

R'OHAN INDUSTRIAL PARK AREA STRUCTURE PLAN



Lot 1, Block 1, Plan 032 0702 | SE1/4 Sec 32, Twp 49 Rge 1, W4M

County of Vermillion River No. 24

April 2017



R'OHAN INDUSTRIAL PARK

Area Structure Plan

Prepared for: **County of Vermilion River MDP**

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1.0 PART 1: INTRODUCTION

1.1 Plan Area

The R'Ohan Area Structure Plan provides framework/guidelines for an industrial development of the subdivided 18 acre R'Ohan parcel (Lot 1, Block 1, Plan 032 0702 in SE1/4 Sec 32, Twp 49, Rge 1, W4M) and the continuation of agricultural and country residential use on the remaining lands within SE1/4 Sec 32, Twp 49, Rge 1, W4M until such time as the landowners choose to initiate development. All lands addressed in this document are located within the County of Vermillion River.

1.2 Purpose

The Area Structure Plan (hereinafter referred to as the "Plan"), as approved by Council, is a guiding document for all future developments that occur within the plan area. Appropriate amendments to the Plan will be required should all or a portion of the remaining lands be chosen for uses other than agriculture and country residential.

The Plan describes how land can be subdivided and developed in a coordinated and sustainable way. It shall comply with the Municipal Government Act, and relevant County policies including the County of Vermillion River Municipal Development Plan (Bylaw 13-13) and the County of Vermillion River Land Use Bylaw No. 15-21.

This Plan will provide descriptions and policies for the overall plan area. As development on the R'Ohan site is the precursor to this Plan, additional details as they pertain to the R'Ohan site specifically will be provided throughout the Plan where applicable.

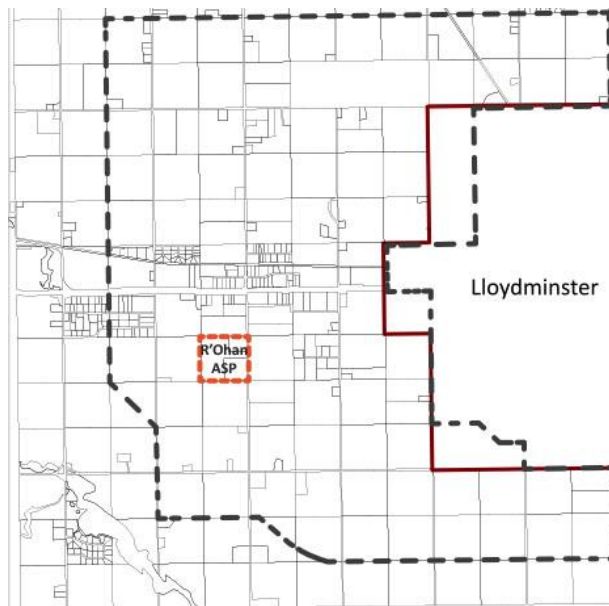


Figure 1: Site Location

1.3 Municipal Policy Context

The Council of the County of Vermilion River establishes the policies and regulations associated with permitted, discretionary and prohibited land uses through its statutory plans:

- Municipal Development Plan (MDP);
- Inter-Municipal Development Plan (IDP);
- Area Structure Plans (ASP); and the
- Land Use Bylaw (LUB).

1.3.1 Municipal Development Plan

The County's Municipal Development Plan sets out a 25-year vision for development within the County. In accordance with the Municipal Government Act and County policy, this Area Structure Plan must comply with the County's MDP.

The MDP is a county-wide document that provides broad policy direction regarding the location of various land uses, provision of municipal reserves, appropriate infrastructure for the servicing of development, the protection of environmentally sensitive areas and hazard lands and other matters such as when ASP's, concept plans or outline plans are required.

As described in the MDP, The County of Vermilion River's philosophy for managing growth and its land base is reflected in this Municipal Development Plan. The philosophy comprises three principles:

Principle #1: Land uses and development activities must respect and maintain the integrity of The County of Vermilion River's land base and water resources.

Principle #2: Growth must be managed and directed in a compatible, transparent, equitable manner that recognizes the diverse needs and aspirations of all County residents.

Principle #3: Smart growth principles will be applied to maintain the integrity of the land base and to promote sustainable development such that the needs of the present generation are met without compromising the County's rural character or the ability of future generations to meet their own needs.

These guiding philosophical principals are the foundation of this Plan.

In addition, according to MDP the term "industry" refers to manufacturing or warehousing and storage, and includes light, medium and heavy industry as well as natural resource extraction industries.

The County recognizes that industrial developments can be of benefit to the County by providing employment, tax dollars and services to County residents. The Plan encourages the clustering together of compatible industrial uses in rural industrial parks.

MDP Policy 4.3.1.4 specifically requires that *all proposals for industrial development (including industrial parks) shall be considered only in accordance with an Area Structure Plan or at the discretion of Council, a Development Concept Plan that has been developed and approved in accordance with the Municipal Government Act, which Development Concept or Area.*

Area Structure Plan will address:

- I. the impact on adjacent land uses;*
- II. transportation;*
- III. provision of water and sewer services;*
- IV. storm drainage;*
- V. the provision for municipal reserve;*
- VI. the impact on community services, such as fire protection;*
- VII. the municipal servicing costs associated with the development;*
- VIII. landscaping and buffering;*
- IX. risk assessment; and*
- X. any other matters identified by the County.*

1.3.2 Inter-Municipal Development Plan

The County of Vermilion River and City of Lloydminster Inter-Municipal Development Plan has been approved by both the County and the City of Lloydminster to guide development within the region.

The Area Structure Plan is located within the Lloydminster Intermunicipal Development Plan (IDP) boundary. In the IDP, the future Land Use is specified to be Rural Commercial/Industrial (RCI) South. The south RCI cell will provide for a variety of lot sizes to suit market demand. The proposed land use shall meet both the requirements of the County of Vermilion River Land Use Bylaw No. 15-21 and the County of Vermilion River and City of Lloydminster Intermunicipal Development Plan, Bylaw 08-17. The proposed land use complies with the future RCI designation specified in the Lloydminster IDP.

The County-City IDP was amended in 2008 to include three Area Structure Plans that provide the framework for future development in the City's intended Urban Expansion (UE) area and certainty of development opportunities on County lands that fall outside the UE area.

The Plan for the subject parcel, and adjacent parcels within the quarter section, is directly adjacent to the Central Urban Expansion ASP, as shown in Figure 2.

