# BYLAW NO. 2011 OF STARLAND COUNTY IN THE PROVINCE OF ALBERTA, CANADA

A Bylaw of Starland County, in the Province of Alberta, to adopt the Starland Business Park Area Structure Plan

**WHEREAS,** the Council of Starland County considers it necessary to adopt, in accordance with Section 633 and 636 of the *Municipal Government Act*, the Starland Business Park Area Structure Plan;

**AND WHEREAS,** it is deemed desirable and in the best interest of Starland County that an Area Structure Plan be adopted to guide future development;

**AND WHEREAS,** the Starland Business Park Area Structure Plan has been prepared in accordance with the requirements of Part 17 of the *Municipal Government Act*, as amended from time to time;

**AND WHEREAS** Council, having considered at a public hearing the concerns of persons claiming to be affected by the Starland Business Park Area Structure Plan;

**NOW THEREFORE,** the Council of Starland County in the province of Alberta, duly assembled, enacts as follows:

- 1. This Bylaw shall be known as the "Starland Business Park Area Structure Plan".
- 2. The Starland Business Park Area Structure Plan being Schedule "A" as attached to and forming part of this Bylaw is hereby adopted.
- 3. This Bylaw takes effect on the date of the third and final reading.

First Reading on motion of	, this day of, 2025.
Second Reading on motion of	, this day of, 2025.
Third and Final Reading on motion of	, this day of, 2025.
Done and finally passed in Council, duly assem	bled this day of 2025.
	Reeve: Steven Wannstrom
	Chief Administrative Officer

Christopher Robblee



NW 1/4 SEC. 12 TWP 31 RGE 20 W4M

**MARCH 19, 2025** 

APPROVED MAY XXX, 2025 BLAW XXXX/2025

PREPARED FOR: STARLAND COUNTY

PREPARED BY: STANTEC CONSULTING LTD.

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# 1.0 INTRODUCTION

Located at the intersection of Highway 9 and Highway 56, the Starland Business Park will support industrial and commercial business opportunities for the area and region. Strategically located adjacent to a major transportation route, the Plan Area aims to take advantage of the exposure and access of major roadways to realize the potential of a significant development opportunity. Starland Business Park aims to attract specific large-format commercial uses, supported by a range of industrial, commercial, and services-based uses.

The development in the Plan Area also recognizes that strategic location, adjacent to surrounding communities, more economical land values, and economic opportunities will attract businesses and users. Starland County recognizes the opportunity of Starland Business Park to attract new economic opportunities, growth of the region, and increase opportunities for local employment.

The Plan Area is in the southeast corner of the Highway 9 and Highway 56 intersection and is approximately 0.8km south and 3 km east of the Town of Morrin and 20 kilometers north of Drumheller. It is legally described as a portion of North West ½ Section 12, Township 31, Range 20, West 4 Meridian as identified on **Figure 1 – Location Plan**.

# 1.1 PLAN AREA

The Plan Area, **Figure 2 - Legal Conditions**, is comprised of approximately 58.02 hectares (143.36 acres), described as the NW 12-31-20-W4M, excepting thereout Road Plan 001 2766 and a portion of road plan 7687 GX which lies south of Road Plan 001 2766.

Generally, the Plan Area and surrounding area are used for agricultural purposes and homesteads. The adjacent areas are described as:

- North Highway 9, undeveloped agricultural lands
- East Undeveloped agricultural land
- South Undeveloped agricultural land
- West –Highway 56, undeveloped agricultural lands

# 1.2 PURPOSE AND BACKGROUND

The purpose of Starland Business Park Area Structure Plan (ASP) is to describe the land use framework and development objectives for a 58.02 hectare (143.36 acre) area shown on Figure 1.0 – Location Plan. The ASP will describe the following:

- Future vision and goals that provide a matrix in measuring the success of the plan.
- Promoting appropriate development activities;
- Providing an effective and safe road network;
- Recognizing environmentally significant areas;
- Creating a visually appealing industrial area;
- Servicing in a cost-effective manner;
- Developing based existing conditions;



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Establishing a logical and sequential pattern of development.

This property is owned by Starland County, which is committed to creating a high-quality, attractive, and successful industrial park while carefully considering the opportunities and constraints of the area. This report has been prepared by Stantec Consulting Ltd. on behalf of the County.





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# 2.0 PLANNING CONTEXT

The Starland Business Park ASP has been written in accordance with Section 633 of the Municipal Government Act. This section describes an Area Structure Plan as providing a framework for subsequent subdivision and development of an area of land. The Municipal Government Act stipulates that an ASP must describe the sequence of development, land uses and location of transportation routes and utilities proposed for the area. In addition, the ASP has been prepared to be consistent with, respect, and function with existing planning documents, policies and direction of Starland County.

# 2.1 PLANNING AND APPROVAL PROCESS

Starland County purchased the Plan Area and began formally working on the development of this area in 2024 with Starland County's administration through the land development process.

#### Phase One: Pre-Application Meeting

The project team met with Starland County Administration in April 2024 to discuss the proposed development as well as Starland County's process, policies, and vision for the Plan Area.

#### Phase Two: Area Structure Plan Submission

The project team worked with Starland County to finalize a preferred land use concept and Area Structure Plan. A internal review and revision of the ASP was completed.

