




Request for Decision	
Meeting Date: July 16, 2024	
Subject: Draft Bench Creek Area Structure Plan Bylaw No. 2309	
Presented By: Julia Darling, Development Officer	
Motion:	<ol style="list-style-type: none"> 1. That Council give first reading to Bylaw No. 2309. 2. That Council schedule a Public Hearing for Bylaw No. 2309 on Tuesday August 20th, 2024, at 7:00pm, at the Edson Civic Centre.
Previous Council Direction:	<ul style="list-style-type: none"> • September 1, 2009 - Regular Council meeting <ul style="list-style-type: none"> ○ Council gave Bylaw No. 2079 first reading. • September 22, 2009 - Regular Council meeting <ul style="list-style-type: none"> ○ Council gave Bylaw No. 2079 second reading. ○ Council gave Bylaw No. 2079 third reading.
Background/Analysis:	<p>An Area Structure Plan (ASP) provides direction for long-term land use and infrastructure planning of a defined area within a municipality. It is approved by a municipal council by bylaw and is prepared in accordance with Section 633 of the <i>Municipal Government Act</i>, which requires an area structure plan to describe:</p> <ul style="list-style-type: none"> • the sequence of the development proposed for the area; • the land uses proposed for the area, either generally or with respect to specific parts of the area, and • the general location of major transportation routes and public utilities. <p>The Town has received an application for a subdivision. The applicant has applied to the Town of Edson and Yellowhead County to amend the Bench Creek Area Structure Plan, namely to change the Plan Area by adding NE 19-53-17-W5 to the Plan Area. Section 638 of the Municipal Government Act, R.S.A. 2000, c. M-26, as amended, requires that all statutory plans must be consistent with each other.</p> <p>Bench Creek Estates was initially subdivided in 2000 and developed between 2001 and 2008.</p> <p>Due to the substantial changes proposed by the applicant to the Bench Creek ASP, Administration is recommending that Bylaw No. 2079 (attachment #2) be repealed and replaced with draft Bylaw No. 2309 (attachment #1).</p> <p>Updated technical reports have not been provided as part of this process and subsequently have been added as a requirement in the ASP as part of the subdivision process. Based on a preliminary review of the available information a geotechnical investigation, a wetland assessment, and a <i>Water Act</i> Report will be required to support a subdivision of land within the Town. In addition, approvals for pipeline crossings will be required.</p> <p>Amendments to the Town's Intermunicipal Development Plan Bylaw 2276</p>

	(proposed draft Bylaw 2306) and the Municipal Development Plan Bylaw 2172 (proposed draft Bylaw 2307) are also required to facilitate the expansion of the <i>Bench Creek ASP</i> .
Legislation/Authority:	<i>Municipal Government Act, RSA 2000, c. M-26, s12, s633, s692</i>
Strategic Plan Alignment:	 Ensuring Quality Infrastructure
Financial Implication:	None.
Public and Stakeholder Engagement:	A Public hearing will be held for community engagement.
Alternative(s):	1. Council could provide alternate direction to Administration.
Attachment(s):	Attachment #1 - Draft Bylaw No. 2309 Attachment #2 - Bylaw No. 2209 Schedule A Bench Creek ASP
APPROVALS:	
Reviewed By:	Julia Darling, Development Officer Christine Beveridge, Chief Administrative Officer Chris Chapates, General Manager, Corporate Services



A Bylaw of the Town of Edson in the Province of Alberta, pursuant to the provisions of the *Municipal Government Act*, RSA 2000, c. M-26, and amendments thereto, to amend Bylaw Number 2079, the Bench Creek Area Structure Plan.

WHEREAS Section 633 of the *Municipal Government Act* permits a Council to adopt an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of an area of land;

AND WHEREAS the Town of Edson has adopted Bylaw 2079, the Bench Creek Area Structure Plan, in accordance with Section 633 of the *Municipal Government Act*;

AND WHEREAS Section 191 of the *Municipal Government Act* states that a Municipal Council may amend the Bench Creek Area Structure Plan;

AND WHEREAS the Council of the Town of Edson wishes to amend the Bench Creek Area Structure Plan as it affects certain lands;

NOW THEREFORE the Council of the Town of Edson, in the Province of Alberta, enacts as follows:

1. the Bench Creek ASP Bylaw 2079 and all amendments there are repealed; and
2. the Bench Creek Area Structure Plan, attached to and forming part of this Bylaw as Schedule "A" is adopted.

This Bylaw shall come into effect upon third reading of the Bylaw and the passage of a corresponding Bylaw amending the Bench Creek ASP passed by the Council of Yellowhead County.

READ a first time this ____ day of ____, 20__.

READ a second time this ____ day of ____, 20__.

READ a third time and finally passed this ____ day of ____, 20__.

Mayor Kevin Zahara

Christine Beveridge, CAO

BENCH CREEK AREA STRUCTURE PLAN

YELLOWHEAD COUNTY

&

TOWN OF EDSON

PREPARED BY

D. A. Juch, BFA (2024)
R. Wescott, B.Sc. AICP (2009)

**BENCH CREEK AREA STRUCTURE PLAN
TABLE OF CONTENTS**

1.0	INTRODUCTION.....	1
1.1	Plan Jurisdiction.....	2
1.2	Purpose.....	2
1.3	Plan Compliance.....	2
1.4	Key Elements of the Plan.....	3
1.5	Policy Interpretation.....	3
1.6	Plan Amendments.....	4
1.7	Map Interpretation.....	4
1.8	Consistency and Monitoring of the Plan.....	4
2.0	PLAN AREA.....	5
2.1	Regional Context.....	5
3.0	EXISTING SITE FEATURES.....	7
3.1	Site Topography.....	7
3.2	Bench Creek Drainage Basin.....	8
3.3	Pipelines & Rights-of-Way.....	8
3.4	Adjacent Land Uses.....	10
3.5	Buildings.....	11
3.6	Vegetation & Soils.....	11
3.7	Surficial Geology.....	11
3.8	Existing Transportation Network.....	12
3.9	Access and Resource Lease Road.....	13
3.10	Water and Sanitary Sewer Services.....	13
3.11	Major Franchised Utilities.....	14
3.12	Constraints and Opportunity.....	14
4.0	STRATEGY.....	15
4.1	Plan Principles.....	15
4.2	Plan Process.....	16
5.0	PLAN OBJECTIVES.....	17
6.0	LAND USE CONCEPT PLAN.....	18
6.1	Plan Policies.....	18
6.2	Phased Development.....	18
6.3	Land Uses and Density.....	21
6.4	Transportation Policies.....	24
6.5	Environmentally Significant Features Policies.....	25
6.6	Municipal Reserve.....	26
6.7	Servicing Infrastructure.....	26
6.8	Hazard Mitigation.....	29

<u>Figures</u>	<u>Page</u>
Figure 1A Yellowhead Regional Context	5
Figure 1B Edson Area Context	6
Figure 1C Orthographic Context	6
Figure 2A Topographical Features Parcel A	7
Figure 2B Topographical Features Parce B	8
Figure 3A Pipelines & Rights-of-way Parcel A	9
Figure 3B Pipelines & Rights-of-way Parcel B	9
Figure 4 Existing Use of Land Patterns	10
Figure 5 Existing Land Use Districts	11
Figure 6 Municipal Servicing Capabilities	13
Figure 7 Land Use Concept Plan	20
Figure 8 Constraints & Opportunities	23

Studies

Studies conducted for, submitted with, and referenced in this Plan:

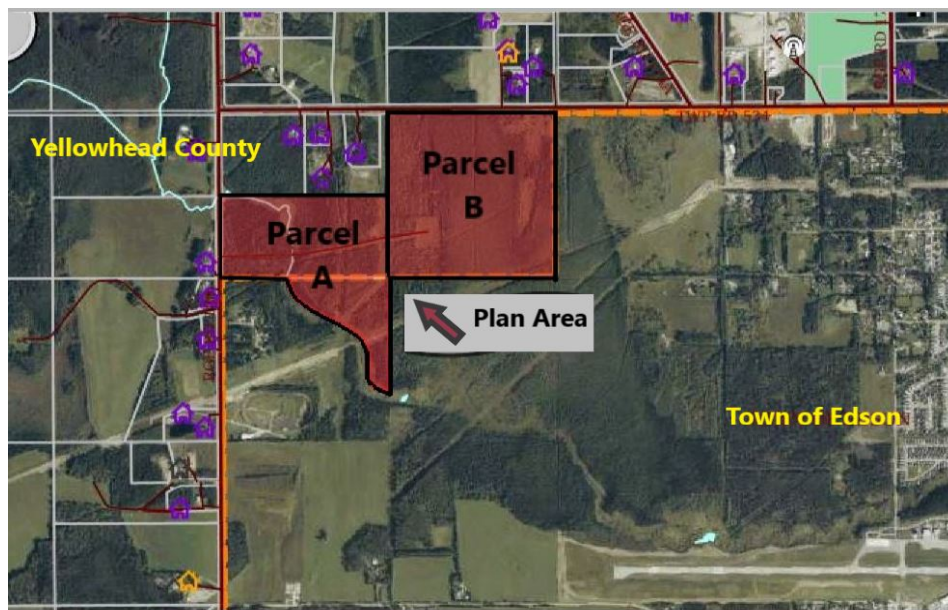
1. *Groundwater Potential Assessment, Proposed Subdivision, NW & SW Sec. 19, Twp. 53, Rge. 17, W5M Edson, Alberta* by Clifton Associates Ltd.
2. *Hydrometer and Sieve Analysis, Cursory Examination, NW & SW Sec. 19, Twp. 53, Rge. 17, W5M Edson, Alberta* by Clifton Associates Ltd.
3. *Preliminary Shallow Groundwater Investigation, Portion of NW 1/4 Sec. 19, Twp. 53, Rge 7, W5M Yellowhead County* by Clifton Associates Ltd.
4. *Groundwater-Table Evaluation, Edson Area, NE 19-053-17 W5M* by Hydrogeological Consultants Ltd.

