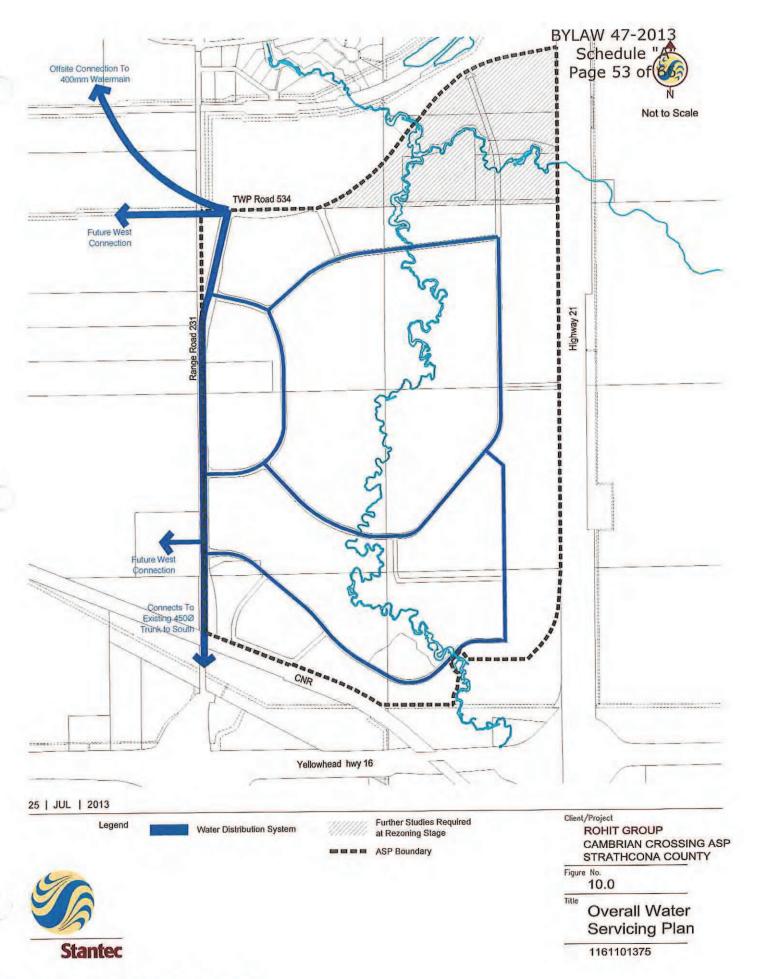
7.8 Eco-Infrastructure Corridor

Eco-infrastructure corridors provide opportunities for eco-industrial networking by facilitating piped sharing of liquid or gas product. It is anticipated that some resource sharing may evolve and occur in the Light Industrial Park. Land dedication for eco-industrial infrastructure within this area may be considered for the purposes of this ASP (Figure 5 – Development Concept)

Policy 7.8.1: Adequate Right-of-Way provisions for piped liquid or gas resource sharing should be provided for within the Light Industrial Park in Cambrian Crossing.







8.0 IMPLEMENTATION

8.1 Overview

The Cambrian Crossing ASP provides a policy framework for development. Once adopted, policies contained within the Plan will be binding and will direct the manner in which development occurs within the plan area. Implementation of these policies shall be achieved through a number of processes that are defined in this section including SuN LIVING, zoning, staging, engineering design and approval, and on-site construction.

Some development objectives apply to the entire plan area. The following outlines some of the policies that must be followed prior to the issuance of a development permit in any part of the plan area:

Objective: to incorporate crime prevention considerations into the design of the development

Policy 8.1.1: Crime Prevention through Environmental Design (CPTED) principles shall be incorporated into public spaces and overall site design throughout Cambrian Crossing to increase public safety through natural surveillance, natural access control and territorial reinforcement. Refer to the SuN Guidelines for guidelines.

