

## AREA STRUCTURE PLAN

JANUARY 2023



We acknowledge Treaty 7 territory—the traditional and ancestral territory of the Blackfoot Confederacy: Kainai, Piikani and Siksika as well as the Tsuu T'ina Nation and Stoney Nakoda First Nation. We acknowledge that this territory is home to the Métis Nation of Alberta, Region 3 within the historical Northwest Métis Homeland. We acknowledge the many First Nations, Métis and Inuit who have lived in and cared for these lands for generations. We are grateful for the traditional Knowledge Keepers and Elders who are still with us today and those who have gone before us. We make this acknowledgment as an act of reconciliation and gratitude to those whose territory we reside on or are visiting.



## AREA STRUCTURE PLAN JANUARY 2023

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#### **Biophysical Conditions** Adjacent Community Infrastructure & Amenities Existing Transportation Network Land Use Concept Neighbourhood Boundaries Interface Areas Example Linear Park between Residential & Employment Uses Open Space & Regional Pathways Road Network Modification to Existing Roads Road Widening Areas Water Servicing Concept Sanitary Servicing Concept Existing Stormwater Catchment Boundaries Stormwater Management - One Pond Concept Development Phasing

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SECTION 1.0 Introduction

## **1.0 Introduction**

The Trilogy Plains Area Structure Plan (ASP) is a statutory document that provides a general land use and servicing framework and supporting policy to guide development of approximately +/- 129.4 hectares (+/- 320 acres) of land in north Okotoks, identified on **Figure 1: Location.** The ASP is a long-term policy document that provides direction for more detailed planning stages including subsequent Neighbourhood Area Structure Plan (NASP), Land Use Amendment, and Subdivision applications.

#### 1.1 Purpose

As outlined in Section 633 of the Municipal Government Act (MGA), the Trilogy Plains ASP describes the following:

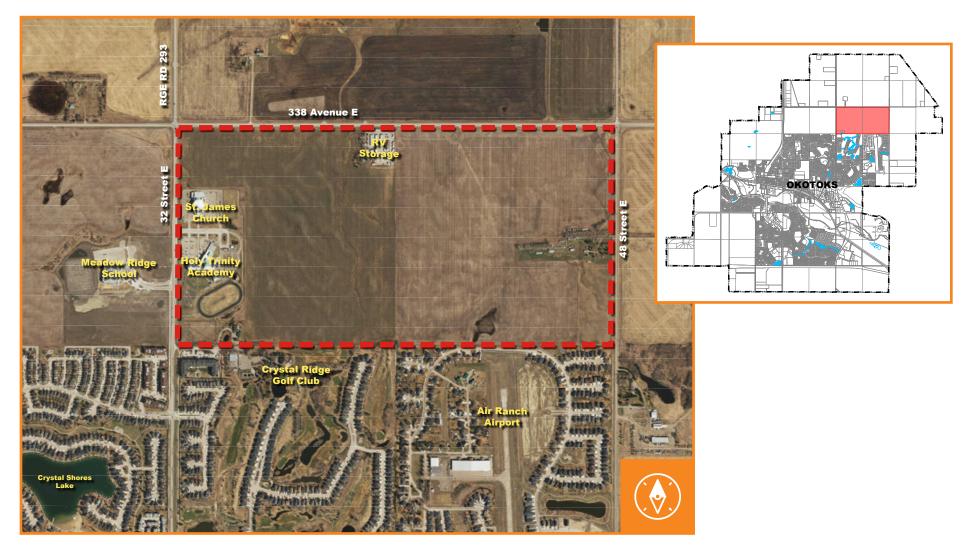
- Proposed land uses;
- Proposed density and population statistics;
- Transportation and servicing frameworks;
- Proposed sequence of development (phasing);
- Policy statements which will help ensure the intent of the ASP is achieved over time.

#### 1.2 Objectives

The objectives of the Trilogy Plains ASP include the following:

- To ensure alignment with the Calgary Metropolitan Region Board Growth Plan and the Okotoks Municipal Development Plan;
- To encourage neighbourhood development, including a variety of housing choices, commercial, and recreational amenities;
- To provide unique and innovative housing types for a range of life stages, building upon the diversity of dwelling options within the Town of Okotoks;
- To ensure appropriate and complementary development around the existing High School and Church sites within the plan area;
- To identify a future employment area for Okotoks including commercial, business, and industrial type uses;
- To provide connectivity through open spaces and active transportation networks within the Trilogy Plains plan area and to the existing urban area.

### Figure 1 | Location



#### **1.3 Policy Direction**

The Trilogy Plains ASP shall be read in conjunction with relevant statutory and non-statutory plans. The following plans provide overarching policy direction and objectives that have helped guide this Area Structure Plan:

#### 1.3.1 Calgary Metropolitan Region Growth Plan:

The Calgary Metropolitan Region Board (CMRB) has received ministerial approval for a Growth Plan, Servicing Plan, and Regional Evaluation Framework as of July 11, 2022. These plans will help guide the coordinated and sustainable development of member municipalities and implement a long-term vision for the Calgary region. The intent is to support long-term sustainability of the Region by ensuring environmentally responsible land-use planning, growth management, efficient use of land, coordinated regional infrastructure investment, and the promotion of economic well-being and competitiveness. Member municipalities have committed to including policies and locally appropriate approaches within their Municipal Development Plans to ensure alignment with the Calgary Metropolitan Region Growth Plan. All statutory plans that are passed by member municipalities must be reviewed and approved by the CMRB to ensure alignment with the Calgary Metropolitan Region Growth Plan.

#### 1.3.2 Town of Okotoks Municipal Development Plan (MDP):

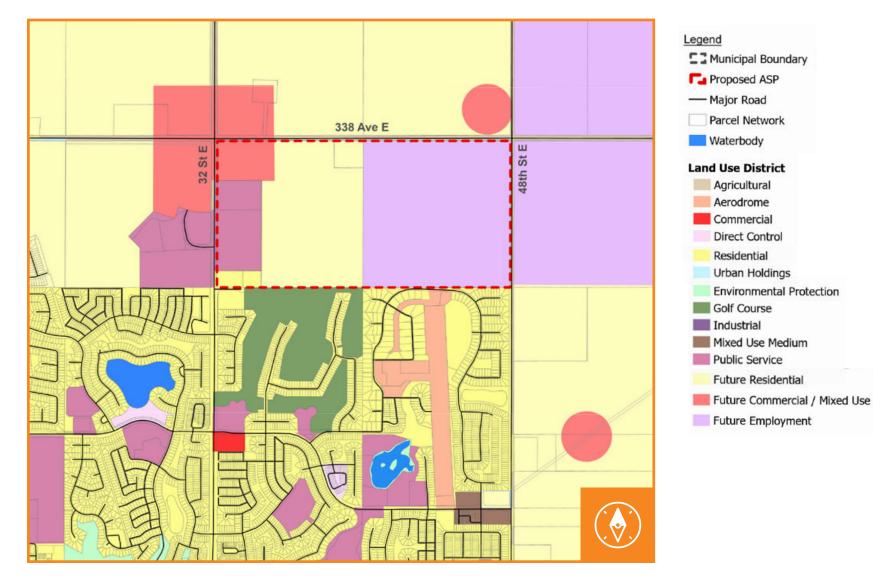
A new MDP was approved by the Town in January 2021. The MDP is the overarching long range planning document that establishes a holistic vision for the Town and guides overall growth and development over a 60-year outlook. The MDP provides a policy framework to guide land use planning and future development in the Town.

Map D.9 in the MDP provides a high-level Future Land Use Concept for the Town of Okotoks see **Figure 2: Okotoks MDP Future Land Use Concept**. Land uses within the Trilogy Plains ASP area identified on Map D.9 include future residential, future employment, future commercial/mixed-use, and existing Public Service. Map D.10 in the MDP (shown on **Figure 3**) identifies a general Area Structure Plan Sequence. The Trilogy Plains ASP is identified as "Area 2", including Future Residential ASP and Future Non-Residential ASP areas.

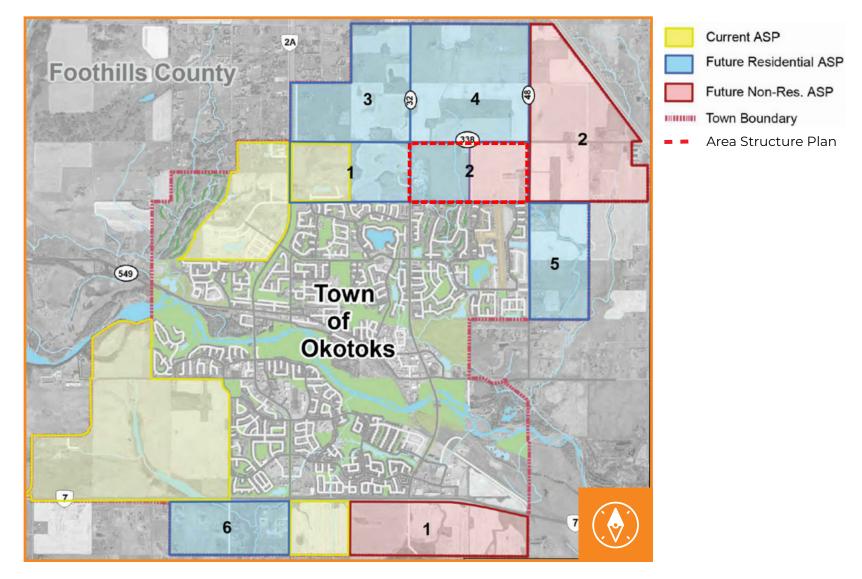
#### 1.3.3 Town of Okotoks Master Planning

The Town of Okotoks has completed both a Water Master Servicing Plan and a Sanitary Servicing Master Plan. Both Plans have been approved by Council and have been referenced in the servicing section in this ASP. In addition to the approved plans there are also two plans: The North Sanitary Study and the 338th Functional Study which are both currently underway. All of the previously mentioned studies are critically important and have informed the ASP to date and will assist with finalization.

#### Figure 2 | Okotoks MDP Future Land Use Concept



#### Figure 3 | General Area Structure Plan Sequence



#### 1.3.3 Other Town Planning Documents:

#### Okotoks Community Visioning 2014 & Community Sustainability Plan:

The Okotoks Community Visioning 2014 was a town-wide visioning process to define a clear vision for the future of Okotoks. Using extensive community engagement, the project developed a vision statement and guiding principles to consider as the community grows. The Community Visioning document currently guides Council decision-making and the development of future plans, policies and programs for growth in the Town.

The Okotoks Community Sustainability Plan provides guiding principles, actions and objectives to guide the implementation of sustainable initiatives in Okotoks. The Sustainability Plan is supported by the 2014 Community Visioning Process, using the community vision and guiding principles as the basis for the Plan. The Trilogy Plains ASP and policy framework was developed to ensure alignment with the guiding principles of the Community Visioning & Sustainability Plan, ensuring the Plan Area supports Okotoks community values and goals.

#### Okotoks Environmental Master Plan (2018):

The Environmental Master Plan provides a comprehensive plan for Okotoks to achieve its vision as a thriving, sustainable community. The plan provides criteria for sustainable development and growth, climate change mitigation and adaptation, ecological protection and enhancement, urban landscape design, water conservation, waste reduction, and green economic growth.

#### Okotoks Active Transportation Strategy (2015):

The Active Transportation Strategy provides guidance to Council, Administration, and other stakeholders in setting priorities to create a healthy and active community. The focus is to develop local capacity and support for multiple modes of sustainable, safe, and accessible active transportation choices that connect people to neighbourhoods, open spaces, recreation, schools and businesses. The Trilogy Plains ASP supports active transportation throughout the Plan Area by providing a comprehensive network of pathways, safe routes, and open spaces that connect key destinations across the community.

#### Recreation, Parks, and Leisure Plan (2016):

The Recreation, Parks, and Leisure Plan is a strategic level plan that provides long-term direction for the delivery of recreation, parks, and leisure services in the community. The Trilogy Plains community will achieve the objectives of the Recreation, Parks, and Leisure Plan by providing an open space system that is diverse and multi-functional, applies environmental stewardship, and is accessible to all Okotoks residents. The development of park spaces within the Trilogy Plains ASP will align with the classification system identified in the Recreation, Parks, and Leisure Plan.

#### INTRODUCTION

#### 1.4 Interpretation

#### 1.4.1 Policy Interpretation

The following guidelines shall be used when interpreting maps within this Plan:

- ASP policies that contain the words "shall" or "will" outline mandatory compliance with a given statement.
- Policy statements that include the word "should" indicate that compliance is encouraged and recommended. However, "should" statements may not be practical in some circumstances and flexibility is provided. Should statements will be applied unless it can be clearly identified to the satisfaction of the Approving Authority that the policy is not reasonable, practical, or feasible in a given situation.
- Where "may" is used in policy statements, there is no obligation to undertake what is proposed, but implies that the Approving Authority shall give due consideration to the policy and has some discretion on decision-making.

#### 1.4.2 Map Interpretation

The following guidelines shall be used when interpreting maps within this Plan:

- Unless otherwise specified within this ASP, the boundaries or location of any symbols or land use areas shown on a map are approximate only, not absolute, and will be interpreted as such. They are not intended to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries such as existing legal property lines, existing roads, or existing utility rights-of-way.
- No measurements of distances or area shall be taken from the maps or figures in the ASP.
- The precise location of land use boundaries will be evaluated at the time of a Neighbourhood Area Structure Plan (NASP), Land Use Amendment, and Subdivision applications. No amendments to the maps within the ASP are required as a result of further delineation at the NASP stage, as long as the intent of the applicable polices is maintained.
- This ASP provides broad policy direction relative to the intended uses and development of an area. The ultimate definition and approval of land uses shall be further delineated at the Neighbourhood Area Structure Plan, Land Use Amendment, and Subdivision stages.