1.0 INTRODUCTION

A Bench Creek Area Structure Plan was first adopted in 2009 with a Concept Plan that was proved not feasible to execute, for reasons detailed in this updated Plan. In 2021, the property was sold and a revised Concept Plan developed proposing a subdivision of lower density. Feasibility was solved by the inclusion of a contiguous quarter section in an expanded Plan Area providing additional road frontage.

Both the original and added land in the new Plan Area lay within the Edson Urban Fringe Planning Area and, throughout this Plan, are distinguished in discussion as **Parcel A** (the original Plan Area) and **Parcel B** (the added quarter section) as illustrated below.

Development of these properties jointly is necessary due to Bench Creek dividing **Parcel A** into two parts, with only the west part having access to a public road allowance. **Parcel B** can connect the severed part of **Parcel A** with frontage on Township Road 534.



Parcel A (the original Plan Area) is defined as Lot 1, Block 2, Plan 002-1462 within the SW ¼ Section 19, Township 53, Range 17, West of the 5th Meridian and Pt. NW Section 19, Township 53, Range 17, West of the 5th Meridian; it comprises 44.35 hectares (109.59 acres). **Parcel B**, the added contiguous quarter section to the east is defined as NE Section 19, Township 53, Range 17, West of the 5th Meridian comprising 65.15 hectares (161 acres).

1.1 PLAN AREA JURISDICTION

The Plan Area (as shown in the preceding illustration) is located within two municipal jurisdictions, Yellowhead County, and the Town of Edson. While the Bench Creek Area Structure Plan spans two jurisdictions, the guiding statutory planning documents share common interests and values. The results are reflected in an Area Structure Plan with policy statements and conceptual representations that provide the framework to promote the following principals:

- Promote sustainable development.
- Conserve and protect significant environmental features.
- Promote the expansion of the tax base within Yellowhead County and the Town of Edson.
- Acknowledge and promote the development potential of the lands while recognizing the geographical importance within both the local and regional context.
- Create a visually appealing residential environment.

1.2 PURPOSE

This Area Structure Plan provides a framework for the orderly and economic approach to the subdivision and development of the lands legally described as Lot 1, Block 2, Plan 002-1462 within the SW ¼ Section 19, Township 53, Range 17, West of the 5th Meridian which were consolidated with Pt. of NW Section 19, Township 53, Range 17, West of the 5th Meridian; together with the NE Section 19, Township 53, Range 17, West of the 5th Meridian. The two parcels are distinguished in this Plan as **Parcel A** and **Parcel B**, respectively.

The Bench Creek Area Structure Plan is intended to identify key issues such as land use, servicing, aesthetic design, environmental and municipal reserve issues, and to provide viable options in the solution of those issues.

The Area Structure Plan is intended to establish sequencing of development to ensure that the development occurs in a logical, efficient, and effective manner.

1.3 PLAN COMPLIANCE

This Area Structure Plan, hereinafter referred to as the 'Plan,' has been prepared at the request of Yellowhead County and the Town of Edson. The Yellowhead County *Municipal Development Plan* at s. 6.10 identifies the subject lands as lying

within the Edson Urban Fringe Planning Area, guided by the *Edson Intermunicipal Development Plan*.

The *Municipal Government Act* at s. 633 authorizes a municipal council to require an Area Structure Plan. S. 3.1 a) of the *Edson Intermunicipal Development Plan* stipulates an ASP be prepared when more than five (5) parcels are subdivided out of a quarter section in the Edson Urban Fringe Planning Area. S. 3.5 lists the Bench Creek Area Structure Plan as having been approved to allow for a multi-lot country residential subdivision in the fringe.

1.4 KEY ELEMENTS OF THE PLAN

The two key elements in the Area Structure Plan are:

- A long-term process structured to coordinate development intensification in concert with transportation capacities and servicing capabilities.
- Policy statements supplemented with a Land Use Concept to establish a logical and sequential pattern of development.

1.5 POLICY INTERPRETATION

The explanatory text accompanying a policy within the Plan is provided for information purposes only to enhance the understanding of the policy. If an inconsistency arises between this text and a policy, the policy will take precedence.

Where “shall” is used in a policy, the policy is considered mandatory. However, where actual quantities or numerical standards are contained within the policy such quantities or standards may be varied, provided that the variance is necessary to address unique circumstances that would otherwise render compliance impractical or impossible, and the general intent of the policy is still achieved.

Where “should” is used in a policy, the intent is that the policy is to be complied with. However, the policy may be varied in a specific situation provided that the variance is necessary to address unique circumstances that will otherwise render compliance impractical or impossible, or to introduce an acceptable alternate means to otherwise achieve the general intent of the policy.

1.6 PLAN AMENDMENTS

To amend or replace the Bench Creek Area Structure Plan--approved by bylaw-- the new or changed Plan must be also approved by bylaw. This requires a statutory public hearing together with notification carried out in accordance with procedures established by both the Council of Yellowhead County and the Town of Edson. Whenever Plan change is proposed, the applicant may be required to submit supporting information necessary to evaluate and justify the amendment. Amendments are expected, so that the text, maps, and policies remain reflective of the land development in all phases.

The 2004 Bench Creek Area Structure Plan, in replacing the 2009 Plan, also triggers amendment of the *Edson Intermunicipal Development Plan* where it refers to the Plan. In this case, the following IDP amendments will be required:

1. Replace *Map 7 – Area Structure Plan Areas* to reflect expanded Plan Area.
2. Replace *Map 8 – Land Use Concept* to show the County Residential districting of **Parcel A** within Yellowhead County.
3. Revise the IDP's Appendix A to:
 - a. Update *Map 5 – Existing Land Use* to reflect the change in use of parts of the new Plan Area from Vacant Urban Reserve and Mixed Use Ag/CR to Country Residential.
 - b. Amend *Map 7 – Future Land Use* to reflect the inclusion of **Parcel B** into the Plan Area.
 - c. Update s. 2.4.1.2 to accurately describe the Plan Area, the Concept Plan, accesses, etc.

1.7 MAP INTERPRETATION

Unless otherwise specified within the Plan, the boundaries or locations of any symbols or areas shown on a map are approximate only, not absolute, and shall be interpreted as such. They are intended as illustrations, not to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries, such as property lines or road and utility rights-of-way.

1.8 CONSISTENCY AND MONITORING OF THE PLAN

It is intended that consistency between the Plan and any other policy directives which have been approved by a Council be maintained, including but not limited to the municipal development plans of the Town of Edson and Yellowhead County as well as the *Edson Intermunicipal Development Plan*. To ensure the Plan remains current and relevant, it will be monitored over time and for any changes deemed necessary the Plan modified through the amendment process.

2.0 PLAN AREA

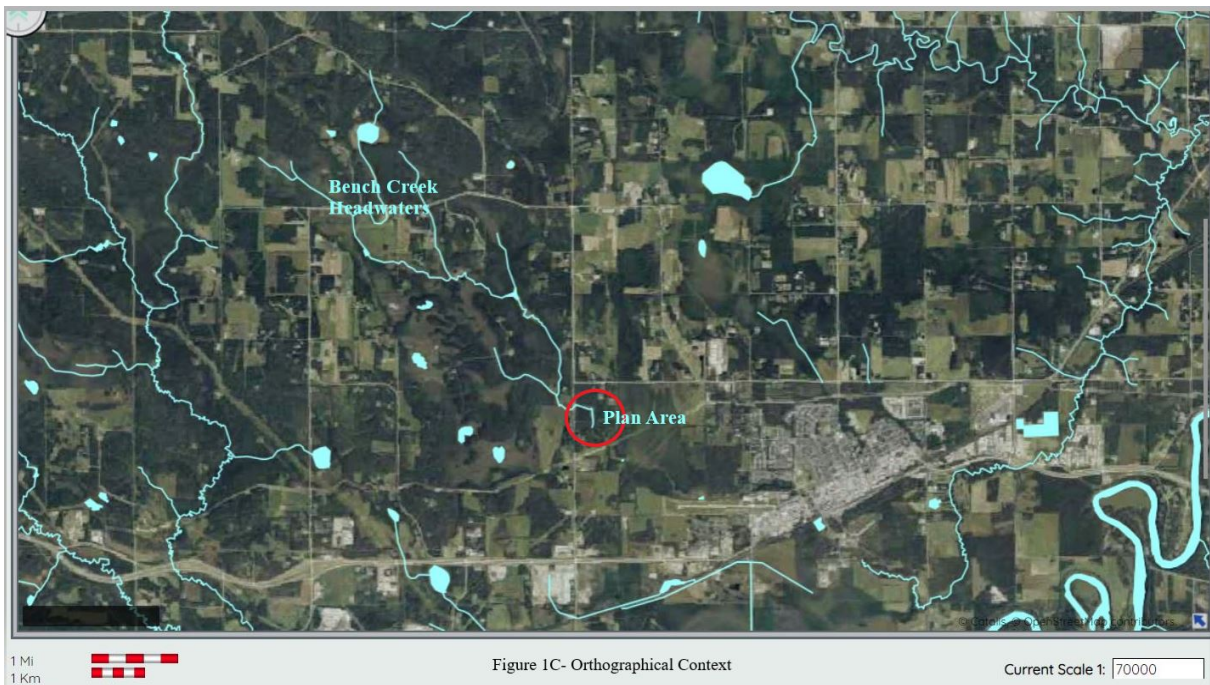
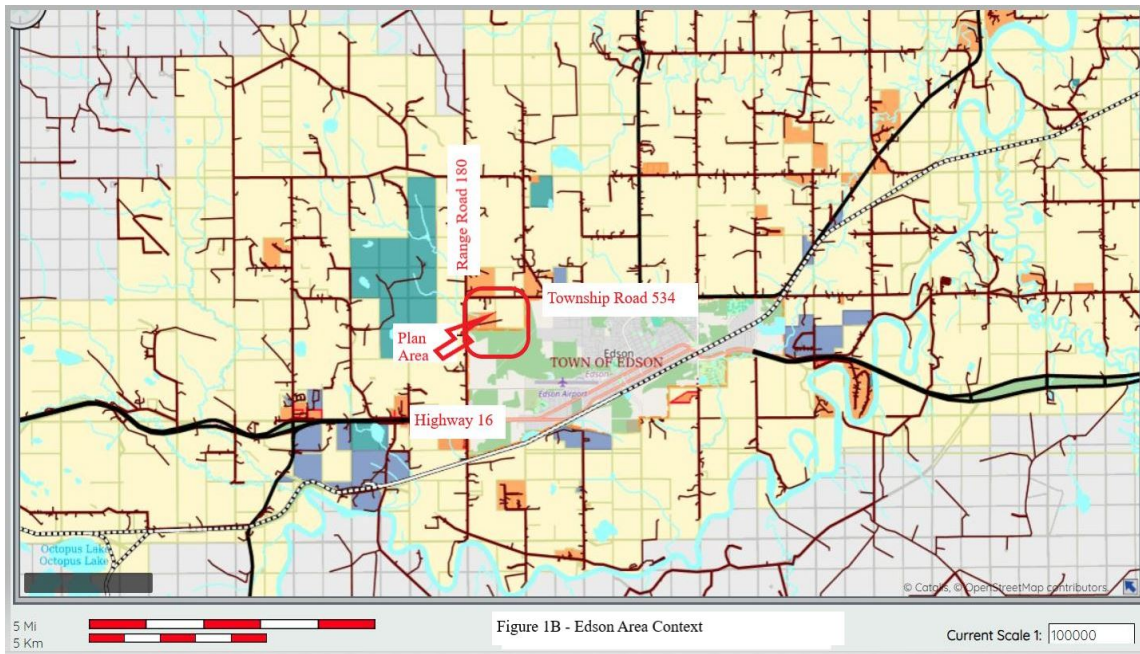
2.1 REGIONAL CONTEXT