Objective: to incorporate Low Impact Development principles into landscaping techniques

Policy 8.1.2: A Landscaping Plan for all development within Cambrian Crossing shall be developed to the satisfaction of the approving agency. The Plan shall incorporate regionally-appropriate, native and drought-resistant plantings. Refer to the SuN Guidelines, Strathcona County Open Space Design Standards and Architecture and Landscape Design Guidelines.

Objective: to guide the development of the business employment and mixed use land uses through the application of the Strathcona County Land Use Bylaw.

Policy 8.1.3: New land use districts that meet the intent of the business employment and mixed use land uses shall be prepared by the plan proponent in consultation with Strathcona County. These districts must be adopted by Strathcona County Council prior to development in these areas.

8.2 SuN Guidelines

The SuN Guidelines further details the development concept and provides guidelines for fostering sustainability in the development. This document will be adopted by resolution of Council and will serve to guide those tasked with implementing this sustainable neighbourhood project. The project is passed forward to the implementation teams with workshops on applying the SuN Guidelines.

The SuN Guidelines will outline the proposed design that must be followed for specific aspects of the development area. This SuN Guidelines is one of the guiding documents for the development area and must be followed in order to obtain permission from the development authority to build on the site.

The vision and the goals of a sustainable neighbourhood plan – no matter how technically sound or innovative – require committed, positive resident buy-in and participation (Mayhew and Campbell, 2008). As an extension of the SuN Guidelines, a sustainable living program will be developed for Cambrian Crossing which will aid in the ongoing support for the principles of sustainability incorporated into Cambrian Crossing by its residents. A potential scenario for sustainable living may include the formation of community leagues or resident's associations which would have access to new and innovative information regarding sustainable living. Part of the ongoing educational component may also include a Lifestyles Coordinator who could work with residents

to help them implement their sustainable lifestyles within Cambrian Crossing into the future. Details of these and other education and awareness campaigns will be further explored in the SuN Guidelines and through the ongoing development and implementation of the plan.

Objective: to guide the development of a sustainable, pedestrian friendly, and aesthetically pleasing community.

Policy 8.2.1: Developers shall create SuN guidelines for Cambrian Crossing to the satisfaction of Strathcona County prior to rezoning.

Policy 8.2.2: Developers shall create architectural guidelines for Cambrian Crossing.

Objective: to ensure that development is in line with SuN LIVING principles

Policy 8.2.3: All development within Cambrian Crossing shall adhere to the guidelines in the SuN Guidelines.

Policy 8.2.4: A Sustainable Living Program should be developed for the ongoing integration of sustainable practices in Cambrian Crossing.

8.3 Zoning

Figure 5 Development Concept identifies several parcels of land in the northeast of the plan area (portions of N ½ 24-53-23-W4M) which have not completed the required technical studies. Prior to rezoning, landowners must submit the necessary technical studies as determined by Strathcona County. Technical studies may include, but are not limited to, biophysical, geotechnical, transportation, and servicing engineering studies.

Objective: to ensure land within N 1/2 24-53-23-W4M are suitable for development.

Policy 8.3.1: Prior to rezoning, landowners of parcels within N ½ 24-53-23-W4M shall complete appropriate technical studies as determined by Strathcona County.

Most land is currently zoned as Agriculture: Future Development (AD) within the subject area. A rezoning application will be required prior to any subdivision or development. Appropriate land use zones will be applied to the Cambrian Crossing development where necessary as development proceeds. Zoning must align with the new Land Use Bylaw currently being developed for Strathcona County. In cases where an appropriate land use district does not exist, a new district or site specific zoning may be developed for areas within Cambrian Crossing.

8.4 Staging

In order for Cambrian Crossing to be developed in accordance to 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 that will be 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 11.

Policy 8.4.1: Prior to the development of the first stage, a development agreement addressing construction of off-site water, wastewater and stormwater infrastructure shall be entered into between the developer and Strathcona County.

8.5 Onsite Construction and Servicing

Onsite construction and development within the plan area will be in accordance with sustainable practices. Strathcona County's servicing standards may require amendments in order to achieve some of the development goals proposed in this plan. Any amendments will be subject to proper circulation and review by Strathcona County and will be subject to all applicable Provincial and National standards and codes.