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# SECTION 2.0 Plan Area & Background Information

## 2.0 Plan Area & Background Information

#### **2.1 Location and Plan Boundaries**

The Plan Area comprises approximately +/- 129.4 hectares (+/- 320 acres) of land located in the north portion of the Town of Okotoks, illustrated on **Figure 1: Location.** The plan area is defined by:

**338 Avenue to the north** – currently a two-lane paved road with a rural crosssection. 338 Avenue is a major east-west connection through the north part of Town, connecting Highway 2 and Highway 2A when the planned interchange at Highway 2 is constructed. Future plans for 338 Avenue include the upgrading of the road to an arterial urban classification with four travel lanes and a pathway. Currently under development, the 338th Functional study will help to inform the final intersection spacing, road widening, and will inform the future detail design.

- **48th Street to the east** is a two-lane north-south collector road that connects to 370 Ave/North Railway Street to the south.
- Neighbourhood of Air Ranch and Air Ranch Airport to the south the existing neighbourhood of Air Ranch and the Air Ranch Airport bound the southeast portion of the ASP area.
- Neighbourhood of Crystal Green and Crystal Green Golf Course to the south - the neighbourhood of Crystal Green and the Crystal Green Golf Course bound the southwest portion of the ASP area.
- 32nd Street to the west is currently a two-lane paved road with a rural cross-section. 32nd Street is an important north-south route through the Town, crossing the Sheep River and connecting with Highway 7 to the south. Future upgrades to 32nd Street include an urban arterial cross-section with 4 travel lanes and pedestrian pathways/sidewalks.

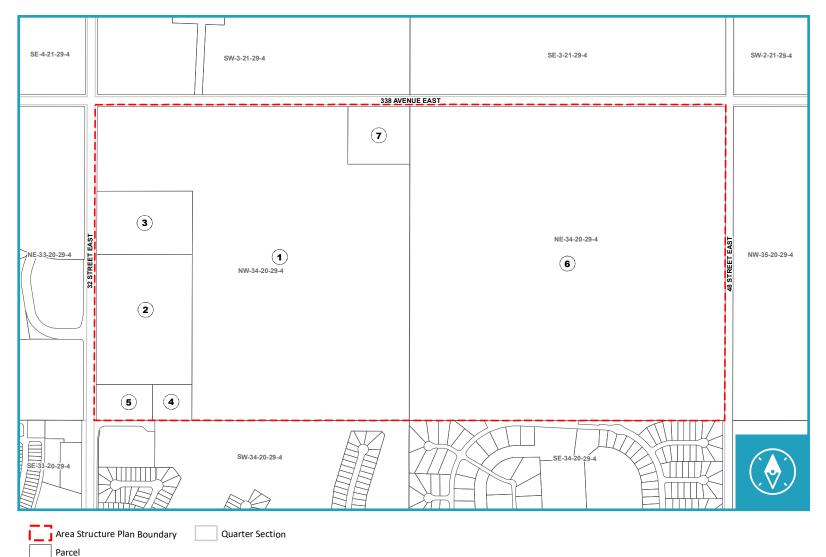
#### 2.2 Legal Description and Ownership

The plan area is owned by a few different landowners with a variety of legal parcels and ownership areas. Land ownership within the ASP area is illustrated on **Figure 4: Land Ownership** and detailed in **Table 1: Legal Description & Ownership**.

#### Table 1 | Legal Description & Ownership Area Area Land Owner Legal (ha) (ac) Hawks Landing GP Ltd NW 34-20-29-4 48.02 118.78 1. Christ the Redeemer 2. Plan 0413364, Block 1, Lot 1 8.1 20.02 Catholic School Roman Catholic Bishop of 3. Plan 0512700, Block 2, Lot 1 3.93 9.71 the Diocese of Calgary 4, Plan 0714709, Block 1, Dan and Susan Wolf 2.23 5.51 Lot 1 and Lot 2. 5. 6. Doris M Heiser NE 34-20-29-4 64.7 160 Instorage Inc. Plan 0212397, Block 2, Lot 1 2.42 5.97 7. **TOTAL AREA** 129.4 320

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#### Figure 4 | Land Ownership



#### **PLAN AREA & BACKGROUND INFORMATION**

#### 2.3 Existing Site Conditions & Constraints

#### 2.3.1 Existing & Adjacent Land Use

The Trilogy Plains ASP is comprised of predominantly agricultural lands for crop production, including a residential farmyard on the east quarter section and an acreage in the southwest corner of the Plan Area. An outdoor RV storage and self-storage site is situated adjacent to 338 Avenue. All of these uses are currently under the Agricultural and Land Holdings District (ALH). Existing land use districts are illustrated on **Figure 5: Existing & Adjacent Land Uses**.

Other existing uses within the Plan Area include Holy Trinity Academy, a High School (Grades 10-12) operated by Christ the Redeemer School Division, and St. James Parish Catholic Church. These institutional uses are identified within the Town's Recreation and Open Space District (ROS). Existing land uses to the north of the Trilogy Plains ASP consist of agricultural lands. Future proposed uses for lands north of 338 Avenue contain Commercial/Mixed-Use and Residential uses (Figure 2: Okotoks MDP Future Land Use Concept).

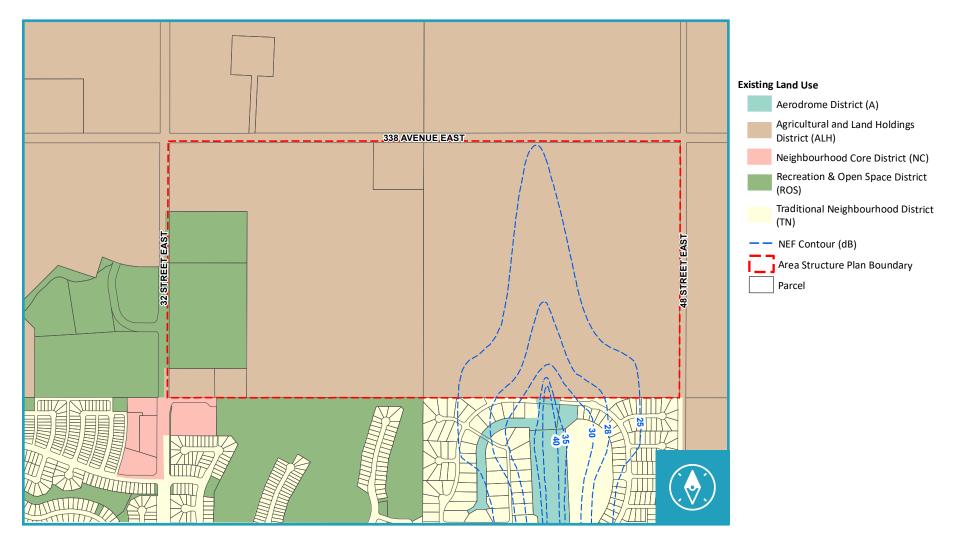
Existing land uses to the west include agricultural lands and Recreation and Open Space District, which includes Meadow Ridge School; a K-9 school operated by Foothills School Division. Future proposed uses on lands west of 32nd Street include Mixed-Use Commercial, Public Services (schools or other institutional uses) and residential. Lands to the east of the Plan Area are currently under the Agricultural and Land Holdings District (ALH). Future proposed uses for lands east of 48th Street include Employment uses. Land uses to the south of the ASP Area include existing neighbourhoods that consist of Traditional Neighbourhood District (TN), Recreation and Open Space District (ROS), which accommodates the Crystal Ridge Golf Course, and Aerodrome (A) District, which includes the Air Ranch Airport.

Appropriate interfaces with existing surrounding conditions including the golf course, airport, existing neighbourhoods, and major roadways will be evaluated through this ASP process and defined at the Neighbourhood Area Structure Plan (NASP) stage.

#### 2.3.1.1 Air Ranch Airport

Future development of the east quarter within the Trilogy Plains ASP area will ensure compatibility with the Air Ranch Airport and adhere to all applicable regulations and height restrictions as related to land use in proximity to aerodromes. The Noise Exposure Forecast (NEF) contours relate to aircraft noise from the Air Ranch Airport within the ASP, as shown in **Figure 5**. Noise contours are used to encourage compatible land use in the vicinity of the Airport. Within the Trilogy Plains ASP, residential uses are prohibited within the 30 NEF contour or higher. Maximum height restrictions for land uses within the vicinity of the Air Ranch Airport Runway 16/34, as shown in **Figure 6**, will be further defined at the NASP stage. Height restrictions are necessary to ensure the safety of aircraft at low altitudes if displaced from the runway centre line in the approach or missed approach phase.

#### Figure 5 | Existing & Adjacent Land Uses

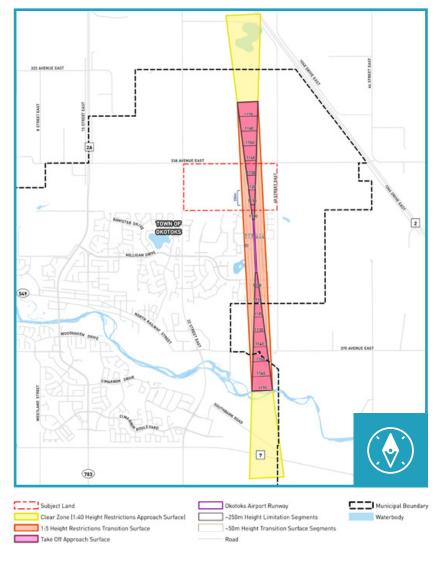


#### POLICIES

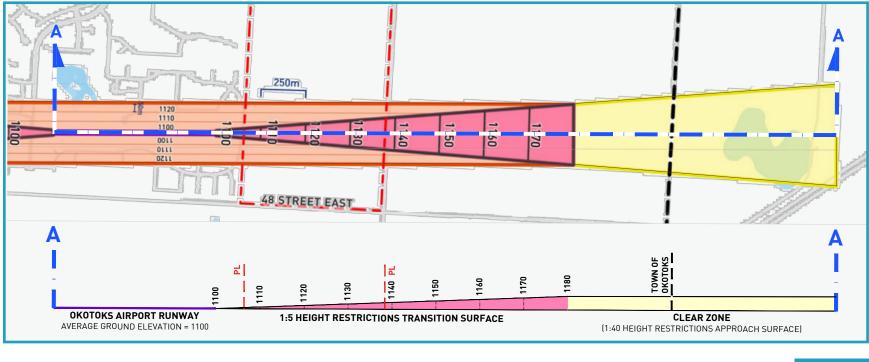
- 2.3.1 (a) Residential land uses within this ASP area shall be prohibited within the 30 NEF contour of the Air Ranch Airport.
- 2.3.1 (b) All applicable federal rules, regulations, and / or guidelines related to development in proximity to aerodromes will be adhered to and determined at the Neighbourhood Area Structure Plan (NASP) stage.
- 2.3.1 (c) The airport height limitation restrictions shall be further defined and the height limitation figure updated as required based on more detailed analysis at the NASP stage.



#### Figure 6A | Airport Height Limitation Map



#### Figure 6B | Airport Height Limitation Map



**— — —** Subject Lands

Town of Okotoks

Clear Zone (1:40 Height Restrictions Approach Surface)
1:5 Height Restrictions Transition Surface

Okotoks Airport Runway

Take Off Approach Surface

——— 250m Height Limitation Segments



#### 2.3.2 Topography

The Plan Area has a gently inclined topography, ranging in elevation from a high point in the northwest corner of about 1,119 metres to the low points along the southern boundary of 1,093 metres above mean sea level, illustrated on **Figure 7: Topography.** Low relief swales, associated with watercourses, are present in both quarter sections. The site drains south towards the communities of Crystal Green and Air Ranch, primarily through the existing watercourses. The Plan Area does not contain any steep slopes, ravines, coulees, or escarpments.

#### 2.3.3 Phase 1 Environmental Site Assessment (ESA)

A Phase 1 Environmental Site Assessment (ESA) for the plan area was completed by Trace Associates in May 2021. The subject lands have historically been agricultural/cultivated with a residential homestead on the east portion of the site. Based on the findings of the report, no significant environmental concerns were identified on the west quarter, NW 34-20-29-4, of the ASP area and no further environmental assessment work is recommended. The east homestead located on the east quarter near 48th Street (**See Figure 8**) has potential for on-site environmental concerns due to the nature of agricultural properties/homesteads and the potential for pits, burn pits, buried debris, fuel Aboveground Storage Tanks (AST's), hazardous building materials, and septic tanks. A Phase 2 Environmental Site Assessment (ESA) is recommended for the east homestead area.

#### POLICIES

2.3.3 (a) A Phase Two Environmental Site Assessment should be completed at the Neighbourhood Area Structure Plan Stage for the east homestead site, located within NE 34-20-29-4.

#### 2.3.4 Geotechnical Conditions

A desktop Geotechnical Assessment was completed by Watt Consulting for the entire plan area and an intrusive Geotechnical Assessment was completed for the Lamont Lands (Portion of NW 34-20-29-4) in May 2021. The objective of the geotechnical assessment was to determine the subsurface ground and groundwater conditions at the project site, and to provide geotechnical comments and recommendations for the proposed development. The subsurface ground conditions at the project site comprise of silty clay and sandy silt soils, which are considered to be generally suitable for the proposed development. No major geotechnical concerns for development were identified in the report.