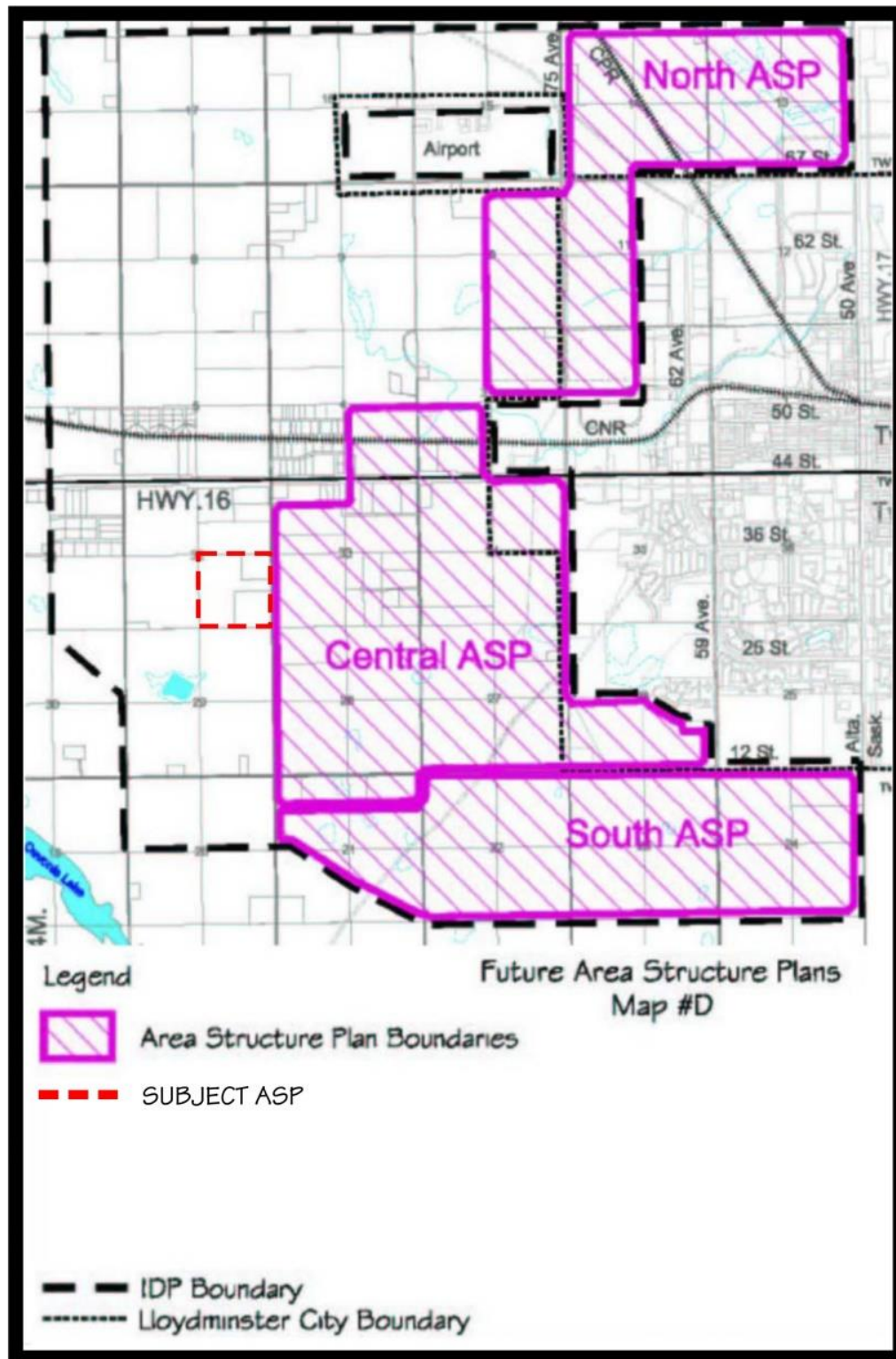


Figure 2: Plan of Adjacent Parcels to the Central Urban Expansion

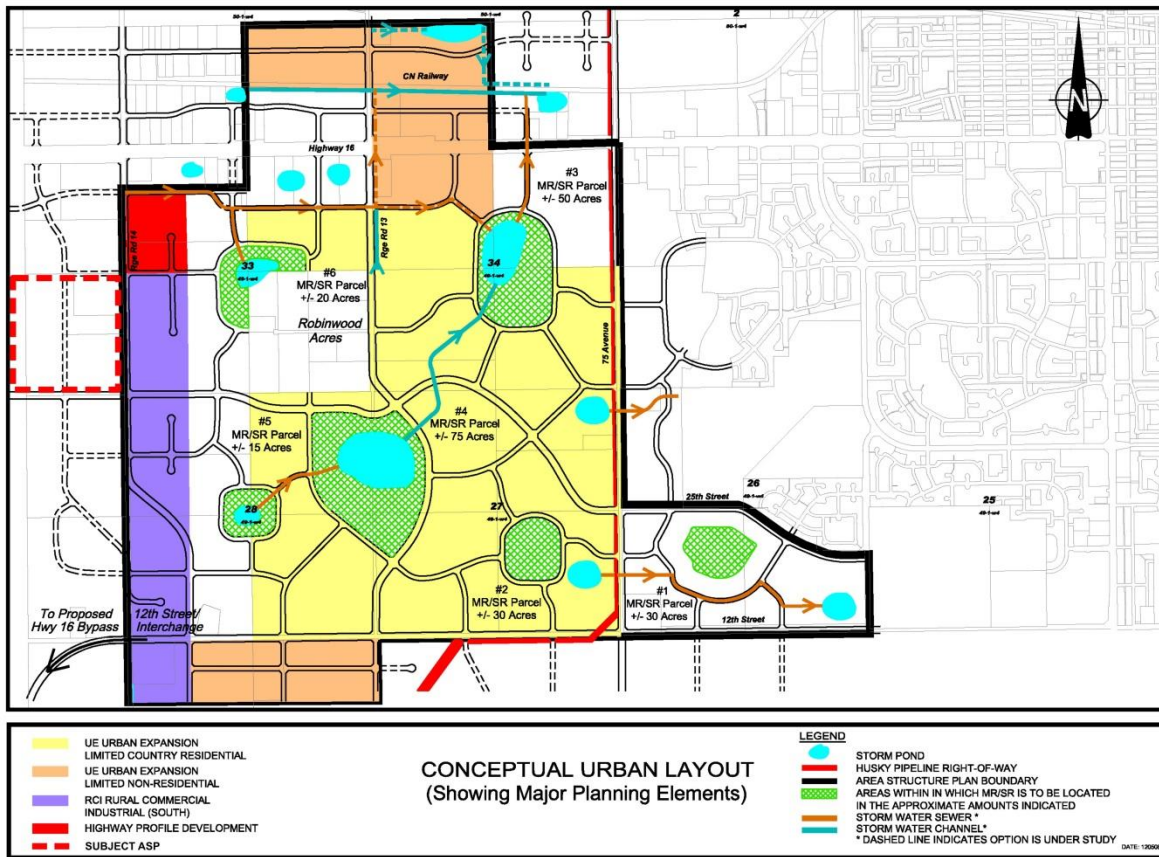


Figure 3: Central Urban Expansion

(from CEU ASP Fig. 3.3.2.1)