Edson is located mid-way between the City of Edmonton and the Town of Jasper on the Yellowhead Highway. The Town's 2021 census of population was 8,374, an increase of about 1,000 persons since 2005. The value of development permits surged in 2004 to about 46 million dollars as compared to an average of about 10 million dollars per year in the previous five-year period. This surge illustrates the tremendous increase in economic activity in the Edson area.

Historically, the Town's growth has also been based on the resource sector. Coal mining in Alberta's Coal Branch was the first such resource in the 1930's followed by oil and gas exploration and extraction in the 1960's. As well, the forestry industry has contributed to the Town's growth. Although most such activity occurs in Yellowhead County, Edson is the region's major service and population centre.

The fringe lands surrounding Edson are a mix of cleared agriculture lands and forested areas that contain a significant country residential component. Industrial subdivisions exist along Highway 16 both to the east and west of Town. Peyto Exploration & Development's sour gas facility is the largest industrial operation in the Edson fringe and is located southwest of the Town. Figures 1A through 1C, below and following page, illustrate the Plan Area's regional contexts.



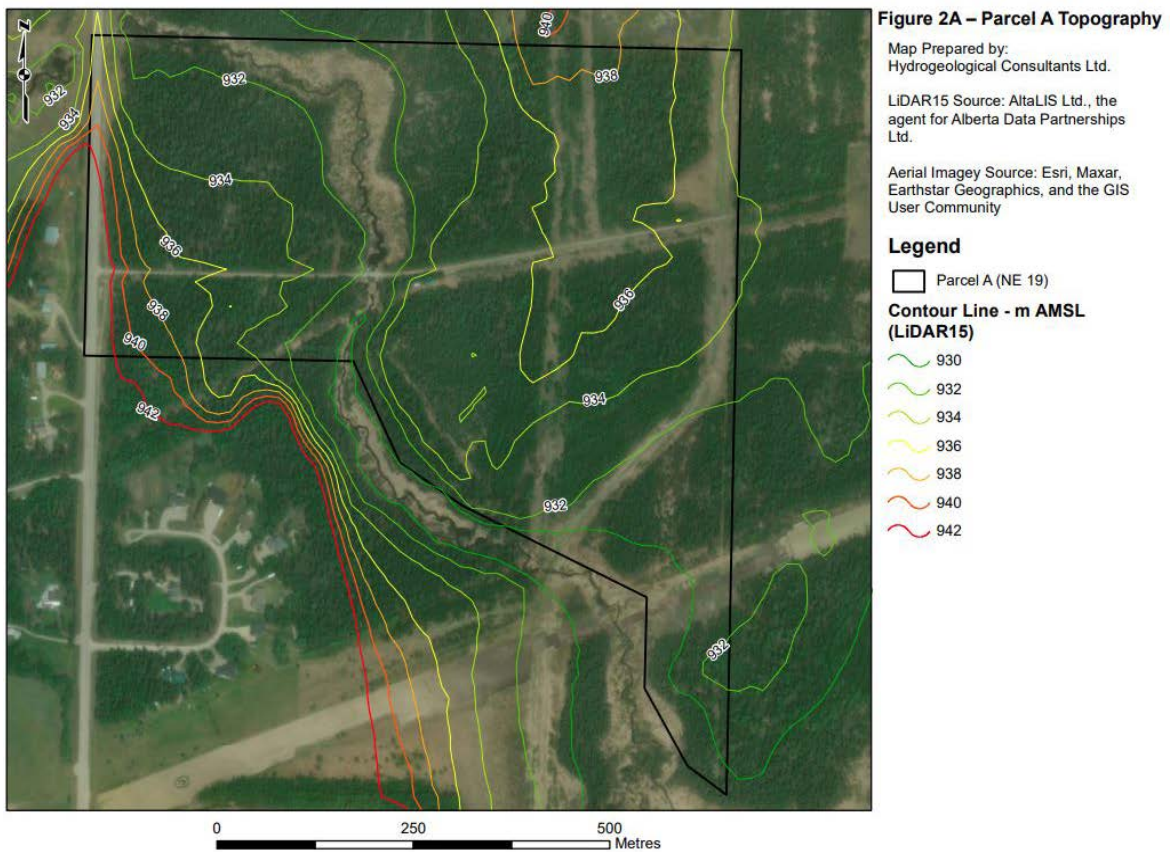


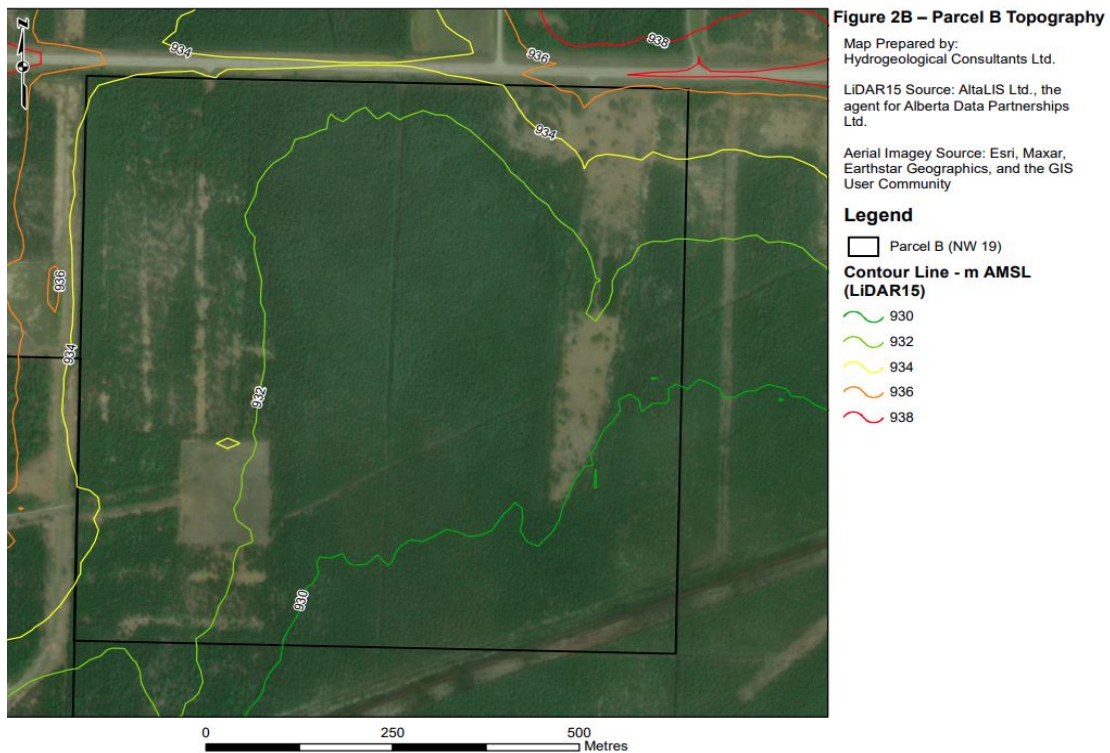
3.0 EXISTING SITE FEATURES & CHARACTERISTICS

The Plan Area consists of two contiguous parcels: **Parcel A** is approximately 44.35 ha (109.59 acres) and **Parcel B** is 65.15 ha (161) acres. The Plan Area is currently districted to accommodate a country residential development and rural district lots as illustrated by Figure 7 *Land Use Concept*, page 20.

3.1 SITE TOPOGRAPHY

The topographical features of the Plan Area are illustrated in Figures 2A, below, and 2B, following page. The west has a gently rolling topography while the east of the Plan Area is relatively flat. The Plan Area varies approximately 12 metres in elevation from two high points (located in **Parcel A** at the southwest corner and north centre boundary) to the Bench Creek drainage basin. **Parcel B** slopes gently southeastward dropping 4 metres from high points of the north and west boundaries to the lower points on the south and east edges.