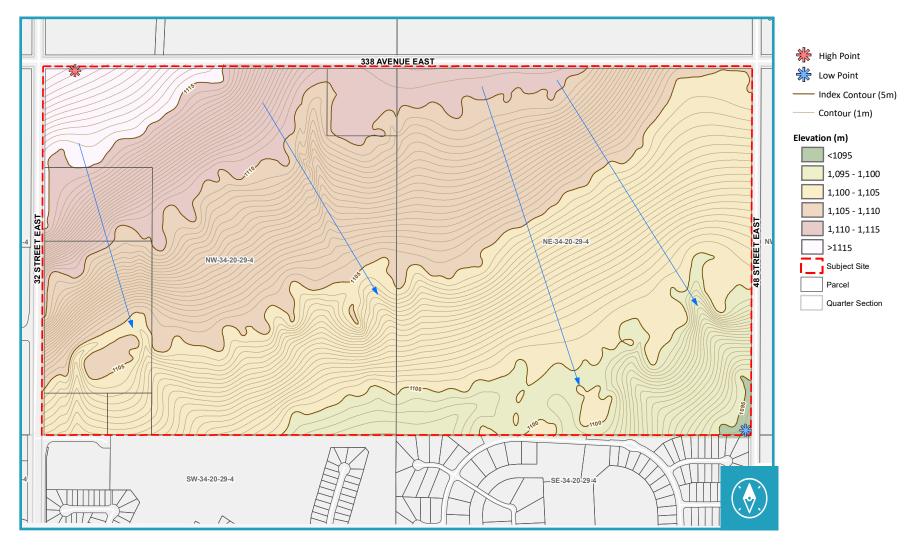
#### POLICIES

2.3.4(a)	Intrusive Geotechnical Evaluations shall be completed and
	submitted concurrently with each Neighbourhood Area Structure
	Plan within the Trilogy Plains area.
2.3.4(b)	Development within the Trilogy Plains area shall comply with the
	recommendations from the completed Geotechnical Evaluations.

#### 2.3.5 Historical Resources

A Historical Resources Overview (HRO) was completed by Bison Historical Services Ltd. in May 2021. Historical Resources Act approval was granted for the entire Trilogy Plains Area Structure Plan area in June 2021. There are no further Historical Resources Act requirements associated with archaeological resources for the plan area.

#### Figure 7 | **Topography**



#### 2.3.6 Biophysical Overview

A Biophysical Overview was completed by Trace Associates in July 2021. The document describes the existing environmental conditions within and adjacent to the plan area and provides high level recommendations for areas that may be considered for further evaluation at later planning stages.

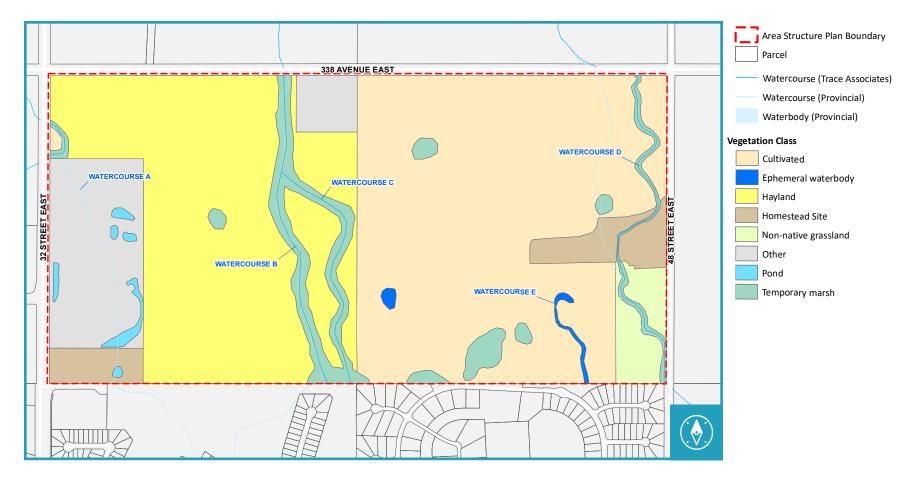
Overall, the Trilogy Plains ASP area does not contain any significant landforms such as steep slopes, ravines, or escarpments and there is no presence of undisturbed, native plant communities. As shown in Figure 8: Biophysical **Conditions,** the Plan Area contains several temporary marshes and ephemeral water bodies that are associated with low-lying depressions within the surrounding terrain. Most of these temporary marshes and ephemeral water bodies have been impacted by agricultural activities and have been tilled and cropped in multiple years. One temporary marsh is associated with water course features and is present along the entire portion of Watercourse D, illustrated in Figure 8. There are three provincially mapped, unnamed indefinite watercourses (A, B, and D) and two provincially unmapped watercourses (C and E) within the Plan Area. All the watercourses appear to be low-vegetated draws without any channel development and with no surface water present. Watercourses B and C have been tilled and cropped for multiple years and downstream connection of these watercourses have been lost, flowing into a constructed swale to the south of the Plan Area.

Watercourse D is associated with a temporary marsh and is an ephemeral watercourse. A portion of Watercourse D runs through non-native grassland and appears to be generally undisturbed, with the downstream portion of the watercourse to the Sheep River intact. The Biophysical Overview suggests that a portion of Watercourse D should be investigated further at future planning stages to determine if it has the potential to be integrated into the proposed future development. This area may be dedicated as Environmental Reserve (ER) and retained as natural open space. Further biophysical analysis through a Biophysical Impact Assessment (BIA) will be required at the time of a Neighbourhood Area Structure Plan and Land Use Redesignation.

#### POLICIES

- 2.3.6 (a) As a prerequisite for Neighbourhood Area Structure Plan approval, Biophysical Impact Assessments (BIAs) shall be completed for lands within the Trilogy Plains Area Structure Plan.
- 2.3.6(b) Any potential Environmental Reserve (ER) dedication and development setbacks from Watercourse D' will be determined at the Neighbourhood Area Structure Plan and Land Use Redesignation stage and subject to requirements as stipulated by the Town of Okotoks.





#### **PLAN AREA & BACKGROUND INFORMATION**

#### 2.4 Surrounding Area Conditions

#### 2.4.1 Adjacent Community Infrastructure & Amenities

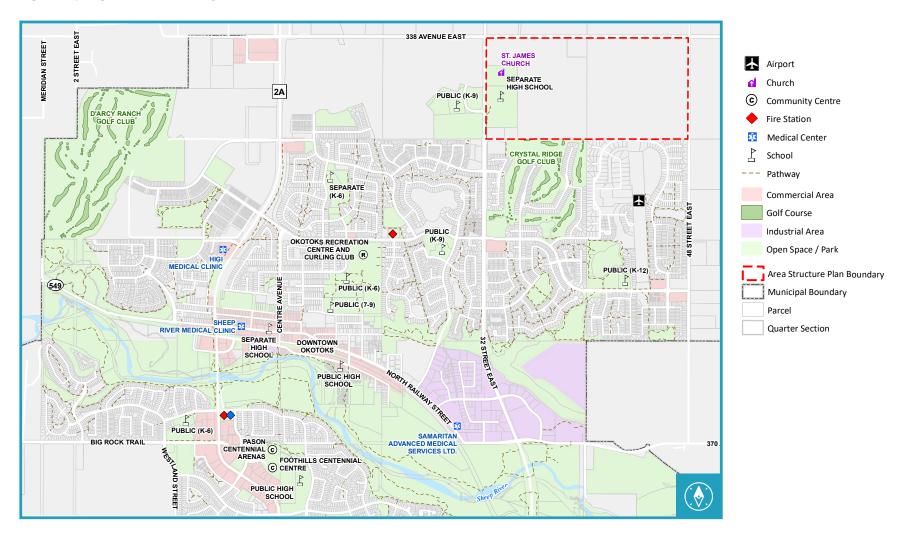
Situated adjacent to major transportation corridors within the Town and access to logical extensions of existing infrastructure, Trilogy Plains is well-positioned to accommodate future neighbourhood and employment development. With the established neighbourhoods of Crystal Green and Okotoks Air Ranch to the immediate south of the Plan Area, and existing development of Holy Trinity Academy and St. James church within the Plan Area, the development of Trilogy Plains will represent contiguous growth within the Town of Okotoks.

#### As illustrated in Figure 9: Adjacent Community Infrastructure & Amenities,

Trilogy Plains is in proximity to existing and future amenities and services. Downtown Okotoks and supporting commercial uses are located a short drive to the south of the Plan Area. Additional retail uses are located on Northridge Drive (Highway 2A) and future commercial areas will be located along 338 Avenue in the community of Wedderburn. Future community commercial development within the Trilogy Plains area will be complementary to the surrounding commercial services and provide a variety of services for the Plan Area and surrounding communities. The Plan Area is situated in proximity to existing schools, representing both public and separate school divisions. Police and Fire services are located to the southwest of Trilogy Plains, at 132 Milligan Drive.







#### Figure 9 | Adjacent Community Infrastructure & Amenities

#### 2.4.2 Existing Transportation Network

As illustrated in **Figure 10: Existing Transportation Network,** the existing road network in relation to the Plan Area consists of 338 Avenue to the north, 32nd Street to the west, and 48th Street to the east. The internal road network within the Trilogy Plains ASP will connect to these boundary roads, providing direct access to the regional road network, which will support the efficient movement of residents and employees to and from the Plan Area.

338 Avenue is a major east-west connection through the north part of Town, connecting Highway 2 and Highway 2A when the planned interchange at Highway 2 is constructed. Future plans for 338 Avenue include the upgrading of the road to an arterial urban classification with four travel lanes and a pathway. The 338 Avenue Functional Plan, which is currently underway, will determine the function, size, and intersection spacing, as well as the look and feel of the Avenue.

32nd Street is an important north-south route through the Town, crossing the Sheep River and connecting with Highway 7 to the south. Future upgrades to 32nd Street include an urban arterial cross-section with 4 travel lanes and pedestrian pathways/sidewalks.

Additional access into and out of Trilogy Plains from development to the south is limited. No direct road connections to the communities to the south are available, except for a potential connection to Ranch Road. The proposed pathway network within the Trilogy Plains ASP will ensure there is an appropriate level of integration and connectivity between existing communities and proposed development within the Plan Area.

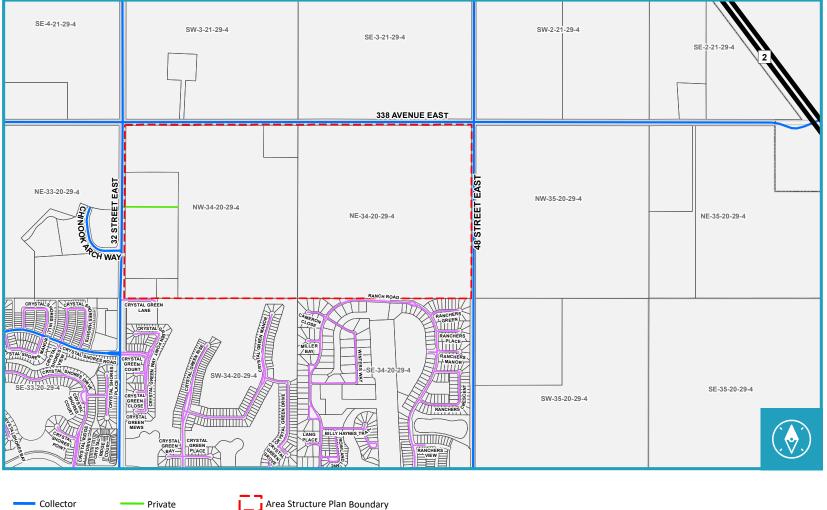






Residential

Primary Highway



Parcel

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# SECTION 3.0 Vision & Guiding Principles

## **3.0 Vision & Guiding Principles**

#### 3.1 Vision

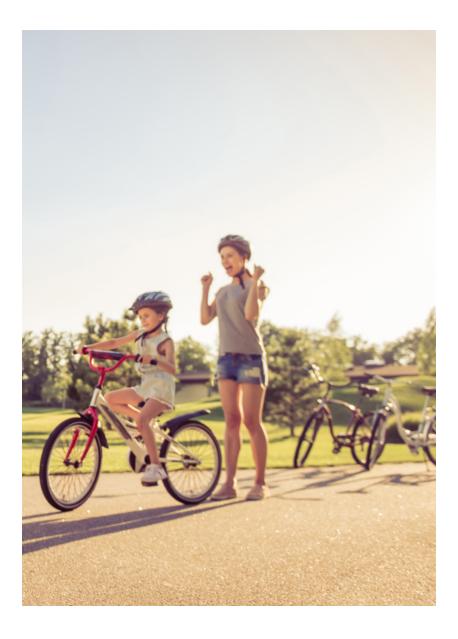
The Trilogy Plains area will be a unique community that consists of a mix of housing options and a range of employment opportunities, appropriately integrated to promote a diverse and vibrant community.

The residential area will complement existing school and church uses, developing housing opportunities for a wide range of Okotoks residents and creating inclusive and attractive gathering spaces within a mixed-use Neighbourhood Hub and interconnected open space system. Commercial services within the Neighbourhood Hub will support the daily retail and service needs of the community and serve as a focal point of community activity.

The employment area will offer a variety of commercial, business, and industrial uses that provide employment opportunities and foster the overall economic health of the Trilogy Plains community and the Town of Okotoks. Pathway connections will allow safe, active movement throughout the entire community, connecting residents to the Neighbourhood Hub, key open spaces, the school and church, employment areas, and adjacent communities.



#### VISION & GUIDING PRINCIPLES





#### **VISION & GUIDING PRINCIPLES**

#### **3.2 Guiding Principles**

The guiding principles of the Trilogy Plains ASP reflect the vision and goals identified in the Okotoks Municipal Development Plan and Community Sustainability Plan. By incorporating the principles and goals of the MDP, Trilogy Plains will provide the framework for a sustainable and inclusive community that contributes to a prosperous Okotoks.

"The Town of Okotoks is resilient, where people, businesses, ideas and sense of community thrive. Grounded by the Sheep River valley and supported by thoughtful planning and design, a strong local economy and a vibrant civic culture, Okotoks offers exceptional quality of life at every stage of life. Respect for each other and the natural environment makes Okotoks home."

Vision identified in Okotoks Community Sustainability Plan.



### Diverse & Healthy Neighbourhood

An appropriate mix of land uses,

housing forms and densities will be integrated throughout the Plan Area. The Neighbourhood Hub and connected green spaces will provide walkable destinations for community interaction, promoting a healthy and inclusive community.



# Connected Transportation Networks

An integrated and connected multi-modal transportation system within Trilogy Plains will support safe and active movement. A comprehensive pathway network allows residents to comfortably move through their neighbourhood and connect to surrounding communities. The street system allows for efficient movement of residents while ensuring appropriate integration between residential and employment areas.



# Economic Opportunities

The array of business opportunities within the Plan Area will provide services and employment opportunities to Trilogy Plains residents and surrounding communities, supporting the vision of a prosperous and thriving Okotoks economy.