Objective: to ensure construction complies with development objectives

Policy 8.5.1: Prior to the issuance of a development permit, Engineering Design and Construction drawings shall be provided for all development within Cambrian Crossing to the satisfaction of the approving agency and shall address all of the required guidelines as defined in the SuN Guidelines, Strathcona County Engineering Standards and Alternative Development Engineering Standards.

Policy 8.5.2: Proposed amendments to Strathcona County servicing standards shall be supported by engineering analysis.

8.6 Offsite Infrastructure

Offsite servicing is integral to the successful implementation of Cambrian Crossing. All of the infrastructure necessary for full development build-out is or will be available in the vicinity of Cambrian Crossing. Extension of necessary offsite infrastructure will be completed in a logical manner and in accordance with good engineering practices. All infrastructure noted below are major facilities and are intended to facilitate future growth of not only Cambrian Crossing, but also several other adjacent or nearby developments. Details of the construction, including timing and appropriate cost sharing arrangements shall be determined as development proceeds and will be subject to the County's various infrastructure policies and programs. A summary of information regarding various offsite infrastructure issues has been provided below for reference.

8.6.1 Offsite Water

A 450mm diameter watermain currently exists within Clover Bar Road, approximately 500 m south of Highway 16. This waterline will be extended, including appropriate looping, for development of the initial stages of Cambrian Crossing using funds provided by levy contributions.

8.6.2 Offsite Sanitary

The South East Regional Trunk Sewer (SERTS) feeds the regional needs in the area, including Sherwood Park. Cambrian Crossing will discharge into the SERTS line using a proposed new 675mm – 900mm gravity sewer. The sewer will extend 2.6 km west from Cambrian, and will be sized to provide sanitary sewer servicing to an estimated 550 hectares of primarily industrial land in the vicinity, north of Highway 16. Details of the sewer extension and connection requirements will be further explored when development proceeds.

8.6.3 Offsite Roadways

Cambrian Crossing is adjacent to an excellent provincial highway system and two national railways – CN and CP. As such, Cambrian Crossing has superior locational advantages over other communities, however, it also has some access challenges for direct site access.

Clover Bar Road – Clover Bar Road will require widening to accommodate the ultimate build-out in accordance with the requirements as set out in the Transportation Impact Assessment for Cambrian Crossing and the County Transportation Master Plans.

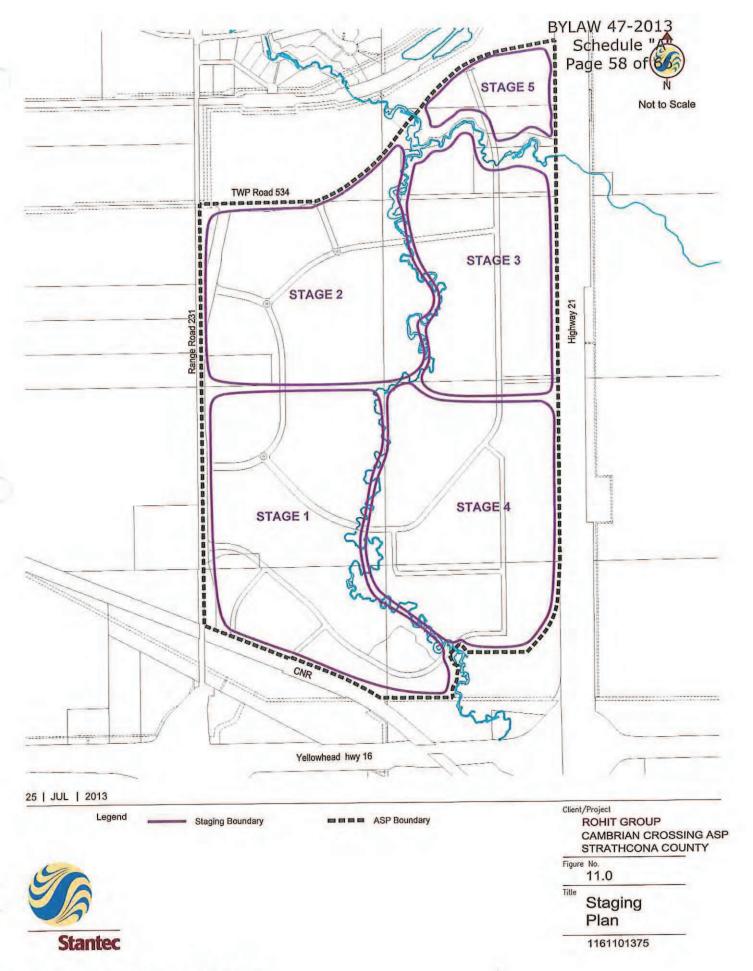
CN Rail Crossing – A grade separation of the CN Rail crossing will be necessary with the initial stages of development.