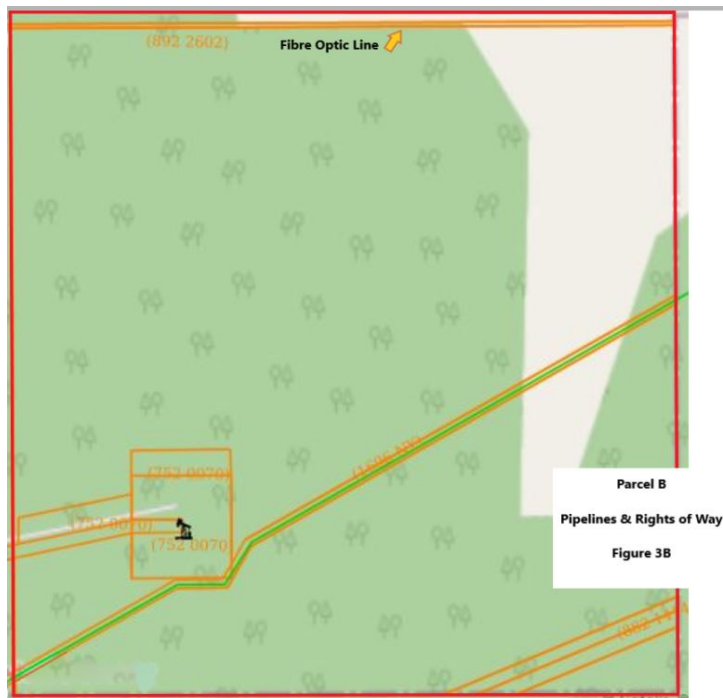
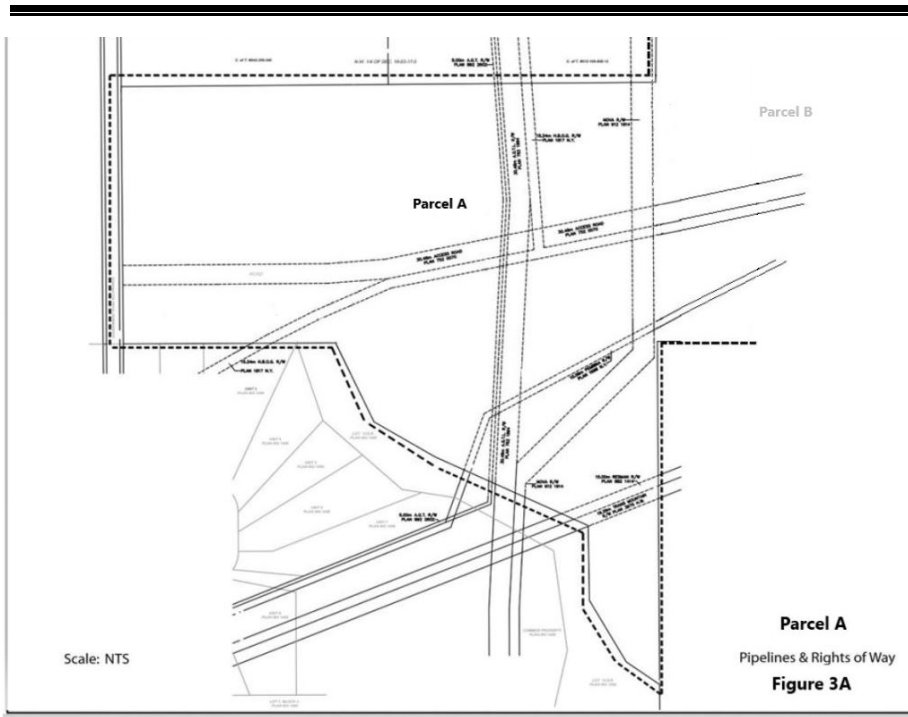
3.2. BENCH CREEK DRAINAGE BASIN

The Plan Area is unique in that Bench Creek meanders through **Parcel A** affording a scenic and picturesque perspective to the rural environment. Bench Creek serves as a major drainage collection basin for the whole Plan Area and for the wider northwest quadrant of the Edson urban fringe area.

Drainage within the Plan Area occurs overland, naturally flowing to the creek; the road ditching system of the existing resource lease road across **Parcel A** channels drainage westward to the creek.

3.3 PIPELINES & RIGHTS-OF-WAY

The Plan Area is crossed by numerous pipelines and utility rights-of-way, as pictured in Figures 3A and 3B, next page (and in the Concept Plan pg. 20). The pipeline rights-of-way can be accessed via the existing resource lease road which also provides physical access from Range Road 180 to the battery site in the southwest quadrant of **Parcel B**.



3.4 ADJACENT LAND USES

Developed lands to the north and west of the Plan Area are predominantly used for agricultural grazing with country residential pursuits on large acreages, while lands to the south and east of the Plan Area are vacant or country residential with minor industrial pursuits. All uses and densities proposed in this Plan are consistent and buffering conflict between uses is not anticipated. Figure 4, *Existing Use of Land Patterns*, below, depicts the existing uses of land within proximity of the Plan Area.

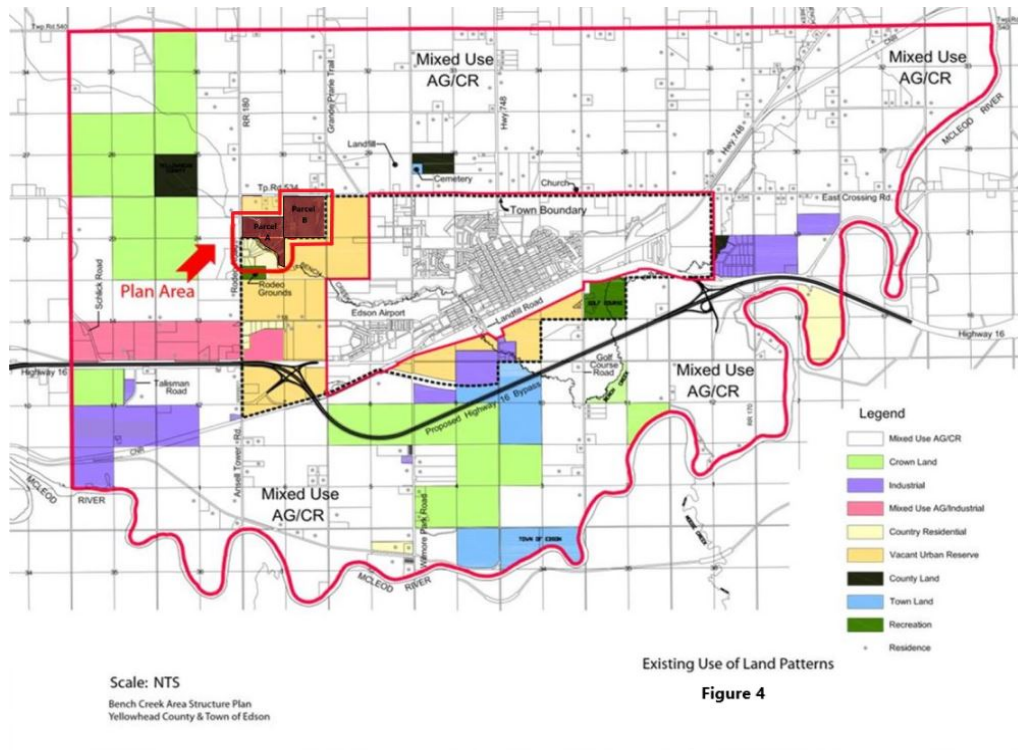
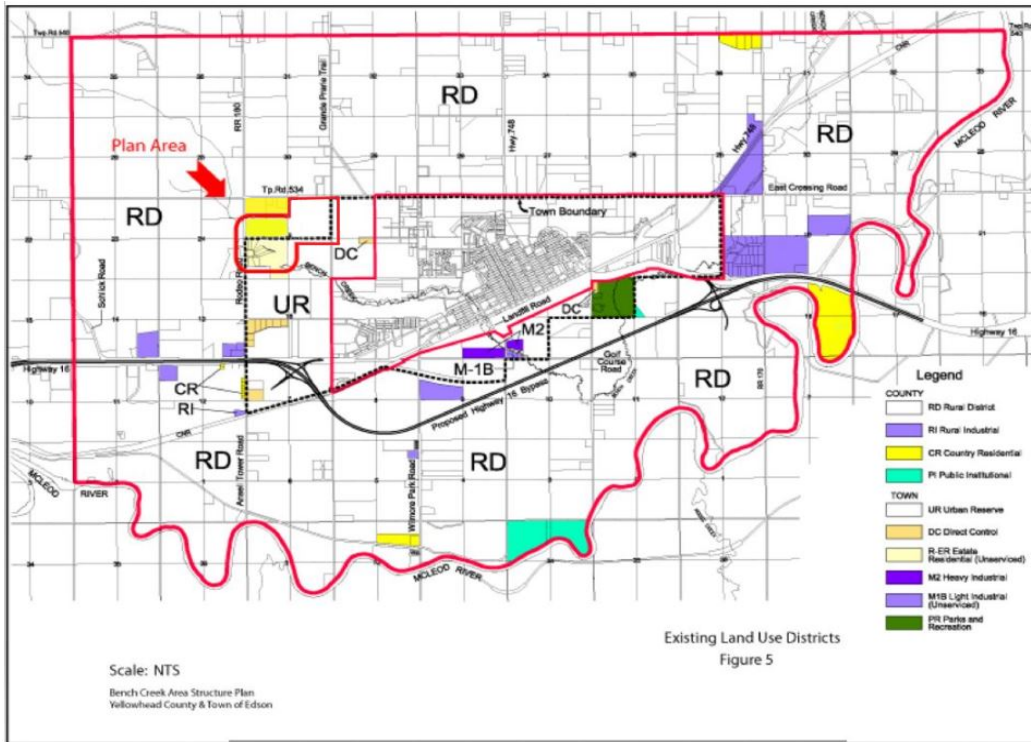


Figure 5, next page, illustrates *Existing Land Use Districts*. **Parcel A** within the jurisdiction of Yellowhead County is presently designated “CRD—Country Residential District” and within the jurisdiction of the Town of Edson is designated “R-ER Estate Residential (Unserviced).” **Parcel B** is currently districted “RD – Rural District”. The area of **Parcel B** to be incorporated into **Parcel A** will require redistricting to “CRD—Country Residential” to create lots with uniform districting.