# Integration with Existing Uses & Communities

Trilogy Plains will respect and complement existing development within the Plan Area boundary, including the High School and Church sites. Appropriate and attractive interfaces with surrounding communities and road networks will ensure Trilogy Plains is integrated within the local context.

#### 3.3 Land Use Concept

Figure 11: Land Use Concept illustrates the general location of proposed land uses, the major street and pathway network, and the interface areas. Table 2: Land Use Overview provides a brief description of the key land use elements that relate to Trilogy Plains.

#### Table 2 | Land Use Overview

- **Neighbourhood Area** will contain a variety of residential housing types, neighbourhood parks, and local roads that will provide housing and amenities for a diverse residential population.
- Neighbourhood Hub Area is a comprehensively planned mixed-use activity centre that is a focal point of the community and serves the commercial needs of the surrounding community. The mixed-use area shall include neighbourhood-scale commercial uses (grocery store, small-medium scale retail, and other services), medium to high-density residential uses, amenity space, and other compatible uses.
  - **Employment Area** includes employment generating land uses such as prestige industrial, light industrial, business, or commercial uses.
  - **Employment Flex Area** includes employment generating land uses such as prestige industrial, light industrial, business, or commercial uses. Residential uses may be permitted in this area under special policy consideration, as outlined in Section 4.7.
- **Existing High School Site** existing High School site that includes a school building, parking, playfields, a running track, and a stormwater facility.

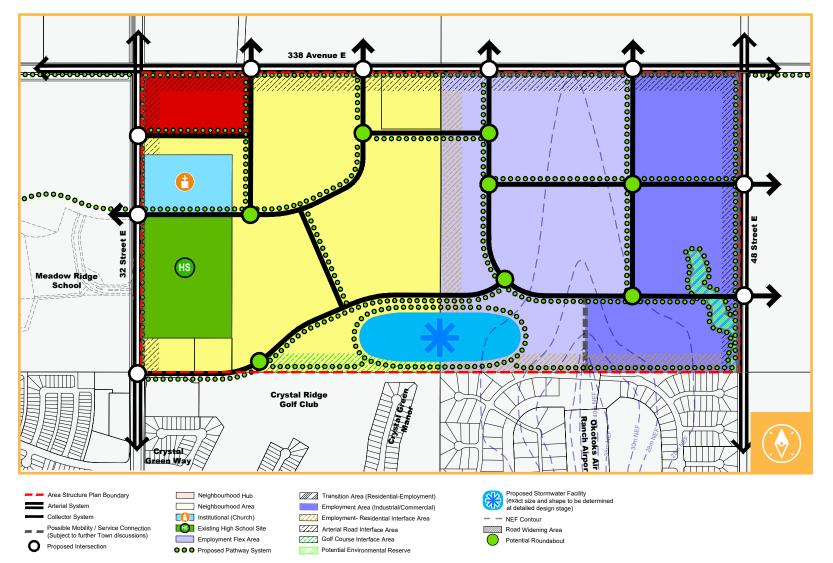
Existing Church Site existing church site and associated parking areas.

**NEF Contour** land uses within the ASP area that are within the 30 NEF (Noise Exposure Forecast) from the Air Ranch Airport shall contain only non-residential uses.

- **Potential Environmental Reserve** existing watercourse and surrounding natural area that requires further evaluation at the NASP stage to determine the potential to be integrated into future development and designated as Environmental Reserve.
- • Regional Pathway a pathway system that connects key features of the community including open spaces, commercial areas, and school sites, and connects the Plan Area to surrounding communities.
- **Employment- Residential Interface Area** existing and future residential portions of the Plan Area that are adjacent to future employment uses. Policy wording in Section 4.9 of this ASP speaks to the appropriate interface conditions with employment uses.
- **Golf Course Interface Area** portions of the Plan Area that are adjacent to the existing golf course. Policy wording in Section 4.10 of this ASP speaks to the appropriate interface conditions with the golf course.
- Arterial Road Interface Area portions of the Plan Area that are adjacent to existing or future arterial roads. Policy wording in Section 4.11 of this ASP speaks to the appropriate interface conditions with arterial roads.

**Stormwater Facility** proposed location of a stormwater facility (pond) and associated open space to accommodate and manage the Trilogy Plains stormwater runoff.

## Figure 11 | Land Use Concept



#### 3.4 Area Structure Plan Statistics

## **3.4.1 Land Use Statistics**

Table 3: ASP Land Use Statistics provides an overview of land use statistics for Trilogy Plains. The statistics have been calculated based on the land uses illustrated on **Figure 11: Land Use Concept.** The statistics are intended to provide a high level understanding of anticipated land use yields and population projections for the Plan Area.

Table 3   Area Structure Plan Statistics				
Land Use	Area (ha)	Area (ac)	Area % of plan	
Neighbourhood Area	45.64	112.78	35.2%	
Neighbourhood Hub	6.07	15.0	4.6%	
Employment Area	30.15	74.5	23.2%	
Employment Flex Area	32.17	79.48	24.8%	
Existing School Site	7.83	19.35	6%	
Existing Church Site	3.80	9.39	3%	
Potential Environmental Reserve	1.19	2.95	0.9%	
Road Widening Area	2.94	7.28	2.3%	
TOTAL AREA	129.7	320.6	100%	

#### 3.4.2 Population & Job Projections

Table 4: Population & Job Statistics calculates the approximate population and job projections for the Trilogy Plains ASP. The gross developable residential area was calculated by deducting the non-developable areas, employment lands, and community commercial area from the total plan area. The population projection for Trilogy Plains was determined using the Town's density target of 12 units per gross residential acre. Anticipated job projections were calculated using an employment ratio for industrial and commercial lands.

- 3.4.1(a) The location and type of land uses, open spaces, and major road network within subsequent Neighbourhood Area Structure Plans (NASPs) shall be in general conformance with this Area Structure Plan at the discretion of the Approving Authority.
- 3.4.1(b) Notwithstanding Policy 3.4.1(a), minor variances to the land use concept at the time of an NASP, land use redesignation, or subdivision application should not require an amendment to this ASP; however, this decision is ultimately at the discretion of the Town Administration.

Table 4   Population & Job Statistics				
Total Plan Area	Hectares (HA)	Acres (AC)		
Less Potential Environmental Reserve	1.19	2.95		
Gross Developable Area	128.56	318.20		
Less Existing High School	7.83	19.35		
Less Existing Church	3.80	9.39		
Less Employment Area	62.09	153.42		
Less Commercial Component of Neighbourhood Hub Area *	4.45	11.0		
Gross Developable Residential Area	50.39	125.04		

\*Note: The Neighbourhood Hub Area is the commercial component within the Mixed-use Area as identified in Figure 10: Land Use Concept.

#### POLICIES

3.4.2(a) Neighbourhood Area Structure Plan applications within Trilogy Plains shall achieve a minimum residential density of twelve units per gross developable acre (29 units per gross developable hectare). Gross Developable Residential Area 50.39 hectares (125.04 acres)

**Town of Okotoks Density Target** 29 units per hectare (12 units per acre)

Approximate number of dwellings 1,407

Approximate number of people per dwelling 2.9 people

Anticipated Population Projection 4,080

Anticipated Job Projection<sup>1</sup> 1,915

# Areas used to calculate the anticipated job projection include:

Neighbourhood Hub Area in NW corner of ASP (11 acres) Employment Area (Regional Commercial) (28 acres) Employment Area (Quasi-Commercial) (30 acres) Employment Flex Area (Industrial) (97 acres)

Anticipated Job Projection is based on the following assumptions:

#### Commercial areas:

Gross-Net Ratio: less 35% Floor Area Ratio: 0.35 FAR Employment Ratio: 1 job per 50 m2 of commercial area

#### Quasi-Commercial Areas:

Gross-Net Ratio: less 30% Floor Area Ratio: 0.3 FAR Employment Ratio: 1 job per 100 m2 of quasi-commercial/ industrial area

#### Industrial Areas:

Gross-Net Ratio: less 20% Floor Area Ratio: 0.3 FAR Employment Ratio: 1 job per 100 m2 of industrial area

## **3.5 Historical Considerations**

#### **3.5.1 Historical Considerations**

This ASP provides an overview of general historic importance of the landscape found within the Trilogy Plains site. Recent uses of the land include farming and homesteading, which were found across the community, will be brought into the overall theme of the community. Understanding the site's past will to help solidify the neighbourhood identity within the Town of Okotoks

#### POLICIES

- 3.5.1(a) The location and naming convention of open spaces and the road network within subsequent Neighbourhood Area Structure Plans (NASPs) shall be in general conformance with this Area Structure Plan at the discretion of the Approving Authority.
- 3.5.1(b) Road names and parks will incorporate the history of the site into the creation of a holistic community identity that is unique to Okotoks.

#### 3.6 Gateways

#### 3.6.1 Gateways

Community entrances or Gateways are one of the primary ways visitors and residents first experience a community's identity. A proper gateway establishes a hierarchy in entrances and how the community should be experienced. Trilogy Plains will have multiple entrances for vehicles and pedestrians along with a variety of intersection types.

- 3.6.1(a) The intersections between the collectors with 338 Ave should be comprehensively designed to create primary gateway entries into the Trilogy Plains community.
- 3.6.1(b) The intersections between the collectors and 32 Street should be individually designed to create gateway entries into the Trilogy Plains community.
- 3.6.1(c) The Trilogy Plains neighbourhood will have signage and appropriate road widths to establish primary and secondary neighbourhood entrances.

## 3.7 Natural Systems

#### **3.7.1 Natural Systems**

Natural landscapes will be preserved where possible and integrated with the open space network. Moreover, neighbourhood design will incorporate natural storm water management strategies to minimize environmental impact. Currently, much of the landscape displays a history of cultivation and ranching. Overland drainage into the neighbourhoods south of the Plan Area is a yearly occurrence and a dry creek exists in a natural or semi-natural state in the SW corner of the site.

#### POLICIES

- 3.7.1(a) The Regional Pathway network should be located as shown on Figure 15:Open Space & Regional Pathways.
- 3.7.1(b) Provide access and views from Neighbourhood Areas by establishing a permeable block design that allows for green pockets to open onto adjacent natural areas, park spaces, and the high school.
- 3.7.1(c) Alignment of community pathways may be refined but not removed at the Neighbourhood Area Structure Plan stage.

## 3.8 Innovation & Green Building Design

## 3.8.1 Innovation and Green Building Design

Building innovation and design will be incorporated into the community of Trilogy Plains. Green design features will be added into the design through partnerships with builders, neighbouring communities, and the Town of Okotoks.

- 3.8.1(a) Innovation in housing forms will be encouraged, such as park fronting homes, elongated park space to connect commercial and residential areas, and provisions to encourage stormwater use.
- 3.8.1(b) Within the Employment Areas, amenity spaces should incorporate pervious surfaces, such as permeable concrete or pavers, in low pedestrian traffic areas.
- 3.8.1(c) Urban forms and infrastructure that support alternative and renewable energy production, sources and systems, and reduced energy consumption are strongly encouraged.

TRILOGY PLAINS // AREA STRUCTURE PLAN // JANUARY 2023

# SECTION 4.0 Community & Neighbourhood Framework

# 4.0 Community & Neighbourhood Framework

## 4.1 Community Development & Neighbourhood Boundaries

Trilogy Plains will be developed as a complete community that contains a range of housing options, commercial uses, an integrated employment area, existing institutional uses, and parks and open space features. The Plan Area consists of two communities, Community A and Community B, as shown in **Figure 12: Neighbourhood Boundaries - Community A & Community B.** 

The complete community of Trilogy Plains will consist of approximately 4,000 residents at full build-out, which includes the mixed-use neighbourhood hub. The neighbourhood boundary is approximate and may be refined at the Neighbourhood Area Structure Plan (NASP) stage. Should the opportunity arise to accommodate residential uses in the Employment Flex Area to the east, an ASP amendment would be required prior to an NASP amendment being considered in reference to the use of Employment Flex Area for residential uses.

- 4.1(a) The Trilogy Plains community should consist of two distinct communities
   one distinct neighbourhood area and one employment area that
   supports a livable and complete community.
- 4.1(b) The exact boundaries of the communities illustrated in Figure 12:
   Neighbourhood Boundaries Community A & Community B may be refined at the time of a Neighbourhood Area Structure Plan and may require an amendment to this plan.
- 4.1(c) Additional neighbourhood-scale commercial should be included in the Employment Flex area subject to a market assessment. A market assessment for Community B shall be completed at the time of the preparation of the NASP for Community B.



## Figure 12 | Neighbourhood Boundaries - Community A & Community B

🗕 💻 Area Structure Plan Boundary

Proposed Neighbourhood Boundary

## **COMMUNITY & NEIGHBOURHOOD FRAMEWORK**

## 4.2 Community A

Community A allows for a mix of residential uses of varying densities and forms, neighbourhood parks, and local streets. Community A will contain a distinct identity, created through public parks, streetscape design, landmarks, and sightlines. Low, medium, and high-density residential uses should be cohesively integrated throughout the area, encouraging a walkable and active community.

Within the Community A area, the majority of the medium and high-density development is anticipated to be located in the Neighbourhood Hub, along major road networks, and in proximity to open space features. A range of housing types will be accommodated to provide housing choice to a diverse population at various stages of life.

Appropriate interface areas and gradients in density will be provided to ensure appropriate transitions and compatibility between proposed land uses and in relation to existing surrounding development.