While the subject quarter section does not fall within the Central Urban Expansion ASP, the Central Urban Expansion ASP prescribes and details future land uses, major and minor roadways and services within the Central Urban Expansion ASP boundaries.

The proposed use for the lands adjacent to the R’Ohan ASP on the east side of RR14 is “Rural Commercial/Industrial” (RCI). This land use category is a mix of the existing Business (B) and Industrial (M) uses. The IDP indicates that *the intent of the RCI designation is to provide for the orderly development of rural industrial and compatible commercial uses*. This land use is entirely consistent with the Business (B) District designation on the R’Ohan ASP lands.

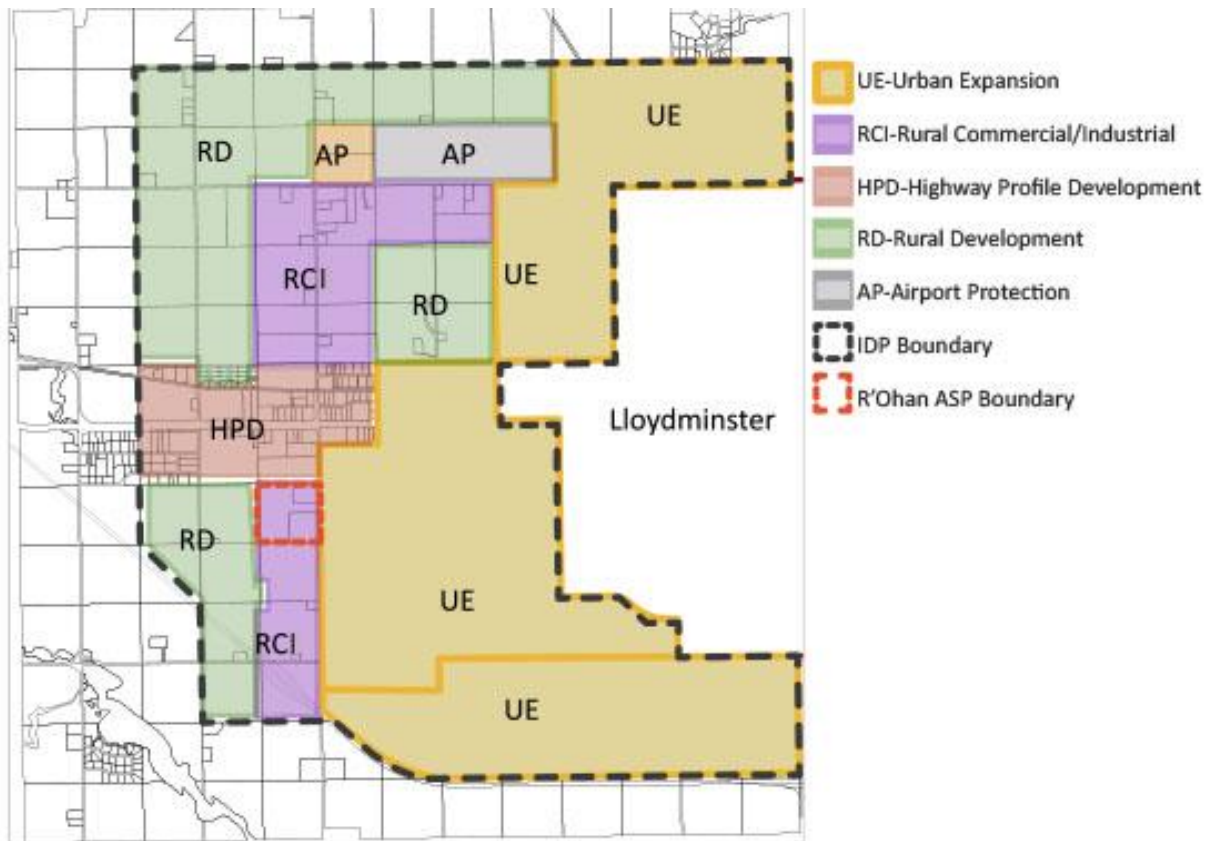


Figure 4: Future Land Use

1.3.3 Land Use Bylaw

All the lands within the Plan are currently designated “B - Business District” under Bylaw No. 15-21 - Land Use Bylaw of the County of Vermilion River.

The purpose of the business district is to allow development of industrial, warehousing, service, and commercial land uses which require large parcels with good accessibility.

Permitted uses for Business District include:

- a) Agri-tourism,
- b) Commercial uses;
- c) Extensive agriculture;
- d) Highway maintenance yards, signs, weigh scales, and campsites;
- e) Institutional uses;
- f) Participant recreation facilities;
- g) Public or quasi-public buildings and uses;
- h) Public utilities and public utility buildings;
- i) Recreational uses;

- j) Veterinary services; and
- k) Buildings and uses accessory to permitted uses.

Discretionary uses include:

- a) Auctioneering establishments
- b) Automotive and minor recreational vehicle sales/rentals and service
- c) Bulk fuel storage & sales
- d) Dwellings existing as of the date of the approval of the Bylaw
- e) Health services
- f) Home occupations, major
- g) Home occupations, minor
- h) Intensive agriculture
- i) Licensed industrial hemp production facilities
- j) Light industry
- k) Licensed medical marijuana production facilities
- l) Outdoor Storage
- m) Private liquor sales and storage facilities
- n) Signs that advertise businesses not located on the lot on which the sign is located
- o) Service stations
- p) Other uses which, in the opinion of the Development Authority, are similar to the above mentioned permitted and discretionary uses or required to serve the traveling public
- q) Buildings and uses accessory to discretionary uses.