#### Phase Three: Municipal Review

Following the Area Structure Plan Submission Phase, Starland County circulated the ASP internally and external for review and comments. The purpose of this circulation is to obtain comments from various departments, stakeholders and agencies to obtain feedback. An Open House was held on February 26, 2025, to present the ASP to adjacent land owners, and members of the public.

#### Phase Four: Formal Approval by Council

Subsequent to the internal and external circulation, the Starland Business Park ASP was presented to Council for approval. The approval process included a First Reading, Public Hearing, Second and Third Readings. Land use redesignation required to facilitate development will be completed following approval via Land Use Bylaw amendment.



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#### 2.2 RELEVANT PLANNING DOCUMENTS

The following relevant documents have been reviewed and referenced in preparation of the Starland Business Park ASP. Notwithstanding other plans as identified below, the Area Structure Plan will conform to applicable provincial and municipal legislation including but not limited to the Environmental Protection and Enhancement Act and the Water Act.

# 2.2.1 Statutory Plans and Regulatory Framework

#### **MUNICIPAL GOVERNMENT ACT (2000)**

The *Municipal Government Act* (MGA) of Alberta outlines the purpose and powers of municipalities. One of these powers is to adopt an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of an area of land. As stated in s633(2), an Area Structure Plan must describe:

"633(1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may by bylaw adopt an area structure plan.

- (2) An area structure plan
  - (a) must describe
    - (i) the sequence of development proposed for the area;
    - (ii) the land uses proposed for the area, either generally or with respect to specific parts of the area; -Municipal Government Act

The Starland Business Park ASP describes these items as required by the MGA and provides additional clarity and details regarding build out, potential uses and transportation routes to guide development of the Plan Area.

#### **MUNICIPAL DEVELOPMENT PLAN (BYLAW 1142/2019)**

Starland County's Municipal Development Plan (MDP) October 2019, sets a vision for the County to recognize the important role the agricultural and natural resource industries play in contributing to the growth and development of the County.

The MDP identifies various policies for responsible management of land, as well as policies directly related to industrial and commercial land uses. The goals of County related to land use is:

- 1. To ensure opportunities for well-planned growth are available throughout the County.
- 2. To ensure opportunities for increased economic development are available throughout the County.
- To protect agricultural land and natural landscapes from undesirable or incompatible land uses and/or developments.
- 4. To balance all of the above through sound land use planning and development principles and policies.



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General Policies within the MDP provide a number of policies for consideration. The following policies are considered fundamental to the creation of the ASP:

(3) Existing land use patterns set the stage for development of adjacent lands. The distribution of existing agricultural, residential, commercial, industrial, recreational and educational facilities influences future development patterns as per Starland County Land Use Bylaw Maps.

The Highway 56 and 9 corridor has been chosen as a location to alleviate the demand for industrial and commercial north of Drumheller. This development will be a starting point for other such industrial and commercial sites in the region.

(7) Council and/or the Development Officer should consider the environmental impacts of any proposed subdivision or development in the County in accordance with the policies in this Municipal Development Plan and any other Starland County planning documents.

The Plan Area does not contain and significant environmental constraints and will take into account any surrounding natural features in its development. A Biophysical Impact Assessment to consider wildlife, wetlands, and vegetation.

(8) Prior to a significant subdivision or development, Starland County may require the preparation of an Area Structure Plan or alternative planning document to the satisfaction of Council.

The Starland Business Park ASP has been prepared to support future subdivision and rezonings, as well as provide clarity of full buildout.

Section 10.0 - Industrial and Commercial of the MDP provides specific policies for development. The intent is that rural industrial and commercial developments will aim to support oil and gas, agriculture, and tourism sectors. Starland County recognizes that industrial commercial, located along a main transportation route, can serve a number of industries and uses, which include large vehicle storage and maintenance, pipe yards, large item storage that require larger tracts of land and limited servicing, oilfield and agricultural operators, or highway commercial.

#### Key policies include:

- (1) Industrial developments will generally be encouraged to locate in urban centres; however, provision will be made for industrial developments seeking a rural location. Consideration will be given to the site requirements, the operations to be carried out, and incompatibility with an urban environment. Arrangements must be made for adequate infrastructure services.
- (2) The County Council will support and encourage the development of local value-added facilities.
- (5) County Council shall control industrial subdivisions and developments through the Land Use Bylaw amendment process. Where appropriate, areas will be reclassified to a Rural Industrial or Commercial District in the Land Use Bylaw prior to subdivision or development.
- (7) Highway Commercial and Industrial development may be accommodated along the major transportation routes throughout the County in appropriate and strategic locations.



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(10) The County may require an Area Structure Plan or alternative planning document prior to the development of a rural industrial park. If industrial operations begin to concentrate in an area an Area Structure Plan or alternative planning document may be required to provide a transparent planning framework and to provide long-term stability of the area.

#### LAND USE BYLAW (NO. 1196/ 2024)

The existing land use designation for the Plan Area is RAG – Rural Agriculture General. It is intended that the land use currently identified for the Plan Area will be replaced with those described in this Area Structure Plan as land use redesignation occurs.

The 2024 Starland County Land Use Bylaw (LUB) describes land use districts to be used throughout the County. The LUB establishes various regulations that define general, site specific and zoning district regulations. LUB Redesignation and Subdivision Applications, consistent with the information in the Starland Business Park ASP, will be submitted to Starland County on a phased basis subsequent to the ASP approval.

# 2.2.2 Supportive Studies

The following supportive studies were completed to inform the development of the ASP.

#### PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

A Phase 1 Environmental Site Assessment (ESA) was completed by ParklandGEO in May 2024. The Phase 1 ESA report was based on a visual site inspection, a review of public records, and personal interviews with the landowner. The ESA determined the potential environmental risk for the property to be high in various areas and recommended that a Phase 2 ESA be completed prior to subdivision.

#### **Natural areas**

The Plan Area was generally described as a vacant agricultural field with the east half containing pastureland and the west cropland.

#### Historic use and buildings

The Phase 1 ESA indicated the property was historically used for agricultural purposes. A gas station was situated along the north boundary of the site approximately 100 years ago with no further records of its existence or the environmental status of the area. No buildings, borrow pits or refuse pits were located on site.

#### Oil and gas facilities

Two well sites exist centrally within the Plan Area:

- The northern one is a flowing crude oil well owned by Pine Cliff Energy Ltd. and was developed in 2010.
- The southern well is owned by Whitecap Resources Inc and is a suspended Gas Well that was developed in 1972.

Environmental Site Assessment Repository (ESAR) contained multiple records of email correspondence about hydrocarbon and salinity impacts on the southern lease. No further information was available to identify if remediation was completed and successful.

Based on the information gathered during the Phase 1 ESA, the environmental risk associated with the Plan Area is considered to be high due to the know impacts from the southern oil lease as well as the potential impacts from the



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former service station in the northwest corner of the quarter section. A Phase 2 ESA is recommended to assess for potential impacts from these areas.

#### **BIOPHYSICAL IMPACT ASSESSMENT**

A desktop Biophysical Impact Assessment (BIA) was completed by Stantec Consulting Ltd. in October 2024. Major components of the BIA included; providing desktop assessments of the Plan Area's vegetation and wetlands, provide recommendation on preservation and value of the existing inventory, and identify the necessary regulatory requirements to develop within the Plan Area. The assessment included the following components:

#### Vegetation

The Study Area falls within the Northern Fescue Natural Subregion of Alberta which contains largely cultivated fields and grazed native prairie, dominated by plains rough fescue. Vegetation within the project area is considered common and no rare plants were documented and there is no concern for project development

#### Wildlife

A query of the FWIMT database yielded no results of SOCC within a 1,000m radius of the Study Area; however, this is not an indication of species that may be present at any given time.

There are a number of Provincially designated wildlife sensitivity ranges that overlap the Study Area. Sharp-tailed grouse are generally associated with native grasslands and agricultural settings which are present in the Study Area.

#### Historic Resources

A portion of the Study Area falls contains an HRV-5 designation within the Historical Resources Act. The Act protects historical resources including paleontological, prehistoric, historic and archaeological.

#### Wetlands

Twelve wetlands and five ephemeral bodies were identified within the Plan Area during the completion of the Biophysical Assessment. These were classified as six temporary graminoid marshes (MGII) and six seasonal graminoid marshes (MGII) The west half of the Plan Area was tilled and cultivated, containing only two of the wetlands. The remaining wetlands are contained within the east half which is currently pasture. None of the areas contain or are surrounded by vegetation.

Wetland field assessments will need to be completed to refine wetland boundaries, confirm wetland values and financial replacement costs. Wetland assessment field work will be required to support the Water Act Applications for wetland removal.

#### HISTORIC RESOURCES APPLICATION

A Historical Resources Approval was required as the Plan Area identified an HRV-5 designation within the Historical Resources Act. An HRV-5 value represents high potential to contain a historic resource. The Act protects historical resources, including paleontological, prehistoric, historic, and archaeological. In November 2024, the Starland County Business Park Historic Resources Application was approved with no further requirements outside of responsibilities related to reporting of chance finds during construction.



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#### STORMWATER MANAGEMENT REPORT

The objective of Stormwater Management Report is to demonstrate how Starland Business Park will meet Alberta Environment and Protected Areas (AEPA) and Starland County (County) criteria for permissible release rate and water quality improvement. It will also define the proposed stormwater management system located within the Plan Area.

The Plan Area largely drains from west to east at an average slope of approximately 1.0%, and from 835.0 m to 820.0 m in elevation. For post-development conditions, it is expected that virtually all of the proposed development can be drained east towards a required storm pond. The Michichi Creek West comes to within 220 m of the southeast corner of the property and thus provides an adequate outlet; however, it is recommended that a drainage ROW be obtained for the intervening 220m. It is envisioned that drainage within the development will largely be achieved with roadway ditches and with culverts located at approaches and intersection locations. The combined ditch and culvert system shall be designed such that private property shall not be inundated for up to and including the 1:25 year event, and private infrastructure shall be protected for up to and including the 1:100 year event. Development roadways shall not be overtopped for up to and including the 1:100 year design storm event. A minimum culvert diameter of 450 mm is recommended for approach culverts, and a minimum culvert diameter of 600 mm at development roadway crossings. At the time of detailed design, the development roadway ditch/culvert system shall need to be analyzed to ensure that culverts and ditches are appropriately sized to meet the above criteria.

A wet storm pond configuration is proposed for the Plan Area because it works well with the existing site conditions and will also provide the necessary water quality improvement to meet the Alberta Environment and Protected Areas (AEPA) criteria of removing 85% of Total Suspended Solids (TSS), for sediment particles 75 microns and larger. Wet ponds are considered by AEPA as an acceptable end-of-pipe stormwater management BMP for providing discharge rate control and the enhancement of stormwater runoff quality.