- 4.2(a) The Neighbourhood Area within Community A shall be generally located as shown on Figure 11: Land Use Concept.
- 4.2(b) The Neighbourhood Area within Community A shall consist of predominantly residential uses with limited and compatible nonresidential uses located in the Neighbourhood Hub.
- 4.2(c) The Neighbourhood Area shall accommodate a diversity of housing types that are integrated throughout the plan area to promote an inclusive community.
- 4.2(d) A minimum of 40% of housing within the ASP area shall be a housing type other than single-detached housing.
- 4.2(e) Multi-dwelling residential development within within Community A should be:
  - i. located adjacent to or in proximity to major roadways, future transit service, open space systems, and the pathway network
  - ii. located within the Neighbourhood Hub

## **COMMUNITY & NEIGHBOURHOOD FRAMEWORK**

- 4.2(f) Multi-dwelling residential development should have a strong street presence and should include appropriate transitions that create compatible interfaces between higher density development and lower density development.
- 4.2(g) Innovative housing forms (such as secondary suites, live-work units, co-op housing, laneway housing, mixed-use housing, and reverse housing, among other alternative and innovative forms) should be supported within the Neighbourhood Area in order to meet the needs of various lifestyles and support the delivery of affordable housing.
- 4.2(h) The provision of rental, affordable and special needs housing should, where applicable, be in accordance with the Town's Housing Needs Assessment.
- 4.2(i) The Neighbourhood Area shall be designed to have a series of focal points and destinations to support community interaction and activity.
- 4.2(j) A public art component should be incorporated into either the park system or the Neighbourhood Hub to enhance the sense of place.







## 4.3 Community A - Neighbourhood Hub

The Neighbourhood Hub, identified in **Figure 11: Land Use Concept**, is envisioned as a community destination, providing a mix of land uses that provide commercial services, higher density residential uses, and gathering spaces. The Hub is located at the corner of two arterial roads, 338th Avenue and 32nd Street, and supported by the Trilogy Plains collector road system to provide convenient access and accommodate future transit service. An appropriate intersection design and treatment at 32nd Street to ensure the necessary traffic exposure to support the commercial development will be determined in consultation with the Town. Strong pedestrian and cyclist networks and multi-use pathway connectivity to the Neighbourhood Hub shall be provided to encourage a walkable destination.

Commercial uses within the Hub will meet the daily shopping needs of the Trilogy Plains community and surrounding communities. The Neighbourhood Hub may provide services such as a supermarket, drugstore, financial institutions, restaurants, a range of specialty stores, services, and office space (i.e., personal, medical, professional, financial services) among other uses. The Hub may also include various community facilities and services, such as a daycare and fitness centre. Commercial uses within the Neighbourhood Hub can be stand-alone developments or part of a mixed-use development within higher density mixed-use areas of the Neighbourhood Hub. Medium and high-density residential development should be located within and in close proximity to the Neighbourhood Hub to promote walkability, increase vibrancy and success of the retail developments, encourage activity within the Hub, and provide a transition to surrounding lower density residential areas.

- 4.3(a) The Neighbourhood Hub shall be generally located as shown on Figure 11: Land use Concept. The exact boundary will be refined at the Neighbourhood Area Structure Plan (NASP) stage.
- 4.3(b) The commercial area within the Neighbourhood Hub shall be located at the intersection of 32 Street and 338 Avenue and supported by a collector road within the Plan Area.
- 4.3(c) Two intersections that provide access into the Neighbourhood Hub should be provided from the surrounding regional road network to ensure convenient access and adequate traffic volumes to support the commercial development.
- 4.3(d) Additional right-in/right-out vehicle access points from 338 Avenue into the commercial area may be provided and will be determined at the NASP stage at the discretion of the Town of Okotoks.

## POLICIES

- 4.3(e) The Neighbourhood Hub shall be well-connected to the surrounding residential area through a network of pathways and walkways that provide convenient and safe connections for active modes of transportation.
- 4.3(f) The Neighbourhood Hub should be comprehensively planned and should include the following uses:
  Community commercial uses
  Medium or High-density residential development
  A public open space/amenity space
- 4.3(g) Proposed land uses within the Neighbourhood Hub shall be in accordance with the Town of Okotoks MDP policies and Land Use Bylaw, including policies concerning electric vehicle charging stations. The Neighbourhood Hub may include land uses such as recreational activities, commercial uses, office, institutional uses, or other compatible uses.
- 4.3(h) Drive-thru businesses are generally discouraged; however, consideration for a drive-thru business(es) may be granted where suitable design solutions can be provided to the satisfaction of the Approving Authority. Drive-thru policies to minimize disruption to pedestrian connectivity through appropriate design solutions shall be explored at the NASP stage and be in alignment with the MDP and LUB.
- 4.3 (i) The commercial area shall consist of predominantly small and medium format retail uses and may consist of other compatible employment uses such as personal, professional, medical, and financial services.
- 4.3(j) The commercial area within the Neighbourhood Hub shall be a minimum of 10 acres in size.

- 4.3(k) The exact land area size and commercial floor area of the commercial area will be determined through subsequent analysis at the Neighbourhood Area Structure Plan (NASP) stage.
- 4.3(I) Medium and high-density residential uses should be located adjacent to or incorporated within the Neighbourhood Hub.
- 4.3(m) Public plazas and gathering spaces should be comprehensively planned within the Neighbourhood Hub to create focal points and promote community interaction.
- 4.3(n) A public art component should be incorporated into the gateway entrances, the park system or the Neighbourhood Hub to enhance the sense of place.
- 4.3(o) Community amenities (such as schools, recreational areas, churches, and open spaces) should be linked to the Neighbourhood Hub via an interconnected regional and local pathway system.
- 4.3(p) Design guidelines for the Neighbourhood Hub should be prepared at the NASP stage to ensure overall design consistency within the Neighbourhood Area.
- 4.3(q) At the NASP stage, a conceptual layout of the Neighbourhood Hub shall be provided. Sites should be designed so that buildings in the Hub that front or back onto major roadways such as 32nd Street and 338th Avenue are oriented toward adjacent roadways, designed with a high level of architectural detail, and provide screening of surface parking lots where possible.

## 4.4 Community B - Employment Area

The purpose of the Employment Area within Community B is to provide for a range of employment uses in the form of regional commercial uses, prestige industrial, or light industrial uses. Industrial uses are generally high employment generators and inclusion of these services within the Trilogy Plains area further enhances the concept of a complete community. Employment uses also help support a thriving Okotoks economy.

Regional serving commercial development is usually comprised of one or more "large format" retailers plus a host of complementary stores, restaurants, and services within a comprehensively designed development. Regional commercial uses require a high level of regional accessibility, large traffic volumes, and strong visibility. If further market analysis at the Neighbourhood Area Structure Plan stage determines a regional commercial area is warranted, an ideal location is the northeastern portion of the Plan Area, adjacent to 338 Avenue and 48 Street.

Other regional commercial and light industrial uses that potentially could be supported with visibility from 48 Street may include motor vehicle dealerships, automotive services, storage facilities, garden centres, microbreweries, a farmer's market, and other uses that require traffic exposure or congregation with other commercial or industrial uses.

Other light industrial-type uses, such as warehousing, manufacturing, construction services, food services, or other uses may be located in the Employment Area. The type of uses within the Employment Area will be determined at the Neighbourhood Area Structure Plan (NASP) stage for Community B.

- 4.4(a) The Employment Area shall be generally located as shown in **Figure 11: Land Use Concept.**
- 4.4(b) The Employment Area should be comprised of light industrial, business service, commercial, and other industrial-supportive uses, and shall be further defined at the NASP stage.
- 4.4(c) The road network within the Employment Area shall ensure direct and efficient access to the surrounding regional road network and, where possible, align with development access points to the east of 48 Street.
- 4.4(d) The Neighbourhood Area within Community A and the Employment Area within Community B shall be connected, but designed to minimize the amount of employment traffic travelling through the Neighbourhood Area.
- 4.4(e) The multi-use pathway network within the Plan Area shall provide direct connections between the Neighbourhood and Employment Areas.
- 4.4(f) The Employment Area shall provide an appropriate and attractive transition area between residential uses and employment uses.

## **COMMUNITY & NEIGHBOURHOOD FRAMEWORK**

## 4.5 Community B - Employment Flex Area

The Employment Flex Area is situated between the Neighbourhood Area to the west and the Employment Area to the east. The Employment Flex Area is intended to include employment generating land uses such as prestige or light industrial uses, office, or commercial uses. While the Okotoks Municipal Development Plan designates the entire east quarter section of the ASP for 'employment uses', current market analysis completed at the time of the preparation of the Area Structure Plan indicates a potential overabundance of industrial and employment lands within Okotoks over the next 40-year horizon. If further analysis at the time of preparation of a Neighbourhood Area Structure Plan (NASP) provides compelling rationale for the conversion of some or all of the Employment Flex Area to residential, an application for residential uses may be considered by the Town. However, an amendment to the Municipal Development Plan (MDP) would be required and must be approved by Council prior to establishing the Employment Flex Area as an area for future residential uses.

Since the Employment Flex Area borders the Neighbourhood Area, an appropriate and attractive transition area between the residential and employment uses should be established. This transition area may include, but not be limited to, open space features, building and site design, landscaping, and lighting placement.

- 4.5(a) The Employment Flex Area shall be generally located as shown in **Figure 11: Land Use Concept.**
- 4.5(b) The Employment Flex Area should be comprised of light industrial, business service, commercial, and other industrial-supportive uses, and shall be further defined at the Neighbourhood Area Structure Plan (NASP) stage.
- 4.5(c) The Employment Flex Area shall provide an appropriate and attractive transition area between residential uses and employment uses.
- 4.5(d) The Employment Flex Area may comprise residential uses, contingent upon further review at the Neighbourhood Area Structure Plan (NASP) stage and subject to the approval of a Municipal Development Plan amendment. Long-term planning of the Employment Flex Area should be based on future analysis, overall residential and commercial land supply, and forecasted demand in the Town of Okotoks.
- 4.5(e) Non-employment related uses and the subsequent MDP and ASP amendments shall only be considered if, in the opinion of the Town, there is significant long-term existing non-residential land supply.

## 4.6 Existing Site Uses - School & Church

An existing high school site and church site will be maintained and integrated within the Trilogy Plains Plan Area. Holy Trinity Academy is a Catholic High School (Grades 10-12) in the Christ the Redeemer School Division. The school site is adjacent to 32nd Avenue and is approximately 19.3 acres in size, containing a school building, parking areas, a play field and track, and a stormwater management area. The school site is intended to be maintained in its current configuration with minor changes to site circulation based on entrance road requirements.

St. James Parish is directly north of the school site and contains approximately 9.4 acres of land for a church building, parking facilities, and stormwater management areas. The east portion of the church site is currently being considered for redevelopment and potential residential uses. The details of the church site should be determined at the NASP stage. Redevelopment of a portion of the site shall not require an amendment to this plan.

An existing private road shared between the school and church sites provides access from 32nd Street. This access road is proposed to be upgraded to a public Town collector standard and serve as a main entrance to Trilogy Plains. Design details, right-of-way requirements, and land acquisition from the school and church sites will be determined at the NASP stage.

Surrounding residential uses within Trilogy Plains should provide compatible interface treatments and ensure integration of the church and school with the neighbourhood. Pathway or road connections should be established that connect the school and church sites to commercial areas, open spaces, and activity centres to promote walkability and connectivity to key focal points throughout the neighbourhood.

- 4.6(a) The existing school and church sites within the Trilogy Plains ASP area shall remain in the location as shown on **Figure 11: Land Use Concept**.
- 4.6(b) A public collector road and all-turn access to 32 Street shall be developed to Town standards between the school and church site. The amount of right-of-way dedication and detailed design of the road access shall be determined at the Neighbourhood Area Structure Plan stage.
- 4.6(c) Adequate road access, bus zones, and loading areas for the school site shall be maintained and coordinated with the school division at the time of a Neighbourhood Area Structure Plan.
- 4.6(d) Potential redevelopment of a portion of the church site for residential uses shall not require an amendment to this ASP.
- 4.6(e) The interface treatment between future residential uses and the school and church sites should be generally defined through the Neighbourhood Area Structure Plan process.
- 4.6(f) Safe routes and pathway connections, where possible, from the school and church sites to activity centres, commercial areas, and neighbourhood focal points will be provided.

## 4.7 Interface Areas

#### 4.7.1 Arterial Road Interfaces

The 338 Avenue Interface Area is highlighted as 'Area A' in **Figure 13: Interface Areas** and includes residential and employment lands adjacent to and highly visible from 338 Avenue. 338 Avenue is proposed as an arterial roadway and a major east-west thoroughfare within the Town. A functional study is currently underway for 338 Avenue and will determine the function, size and look/feel of the roadway. The functional study will also finalize the intersection spacing and treatment. The intent of the 338 Avenue corridor is that it will be multi-modal and will equitably accommodate vehicular traffic, future transit service, and active modes of transportation. It is anticipated the regional pathway network will continue along 338 Avenue, connecting communities to the west, Trilogy Plains, and future employment areas east of 48 Street. The interface area along 338 Ave should consider visual appeal for commuters, noise mitigation for residents, and overall safety considerations.

In order to provide an attractive interface, a variation of residential densities, commercial uses, and employment uses should be situated adjacent to 338 Avenue to provide visual relief to the traveling public. High density residential uses and commercial uses should be designed, where possible, to have some street facing presence towards 338 Avenue to help activate the street. Low density residential uses and employment uses should ensure high-quality fencing/noise mitigation walls and landscaping elements are appealing for all modes of transportation along 338 Avenue. 32 Street and 48th street will also contain a similar arterial interface between the road and community.

- 4.7.1(a) The Arterial Interface Areas shall be located as generally shown on Figure 13: Interface Areas, along the western, northern, and eastern boundary of the Trilogy Plains ASP.
- 4.7.1(b) The Arterial Interface treatment should include high quality built form, natural landscaping elements, pathways, and high quality fencing/ noise mitigation measures. Enhanced urban design and architectural controls should be incorporated for all buildings (residential and commercial) that back or front onto major corridors and interface areas. The urban design and architectural controls should be further refined and outlined at the NASP stage.
- 4.7.1(c) High density residential uses and commercial uses should include, if possible, some street presence towards the roadway to help activate the street.
- 4.7.1(d) The treatment of the Arterial Interface Areas should be generally defined through the Neighbourhood Area Structure Plan and will be informed by the 338 Avenue Functional Study.
- 4.7.1(e) The 338 Avenue Functional Study will define the look, feel, function, and design of the 338 Avenue Corridor. The surrounding arterial road network of 32nd Street, and 48th street are outside of the plan boundary and all connections and intersection treatments (ie. all turns, signalized) are at the discretion of the Town.