The R'Ohan ASP anticipates conformity to the existing Business (B) District land use.

The 18 acre R'Ohan site itself is proposed to be developed as "Light Industry" which falls under the Discretionary Use category of the Business (B) District land use. This Land Use also conforms to the future RCI designation outlined in the Lloydminster Intermunicipal Development Plan.

Amended by
Bylaw 22-13

There are currently no development plans underway for the remainder of the lands within this Area Structure Plan area. Therefore it is not possible to be more specific about ultimate uses on the remaining lands within the plan. The preferred future land use for this area is commercial/light industrial, with the exception of the existing dwelling which, may remain a country residential use.

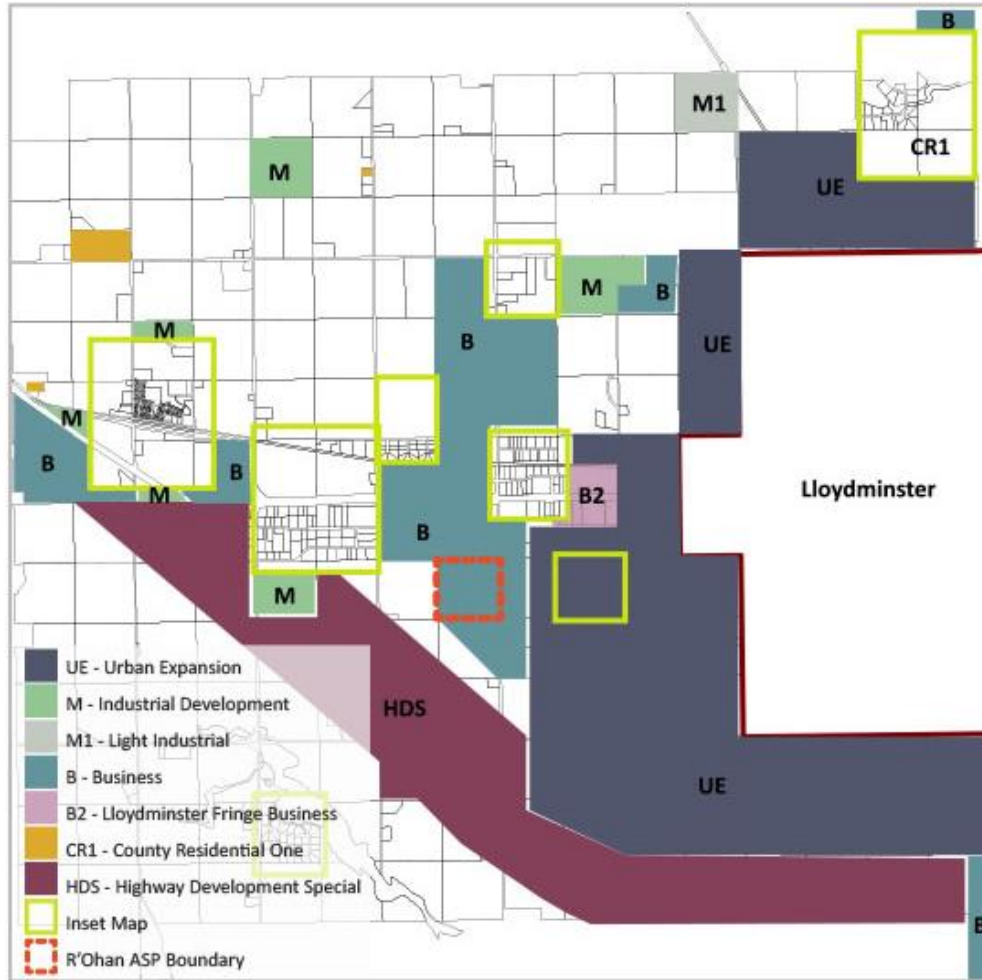


Figure 5: Land Use Bylaw Map

1.4 Approval Process

The implementation of this ASP is the responsibility of Council, the Administration and the Developer. Upon receiving first reading from Council, the Plan will be advertised to the public and an Open House will be held to receive feedback from the public. At the time of first reading Council will set a date for a formal Public Hearing in accordance with the Municipal Government Act. Council will then advertise and hold a Public Hearing. Upon conclusion the Public Hearing council may then choose, but is not required, to give both second and third reading to the adopted bylaw.

Should the ASP be approved by Council, future development shall require Subdivision, Development Permits and Buildings Permits as required by the County.

1.5 Public Consultation

Individual landowners whose properties are adjacent to the R'Ohan parcel have been contacted in regards to the development proposal described in this ASP. Input from those persons is included in Appendix "A".

2.0 PART 2: SITE ANALYSIS

2.1 Existing Development / Uses

The Plan Area is the SE 1/4 Sec 32, Twp 49, Rge 1, W4M, located approximately 3 km west of the City of Lloydminster and approximately 1.6 km south of Highway 16 (Yellowhead Highway) on the west side of Range Road 14. Alberta Transportation has plans to relocate Highway 16 in the future, at which time an interchange is proposed for the Range Road 14 to service lands in this vicinity.

The region has rail service from the Canadian National Railways mainline located north of Highway 16, and air service via the Lloydminster Municipal Airport.

The land to the north includes an acreage development and outdoor storage yard. The lands to the east, west and south are presently in agricultural and country residential use.

Quarter sections on all sides of the Plan Area accommodate a number of oil and gas wells that have not been abandoned. Ongoing operations and future activity associated with these oil and gas facilities can be anticipated for the foreseeable future.

The majority of lands contained within the Plan Area are currently utilized for agricultural production. There is also one existing country residential development, which may remain with appropriate buffering.

In regards to municipal services, municipality provided potable water, waste water collection and storm water collection services are not available to the properties within the Plan area. Future owners of subdivided lots will be responsible for providing these services in a manner that meets municipal and provincial standards.

The Plan Area contains existing oil and gas pipeline and well facilities. The operator of these facilities should be contacted at the subdivision and/or development application stage to ensure impacts are minimized through use of appropriate building setbacks, crossing agreements or other arrangements. Well sites in this area are not producing measureable quantities of hydrogen sulphide gas (H₂S) and are not considered to be sour gas wells. The typical setback for well sites that have not been abandoned is 100m. For subdivision and development applications where it

is known that the 100 meter setback to a non-sour well would not be met, a setback relaxation request must be made to the AER. Refer to AER Bulletin 2013-03 for additional information.