TWP. Rd. 534 – TWP. RD 534 will require land acquisition and construction between Anthony Henday Drive and Highway 21. The roadway exists within both Strathcona County for 3.6 km and within the City of Edmonton for 3.2 km. Acquisition and construction of these roadways will be in accordance with the arterial roadway policies relevant for each Municipality.

Clover Bar Road / Highway 16 Interchange – Improvements to the Highway 16 / Clover Bar Road interchange will be required prior to full build out of Cambrian.

TWP. RD. 534 / Highway 21 Interchange – Highway 21 / TWP. RD. 534 interchange will be required with the connection of TWP. RD. 534 to Highway 21.

Policy 8.6.1: A Traffic Impact Assessment for the Plan Area and the Highway 16/Clover Bar Road and the Highway 21/Township Road 534 interchanges shall be completed to the satisfaction of Strathcona County and Alberta Transportation prior to development.



Proposed Development Statistics Table 8.1

	Cambrian Cross					
			Area (ha)	% of GA	% of GDA	
Gross Area			365.29	100%		
Arterial Roadway			7.40	2.0%		
Environmental Reserve			51.44	14.1%		
Wetland-Crown Claimed			2.00	0.5%		
Wetland			2.10	0.6%		
Gross Developable Area			302.35		100%	
Municipal Reserve			33.39		11.0%	
Parks			15.49		5.1%	
School / Park			17.90		5.9%	
Bioswale			1.58		0.5%	
Circulation			60.47		20.0%	
Stormwater Management			19.84		6.6%	
Business Employment			22.80		7.5%	
Light Industrial			8.54		2.8%	
Institutional			5.45		1.8%	
Arterial Commercial			5.16			
Community Commercial			1.03		0.3%	
Mixed Use Commercial*			1.24		0.4%	
Total Non-Residential Area			159.50		50.5%	
Net Residential Area (NRA)			142.85		47.2%	
RESIDENTIAL LAND USE, DWELLING UNIT CO	UNT AND POPULATION	NC				
Land Use	Area (ha)	Units/ha	Units	% of NRA	People/Unit	
Single / Semi-Detached	100.28	24 *		70.2%	2.80	100
Townhouse	24.82	35 *		17.4%	2.80	
Mixed Use Residential**	3.72	69	257	2.6%	1.80	
Low-Rise / Medium Density Housing	14.03	90	1,263	9.8%	1.50	-
Total	142.85		4,766	100%		11,447
SUSTAINABILITY MEASURES						80
Population Per Net Hectare (p/nha)						
Dwelling Units Per Net Residential Hectare	(du/nrha)					33.4
Student Population			Student Gen	eration ****		
attacht i opulation	Public	Separate	A PA		Public	Separate
Elementary	1764	572	Elementary		0.37	
	620	95	Senior High			

^{*}Calculated at 25% of total Mixed Use area

**Calculated at 75% of total Mixed Use area

*** The Single / Semi-Detached and Townhouse density figures have been calculated based on
the original densities proposed for the east half of the plan area blended with the anticipated
densities for the west half of the plan area.