## 4.7.2 Golf Course Interface Area

The Golf Course Interface Area is situated directly adjacent to the Crystal Ridge Golf Course on the southwest boundary of the Plan Area (shown as 'Area C' on **Figure 13**). Future residential uses within the Trilogy Plains Plan Area should consider the unique interface conditions with an active golf course, including golf ball hazards and noise implications at various times of the day.

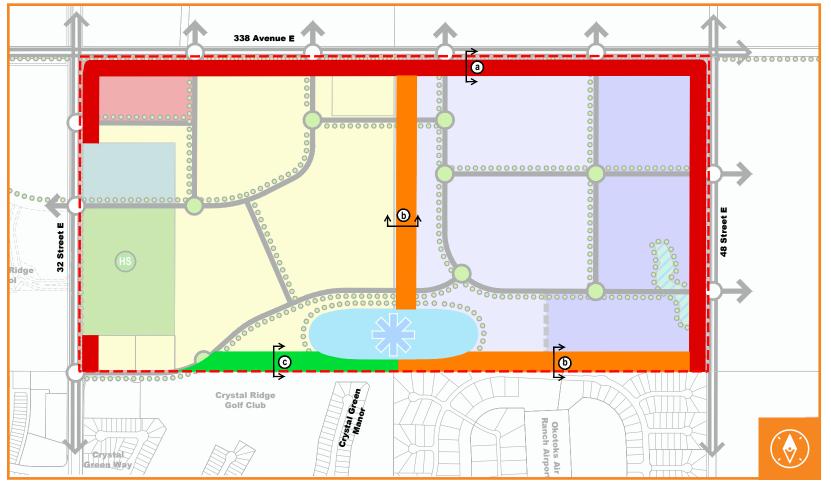
To promote compatibility while ensuring an appropriate separation of uses between the golf course and future residential uses, the Golf Course Interface area should consider building placement and angles in relation to tee boxes, open space, and natural landscaping buffers in the form of Municipal Reserve and high-quality fencing.

- 4.7.2(a) The Golf Course Interface Area shall be located as generally shown on
   Figure 13: Interface Areas, along the northern boundary of the Crystal
   Ridge Golf Course.
- 4.7.2(b) Golf Course Interface treatment may include a combination of strategic housing placement, natural landscaping elements, open space (Municipal Reserve), pathways, high quality fencing, and/or security provisions.
- 4.7.2(c) The treatment of the Golf Course Interface area should be generally defined through the Neighbourhood Area Structure Plan stage and finalized through the subdivision process.









Area Structure Plan Boundary Arterial Road Interface Area Employment- Residential Interface Area Golf Course Interface Area

▲ ⓑ ▲ Section Reference

#### 4.7.3 Employment-Residential Interface Area

The Employment-Residential Interface Area within the Trilogy Plains ASP consists of employment lands situated directly adjacent to existing residential uses within the Air Ranch community and future residential lands located adjacent to the future 'Employment Flex Area', illustrated as 'Area B' on **Figure 13: Interface Areas.** 

The intent of the Interface Area is to ensure that new development within the Plan Area ensures an appropriate and appealing transition from residential to employment uses. The quality of the interface is important due to non-residential nuisance factors, visual appeal for residents, and safety considerations for residents, business owners, and the airport to the south. The Interface Area consists of existing and future residential lots that directly back onto future employment development.

The Interface Area shall ensure an attractive and safe transition area that mitigates the impacts of non-residential uses on adjacent residential development while ensuring appropriate height transitions within the Interface Area so as not to impact the safety of airport operations. Landscaped areas should be developed in the form of linear park space (Municipal Reserve) that consists of high-quality landscaping, multi-use pathways, berms, and fencing. Site design guidelines for non-residential lots within the Interface Area will entail minimum building setbacks, limitations on activity, lighting and façade requirements, building height limits in accordance with the Airport Height Limitation requirements, and other security/nuisance prevention provisions. See **Figure 13: Example Linear Park Between Residential & Employment Uses** for an example cross-section of a green buffer space and setback area between residential and employment uses.

- 4.7.3(a) The Employment- Residential Interface Area shall be located as generally shown on Figure 13: Interface Areas, along the north boundary of the Air Ranch community, and between future residential and the Employment Flex Area in the central portion of the Plan Area.
- 4.7.3(b) Acceptable land uses within the Employment- Residential Interface Area include business activities primarily carried out within an enclosed building that generate no significant nuisance factors (noise, dust, odour, vibration) outside of an enclosed building.
- 4.7.3(c) Business uses that interfere with the use and enjoyment of adjacent residential development because of the nature of the business use shall not be permitted, even where the business activities may be fully enclosed within a building.
- 4.7.3(d) Spatial separation between non-residential and residential uses should be achieved by providing a minimum 30 metre building setback for nonresidential uses from the residential property line. Interface area policies will be outlined at the NASP stage to guide development permit applications within a defined buffer area.
- 4.7.3(e) Uses within the 30-metre minimum building setback of the Employment-Residential Interface Area may include:
  - Landscaping, berms, landscaped stormwater ponds, natural areas, pathways, and linear parks that d;
  - ii) Surface parking (up to 10 metres of the 30-metre setback) where the parking is hidden from view by berms and landscaping;
  - iii) No storage or other uses besides the uses listed above can be placed in the 30-metre setback area.

## **COMMUNITY & NEIGHBOURHOOD FRAMEWORK**

#### POLICIES

- 4.7.3(f) Municipal Reserve should be allocated to linear parks and multi-use pathways within the Employment-Residential Interface Area:
  - i) The MR should contain a linear park / buffer area that consists of a 3.0 metre multi-use regional pathway and significant landscaping constructed along the southern edge of the plan area to connect to 48th Street and the stormwater pond.
  - ii) High-quality landscaping should include mass plantings that incorporate an upper canopy and lower canopy to ensure adequate screening between employment and residential uses.
  - iii) The height of the landscaping within the linear park / buffer area north of runway 16/34 shall align with the height limitation requirements as noted in Figure 6: Airport Height Limitation Map, which will be further defined at the NASP stage.
- 4.7.3(g) Non-residential building heights within the Employment-Residential Interface Area should not exceed 2 storeys or 10 metres.
- 4.7.3(h) Garbage storage, loading bays, loading doors, or other activities creating heavy truck movements and noise on lots adjacent to a residential area shall not face the residential area.
- 4.7.3(i) Façades of buildings facing adjacent residential areas should consist of high-quality materials that vary in architectural detail.
- 4.7.3(j) Lighting on non-residential lots shall face downwards and implement dark-sky policies.
- 4.7.3(k) The treatment of the Employment- Residential Interface area shall be generally defined through the Neighbourhood Area Structure Plan stage and finalized through the subdivision process.

## Figure 14 |

## **Example Linear Park between Residential & Employment Uses**



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# SECTION 5.0 Open Space

# 5.0 Open Space

The open space system within the Trilogy Plains ASP will consist of a combination of parks and pathways, programmed open space, and a high school site. Neighbourhood parks, linear open spaces, and local pathways are not illustrated in the Trilogy Plains ASP but will be integrated throughout the Plan Area and defined at the time of a Neighborhood Area Structure Plan.

## 5.1 Environmental Reserve

An existing watercourse in the southeast corner of the plan area currently drains to the southeast of the ASP and eventually to the Sheep River. The watercourse, identified as "Watercourse D" on **Figure 8: Biophysical Conditions**, appears to be relatively undisturbed and its downstream portion that connects to the Sheep River is intact. The Biophysical Overview completed as part of this Area Structure Plan suggests that further investigation occur at the Neighbourhood Area Structure Plan to determine if a portion of the watercourse has the potential to be retained and integrated into the proposed future development as Environmental Reserve. As per the Alberta Municipal Government Act, the potential Environmental Reserve (ER) area within the Plan Area (See **Figure 15: Open Space & Regional Pathways)** would consist of the watercourse and "a strip of land, not less than 6 metres in width, abutting the bed and shore of the body of water for the purpose of preventing pollution and providing public access."

- 5.1(a) The potential Environmental Reserve (ER) area is located as shown on **Figure 15: Open Space & Regional Pathways.**
- 5.1(b) The potential Environmental Reserve area shall be further evaluated through a Biophysical Impact Analysis completed at the Neighbourhood Area Structure Plan stage.
- 5.1(c) If the Potential Environmental Reserve area is not determined to be required at the Neighbourhood Area Structure Plan stage, an amendment to this ASP shall not be required.
- 5.1(d) Any land dedicated as Environmental Reserve shall be in accordance with the Municipal Government Act (MGA). MR should be provided adjacent to the ER lands to ensure useability for parks as well as connections to natural features in alignment with the MDP.
- 5.1(e) The setback from land dedicated as environmental reserve shall be in accordance with the setbacks outlined in the MDP.

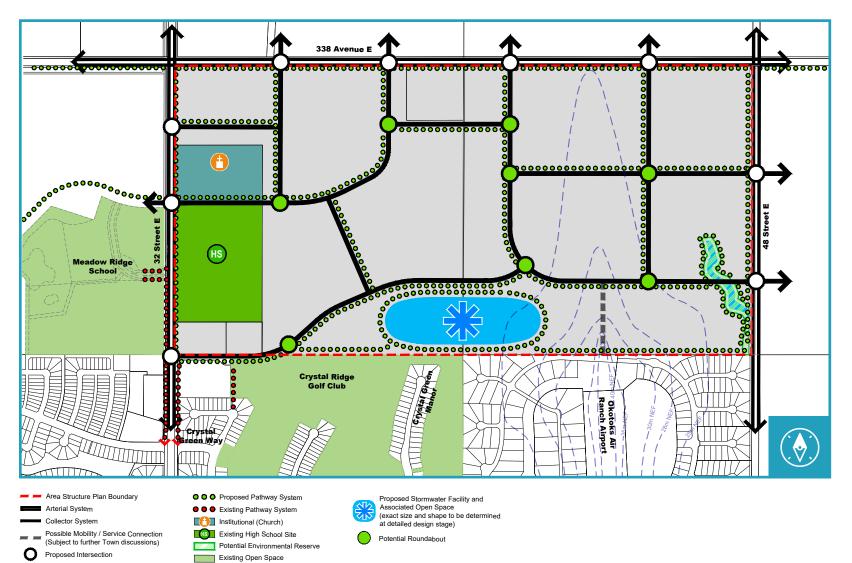


Figure 15 | Open Space & Regional Pathways

## **5.2 Municipal Reserve**

Municipal Reserve (MR) requirements for the Plan Area are outlined in **Table 5: Municipal Reserve Requirements**. Provincial legislation requires 10% MR dedication for gross developable areas. Specific MR requirements and distribution within the Plan Area will be determined at the Neighbourhood Area Structure Plan Stage.

Areas within Trilogy Plains that are considered undevelopable and not subject to Municipal Reserve credit include potential Environmental Reserve and the existing school and church sites located on 32 street.



Table 5   Municipal Reserve Requirements				
Total Plan Area	Hectares (HA)	Acres (AC)		
Less Potential Environmental Reserve	1.19*	2.95*		
Gross Developable Area	128.56	317.66		
Total Municipal Reserve Requirement (10%)	12.85**	31.76		

\*Note: The ultimate area depends on the classification at the NASP stage and the subsequent setback requirements outlined in the MDP.

\*\* The total MR allocation obligation will be finalized at NASP stage and in consideration of land ownership that comprises the ASP area.

## 5.3 Neighbourhood Parks & Open Space

The open space system for Trilogy Plains will be designed as an interconnected network that accommodates a range of passive and active recreation opportunities for neighbourhood residents. Neighbourhood Parks can include playgrounds, open play areas, pathways, naturalized areas, play fields, plazas, or other areas for socializing and recreating. The location and distribution of Neighbourhood Parks within Trilogy Plains will be determined at the Neighbourhood Area Structure Plan (NASP) stage.

Neighbourhood Parks should form focal points throughout the neighbourhood, providing an attractive and safe area for residents to gather and socialize. Neighbourhood parks, linear parks, and walkways should be integrated with the regional pathway system and with activity centres within Trilogy Plains, including the Neighbourhood Hub, existing school site, and church site.

#### POLICIES

- 5.3(a) Neighbourhood Parks should be centralized within a neighbourhood and within walking distance for most residents.
- 5.3(b) Neighbourhood Parks should create focal points and terminating vistas that are highly visible and accessible to residents.
- 5.3(c) The parks and open space system will be composed of a hierarchy and diversity of open spaces with differing roles and functions, designed for various recreation uses, different seasons, and multi-generational use.

- 5.3(d) Neighbourhood Parks should be linked to the regional pathway system and activity centres throughout the Plan Area to ensure an interconnected open space network, promote active modes of transportation, and increase neighbourhood vibrancy.
- 5.3(e) Neighbourhood parks and open space system within Trilogy Plains will be designed for the recreation needs of Okotoks residents and will be guided by the Town's Recreation, Parks, and Leisure Plan (2016).
- 5.3(f) Neighbourhood parks should have a distinct theme that ties the parks into the overall neighbourhood design and character. The theme should be outlined at the NASP stage.
- 5.3(g) The location, composition, configuration, and programming of Neighbourhood Parks within the Plan Area shall be determined at the Neighbourhood Area Structure Plan stage.
- 5.3(h) Neighbourhood parks should include activities for four-season activities (ie. toboggan hill, skating, etc.).
- 5.3(i) Stormwater management systems should be integrated with parks and recreation infrastructure development. Land used for stormwater management systems shall be designated as PUL (including overland drainage) and not considered as part of MR dedication.
- 5.3(j) The stormwater pond will be an aesthetically-pleasing natural shape and heavily landscaped as a key neighbourhood feature.