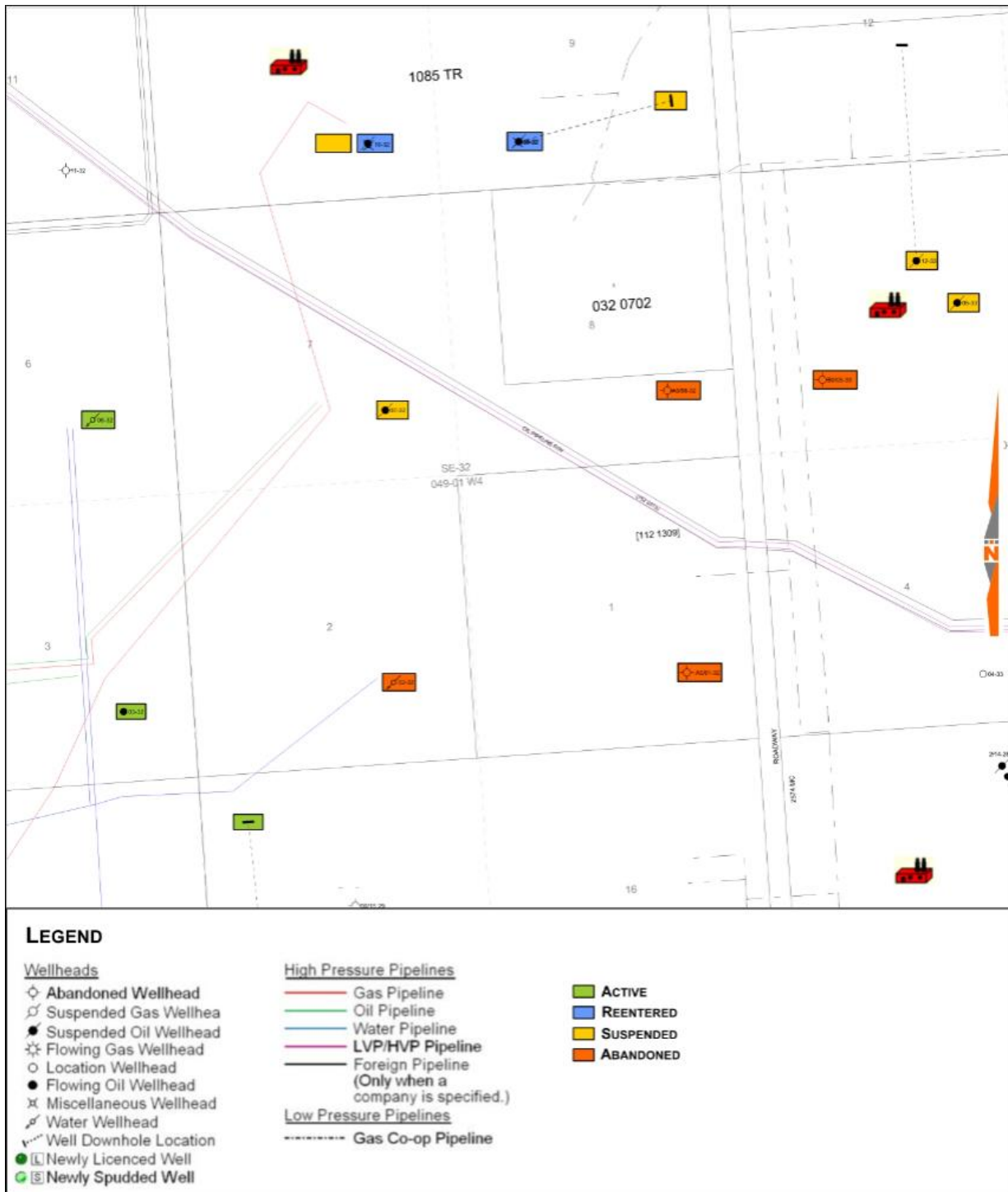


Figure 6: Well Site Location Plan

Regarding abandoned wells, AER Directive 079 states that “Surface structures on top of an abandoned well are not permitted and a minimum 5 m setback radius around the well must be maintained.”

The Subdivision and Development Regulation (*SDR*) requires the municipality to ensure that applicants seeking subdivision or development approval have appropriately identified and considered locations of abandoned wells, including any prescribed setback area, when making planning, development, and construction decisions. The municipality requires a larger setback than the minimum requirement set out in this directive.

No active or abandoned well sites have been identified on the 18 acre R’Ohan development site.



Figure 7: Site Location

2.2 Ownership

The lands contained within this plan area are owned by 3 individuals as illustrated in Figure 8.

Owner	Land Area (Acres)	Legal Address
R'Ohan Rig Services Ltd.	18.31 Acres	Lot 1, Block 1, Plan 0320702
David Edward & Cindy Hofer	40 Acres	SE 32-49-1-4 (Portion described in Title)
Rockytop Ventures	100.69 Acres	Remainder of SE 32-49-1-4