#### TRANSPORTATION IMPACT ASSESSMENT

A Traffic Impact Assessment (TIA) was prepared by Stantec Consulting Ltd. in January 2025. The objectives of this analysis include:

- Examining the existing site conditions, including roadways, intersections and traffic volumes.
- Establishing future background traffic conditions in the vicinity of the proposed development.
- Estimating the magnitude and characteristics of traffic generated by the proposed development at different future horizon years. Evaluating the impacts of the generated vehicular traffic on the roadway network adjacent to the study area.
- Recommending appropriate roadway and intersection improvements to mitigate any unacceptable impacts.

The Highway 9 & Highway 56 intersection is currently operating adequately with all movements staying within the threshold criteria in terms of LOS and v/c ratio. Based on the signal warrant analysis results, the intersection of Highway 9 & Highway 56 will require signalization prior to the development 2027 build out year. Delineation lighting is already in place at the intersection of Highway 9 & Highway 56, and delineation lighting will be warranted at the 2027 buildout year for the intersections of Highway 9 & North Access and West Access & Highway 56.

At the 2047 20-year horizon, the west intersection is expected to function adequately with max, however, the LOS for the westbound left turn movement is LOS-F during the PM peak hour, mainly due to the control delay. It is recommended that further study to be carried out prior to the 2047 20-year horizon to determine whether a



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traffic signal is required. Both the North Access and West Access are expected to have no horizontal and vertical sight distance issues.

# 3.0 EXISTING CONDITIONS

The existing conditions described in the following sections are informed by the Phase 1 ESA, the Biophysical Assessment, and site inspections that have been completed for the Starland Business Park Plan Area.

#### 3.1 OVERVIEW

The Plan Area is an undeveloped agricultural property with no tree stands or any improvements constructed. Land surrounding the Plan Area is also undeveloped agricultural land. A homesite exists to the north of the Plan Area across Highway 9 and a second homesite is on the ¼ to the east but does not border the Plan Area.

# 3.2 TOPOGRAPHY

As shown in Figure 3.0 – Existing Conditions, the site topography shows a moderate slope from the west and east co. Elevations range from 815.0m to 835.0m for a total relief of 20m, with a drop-off in the central portion of the Plan area The Plan Area is bare agricultural land with low laying areas in the east.

# 3.3 HISTORICAL RESOURCES

Historical Resources Act approval was applied for and obtained in October 2024 for the Plan Area, subject to Section 31 which reads, "a person who discovers an historic resource in the course of making an excavation for a purpose other than for the purpose of seeking historic resources shall forthwith notify the Minister of the Discovery."

#### 3.4 NATURAL AREAS

As described in the Biophysical Assessment, the Plan Area is primarily agricultural cropland with a total of twelve wetlands located throughout. Vegetation, wetlands, and wildlife observations are described further in **Section 2.3.2 Biophysical Assessment**.

# 3.5 EXISTING UTILITIES

As shown on **Figure 5 – Existing Conditions Plan**, there are five pipeline right-of-ways and two well sites located within the Plan Area. It must be noted that ownership of these utilities is subject to change and is only a reflection of the ownership at time of Area Structure Plan approval.

#### Pine Cliff Energy Ltd.

Two operational Natural Gas lines registered to Pine Cliff Energy Ltd. are within the Plan Area. The main one runs from the bottom central to the northeast of the Plan Area. This pipeline is located within registered right-of-way Plan 891 1562.



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The second line connects a well within the centre of the Plan Area to the previously mentioned line. This connection is within registered right-of-way Plan 121 2250.

#### Whitecap Resources Inc.

Three pipelines registered to Whitecap Resources Inc. are located within the Plan Area. Two of these pipelines have a Decommissioned status. The first runs from the southwest corner of the Plan Area to an abandoned well in the central area within registered right-of-way Plan 741 0550. The second one runs from the well site to the southeast corner of the Plan Area and is located within registered right-of-way Plan 961 0772.

The third pipeline is Abandoned and connects a well on the parcel to the east with the second Whitecap Resources Inc. pipeline. This pipeline is contained within right-of-way Plan 041 3849.

Two well sites are within the central portion of the Plan Area. The northern one is a flowing crude oil well owned by Pine Cliff Energy Ltd. The southern well is owned by Whitecap Resources Inc and is a suspended Gas Well.

Well and its associated lease sites will remain operational for the foreseeable future. Both of these sites will be remediated by the well owner at a time of their choosing and the sites will be incorporated into the plan. Three of the pipeline utility right-of-ways contain abandoned or decommissioned lines. These pipelines will be removed, and the areas will be included in the developable area. The remaining two operational pipelines will remain and be incorporated into the plan area as Public Utility Lots.

# 3.6 EXISTING TRANSPORTATION

As part of the planning process, discussions were held with Alberta Transportation in preparation for the Transportation Impact Assessment and ASP. The Plan Area is accessed via a private driveway at the SW, along Highway 56.

With the NW corner of the quarter section, once a service center, is now an Alberta Transportation road ROW identified for future potential intersection improvements. Through communication with Alberta Transportation, there is no desire to incorporate this parcel of land within Starland Business Park. As such, no access has been provided to it.