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Cambrian Crossing Area Structure Plan (West Area) LAND USE & POPULATION STATISTICS % of GA % of GDA Area (ha) 182.60 100% Gross Area 7.40 4.1% Arterial Roadway 20.09 11.0% **Environmental Reserve** 0.00 0.0% Wetland-Crown Claimed 0.0% 0.00 Wetland 155.11 100% Gross Developable Area 14,64 9.4% Municipal Reserve 4.3% 6.74 Parks 7.90 5.1% School / Park 1.0% 1.58 Bioswale 20.0% 31.02 Circulation 10.94 7.1% Stormwater Management 14.7% 22.80 **Business Employment** 5.5% 8.54 Light Industrial 3.45 2.2% Institutional 3.3% 5.16 **Arterial Commercial** 0.7% 1.03 Community Commercial 0.37 0.2% Mixed Use Commercial * 64.2% Total Non-Residential Area 99,53 55.58 35.8% Net Residential Area (NRA) RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION People/Unit Population Units/ha Units % of NRA Land Use Area (ha) 25 1,023 73.6% 2.80 2,865 40.93 Single / Semi-Detached 140 6.6% 2.80 392 38 Townhouse 3.68 2.0% 1.80 69 76 136 Mixed Use Residential ** 1,10 1,334 1.50 Low-Rise / Medium Density Housing 9.88 90 889 17.8% 100% 4,726 2,128 55.58 SUSTAINABILITY MEASURES 85.0 Population Per Net Hectare (p/nha) 38.3 Dwelling Units Per Net Residential Hectare (du/nrha) Student Generation *** Student Population Public Separate Public Separate 0.37 0.12 Elementary 787 255 0.02 0.13 Senior High 277 43 Senior High 298

Total

1,064

^{*}Calculated at 25% of total Mixed Use area

^{**}Calculated at 75% of total Mixed Use area

Table 8.3 Proposed Development Statistics (East Area)

	n Crossing Are		Plan (East Area ATISTICS	1		
			Area (ha)	% of GA	% of GDA	
			182.69	100%	AUIODA	
Gross Area			0.00	0.0%		
Arterial Roadway			31.35	17.2%		
Environmental Reserve			2.00	1.1%		
Wetland-Crown Claimed			2.10	1.1%		
Wetland			2.10	1.1/3		
Gross Developable Area			147.24		100%	
Municipal Reserve			18.75		12.7%	
Parks			8.75		5.9%	
School / Park			10.00		6.8%	
Bioswale			0.00		0.0%	
Circulation			29.45		20.0%	
Stormwater Management			8.90		6.0%	
Business Employment			0.00		0.0%	
Light Industrial			0.00		0.0%	
Institutional			2.00		1.4%	
Commercial			0.00		0.0%	
Mixed Use Commercial *			0.88		0.6%	
Total Non-Residential Area			59.97		40.7%	
Net Residential Area (NRA)			87.27		59.3%	
RESIDENTIAL LAND USE, DWELLING UNIT COUNT	AND POPULATIO	N				_
Land Use	Area (ha)	Units/ha	Units	% of NRA	People/Unit	Population
Single / Semi-Detached	59.35	23	1,365	68.0%	2.80	3,822
Townhouse	21.14	34	719	24.2%	2.80	2,013
Mixed Use Residential **	2.63	69	181	3.0%	1.80	326
Low-Rise / Medium Density Housing	4.15	90	374	4.8%	1.50	560
Total	87.27		2,638	100%		6,721
SUSTAINABILITY MEASURES						
Population Per Net Hectare (p/nha)						77.
Dwelling Units Per Net Residential Hectare (du/no	rha)					30.
Student Population			Student Gene	ration ***		
- Paris - Pari	Public	Separate	1		Public	Separat
Elementary	976	317	Elementary		0.37	0.1
Senior High	343	53	Senior High		0.13	0.0
Total	1,319	369				