3.5 BUILDINGS

Parcel A contains one serviced, single-family dwelling with an accessory building which will be fully incorporated into one lot in the Concept Plan.

3.6 VEGETATION & SOILS

The Plan Area is densely vegetated with mature stands of forest varied with areas of swamp and fen and open disturbed areas. On **Parcel A** disturbance includes the pipeline rights-of-way, the resource lease road, and preliminary building sites. Disturbed land on **Parcel B** includes the battery site, access clearings, and ± 20 acres previously in hay.

3.7 SURFICIAL GEOLOGY

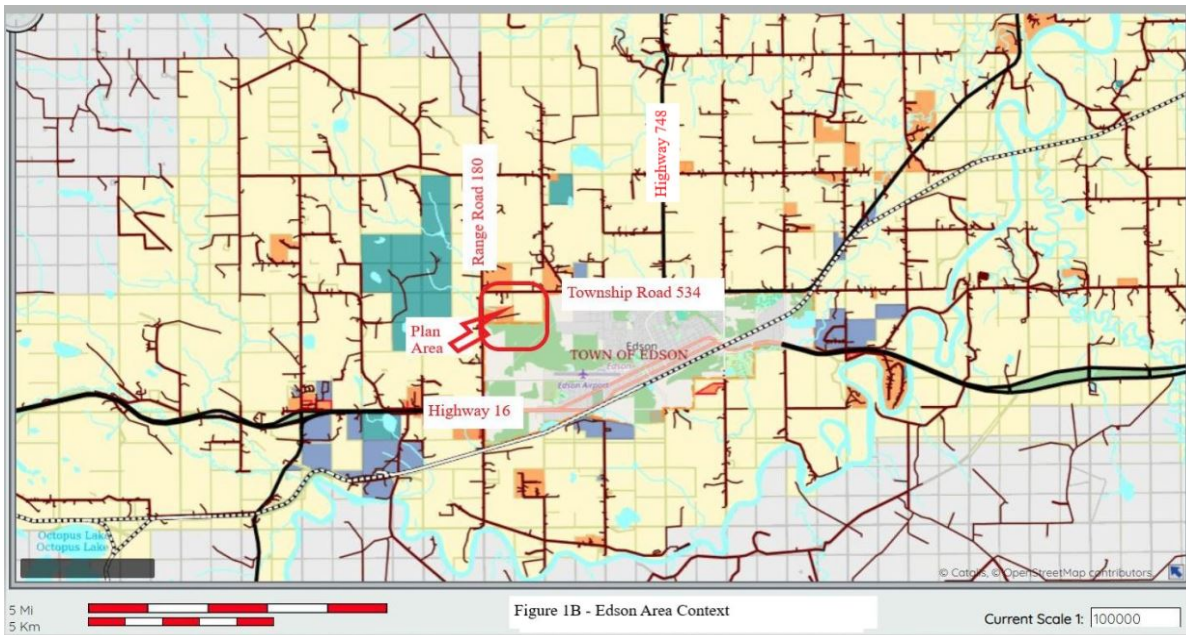
The surficial geology consists of Pleistocene lacustrine deposits, composed of lake-deposited sediments containing clay, silt and sand. Outliers of glacial Edson Till are also present. The till is primarily continental in source with few stones (quartzite, granite, and metamorphic rock) with a silty-clay matrix with low carbonate content (Roed, 1970).

The west part of the Site contains glacial deposits, while the east part of the Site contains lacustrine deposits. Bedrock beneath the evaluation area consists of the Tertiary Paskapoo Formation. The Paskapoo Formation is described as containing non-marine, thick-bedded calcareous cherty sandstones; siltstone and mudstone; minor conglomerates, limestone, coal and tuft beds (Vogwill & Beerwald, 1981).

3.8 EXISTING TRANSPORTATION NETWORK

Figure 1B *Edson Area Regional Context*, replicated below, also serves to illustrate the major features of the existing transportation network serving the Plan Area. The system is comprised of Highway 16, two paved county roads (Range Road 180 and Township Road 534), and Highway 748. These features comprise the bypass route for Edson and are detailed as follows:

- Highway 16 is located approximately 2.4 km south of the Plan Area. This major provincial highway is a four lane, divided highway.
- Access to Range Road 180, commonly referred to as Rodeo Road, from Highway 16 is presently an ‘at grade’ intersection, however an overpass is proposed for this intersection.
- Range Road 180 and Township Road 534 intersect north of the Plan Area. Township Road 534 is accessible from Highway 748 3.3 kms to the east.

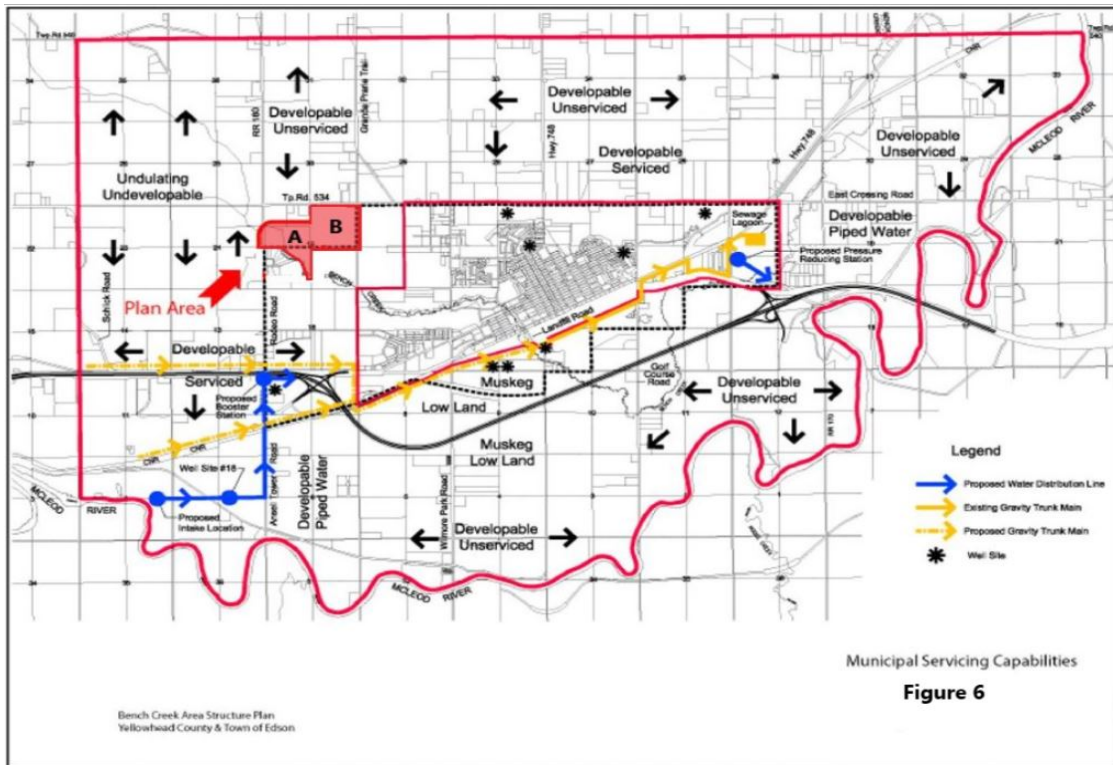


3.9 ACCESSES AND RESOURCE LEASE ROAD

Parcel A's single approach is on Range Road 180 approximately 500 metres south of the intersection of 180 and Township Road 534. **Parcel B** has two approaches on Township Road 534, approximately 1 km and 1.4 km east of the same intersection. Physical access across **Parcel A** (extending into **Parcel B**) is via resource lease road built in 1965. This road is an approved land bridge over four of the eight pipeline/utility rights-of-way in the Plan Area, as well as over Bench Creek (via twin culverts). The road was used by commercial vehicles and equipment accessing the battery site on **Parcel B** until the 1990's (see also s. 6.8 Hazard Mitigation.)

3.10 WATER AND SANITARY SEWER SERVICES

The Town of Edson and Yellowhead County, in adopting the *Edson Intermunicipal Development Plan*, have indicated that servicing of the Plan Area with municipally owned water and sanitary sewer utilities does not appear to be a viable option now or in the near future; see Figure 6, *Municipal Servicing Capabilities*, below. The servicing solutions for the Plan Area are a recognition of this constraint.



Bench Creek Area Structure Plan

3.11 MAJOR FRANCHISED UTILITIES

Electrical service has been extended into the Plan Area from Range Road 180 by Fortis Alberta via an overhead power transmission line approximately 750 metres eastward along the resource lease road. The service was sized on install for future subdivision.

Natural gas is provided into **Parcel A** along the same alignment by Yellowhead Gas Coop with a service line adjacent to the Fortis utility.

Telephone landline and cable is not currently provided to the Plan Area.