Figure 3.0 EXISTING CONDITIONS



Plan Boundary

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# 4.0 DEVELOPMENT CONCEPT

The development concept for the Starland Business Park has been prepared in response to current and anticipated industrial/commercial market trends in the region. An analysis of these trends and response to direct requests from potential lot purchasers assisted in shaping the Concept Plan with respect to roadway layout, lot size, and orientation.

The overall design for the Plan Area is shown in Figure 4 – Concept Plan and Figure 5 – Concept Plan with Aerial and Figure 6.0 – Development Potential Plan. The concept features a simple and logical layout that has proven successful with industrial developments. By providing large lots in sequence, potential lot purchasers will be able to easily expand their operations by purchasing multiple lots.

The roadways within the Plan Area have been designed to accommodate large commercial and industrial vehicles that are anticipated to frequent the area, which is further described within the transportation section. The land use statistics and industrial units are represented in Table 1.0 - Land Use Allocation.

### 4.1 DEVELOPMENT POTENTIAL

Starland Business Park has been envisioned to support a variety of business types and designed to leverage site attributes. The types of use are presented below:

# 4.1.1 Large Format Commercial

Located along Highway 9 and Highway 56, a number of large format commercial lots will be situated along the boundary to promote the business via the high visibility corridor, ease of access and availability of large lots. Large format commercial lots are envisioned to be 2.0-4.0 ha (5.0-10.0 ac) in size and area areas are generally retail based businesses that require high visibility of adjacent roadways by using the frontage for product display or building presence typically support businesses that need a large showroom, shop bays and large outdoor parking areas.

#### 4.1.2 Medium Sized Lots

A number of medium sized lots have been located near the center of the Plan Area. Medium lots are envisioned to be 0.8-2.0 ha (2.0-5.0 ac) and generally consist of light and medium industrial uses. Light and medium industrial areas provide for the development of a wide range of compatible commercial businesses and general industrial areas, ranging from larger shops to laydown yards, and are ideal for smaller format processing, manufacturing, and servicing industries. Light and medium industrial uses are typically low impact and do not create much nuisance (emissions, noise, odors, vibrations, heat, bright light, or dust).

#### 4.1.3 Commercial/Industrial Retail

Commercial/Industrial retail lots are smaller sized lots, 0.8-1.2 ha (2.0-3.0 ac), that typically support commercial retail units with multiple tenants or businesses that require a small lot for an office and yard. These lots provide the most flexibility and variety of uses. Most commercial/industrial retail lots will have retail frontage with associated workshops, vehicle bays, or storage areas.



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# 4.1.4 Special Project Area

Located in the east portion of the Plan Area is a 11.89 ha (29.38 ac), area identified as a Special Projects Area. This area should be considered for unique uses that require a single-site, large lot that does not require much servicing, transportation, or specific site features. Should the Special Projects Area not find a suitable single user, a shadow plan has been shown to further subdivide the area and provide roadways for access.

Table 1 - Area Use Summary

Land Description	Hectares	Acres	% of Commercial/Industrial Area
Large Format Commercial	12.14	30.01	26.5
Medium Sized Lots *including lease sites	13.53	33.43	29.6
Commercial/Industrial Retail	8.20	20.27	17.9
Special Project Area	11.89	29.38	26.0

# 4.2 LAND USE ZONING

#### 4.2.1 Industrial and Commercial uses

As all commercial and industrial land uses will be zoned Rural Business District (RB), Starland Business Park has been designed to support varying businesses and users that require various lot features.

The purpose of the Rural Business District (RB) land use district is to provide for a range of commercial and industrial uses. The zoning district identifies a wide range of uses within permitted and discretionary. Most applications will fall under discretionary use and will require approval from Municipal Planning Commission.

Full buildout of the areas is assumed to include individually subdivided parcels ranging from 0.8-12.14 (2.0-30 ac) as per the parcel area requirements. At the time of subdivision, lot sizes will be determined based on market conditions and needs of potential buyers. The layout of Starland Business Park has been designed to support typical lot sizes but envisioned that businesses would consolidate lots to create the ideal property sizes to expand their operation or storage facilities.

# 4.2.2 Open Spaces

# 4.2.2.1 Municipal Reserve

The Starland Business Park is required to provide up to 10% municipal reserve dedication, either as land dedication or as cash in lieu of land as per Section 666 the Municipal Government Act. Due to the location of the Plan Area, lack of connectivity to a larger open space system, and minimal significant environmental features, opportunities to develop parks and dedicate land are limited. Municipal reserve dedication within the Starland Business Park Plan area will be compensated as cash-in-lieu.



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# 4.2.2.2 Public Utility Lots

The existing pipeline right-of-ways, stormwater retention ponds, overland drainage routes, or utility routes will be dedicated as Public Utility Lot as outlined in **Table 2.0 – Land Use Statistics**.

**Table 2 - Land Use Calculations** 

Land Description	Hectares	Acres	% of Net Developable Area
Gross Plan Area	58.02	143.36	
Net Developable Area	58.02	143.36	100.0%
Commercial/Industrial	45.76	113.09	78.9%
Rural Business District (RB)* *including lease sites and Special Project Area	45.77	113.09	78.4%
Public Utilities	5.58	13.79	9.6%
PUL	2.15	5.32	3.7%
PUL Pipeline	1.18	2.91	2.0%
PUL SWMF	2.25	5.56	3.9%
Transportation Network	6.67	16.49	11.5%
Internal Roadways	6.67	16.49	11.5%

# 4.2.3 Development Guidelines

As the Starland Business Park is adjacent to two major transportation routes, all effort should be made to increase visual appeal via screening, plantings, building envelope considerations, and signage. The Plan Area will enforce design guidelines and standards that promote the development in a visually appealing, consistent, and organized manner while ensuring all development occurs to the satisfaction of Starland County.