^{*}Calculated at 25% of total Mixed Use area

^{**}Calculated at 75% of total Mixed Use area

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9.0 SUMMARY OF POLICIES

- Policy 3.1.1: All developments within Cambrian Crossing shall comply with Strathcona County policies current at the time of development.
- Policy 3.8.1: Stormwater Management facilities within the Edmonton Garrison Heliport Approach Zone in Cambrian Crossing shall not include bodies of standing water. Refer to the SuN Guidelines for guidance.
- Policy 4.5.1: Cambrian Crossing will provide light industrial land within the Industrial Parks in the plan area in general accordance with the development concept (Figure 5)
- Policy 4.5.2: Industrial uses in Cambrian Crossing shall be limited to light industrial and will not produce nuisance factors that extend beyond the building envelope.
- Policy 4.5.4: All outdoor storage in industrial areas within Cambrian Crossing must be screened from view.
- Policy 4.5.5: Industrial buildings that are visible to other land uses within Cambrian Crossing must maintain a high level of aesthetic appeal.
- Policy 4.5.6: Industrial buildings within Cambrian Crossing shall be oriented to maximize solar efficiencies for passive and active applications and utilize thermal massing for heating and cooling with less energy requirements. Refer to the SuN Guidelines for development guidelines.
- Policy 4.5.7: Industrial development throughout Cambrian Crossing shall encourage the use of green infrastructure. Refer to the SuN Guidelines for development guidelines.
- Policy 4.5.3: A Right-of-Way intended for the piped distribution of liquid or gas resource sharing shall be designed into the Light Industrial Park within Cambrian Crossing.
- Policy 4.5.9: Strathcona County shall maintain an eco-industrial database system for the purposes of resource sharing.
- Policy 4.5.10: Industrial development within Cambrian Crossing should provide accessible outdoor public spaces/amenities for socialization and enjoyment of nature. Refer to the SuN Guidelines for development guidelines.
- Policy 4.5.11: Residential development in Cambrian Crossing shall meet a minimum average net residential density of 30 units/nrha.
- Policy 4.5.4: Within Cambrian Crossing there shall be a range of housing types including single family, single family with secondary suites, townhouses and apartments.
- Policy 4.5.13: Commercial nodes within Cambrian Crossing shall be mixed-use with service and retail opportunities on the ground floor and residential units on the upper levels.
- Policy 4.7.5: Lot sizes within the Light Industrial Park of Cambrian Crossing shall be a minimum of 0.4 ha and a maximum of 4 ha.
- Policy 4.7.6: Industrial uses in the Light Industrial Park within Cambrian Crossing shall meet a high standard of aesthetic appeal. Refer to the Architecture and Landscape Design Guidelines as set out by the developer's architectural controls, the Land Use Bylaw and the SuN Guidelines.
- Policy 4.8.7: A variety of commercial uses, such as a grocery store, shall be provided in the West Commercial Centre of Cambrian Crossing to satisfy local and regional demands.
- Policy 4.8.2: Parking shall be provided to the rear of commercial businesses in the West Commercial Centre of Cambrian Crossing.
- Policy 4.8.8: Commercial buildings within the West Commercial Centre shall meet aesthetic standards as outlined in the SuN Guidelines for Cambrian Crossing.
- Policy 4.8.4: Apartment development in the West Commercial Centre of Cambrian Crossing shall only be permitted adjacent to Commercial land uses at the centre of the neighbourhood or on institutional sites.
- Policy 4.8.5: Retail space may be incorporated on the ground floor of apartment sites within the West Commercial Centre of Cambrian
- Policy 4.8.6: The West Commercial Centre within Cambrian Crossing shall achieve a minimum residential density of 55 units/nrha and maximum residential density of 70 units/nrha.