3.12 CONSTRAINTS AND OPPORTUNITY

In addition to the water and sewer servicing constraints illustrated in Figure 6, *Municipal Servicing Capabilities* (previous page), Bench Creek imposes a critical topographical constraint on developability in the Plan Area. As illustrated below, **Parcel A** (at 109.6-acres) is served with only a single approach on its west boundary. Bench Creek flowing into the parcel from the north and through to exit south and east severs the majority of **Parcel A** from its access. Internal public road bridging Bench Creek proved economically unfeasible in 2009 and is likely to continue to be until municipal water and sewer servicing becomes available to facilitate urban densities.

The solution proposed to this constraint, illustrated below and in Figure 7, Land Use Concept Plan (p. 20), is the opportunity to provide the severed part of **Parcel A** with frontage on Township Road 534 through land consolidated from **Parcel B**.



Bench Creek Area Structure Plan

4.0 STRATEGY

4.1 PLAN PRINCIPLES

4.1.1 SUSTAINABLE DEVELOPMENT

The first principle is focused on sustainable development:

- All development shall be in an environmentally sustainable manner, which includes the protection of groundwater supply to ensure that this resource lasts well into the future.
- Development shall be restricted to non-polluting uses and practices.

4.1.2 SIGNIFICANT ENVIRONMENTAL FEATURES

The second principle is one of identifying and protecting environmental features of significance:

- Low lying areas, which at the present time serve as a seasonal surface runoff retention area, need be protected where possible.
- Existing mature stands of trees need be fostered and protected where possible.

4.1.3 INTEGRITY OF HIGHWAY INFRASTRUCTURE

The third principle is maintaining the integrity of the highway infrastructure:

- Ensuring that development is accommodated in a fashion that public safety is first and foremost.

4.1.4 EXPANSION OF THE TAX BASE

The fourth principal is taking the necessary steps to broaden the tax base of Yellowhead County and the Town of Edson in a manner that limits the demands of new development on the Town and the County's existing infrastructure:

- Proposing the uses of land that demand limited services from the Town of Edson and Yellowhead County.
- Encourage the location of land uses in which assessment are sustained at a high level (minimal depreciation).
- Ensure each phase of development facilitates future densification to the greatest degree possible in anticipation of urban growth.

4.1.5 GEOGRAPHICAL IMPORTANCE AND VISUAL APPEAL

The last principal relates to the highest and best use of lands:

- Ensuring that the nature of development is one that reflects positively on both the Town of Edson and Yellowhead County.
- Development espouses the values of a proud, prosperous, healthy, and vibrant community.
- Consistent site development guidelines be implemented to ensure that development within the Plan Area is visually appealing and environmentally sustainable.

4.2 PLAN PROCESS

The Plan update preparation process began by gathering, reviewing, and analyzing all relevant information pertaining to the current and future development options within and around the Plan Area. Secondly, studies relating to hydrology, soil permeability, and shallow groundwater levels were completed and submitted to both jurisdictions in support of this Plan.

4.2.1 HYRDOLOGICAL REPORT

A Hydrological Report was prepared by Clifton & Associates Ltd to determine if there was sufficient groundwater in the area to sustain the proposed development. The report is entitled "Groundwater Potential Assessment, Proposed Subdivision, NW & SW Sec. 19, Twp. 53, Rge. 17, W5M, Edson, Alberta."

4.2.2 SOILS ANALYSIS

Hydrometer and grain sieve analysis was conducted on near surface materials randomly selected within the Plan Area. The testing was a cursory examination of the near surface soil structure within the Plan Area. The results are entitled "Hydrometer & Grain Sieve Analysis."

4.2.2 NEAR SURFACE GROUNDWATER

Near surface groundwater evaluations were conducted in the Plan Area to determine the proximity of the water table to surface ground elevations. The results for **Parcel A** are entitled "Preliminary Groundwater Investigation." The preliminary results for **Parcel B** are entitled "Groundwater-Table Evaluation, Edson Area."

5.0 PLAN OBJECTIVES

5.1 PLAN OBJECTIVES

Figure 7, *Land Use Concept* on page 20, reflects the following key objectives of the Bench Creek Area Structure Plan Joint Municipal Plan Objectives:

- Develop a land use pattern for lands in the County and Town that both parties support and agree is in the long-term best interests of both.
- Include a strategy to address concern over the long-term health of the aquifer for potable water source.
- Address lands in the County that make best sense to consider as logical Town annexation areas.
- Identify a specific implementation program that will move the plan forward from vision to reality.

Town of Edson objectives for Lands within the Town:

- Consider areas where extension of municipal services may make long-term sense to both Town and County.

Yellowhead County objectives for Lands within the County:

- Address specific areas for designated land uses (e.g. specify southeast sector of the Urban Fringe for only country residential uses rather than a full range of uses).
- Recognize the existence of numerous sour gas pipelines and facilities in the region.

6.0 LAND USE CONCEPT PLAN

The land use prescribed for the Plan Area is reflected in Figure 7, *Land Use Concept Plan*, next page. This section also outlines the planned densities and potential development sequencing, land uses, transportation network connections, environmental protections, utility servicing infrastructure, and other plans for the Plan Area.

6.1 PLAN POLICIES

The policies listed below are unique to the Bench Creek Area Structure Plan and are to be applied at the time of the new subdivision and development. All existing statutory plans and policies, particularly those policies referenced in the Yellowhead County and Town of Edson Municipal Development Plans as well as the *Edson Intermunicipal Development Plan* must also be applied.

6.2 DEVELOPMENT PHASES

The Bench Creek Area Structure Plan envisions that the Plan Area will be a phased development, the timing of which is influenced by several factors notwithstanding:

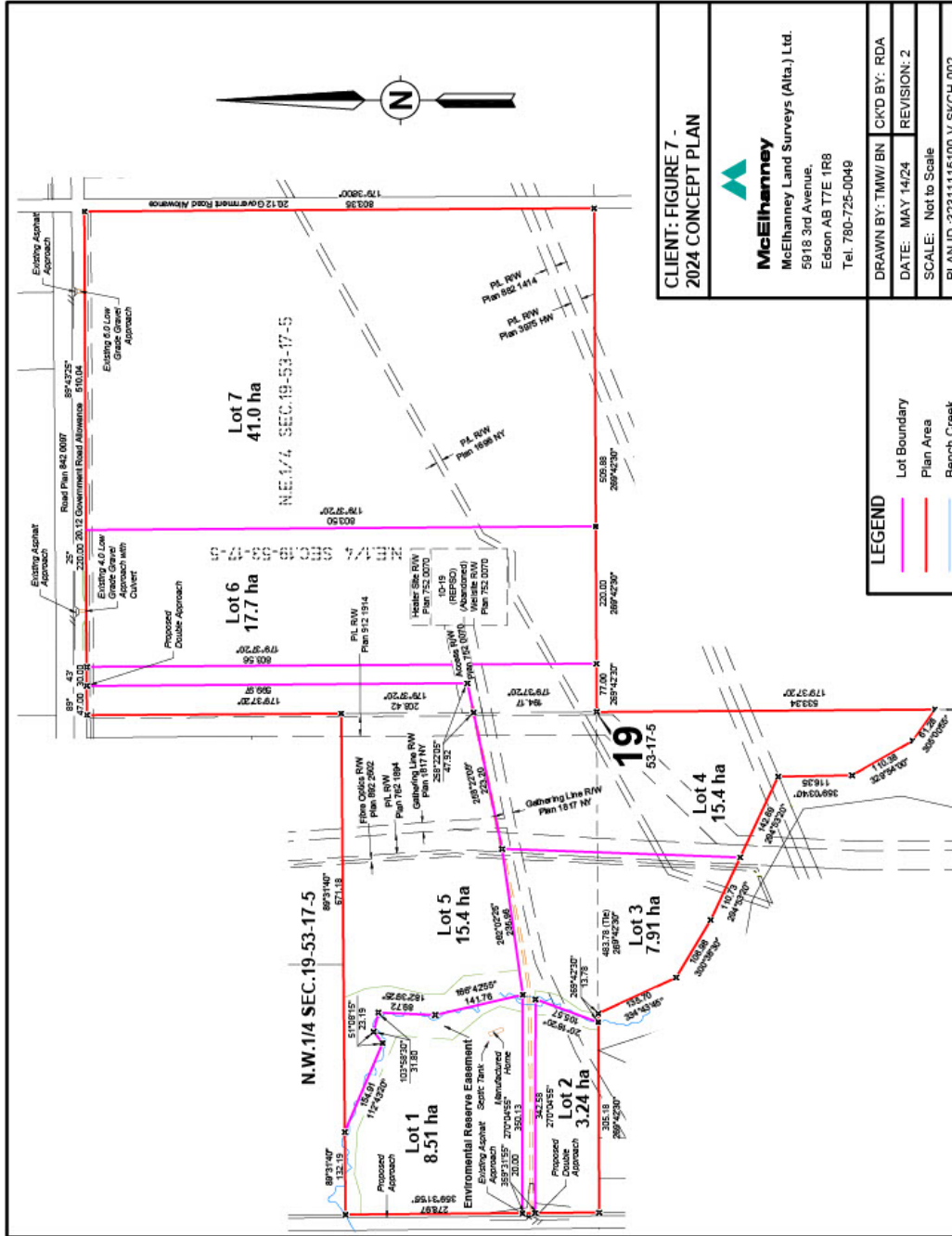
- The immediate needs of the landowner.
- Market conditions.
- A coordinated approach in the provision and construction of the 'onsite' infrastructure requirements such as shallow utilities.
- A coordinated approach in the provision and construction of the 'external' infrastructure improvements.
- The establishment of an economic model that reflects the nature of the development and the limitations of front-loading financial obligations.

6.2.1 PHASE 1

As shown in Figure 7 *Land Use Concept Plan*, next page, Phase 1 shall consist of a subdivision to create:

- five (5) country residential lots from **Parcel A**, two of which will span the municipal boundary between Town of Edson and Yellowhead County* and
- two (1) rural district lots from **Parcel B**, lying wholly within Yellowhead County.