Rural Business District - RB Public Utility Lot

Stormwater Management Facility Roadway



Figure 5.0

LAND USE CONCEPT AERIAL



Plan Boundary



Special Projects Area

Public Utility Lot

Figure 6.0 Development Potential Plan

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# 5.0 TRANSPORTATION

# 5.1 OVERVIEW

The proposed transportation system within the Plan Area has been designed as a simple network of service roads that will provide connectivity within and surrounding the Starland Business Park. The network will also accommodate large-sized commercial or industrial vehicles and is designed in accordance with the requirements of *Starland County*, Alberta Transportation Standards, and best practices for industrial developments.

A Traffic Impact Assessment (TIA) was completed to take into consideration the existing and future roadways and connections and how they would affect and be affected by future development within the Plan Area.

# 5.2 ROADWAY NETWORK

#### **5.2.1 External Roadways**

The Plan Area is bordered by Highway 9 on the north and Highway 56 on the west. Access to the highways has been carefully considered to provide adequate separation from the Highway 9/56 intersection. A road widening Plan 001 2766 provides additional width to both highways as well as a large undeveloped corner cut into the Plan Area. No additional road widening will be required for either highway. There is one adjacent private farm access along Highway 9, north of the Plan Area.

Primary access to the Plan Area will be provided in the SW corner along the south property line. A second access is proposed in the north and will be constructed as a right-in/right-out.

#### 5.2.2 Service Roads

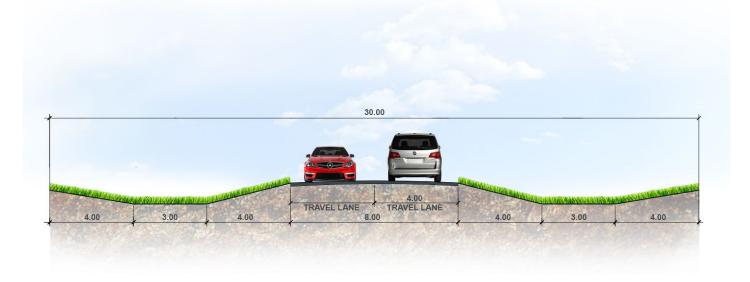
The internal roadway network has been designed to allow direct access from both adjacent highways as well as logical and convenient movement for all types of vehicles within the Plan Area. The proposed roadway, shown in **Figure 7 – Service Road Cross Section**, is a 30.0 m wide rural gravel cross section consisting of two 4.00 m driving lanes and ditches on both sides. Seeded ditches will have a maximum 1:3.5 slope, and a 2-3.0 m bottom will run along both sides of the roadway.

Due to the location of the development and considering limited pedestrian movement, low anticipated traffic volumes, and the type of intended businesses, pedestrian sidewalks have not been envisioned within the Plan Area.



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Figure 7 – Service Road Cross Section





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# 6.0 INFRASTRUCTURE SERVICING

#### 6.1 OVERVIEW

Servicing for the Starland Business Development will ultimately consist of a piped water system and an overland stormwater collection and retention. Sanitary sewer will be collected on individual lots for storage and disposal.

# 6.2 WATER SERVICING

As shown in **Figure 8 – Water Servicing**, an existing Regional Starland County Supply Waterline is located approximately 800m to the west of the Plan Area, heading NS along the west boundary of NE 11-31-20-4. This line is a low-pressure supply line that provides trickle feed water to the surrounding area. A new water line will be connected to this existing regional line to supply water to the Starland County Business Park. The overall water distribution system will consist of an interconnected piped system located within the roadway right-of-way with individual service connections stubbed at every lot. Each lot owner will be required to size and install a holding tank and pressure system to accommodate their water requirements. It is important to note that the water system will not provide fire flows; as such, a fire hydrant system will not be installed in Starland Business Park. Additional fire protection details are provided below.

A second water distribution system will be explored during detailed design, which includes a single reservoir and pump house to provide pressurized water distribution throughout the Business Park. Without knowing the actual end users in the Business Park, sizing the system would need to make assumptions and recognize that future expansions may be required or require higher volume users to provide their own storage onsite. This option would not include fire protection and would incorporate smaller disruption pipes. A reservoir site is located in the south central part of the Plan Area. Should the reservoir water distribution system not be utilized, the site will be reverted back to Rural Business District (RB).

#### 6.3 SANITARY

Due to the location of the Plan Area, there will be no overall sanitary servicing. Instead, each site will be responsible for constructing and maintaining underground septic tanks or vaults. These would then be emptied, and the waste transferred to a nearby waste facility using a private company's waste truck.

# 6.4 STORMWATER SERVICING

As shown on **Figure 9 – Stormwater Servicing**, two stormwater management facilities (SWMF) are proposed in the northeast and southeast corners of the Plan Area to maintain existing drainage patterns sloping to the east. The SWMF's will be designed to accommodate 1:100 year storm water flows for the entire Plan Area, and restrict outflows to pre-development rates. Stormwater will be collected in ditches along the roadways, which will feed into the storm ponds. From the ponds, water will be released at a predetermined predevelopment rate to the southeast into West Michichi Creek using existing drainage channels.