- Policy 4.10.9: Businesses within the Transitional Business Employment neighbourhood in Cambrian Crossing shall not have associated nuisance factors.
- Policy 4.10.10: Outdoor storage and manufacturing shall not be permitted in the Transitional Business Employment neighbourhood in Cambrian Crossing.
- Policy 4.10.11: The Transitional Business Employment neighbourhood within Cambrian Crossing shall meet a high standard of aesthetic appeal and shall be considered contiguous in style with surrounding development. Refer to the Architecture and Landscape Design Guidelines as set out by the developer's architectural controls, the Land Use Bylaw and SuN Guidelines to provide an appropriate transition to residential land uses to the east.
- Policy 4.10.12: A religious assembly may be developed in the Transitional Business Employment neighbourhood in the area south of the hill park.
- Policy 4.11.13: Provide a range of residential land uses, including single-detached, semi-detached, town houses, and low-rise apartments. Policy 4.11.14: The overall residential density within the West Village of Cambrian Crossing shall be a minimum of 30 units/nrha.
- Policy 4.11.15: In the West Village of Cambrian Crossing the majority of residential development adjacent to the West Commercial Centre and Transitional Business Employment neighbourhoods shall be medium density residential.
- Policy 4.11.16: Residential development adjacent to the Oldman Creek shall include low- and medium-density housing.
- Policy 4.11.17: The hill located within the west central portion of both the Transitional Business Employment and West Village Neighbourhoods shall be retained in its natural state to be used as a public amenity.
- Policy 4.12.1: The North Village in Cambrian Crossing shall achieve a minimum residential density of 26 units/nrha and a maximum residential density of 32 units/nrha.
- Policy 4.12.2: In the North Village of Cambrian Crossing single family residential shall be adjacent to Old Man Creek
- Policy 4.12.3: In the North Village of Cambrian Crossing apartments shall be located adjacent to the mixed-use node.
- Policy 4.13.1: All commercial areas within the Village Core of Cambrian Crossing shall be part of a mixed use development.
- Policy 4.13.2: The Village Core of Cambrian Crossing shall have a minimum residential density of 65 units/nrha and a maximum residential density of 90 units/nrha.
- Policy 4.14.1: The South Village in Cambrian Crossing shall achieve a minimum average residential density of 30 units/nrha and a maximum residential density of 40 units/nrha.
- Policy 5.1.1: Strathcona County policies with respect to tree conservation and tree management shall be followed to encourage the preservation of existing natural vegetation within open spaces throughout Cambrian Crossing.
- Policy 5.1.2: The poplar stand adjacent to Oldman Creek within the Cambrian Crossing plan area shall be conserved.
- Policy 5.2.1: Stormwater management facilities should be publicly accessible throughout the Cambrian Crossing plan area.
- Policy 5.2.18: Stormwater management facilities shall be constructed wetlands whenever feasible throughout the Cambrian Crossing plan area.
- Policy 5.2.3: Compensation for disturbed wetlands within Cambrian Crossing shall occur within the plan area at a ratio in accordance with the Alberta Wetland Policy and applicable Strathcona County policies.
- Policy 5.3.19: A development setback from the Oldman Creek shall be established through geotechnical and biophysical evaluation.
- Policy 5.4.1: School sites within Cambrian Crossing shall be located on collector roadways in locations that are accessible by school buses, public transit, automobile, cyclists and pedestrians.
- Policy 5.4.2: School sites within Cambrian Crossing shall be integrated into a continuous pedestrian network.
- Policy 5.4.3: School sites within Cambrian Crossing shall be located to minimize travel distance from residences within their respective neighbourhoods.
- Policy 5.4.4: One school site shall be removed from the land use concept when the east side of the plan area is amended.