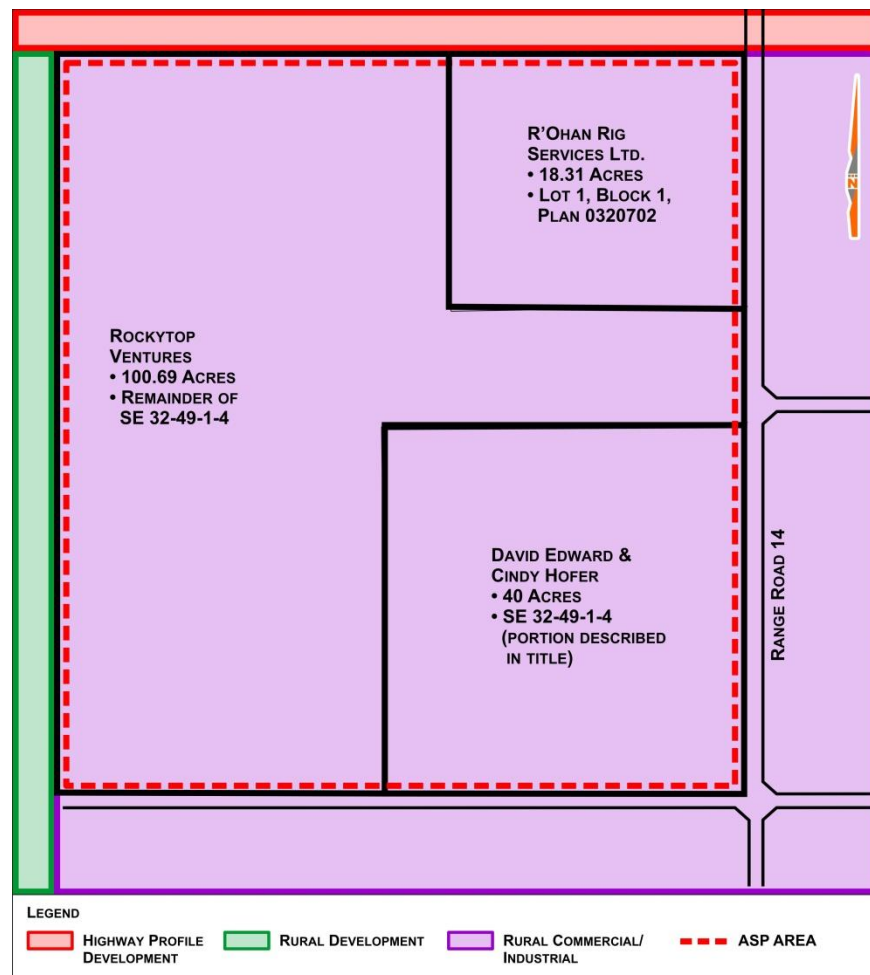


Figure 8: Land Ownership

2.3 Natural Environment

The Plan area is located in a transitional ecosystem between prairie grassland and boreal forest known as the Central Parkland Natural Sub-Region. There are three natural depressions on the

west side of the Plan area which form wetlands. These wetlands are shown in Figure 9. The Plan area has a catchment area boundary intersecting the site in a NW to SE direction as shown in Figure 9. The Plan area is relatively flat with gentle slopes to the north east on the east side of the catchment area boundary and to the south west on the west side of the catchment area boundary. The overall elevation differential across the site is approximately 2 meters falling from an elevation of 670 meters to about 668 meters.

The natural constraints within the plan area are the existing low lying wetlands. These wetlands are defined in Desktop Review conducted by Ghostpine Environmental Services Ltd., a copy of which is included in the Background Report.

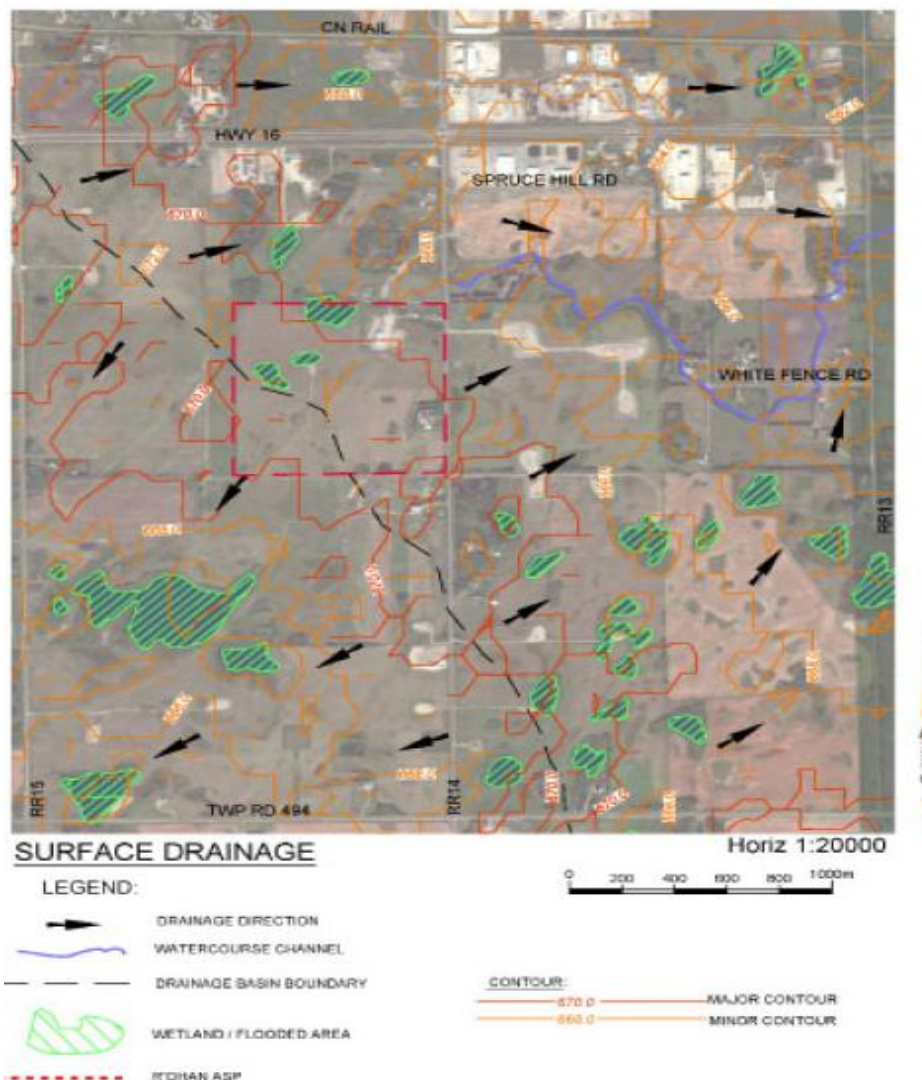


Figure 9: Surface Drainage

3.0 PART 3: PROPOSED DEVELOPMENT PLAN

3.1 Industrial Development

Amended by
Bylaw 22-13

All future development within the Plan area will be high quality, professionally landscaped business / industrial development that is reflective of the policies of the County's Municipal Development Plan and Inter-Municipal Development Plan. Following the adoption of this Plan, architectural, landscape and storm water management guidelines will be professionally prepared and a requirement to comply with these guidelines will be attached by caveat to each individual lot created by future subdivision.

Development within the Plan area shall support the County's Smart Growth principles contained in the MDP and the Regional Growth Management Strategy. Specifically, development within the R'Ohan parcel will be guided by the above cited guidelines in order to achieve the preservation of natural environment, fiscal responsibility regarding servicing and infrastructure needs, and encourage intensity of use that is consistent with Smart Growth principles.

The uses outlined within the Land Use Bylaw are compatible with the intended future development within the R'Ohan parcel, and could, upon future application and approval by Council, apply to all development within the Area Structure Plan boundary.

Applicants may propose land uses that are either permitted or discretionary uses at Development Permit stage. Should discretionary uses be proposed, the developer shall work with the County to determine suitability for the site. The County shall review and advertise both permitted and discretionary uses in accordance with the Municipal Government Act and County policies.