**The Province of Alberta's Land Titles and Surveys Branch confirmed that the registration of new lots spanning municipal boundaries is fully approvable.*



CLIENT: FIGURE 7 - 2024 CONCEPT PLAN

McElhanney
 McElhanney Land Surveys (Alta.) Ltd.
 5018 3rd Avenue,
 Edson AB T7E 1R8
 Tel. 780-725-0049

DRAWN BY: TMW/BN	CKD BY: RDA
DATE: MAY 14/24	REVISION: 2
SCALE: Not to Scale	
PLAN ID: 3231115/100-V-SKCH-002	

LEGEND

	Lot Boundary
	Plan Area
	Bench Creek

Bench Creek Area Structure Plan

6.2.2 FUTURE PHASING

Phase 2: The Land Use Concept Plan creates one 100-acre ± lot, Lot 7. A potential Phase 2 is the re-subdivision of Lot 7 into four (4) Rural District acreages via internal road. Phase 2 is contingent on market demand, further detailed design, project costs, and site suitability testing of Lot 7.

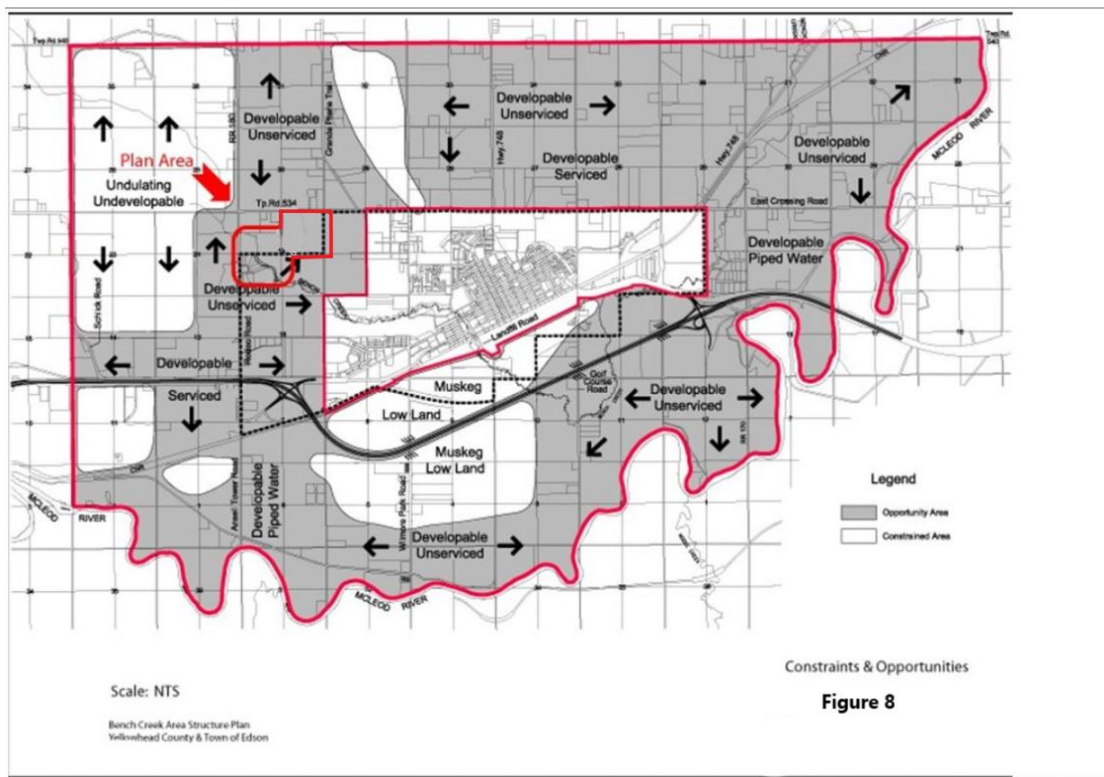
Future Phases: The Plan Area is ideally staged for additional future phases, e.g. re-subdivision of the larger acreages into smaller acreages in response to future demand should it manifest. The overall impact of the current Concept Plan in this key part of the intermunicipal area is to develop the parcels now and potentially continuing to develop as needed, benefiting the region as outlined further in s. 6.3 (following page). To requote:

“...development pressures and general public support exists for densified country residential use of the land. The public recognizes the proximity of the area to the Town of Edson and highway corridor, and the resultant increases in land values [therefore warrant future densification.]”

6.3 LAND USES AND DENSITY

While it is acknowledged that much of the Plan Area are considered lands having marginal agricultural capabilities, development pressures and general public input suggest that support exists for country residential use of the land.

The public recognizes that the proximity of the area to the Town of Edson and highway corridor, and the resultant increases in land values and marginal agricultural soil capacities have reduced the viability of conventional agricultural operations. As such, the Plan Area has been identified as having characteristics favorable for future development as per Figure 8 *Development Constraints & Opportunities*:



The Land Use Concept proposed for the Bench Creek Area Structure Plan specifically responds to the following four critical factors:

- Yellowhead County and the Town of Edson existing statutory plans, and in particular the Municipal Development Plans and the Intermunicipal Development Plan.

- Acknowledgment of the existing conditions, such as natural features, current uses of land, parcel boundaries, and subdivision and development opportunities, which result in both opportunities and constraints for future land use.
- The existing transportation network infrastructure including proposed improvements.
- Acknowledgement, that, for the foreseeable future, services will be provided on-site.

6.3.1 LAND USE POLICIES

Land Use Policy 6.3.1 is separated into three distinct policy statements speaking to the bi-jurisdictional application of land use regulation to **Parcel A** (resulting in two sets of uses) and a third land use applying to **Parcel B**.

The Land Use Concept proposed, and the plan of subdivision that follows will create two lots (Lots 3 and 4) from Parcel A carrying the bi-jurisdictional application of land use regulations of the parent parcel. Development of these lots will require close adherence to section 6.3.1.2, below.

Notwithstanding the below specified policies, all future subdivision and development within the Plan Area shall have regard to the spirit and intent of the Bench Creek Area Structure Plan and shall have regard to the vision for the Plan Area and the itemized land uses which serve to promote that vision.

6.3.1.1 All future subdivision and development within the Plan Area shall comply with the Land Use Concept shown in Figure 7 *Land Use Concept Plan*.

6.3.1.2 All development approvals will be as per the geographic location of the development when determining which municipality's Land Use Bylaw will be applied to the development.

6.3.1.3 The land area consolidated into **Parcel A** from **Parcel B** shall be redistricted from RD - Rural District to CRD – County Residential District prior to subdivision.

6.3.1.4 All future subdivision and development within the Plan Area on land districted CRD – Country Residential District of the Yellowhead County *Land Use Bylaw* will accord with regulations at the time of development, which currently include:

Permitted Uses:

- Single Detached Dwelling, Manufactured Home, Duplex

-
- Secondary Suites
 - Public Utility, Public Services
 - Bed and Breakfast, Short Term Accommodation
 - Home Business Small
 - Accessory Building

Discretionary Uses:

- General Agriculture
- Recreational Cabin
- Rural Business, Home Business Medium
- Community Facility, Supportive Housing
- Storage Container
- Recreation Extensive, Recreation Intensive
- Kennel
- Similar Uses as determined by the Development Authority.

6.3.1.5 All future subdivision and development within the Plan Area on land districted RD – Rural District of the Yellowhead County *Land Use Bylaw* will accord with regulations at the time of development, which currently include:

Permitted Uses:

- Single Detached Dwelling, Manufactured Home, Duplex
- Secondary Suites, Recreational Cabin
- General Agriculture
- Public Utility, Public Services
- Bed and Breakfast, Short Term Accommodation
- Recreation Extensive
- Home Business Small, Rural Business
- Accessory Building, Storage Container

Discretionary Uses:

- Agricultural Processing
- Manufactured Home Community
- Campground, Hotel, Recreation Resort, Community Facility
- Home Business Medium and Large, Kennel
- Staff Accommodation, Work Camp, Supportive Housing
- Natural Resource Extraction, Alternate Energy Facility
- Commercial Storage, Storage Container
- Similar uses as determined by the Development Authority.

6.3.1.6 All future subdivision and development within the Plan Area on land districted R1E - Estate Residential of the Town of Edson *Land Use Bylaw* will accord with regulations at the time of development, which currently include:

Permitted Uses:

- Single Detached Dwelling
- Accessory Building
- Home Business Minor
- Park and Public Utility

Discretionary Uses:

- Excavation, Clearing, and Grading
- Home Business Major, Home Day Care
- Secondary Suite

6.3.2 DENSITY POLICY

6.3.2.1 Phase 1 of the Concept Plan will densify the Plan Area from an average of one lot per 135 acres to an average of one lot per 38.65 acres, consistent with surrounding land uses, via the subdivision of:

- **Parcel A** into five (5) country residential lots (incorporating 15 ± acres from **Parcel B**), ranging from 8 acres ± to 30 acres ±.
- **Parcel B** into two (2) rural district lots of 46 ± acres and 100 ± acres.

6.3.2.2 Phase 2 of the Concept Plan if undertaken will densify the Plan Area from an average one lot per 38.65 acres to an average of one lot per 27 acres via the re-subdivision of:

- Phase 1 Lot 7 into four (4) rural district lots from 10 acres to 43 acres.