Both SWMF's will be constructed as wet ponds. Through best management practices, as directed by Alberta Environment Initiatives, the SWMF's will not only detain stormwater from major storm events but also enhance water quality to meet Alberta Environment's standards before discharging out of the development.



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As Starland Business Park will not have fire hydrants, one dry hydrant has been proposed in the southeast storm pond. The installation of a dry hydrant will provide a source of water supply and safer operations for the emergency responders. A review of the equipment of responding fire stations will be required to ensure that appropriate equipment and sufficient hose are available to appropriately utilize the dry hydrant.

# 6.5 UTILITIES (SHALLOW UTILITIES, POWER DISTRIBUTION, ETC.)

Shallow utility services will be extended from existing areas to service the Plan Area.

Power service connections are located along the north boundary. The details of tie-in locations and required easements will be determined at the subdivision approval stage. The owners/developers should contact ATCO power to determine needs and best practice for industrial commercial development.

Natural gas will service this development with the provision of a feeder originating from the north. Existing gas lines within the development area are to be relocated as development occurs. The details of tie-in locations and required easements will be determined at the subdivision approval stage.

Telecommunications i.e. fibre optics, shall be encouraged within the Plan Area in order to maximize communications efficiencies and economic opportunities for plan area businesses. The details of service providers, tie-in locations and required easements will be determined at the subdivision approval stage.

# 6.6 EMERGENCY SERVICES

Emergency services for the development will be provided by the fire station in the Village of Morrin, which is approximately 3.8 km northwest of the entrance to the Plan Area. The Alberta Building Code recognizes that firefighting capacity varies significantly from municipality to municipality. The code states that:

"The responsibility for controlling the maximum size of building to be permitted in a municipality in relation to local firefighting capability rests with the municipality. If a proposed building is too large, either in terms of floor area or building height, to receive reasonable protection from the municipal fire department, fire protection requirements in addition to those prescribed in this Code, may be necessary to compensate for this deficiency. Automatic sprinkler protection may be one option to be considered.

Alternatively, the municipality may, in light of its firefighting capability, elect to introduce zoning restrictions to ensure that the maximum building size is related to available municipal fire protection facilities. This is, by necessity, a somewhat arbitrary decision and should be made in consultation with the local firefighting service, who should have an appreciation of their capability to fight fires."

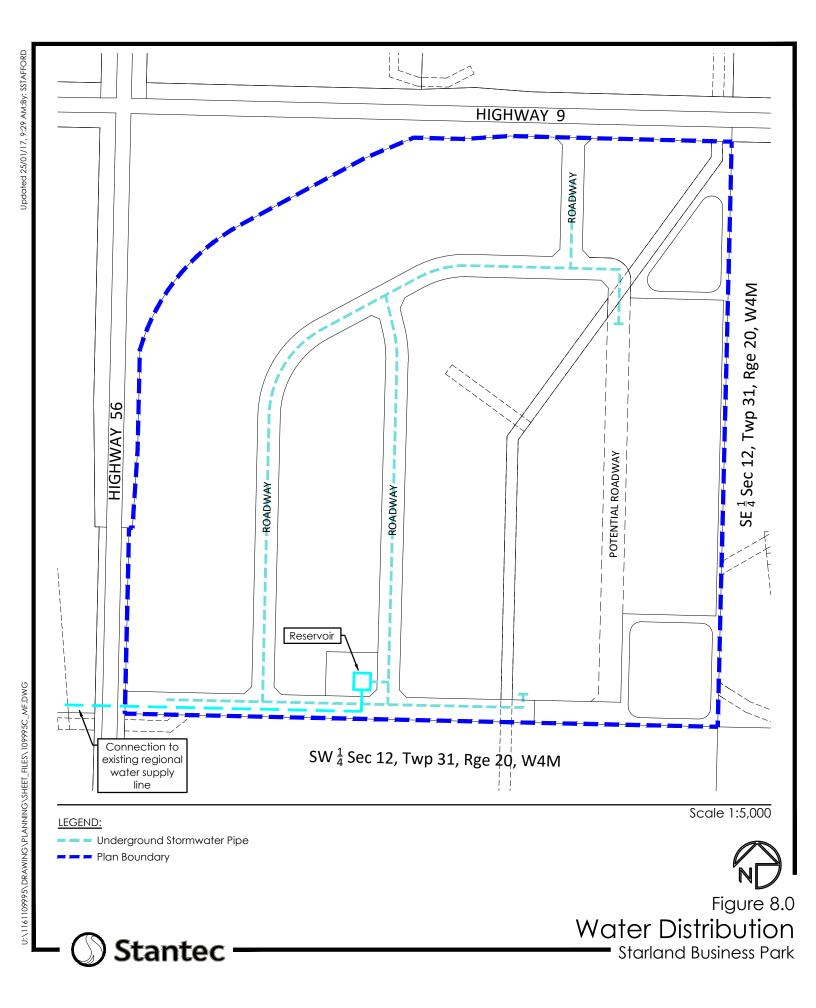
In general, there are options available to users of the development depending on several factors such as building use, size, and available water supply. For example, buildings under 3 stories in height and under 600 m2 (1200 m2 in area for medium to low hazard industrial occupancy) in area could require no available water supply for firefighting. Beyond this, the installation of sprinkler systems in buildings can greatly increase uses available to users of the development and require significantly less water storage. While these sprinkler systems are generally affordable to install, the water storage component presents the greatest obstacle with respect to cost, space, and operation. Each building will be required install their own water storage. It is recommended that consideration be made where possible to coordinate users and allow for design and installation of shared water storage systems.