Amended by
Bylaw 22-13

3.1.1 Industrial Development Policies

Policy 3.1.1.1 All industrial development shall comply with current municipal policies and bylaws; including:

- a. Municipal Development Plan (2013);
- b. Regional Growth Management Strategy (2014);
- c. Land Use Bylaw (2014), as amended;
- d. General Municipal Servicing Standards (2012);
- e. Master Transportation Plan (2009);
- f. Master Storm Water Drainage Plan (2009).

Policy 3.1.1.2 At the time of subdivision, industrial developments shall provide architectural, design and landscape plans demonstrating the use of best management practices to reduce the impact to surrounding lands, the environment, and minimize the release of hazardous materials. These plans may include, but are not limited to:

- a. a landscaping plan illustrating planting locations, buffering, fencing and other means to screen commercial and industrial uses from adjacent lands;
- b. the location, surface treatment, and landscaping of parking areas;
- c. the orientation of buildings (where there is a double frontage, the structure should provide two “front” facades); and
- d. a signage strategy illustrating the theme and/or consistent signing throughout.

Policy 3.1.1.3 All industrial developments shall:

- a. maintain high standards of visual appearance;
- b. Integrate industrial uses with the surrounding non-industrial uses including the incorporation of fencing, screening, landscape buffers and berms;
- c. reduce negative impacts from such potential polluters including but not limited to noise, traffic, air emissions, storm water runoff; and
- d. address interface issues with current/future adjacent developments including, but not limited to, provision of landscaping and buffering.

Policy 3.1.1.4 Industrial signage shall be aesthetically pleasing and incorporate landscaping features to create a holistic community identity and feel.

- a. A development permit shall be required for all industrial signage.

Policy 3.1.1.5 Industrial developments should consist of multiple lot subdivisions; with shared access and servicing and concentration of compatible uses in a planned and properly developed area for industrial and/or commercial uses.

Policy 3.1.1.6 Smart growth principles shall be encouraged with all developments in the Plan area. Accordingly, future developments should feature:

- a. Subdivision design and applications that utilize Conservation Subdivision Design (CSD) techniques.
- b. Utilization of green development guidelines for Business parks and industrial developments wherever possible, particularly for water conservation, collection and storage of supplemental fire suppressant water sources and individual pressurized sprinkler systems.
- c. Open spaces developed to include pathways which connect to the County’s other open spaces.

Policy 3.1.1.7 All development applications shall provide for appropriate buffering and interface between current and /or future land uses.

- Policy 3.1.1.8** All outdoor solid waste disposal areas shall be adequately contained and screened to the satisfaction of the municipality;
- Policy 3.1.1.9** Development shall be setback from oil and gas wells as per municipal and provincial guidelines;
- Policy 3.1.1.10** Development shall adhere to building setbacks as outlined in the Land Use Bylaw. Variances should only be applied for when absolutely necessary; and
- Policy 3.1.1.11** A landscaping plan shall be required as part of the subdivision application package.

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3.1.2 Residential Development

- Policy 3.1.2.1** The existing country residential development within the ASP Area may be allowed to continue.
- Policy 3.1.2.2** a single lot subdivision to separate the existing county residential development from the undeveloped industrial lands may be allowed.
- Policy 3.1.2.3** a landscaping plan shall be required as part of the subdivision application package to ensure that the site is adequately buffered from future industrial development on adjacent lands.

3.2 Open Space

The Municipal Government Act (MGA) requires either 10% of plan area proposed for subdivision to be dedicated as Municipal Reserve (MR) or cash-in-lieu of Reserve dedication. Reserve dedication or money in-lieu or a combination thereof shall further comply with the current County of Vermilion River Policy PD-012.

The Plan proposes that storm water management facilities be integrated into a natural open space system that will be preserved as a wetland. This system will treat the storm water runoff and enhance wetlands in the area for local and transient waterfowl.

Further, MR dedications will be utilized to create a walkable park surrounding wetlands. This park will be available to the public, including local employees, to enjoy. To create this area, MR dedications will be provided through a combination of land and cash-in-lieu at the time of subdivision in accordance with the MGA and the County's Policy PD-012.

Wetlands within the Plan area will be dedicated as Environmental Reserve in accordance with the Municipal Government Act.

3.2.1 Environmental Policies:

- Policy 3.2.1.1** The County may require a detailed biophysical assessment prior to subdivision to determine if there are any environmentally significant areas.
- Policy 3.2.1.2** The location and design of open spaces should preserve natural beautify and environmentally sensitive areas.

- Policy 3.2.1.3** All development shall comply with Alberta Environment requirements pertaining to wetland permanence as outlined in the Water Act.
- Policy 3.2.1.4** Prior to issuing a development permit, the County shall require a copy of Alberta Environment approval and receipt of mitigation fees should any be applicable.
- Policy 3.2.1.5** All development shall provide adequate buffering to wetlands as per Alberta Environment requirements.
- Policy 3.2.1.6** An Environmental Site Assessment will be required for areas where abandoned wells and pipeline right-of-way's are present prior to subdivision approval.

3.2.2 Municipal Reserve Policies:

- Policy 3.2.2.1** All new subdivisions within the Area Structure Plan shall demonstrate a municipal reserve dedication strategy to the satisfaction of the County.
- Policy 3.2.2.2** All cash in lieu for municipal reserve shall be paid to the County in accordance with the Municipal Government Act and the County's Policy PD-012.
- Policy 3.2.2.3** Every subdivision application will show the Municipal Reserve parcel for that subdivision if applicable.

3.2.3 Environmental Reserve Policies:

- Policy 3.2.3.1** Subject to Section 664(1) of the Municipal Government Act, environmental reserve may be taken by the County without compensation at the time of subdivision if it consists of:
- a. a swamp, gully, ravine, coulee or natural drainage course;
 - b. land that is subject to flooding or is, in the opinion of the County, unstable; or
 - c. a strip of land, not less than 6 m in width, abutting the bed and shore of any lake, river, stream or other body of water for the purpose of:
 - i. preventing pollution; or
 - ii. providing public access to and beside the bed and shore.
- Policy 3.2.3.2** As a condition of subdivision or development approval, environmentally significant lands may be protected via the dedication of land as environmental reserve, or via the registration of an environmental reserve easement or restrictive covenant on the lands deemed to be environmentally significant subject to the provisions of the Municipal Government Act.
- Policy 3.2.3.3** Wetlands shall either be protected as Environmental Reserve or compensated for as approved by Alberta Environment and Parks, or its successor.