Summarized, the sequence of development densifies the Plan Area:

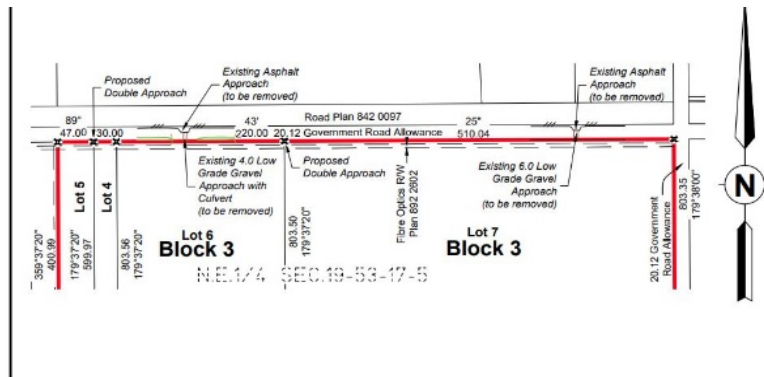
Phase	Density Across Plan Area (Averaged)
Initial	1 lot per 135 acres
Phase 1 Completed	1 lot per 38 acres
Phase 2 Completed	1 lot per 27 acres

6.4 TRANSPORTATION POLICIES

6.4.1. The Developer will connect all lots to the transportation network with approaches in the road allowance at the lot frontages.

6.4.2 All approach construction shall comply with the Yellowhead County *Design Guidelines and Construction Standards 2007*.

6.4.4 The Developer shall be responsible for the cost of all approach construction and decommissioning.



Illustrated left is the approach configuration for Phase 1 required to comply with Yellowhead County's *Design Guidelines and Construction Standards 2007*. To ensure the number of approaches in

the Plan Area conforms with the Standards, both existing approaches of **Parcel B** must be decommissioned and two new double approaches (for Lots 4 and 5 and Lots 6 and 7) built on the shared boundaries.

6.4.5 The Developer shall be responsible for construction of any road required for Phase 2 and any future phases, if undertaken.

6.5 ENVIRONMENTALLY SIGNIFICANT FEATURES POLICIES

Policies are proposed to ensure that the existing environmentally significant features within the Plan Area are protected, while also providing opportunities for the development of new environmental features.

6.5.1 Environmentally significant features in the Plan Area such as riparian areas and stream beds / banks shall be dedicated as Environmental Reserve or Environmental Reserve Easement as required by each jurisdiction.

6.5.2 Prior to any activity undertaken within the Bench Creek basin or riparian areas, approval for such works shall be obtained from both Alberta Environment and the Department of Fisheries and Oceans.

6.5.3 An Environmental Reserve protecting the natural and environmentally sensitive elements of the Bench Creek basin will be dedicated at the time of subdivision.

6.5.4 Existing natural features such as tree cover, seasonal drainage courses, and wet areas shall be preserved wherever possible by integrating such features into the design of the lot development.

6.5.5 Native tree stands shall be retained, where possible, depending on grading and construction requirements.

6.6 MUNICIPAL RESERVE

6.6.1 Land dedicated as Municipal Reserve will be in a manner to enhance and compliment the dedication of Environmental Reserve by providing interpretative, educational, and recreational opportunities.

6.6.2 Cash in Lieu of Municipal Reserve and the disposition of the existing deferred reserve caveat will be provided as determined by the relevant planning authority, in accordance with requirements stipulated within the Municipal Government Act. Each municipality will determine the reserve requirements and deferred reserve disposition within their jurisdiction at the time of subdivision, with due consideration of the spirit and intent of s. 4.5 of the Edson Intermunicipal Development Plan.

6.7 SERVICING INFRASTRUCTURE

6.7.1 TECHNICAL STUDIES

Technical studies submitted in support of this ASP have examined the majority of the Plan Area for water table levels, soils, and water supply; however, some studies may be outstanding.

6.7.1.1 Additional outstanding technical studies will be provided at the time of subdivision application as requested by the Subdivision Officer of the receiving municipality.

6.7.2 POTABLE WATER POLICIES

The study entitled, "Groundwater Potential Assessment," submitted in support of this Plan indicates an apparent safe yield to sustain the development proposed.

6.7.2.1 All subdivisions and development shall be capable of being serviced onsite with individual well systems; each lot will be served by an individual water well system located within the lot.

6.7.2.2 Easements may be registered along the frontages of lots created within the Plan Area to accommodate future municipal services that may become available.

6.7.2.3 Each dwelling unit developed on the land within the jurisdiction of the Town of Edson will have a water meter installed in accordance with the requirements and specifications of the Town; no

Town dwelling unit will be permitted to consume more than 10,000 imperial gallons per year.

6.7.3 SANITARY SEWER SYSTEM POLICIES

Individual on-site systems of sewage treatment and disposal are proposed for all development within the Plan Area. Groundwater evaluations were undertaken in the Plan Area by technical firms in 2008 and 2023 to determine the location of the water table within the Plan Area. A total of 14 boreholes were drilled to a depth of 3.05 metres and piezometers were then placed in the boreholes and monitored as per the practice and procedures provided in the *Environmental Guidelines for Subdivision Review* prepared by Alberta Environment. The borehole and piezometer locations and results are summarized in two reports submitted in support of this Plan: *Preliminary Shallow Groundwater Investigation* and *Groundwater-Table Evaluation, Edson Area*.

Section 2.6.1.2 of the *Edson Intermunicipal Development Plan* stipulates that on-site private sewage disposal systems are used in the County and these systems must comply with the *Private Sewage Disposal Systems Standard of Practice 2015*. The Town of Edson requires sewage effluent holding tanks and pump out systems complying with the Alberta regulations, in areas where municipal sewer is not available.

In addition to the traditional on-site 'septic tank and field disposal systems' several other methods of on-site sewage treatment and disposal are approved for use within the Province of Alberta. These systems are installed in compliance with and in accordance with the Alberta *Plumbing Code* and practices and procedures stipulated by Alberta Environment. System alternatives range from septic tank and above ground field systems to evaporation mounds and mechanical treatments systems such as the FAST and BIONEST systems.

Alberta's *Environmental Guidelines for Subdivision Review* indicates that the detection of groundwater within 1.8 metres (6 feet) of surface dictate that traditional septic tank and fields systems would be both impractical and unacceptable. From the results of the near surface groundwater testing reported in two studies conducted in support of this Plan entitled, *Preliminary Shallow Groundwater Investigation* and *Groundwater-Table Evaluation, Edson Area*, it is confirmed that the water table is at a sufficient depth for adequate separation between the surface and the water table in each proposed lot.

It is also recognized that identifying the appropriate method of sewage treatment and subsequent disposal may be site specific and based on proven

technologies as well as the physical attributes and soil characteristics of the site. Hydrometer and grain sieve analysis was conducted on near surface materials randomly selected within the Plan Area. The testing was a cursory examination of the near surface soil structure within the Plan Area. The results are contained in the study, *Hydrometer & Grain Sieve Analysis* submitted in support of this Plan.

6.7.3.1 Concurrent with the issuance of a building permit for construction of a building on a lot that requires sewage disposal, the developer, owner, or authorized agent shall obtain a plumbing permit and provincial regulatory approval of the proposed sewage system for the development.

6.7.3.2 On lands within the jurisdiction of the Town of Edson, buildings requiring sewage disposal will be serviced by means of a sewage effluent holding tank and pump out system installed in compliance with the Alberta *Private Sewage Systems Standard of Practice 2015* and the Town of Edson.

6.7.3.3 All private sewage systems developed within the Plan Area must comply with the Alberta *Private Sewage Systems Standard of Practice 2015* and related regulations and comply with the respective regulations of the municipality in which the development is located as well with as the policies identified in this section.

6.7.4 STORMWATER MANAGEMENT POLICIES

Storm water management will incorporate overland drainage only, relying on existing topography. Overland drainage and the ditch system of the resource lease road convey storm water from all parts of the Plan Area to the low-lying areas and drainage basin over time, without erosion or accumulation.

Development in accordance with this Land Use Concept will result in minimal vegetation clearance and will not substantially alter natural overland flow. Cleared land (e.g., at building sites) should be protected with groundcover vegetation as soon as possible to prevent erosion and maintain the quality of the drainage entering Bench Creek.

6.7.4.1 The developer will preserve the natural vegetation of the Plan Area to the maximum extent possible and protect disturbed areas with groundcover as soon as practicable.

6.7.4.2 The integrity of the ditch system of the resource lease road will be preserved through the installation of culverts at driveways connected to it.

6.7.4.3 All fill deposited to provide crossing of low-lying areas will be culverted.

6.7.4.4 Topsoil excavated for development shall be salvaged, stockpiled, and reused onsite as landscaping material.

6.7.5 UTILITY SERVICING POLICIES

6.7.5.1 Electrical servicing will be provided by extending the Fortis Alberta overhead power transmission line to Lots 3, 4, 5 and 6 utilizing Fortis's existing right-of-way (requires creek crossing). Lot 7 will be serviced from Township Road 534.

6.7.5.2 Natural gas servicing will be provided by extending the Yellowhead Gas Coop natural gas service line to Lots 3, 4, 5 and 6 along the resource lease road utilizing the Coop's existing right-of-way (requires creek crossing). Lot 7 will be serviced from Township Road 534 provided natural gas servicing is available.

6.7.5.3 Telephone and cable services will not be provided for the development.

6.8 HAZARD MITIGATION

The Plan Area hosts two high-pressure gas pipelines belonging to Trans Canada Energy (TCE) and multiple other pipeline and utility rights-of-way. These rights-of-way are established by registered instruments on title and limit use and activity in the easements.

The resource lease road from Range Road 180 eastward into the Plan Area pre-existed the four pipelines it crosses including the TCE lines; it is an accepted "dirt bridge" over each. Maintenance of this road and rights of access to it for all lots in the Plan Area channels traffic and mitigates hazards of development near the easements in full support of the land uses prescribed.

6.8.1 HAZARD MITIGATION POLICIES

6.8.1.1 The resource lease road in the Plan Area will be maintained as a passage from Range Road 180 across Lots 3, 4, and 5 terminating at the west boundary of Lot 6, with rights of access registered on the land titles of all lots in the group to the benefit of all other lots in group.

(End of Bench Creek Area Structure Plan)