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# 6.0 Mobility

## 6.1 Regional Pathways & Safe Routes

Regional pathways will connect residents to major destinations throughout the Plan Area, including parks and open space features, commercial and employment areas, the high school and church, and to surrounding communities. Regional pathways typically consist of a minimum 3.0 metre multi-use pathway. The intent of the regional pathway network is to provide safe and attractive routes that allow residents to move through the community, enjoy open spaces, and access local services.

The Trilogy Plains ASP will contain a combination of off-street and on-street regional pathways, illustrated in **Figure 15: Open Space & Regional Pathways**. The off-street pathway will be integrated with open space features surrounding the proposed stormwater facility along the south portion of the Plan Area. The on-street pathway system is integrated within the road right-of-way area and follows the major street network.

The regional pathway network within the Trilogy Plains ASP also supports Safe Routes that help to encourage active transportation. Safe Routes are established, defined routes that allow children (and seniors) to safely use active transportation to get to major facilities and to get to and from school. The on-street and off-street regional pathways identified in the ASP provide direct connections to the high school site, the Neighbourhood Hub, and other community destinations within the Plan Area. The development and implementation of Safe Routes will be determined at the Neighbourhood Area Structure Plan stage.

- 6.1(a) The location of regional pathways must be generally in conformance with Figure 15: Open Space & Regional Pathways. Alignment of the regional pathways may be refined at the NASP stage and additional regional pathways may be added.
- 6.1(b) Regional pathways on the west and south side of the plan area shall connect with existing regional pathways in surrounding communities.
- 6.1(C) Additional connections, such as local pathways, sidewalks, and onstreet bike lanes, should supplement and support the regional pathway system to provide safe and efficient active mode connections throughout the community. The details of the local pathway system will be determined at the Neighbourhood Area Structure Plan stage.
- 6.1(d) Safe Routes should be as direct as possible between the High School,
   Neighbourhood Hub, and other focal points throughout the community.
- 6.1(e) In order to promote Safe Routes, the number of street crossings should be minimized on collector roadways. Where crossings are required on collectors, they should be marked and design elements should be used to ensure high visibility and unobstructed sightlines of the crossing.

## 6.2 Transit Service

The Okotoks transit service currently provides transportation service ondemand, as a "curb-to-curb" ride-sharing bus shuttle. The on-demand transit service currently provides coverage to the entire Town of Okotoks and is accessible for wheelchairs and small children. Current transit services border the Trilogy Plains ASP and could be easily extended to include the Plan Area upon development. The internal road network proposed for Trilogy Plains includes collector streets that support transit service. The layout of the collector street network ensures adequate coverage for transit if regular service transit is provided to this area in the future. Regional pathways and the active transportation network within Trilogy Plains should be designed to support future transit use through the provision of direct pedestrian connections and permeable street patterns.

Planning for public transit routes and stops within Trilogy Plains will be determined at the Neighbourhood Area Structure Plan stage.

- 6.2(a) The collector road network within the Plan Area should be designed to accommodate future transit routes and stops.
- 6.2(b) Future transit route and stops should be conceptually identified at the Neighbourhood Area Structure Plan Stage.

## 6.3 Internal & External Road Network

The internal road network within Trilogy Plains will ensure efficient connections throughout the Plan Area, to key destinations within the community, and to the surrounding regional road network. The proposed collector road network is shown on **Figure 16: Road Network.** The collector road network provides the framework for community circulation patterns and provides the main access and egress to the community. Local roads will be defined at the Neighbourhood Area Structure Plan stage and will be designed to connect and complement the collector road system.

The collector system has been developed to support appropriate connection and integration between future residential and employment uses, while minimizing the amount of employment traffic through the residential area. Two east-west collector roads connect the two areas, while multiple connection points to 338 Avenue and 48 Street will direct employment traffic to the east.

A collector road and intersection on 32nd Street in the NW corner of the Plan Area is situated to ensure the necessary access/egress to support the viability and success of the commercial area and provide additional connection to the regional road network for high-density residential uses associated with the Neighbourhood Hub. An additional right-in/right-out movement from 338 Avenue into the commercial area will also enhance circulation in the area. The collector road located between the existing Church and High School site will support traffic volumes from these uses while also providing an important access to the community. An existing private road currently services the School and Church site and is shared between the two properties (refer to **Figure 17: Modification to Existing Roads).** The detailed road cross-section, intersection design, organization of movements in the area, and land acquisition for the future collector road will be determined at the Neighbourhood Area Structure Plan stage.

An existing local road located on the southwest boundary of the Plan Area (see **Figure 17**), identified as Crystal Green Lane, is proposed to be upgraded to a collector standard to provide additional connection to 32nd Street and accommodate efficient movements for the south portion of the community.

Intersections to the surrounding regional road network along 32nd Street, 338 Avenue, and 48th Street will facilitate connectivity to the rest of North Okotoks and the future interchange at 338 Avenue and Highway 2. The exact configuration of these intersections will be determined at the Neighbourhood Area Structure Plan stage.

#### POLICIES

- 6.3(a) Collector roads within the Trilogy Plains ASP shall be in general accordance with **Figure 16: Road Network.**
- 6.3(b) The number and general location of intersections and access points to the Trilogy Plains area should be provided as illustrated in Figure 15.
- 6.3(c) A collector road and intersection on 32nd Street should be situated to support the development of the Neighbourhood Hub Area in the northwest corner of the Plan Area.
- 6.3(d) Road connections should be minimized between the residential and employment areas to prevent employment traffic traveling through residential neighbourhoods. A second east / west road connection along the southern portion of the ASP area may be designed and constructed to deter short-cutting.

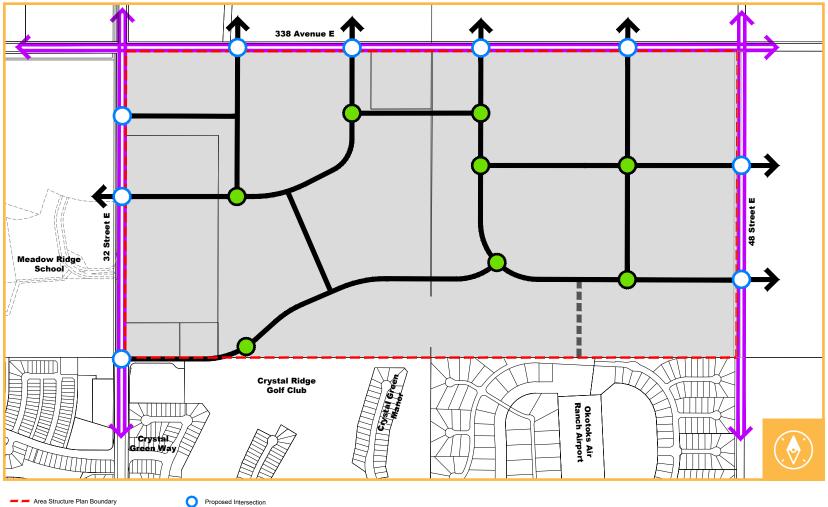
Detailed cross-sections of the collector roads throughout the Plan

6.3(e)

- Area shall be defined at the Neighbourhood Area Structure Plan Stage and will be constructed to the Town of Okotoks design standards.
- 6.3(f) The layout out of residential streets shall be detailed at the Neighbourhood Area Structure Plan stage and must be comprised of interconnected streets that provide multiple and direct connections throughout the community.
- 6.3(g) A Transportation Impact Assessment (TIA) shall be provided at the Neighbourhood Area Structure Plan stage to support internal road network requirements, appropriate intersection treatments with internal and external roads, and timing of when these intersections are required.

## MOBILITY

## Figure 16: Road Network





 Possible Mobility / Service Connection (Subject to further Town discussions)

MOBILITY

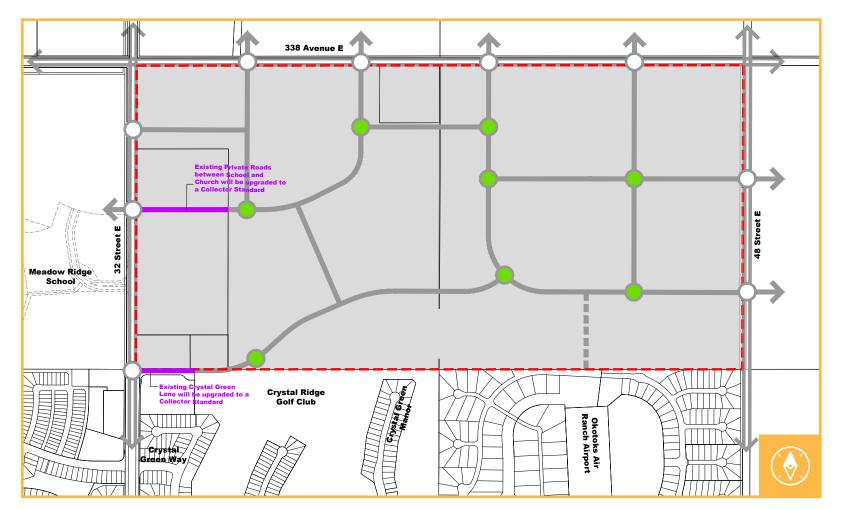


Figure 17: Modification to Existing Roads

💻 💻 Area Structure Plan Boundary

Arterial System

Collector System

 Possible Mobility / Service Connection (Subject to further Town discussions)

#### 6.4 Road Widening Areas

Pursuant to the Town of Okotoks Transportation Master Plan, the Town currently has plans to upgrade 32nd Street to a 4-lane arterial road and 338 Avenue to a 4-lane urban arterial road standard. To accommodate the upgrades, road widening area within the Trilogy Plains ASP will be required along these two roads, as illustrated in **Figure 18: Road Widening Areas.** 

**32nd Street -** Currently a two-lane collector road within a 20.0 metre rightof-way. The preliminary ultimate design for 32nd Street provided by the Town identifies a four-lane divided arterial road within a 36.6 metre right-of-way. Therefore, Trilogy Plains ASP area will accommodate approximately 8.3 metres (approximately 0.65 hectares) for road-widening area along 32nd Street.

**338 Avenue –** Currently a two-lane rural collector road within a 20.0 metre right-of-way. The Town completed a Functional Study for 338 Avenue from Northridge Drive to 32 Street, identifying a 4-lane divided arterial road with supporting pathways and bike lanes. The cross-section for the portion east of 32nd Street, adjacent to Trilogy Plains, has not yet been determined. For the purposes of ASP planning, it was assumed the proposed 40.0 metre cross-section identified for 338 Avenue west of 32nd Street would continue east along the length of 338 Avenue. This requires the Trilogy Plains area to accommodate an approximately 10-metre road widening area for these future upgrades. This equates to approximately 1.64 hectares of the Plan Area.

**48 Street-** Currently a 2-lane rural collector roadway. The Transportation Impact Assessment (TIA) for Trilogy Plains notes that an upgrade to a 4-lane arterial cross-section is not necessary at this time; however, 48 Street should

be protected for an arterial standard road in the future. A typical arterial road right-of-way is 36 metres. This would require approximately 8 metres of road widening area within the Trilogy Plains ASP, equating to approximately 0.63 hectares.

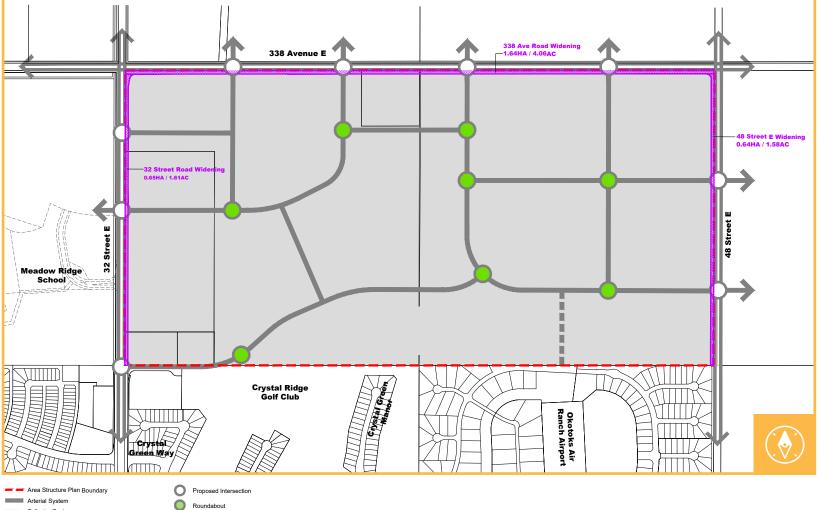
The exact amount of road widening area for all roads will be confirmed at the Neighbourhood Area Structure Plan stage and finalized at the time of subdivision.

#### POLICIES

- 6.4(a) Road widening areas within Trilogy Plains shall generally be accommodated as shown on **Figure 18: Road Widening Areas.**
- 6.4(b) The exact amount of road widening area for 338 Avenue and 32 Street will be confirmed at the Neighbourhood Area Structure Plan stage and finalized at the time of subdivision.

MOBILITY

# Figure 18: Road Widening Areas



Collector System

Road Widening

Possible Mobility / Service Connection (Subject to further Town discussions)

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# 7.0 Servicing

The development of the Trilogy Plains ASP Plan Area will provide delivery of full municipal services (water, sanitary, stormwater, shallow utilities, and surface infrastructure) in accordance with Town of Okotoks design standards. This section of the ASP provides general direction regarding the servicing of the lands. More detailed analysis will be completed at the NASP stage.

#### 7.1 Water Servicing

Water servicing within the Trilogy Plains ASP lands will adhere to the Town of Okotoks Water Allocation Policy, as amended, to ensure there is availability of water capacity to support land use redesignations or subdivisions within the Plan Area.