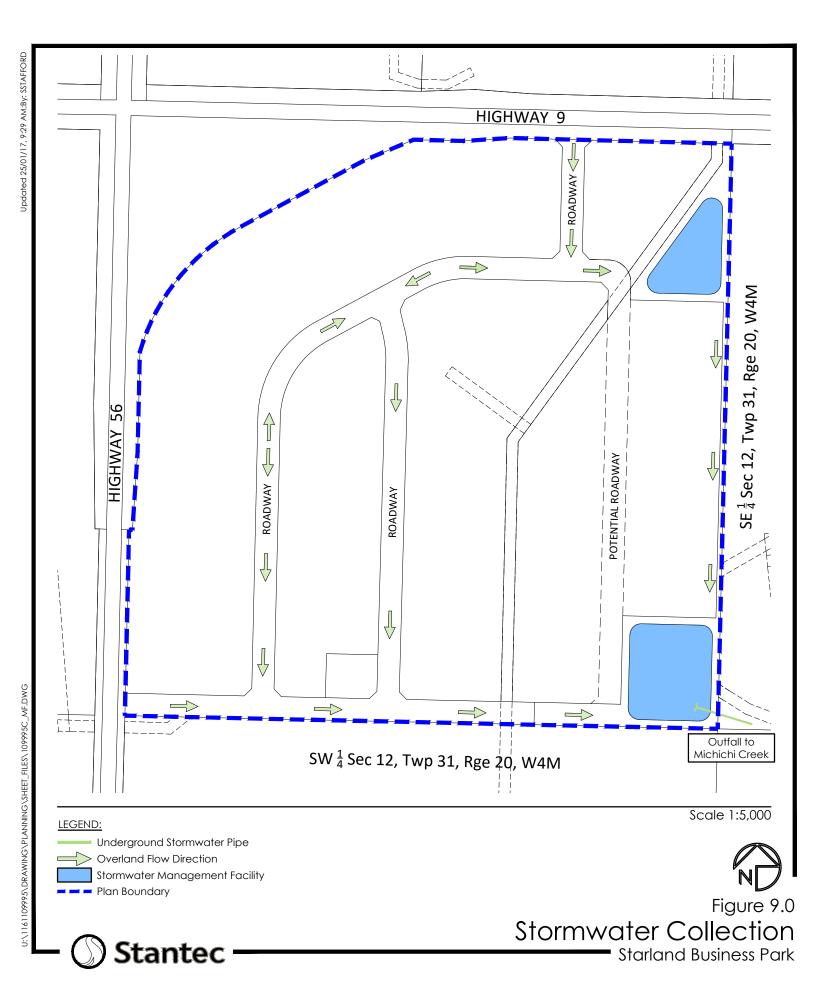


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The considerations herein are described in very general terms and are not a comprehensive list of all the factors that may arise. The amount of detailed code, regulation, and design options is exhaustive and subject to differing interpretation. Whereas these matters affect zoning decisions, safety codes, municipal operations, project economics, etc., it is recommended that Starland County make special consideration to inform and educate each of those involved with the project to the appropriate level and engage consultants as required to effectively manage fire protection services.







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# 7.0 DEVELOPMENT AND PHASING

# 7.1 OVERVIEW

The Starland Business Park will be developed as multiple phases, beginning in the south, along Highway 56. Phase 1 will also incorporate the development of the SE stormwater management facility, Phasing boundaries shown on **Figure 10 – Development Phasing Plan** are conceptual in nature and may vary when redesignation and subdivision applications are made. Size and location of each phase may vary based on market demands and serviceability.

#### 7.2 REDESIGNATION AND SUBDIVISION

Proposed redistricting and subdivision applications that align with the land use designations described in this ASP, will be undertaken as required. Guided by this Area Structure Plan; redesignation and subdivisions must conform to the LUB and not conflict with statutory plans.

# 7.3 PLAN INTERPRETATION

The Starland Business Park ASP is intended to guide development within the Plan Area; all figures shown have been included for visioning purposes only and should not be used to identify exact product types or locations.

All area calculations presented in this ASP have been determined using AutoCAD measurements, recorded in m<sup>2</sup>. Calculations are completed in the unit of m<sup>2</sup> and then converted into hectares and acres, rounded to the nearest hundredth. Due to the conversion and subsequent rounding shown in this Area Structure Plan, it is recognized that not all numbers or calculations appear correct, specifically for small areas.

# 7.4 AMENDMENTS

Should this ASP require amendment, a formal amendment process will be required including consultation with Starland County and approval via Council. Amendments will be required if changes are made to roadway alignments or land uses. Changes may include adding or removing a public road, adding or removing a public utility lot, incorporation of the Special Project Area, or re-designating a parcel of land from one land use to another. Where an amendment to the Plan is requested, the applicant will be required to submit supporting information necessary to evaluate and justify the amendment. Such changes will be made from time to time as determined necessary to ensure that the text and maps remain accurate. An amendment will not be necessary if the intent of the ASP does not change such as minor servicing revisions, minor land use boundary changes, or minor alignments to roadway cross-sections.