- Policy 5.5.1: Municipal Reserve lands within Cambrian Crossing shall be available for public use.
- Policy 6.2.1: Cambrian Crossing will provide contiguous, user-friendly transit, pedestrian, and cyclist networks to encourage a modal shift away from the personal automobile.
- Policy 6.2.2: Cambrian Crossing will have reduced on-site parking availability to levels below what is expected in traditional development in order to encourage alternative modes of transportation.
- Policy 6.2.3: The Cambrian Crossing development shall provide bus stops to be within a 400 metre walking distance of all residences.
- Policy 6.2.4: The Cambrian Crossing development will provide multi-use trails along all major roadways and adjacent to Oldman Creek for pedestrian and cyclist use throughout the plan area.
- Policy 6.2.20: Trail linkages from the Cambrian Crossing development area shall connect to and comply with Strathcona County's Trails Strategy.
- Policy 6.2.21: The trails developed within Cambrian Crossing shall comply with Strathcona County's Trails Strategy and accommodate connectivity to the Trans Canada Trailand Sherwood Park via Range Road 231.
- Policy 6.2.7: All roadways within Cambrian Crossing shall incorporate separate sidewalks on both sides of the street.
- Policy 6.3.1: The mobility network within the Cambrian Crossing development shall link the plan area to greater Strathcona County through an integrated trail network and hierarchical circulation system for vehicles, pedestrians, cyclists and transit to connect to.
- Policy 6.3.2: Guidance on cross sections of all new roadways within Cambrian Crossing shall follow the development guidelines provided in the SuN Guidelines, Strathcona County Engineering Standards, and the Alternative Development Engineering Standards.
- Policy 6.3.3: A Top-of-Bank roadway shall be provided adjacent to Oldman Creek within the South Village of Cambrian Crossing.
- Policy 6.3.4: The Top-of-Bank roadway may be developed within the Top-of-Bank setback, provided that it can be confirmed through geotechnical investigation that the setback reduction will not affect the slope stability of the ravine banks.
- Policy 7.1.1: Servicing for the Cambrian Crossing plan area will be provided in accordance with Strathcona County urban standards and requirements unless it can be demonstrated that alternative methods of servicing better meet the requirements for sustainability as set out in this ASP.
- Policy 7.2.1: Prior to issuance of a development permit, a Surface Runoff Management Plan shall be developed to the satisfaction of the approving agency. The Plan shall address Low Impact Development strategies to be used on site and the projected amount of runoff that will not be managed on-site.
- Policy 7.8.22: Adequate Right-of-Way provisions for piped liquid or gas resource sharing should be provided for within the Light Industrial Park in Cambrian Crossing.
- Policy 8.1.1: Crime Prevention through Environmental Design (CPTED) principles shall be incorporated into public spaces and overall site design throughout Cambrian Crossing to increase public safety through natural surveillance, natural access control and territorial reinforcement. Refer to the SuN Guidelines for guidelines.
- Policy 8.1.2: A Landscaping Plan for all development within Cambrian Crossing shall be developed to the satisfaction of the approving agency. The Plan shall incorporate regionally-appropriate, native and drought-resistant plantings. Refer to the SuN Guidelines, Strathcona County Open Space Design Standards and Architecture and Landscape Design Guidelines.
- Policy 8.1.3: New land use districts that meet the intent of the business employment and mixed use land uses shall be prepared by the plan proponent in consultation with Strathcona County. These districts must be adopted by Strathcona County Council prior to development in these areas.
- Policy 8.2.1: All development within Cambrian Crossing shall adhere to the guidelines in the SuN Guidelines.
- Policy 8.2.2: A Sustainable Living Program should be developed for the ongoing integration of sustainable practices in Cambrian Crossing.
- Policy 8.3.1: Prior to rezoning, landowners of parcels within N $\frac{1}{2}$ 24-53-24-W4M shall complete appropriate technical studies as determined by Strathcona County.
- Policy 8.4.23: Prior to the development of the first stage, a development agreement addressing construction of off-site water, wastewater and stormwater infrastructure shall be entered into between the developer and Strathcona County.

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Policy 8.5.1: Prior to the issuance of a development permit, Engineering Design and Construction drawings shall be provided for all development within Cambrian Crossing to the satisfaction of the approving agency and shall address all of the required guidelines as defined in the SuN Guidelines, Strathcona County Engineering Standards and Alternative Development Engineering Standards.

Policy 8.5.2: Proposed amendments to Strathcona County servicing standards shall be supported by engineering analysis.

Policy 8.6.1: A Traffic Impact Assessment for the Plan Area and the Highway 16/Clover Bar Road and the Highway 21/Township Road 534 interchanges shall be completed to the satisfaction of Strathcona County and Alberta Transportation prior to development.