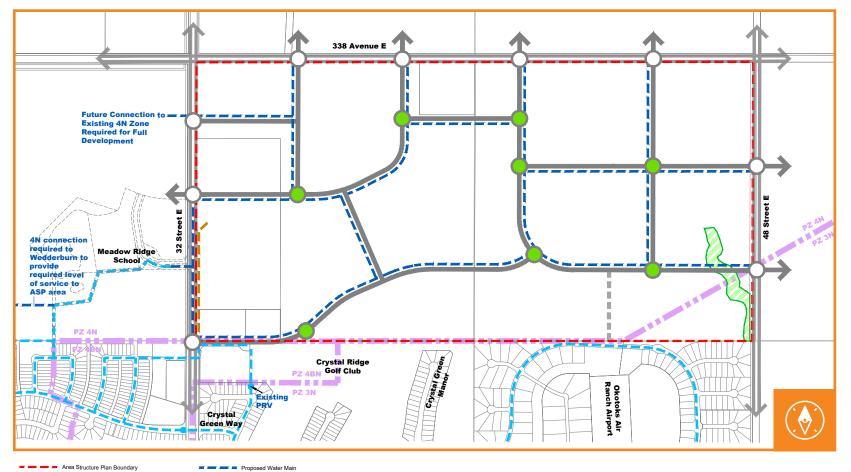
Water servicing may be provided to the Trilogy Plains area as shown in **Figure 19: Water Servicing Concept.** Most of the ASP lands fall within Zone 4N with a small portion of the land area toward 48 Street, that falls within Zone 3N. Both zones are currently serviced by the existing 3N/4N reservoir.

The water system will operate in Pressure Zone 4N. The detailed servicing review and analysis will be completed at the Neighbourhood Areas Structure Plan (NASP) stage.

#### 7.2 Sanitary Servicing

Sanitary Servicing must be provided to the Trilogy Plains ASP area in a manner consistent with the Town of Okotoks approved Sanitary Servicing Master Plan (ISL 2016) and the draft servicing concept completed by ISL. The Master Plan identifies the preferred servicing option for the ASP lands inclusive of required upgrades to the sanitary servicing collection system and preliminary capital cost estimates. Using existing elevations of the bounding roads, boundary conditions were set and conceptual servicing alignment was determined to service the Lamont lands and as much of the East Quarter Section as possible. Ultimately, detailed review and refinement of the servicing plan will be completed at the NASP stage.

Further analysis of the sanitary servicing will need to be completed at the detailed design stage.



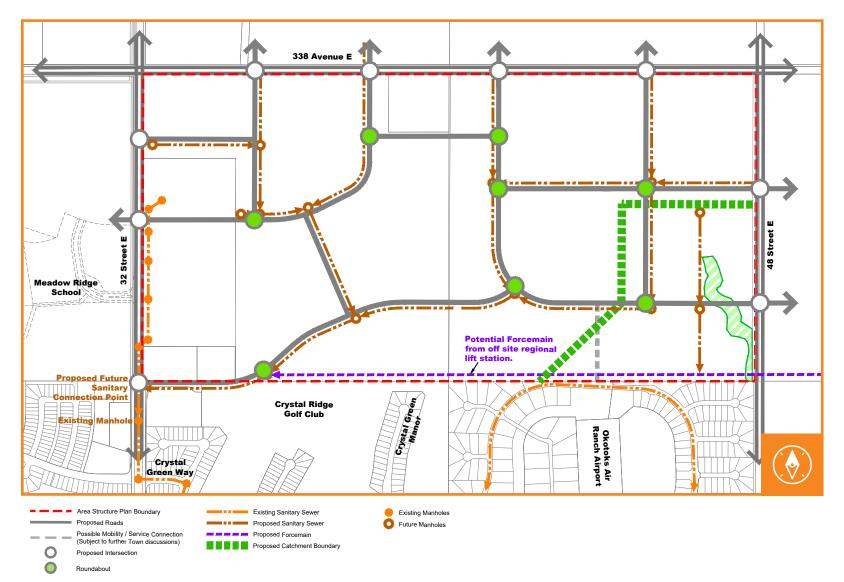
# Figure 19 | Water Servicing Concept

Area Structure Plan Boundary
 Proposed Roads
 Possible Mobility / Service Connection
 (Subject to further Town discussions)
 Procosed Intersection

Roundabout

Existing Water Main Pressure Zone Boundary(PZ)

# Figure 20 | Sanitary Servicing Concept



## 7.3 Stormwater Management

The topography of the Trilogy Plains area is relatively flat with a slope from north to south of approximately 1.5%. Generally, there are four existing drainage outlets for the subject lands:

- Church and high school ditch that discharges to Crystal Ridge Golf Course
- Culvert on the Crystal Ridge Golf Course
- Overland to Air Ranch development
- 48 Street ditch

In addition to the ASP area, upstream agricultural lands also contribute runoff to these outlets (see **Figure 21: Existing Stormwater Catchment Boundaries**); however, the majority of upstream lands drain through the existing ditches and bypass most of the ASP area. Approximately 42 hectares of upstream agricultural lands drain directly into the Trilogy Plains lands that will need to be accommodated for in the future development.

The Town of Okotoks is in the process of completing a stormwater management plan for the lands north of 338th Avenue as part of the 338th Avenue Functional Study. It is expected that this report will inform the stormwater management strategy for the Trilogy Plains ASP area.

Four stormwater scenarios were examined in preparation of the Master Drainage Plan for Trilogy Plains. Additional refinement to the Master Drainage Plan and stormwater management concept will be completed during the NASP stage. All of the scenarios adhered to the 2.5 L/s/ha release rate for the developed lands, while allowing for upstream lands to flow through. **Figure 22** illustrates the onepond stormwater management concept for the Trilogy Plains area. The capacities of the downstream receiving waterbodies will need to be investigated further to determine their applicability and the potential impacts they may have on the pond sizing. The stormwater system will need to ensure that water quality treatment adheres to the Town of Okotoks standards (90% removal of all TSS); this could be completed via oil and grit separators (OGS), innovative forebays in the pond(s) (ie:nautilus pond), or constructed wetlands.



To reduce the amount of water being released to the downstream waterbodies, including the Sheep River, best management practices and low impact developments (LIDs) are considered for the development. Further analysis will be required to determine the most applicable strategies. Although volume control targets are not in place for the Town, the computational modeling undertaken included some provisions for the possibility of stormwater reuse for irrigation. This stormwater reuse can be used for irrigation within the Trilogy Plains development (e.g., municipal reserves) or for irrigating neighbouring lands (e.g., irrigation of the Crystal Ridge Golf Course). Further investigation and discussion with the golf course will identify potential demands. Stormwater reuse in a general context for the development can be discussed further with the Town, including requirements for treatment.

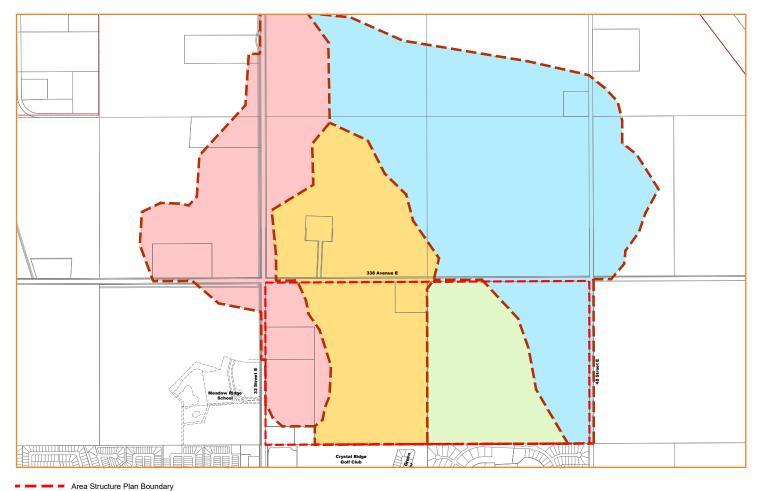


#### POLICIES

 7.1 Stormwater reuse will be explored in the stormwater management strategy for sports fields, parks, and other public areas of the plan.
 Stormwater reuse, if determined to be feasible, will be outlined at the NASP stage.

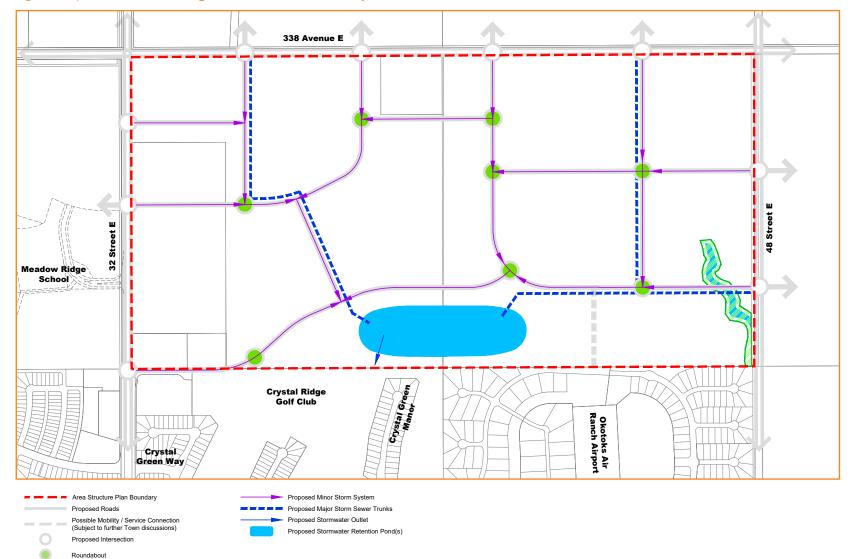


# Figure 21 | Existing Stormwater Catchment Boundaries



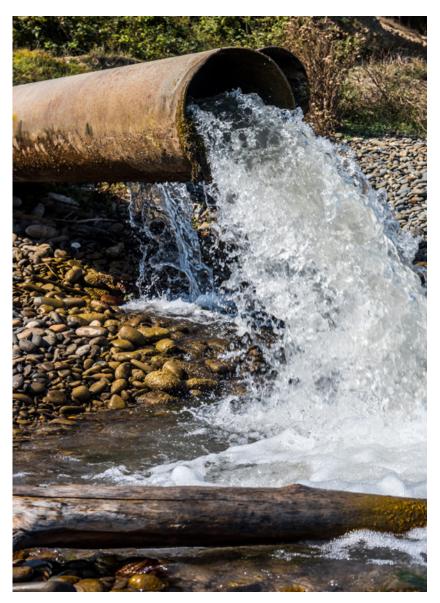
48 St Ditch Overland to Air Ranch Culvert on Crystal Ridge Golf Course

Church and High School Ditch



# Figure 22 | Stormwater Management- One Pond Concept





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# SECTION 8.0 Implementation

# 8.0 Implementation

## 8.1 Plan Adoption

In accordance with Part 7 of the Municipal Government Act, once passed, the Trilogy Plains ASP shall become a statutory planning document of the Town of Okotoks.

To advance development on the subject lands, a Neighbourhood Area Structure Plan (NASP) must first be prepared in accordance with the Okotoks MDP and the Trilogy Plains ASP.

#### POLICIES

- 8.1(a) A Neighbourhood Area Structure Plan application shall be approved for a specific land area prior to subdivision and development of the land.
- 8.1(b) All subsequent Neighbourhood Area Structure Plan applications shall be consistent with the Trilogy Plains ASP.

#### **IMPLEMENTATION**

#### 8.2 Phasing

General phasing boundaries have been defined on **Figure 24: Development Phasing.** Phasing boundaries delineate the anticipated sequence of growth and are based on efficient servicing, logical planning considerations, and developer readiness.

The general direction of phasing in Trilogy Plains is from west to east. However, the Employment Area may develop independently of Phase 1 residential lands if logical and efficient servicing has been provided to the site.

#### 8.3 Plan Amendment

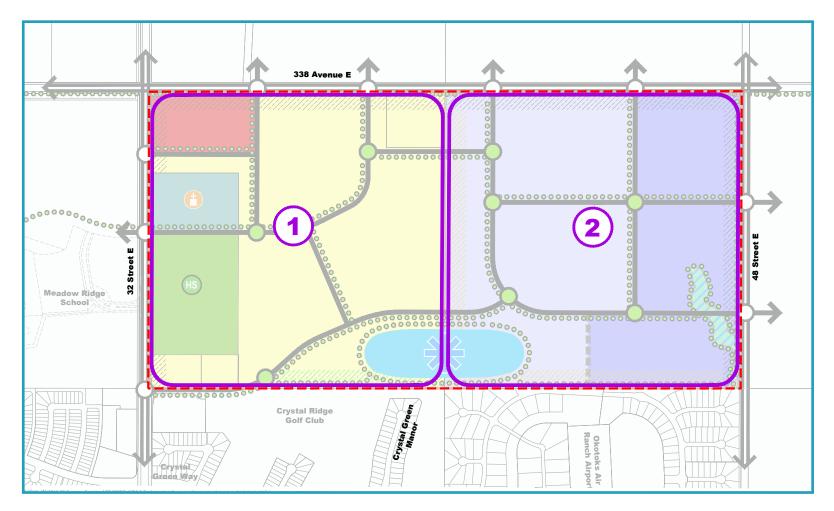
Any changes to the text or maps within the Trilogy Plains ASP may require an amendment unless otherwise stated or deemed necessary by the Approving Authority. Applicants shall submit all necessary supporting information to evaluate and justify the potential amendment.

#### POLICIES

- 8.2(a) Phasing within Trilogy Plains should generally comply with the boundaries shown in Figure 24: Development Phasing.
- 8.2(b) Phasing of development within the Plan Area should be implemented in an efficient and logical manner to ensure a contiguous urban form and servicing efficiencies.
- 8.2(c) Modifications to the anticipated general direction of development phasing or location as illustrated in Figure 24: Development Phasing and the actual planning and development of the Plan Area shall be addressed at the Neighbourhood Area Structure Plan / Land Use stage and would not constitute an amendment to the Trilogy Plains ASP.
- 8.2(d) Neighbourhood Area Structure Plans shall provide detailed direction on anticipated staging of development within each NASP area.
- 8.2(e) The Employment Area may be developed prior to the completion of Phase 1 residential lands if logical and efficient servicing can be provided to the site.

#### **IMPLEMENTATION**

# Figure 23 | Development Phasing



💻 💻 Area Structure Plan Boundary

Phasing Plan



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# TRILOGY PLAINS

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