3.3 Implementation

A principal objective of this ASP is to provide the most economical servicing and utility infrastructure while creating a safe and attractive industrial service corridor.

At each phase of subdivision, all of the proposed infrastructure improvements (i.e. transportation, storm water, sanitary and sewer, utilities and emergency services) shall meet the requirements of the County and the respective Alberta Government department.

Transportation

The road network within the Plan area is intended to provide functional, all weather access to future subdivided parcels, as well as efficient connection to major roadways shown in conceptual locations outlined in the Central Urban Expansion ASP. Primary access to the Plan area is proposed to include multiple accesses from Range Road 14. The north access point will utilize the existing R'Ohan access. The middle access will be providing a central access to the site. This road will terminate at the north-south road that runs through the site. The south road is proposed along the southern property line and provides a connection to future development on the western side of the Plan area. Additionally, a north-south road is proposed to run through the site providing access to the North and South of the property.

Future road widening of Range Road 14 will require an additional right-of-way. Acquisition of lands for access or widening will be completed at the time of subdivision to the satisfaction of the County.

The conceptual road network has been designed to accommodate future traffic flows while minimizing long term infrastructure costs. The transportation network within the Plan is a preliminary design that takes into consideration the enhancement of the existing natural environment, as well as the potential access needs of future development.

3.3.1 Transportation Policies:

- Policy 3.3.1.1** Subject to the provisions of the Municipal Government Act, the County may require the owner of a parcel of land at the time of subdivision to dedicate part of the parcel for the purposes of roads, public utilities, or both. Land dedication shall be in accordance with this Area Structure Plan.
- Policy 3.3.1.2** All roads within the Plan area will be designed and constructed to County standards with a typical rural cross-section. Road rights of way shall be to County standard.
- Policy 3.3.1.3** A variance to the County standard may be requested and shall be subject to the approval of the County's Development Authority.
- Policy 3.3.1.4** Where a paved surface is required the paving shall be to County standards at the developer's expense.
- Policy 3.3.1.5** All municipal roads accessing industrial park developments shall be designed and constructed to connect to the County's road network in an efficient and safe manner.
- Policy 3.3.1.6** A traffic impact assessment shall be required prior to approval of subdivisions within the Plan Area.
- Policy 3.3.1.7** An Off-site Levy Bylaw may require a developer to pay levies, as permitted by the Municipal Government Act, at the time of subdivision.
- Policy 3.3.1.8** Road surfacing shall be done at the developers expense if a phase is 80% developed or within two (2) years of subdivisions, whichever is sooner, and will be turned over to the County for maintenance even though other phases

are not complete. Policy 3.3.1.9 Should road maintenance of phasing require travel through undeveloped phases, then road surfacing may be required prior to phase being completed.

Policy 3.3.1.9 The developer shall achieve the ultimate road standard and surfacing before the road can be turned over to the County for maintenance.

Policy 3.3.1.10 Should land be required for future road-widening, the County shall require their dedication prior to subdivision endorsement.



Figure 10: Road Network

Storm Water

Surface storm water drainage should be directed as much as possible to the natural wetlands within the plan area to preserve their viability. Range Road 14 forms a part of the drainage regime directing flow to a natural drainage channel starting a short distance to the north of the subject site and flowing eastward. Site specific storm water management may require on-site storage ponds to moderate increased flow rates brought on by development.

As per Alberta Environment storm water management guidelines, future development shall not increase water flows from the Plan area onto neighbouring lands. Riparian flow rates will be the same as pre-development flow rates as per Provincial policy. Development shall minimize off site impacts with future storm water management facilities.

The Plan area is divided into catchment areas. Development within each catchment area shall both comply with and enhance each respective basin. Cross-lot drainage shall not be permitted.

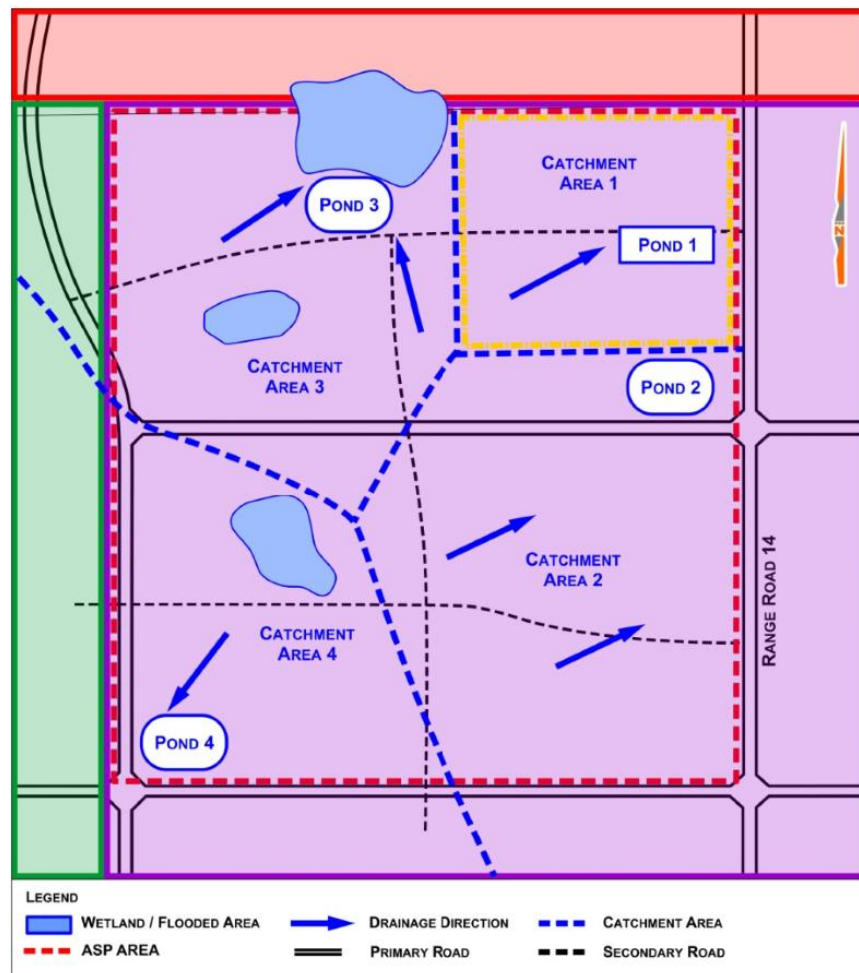


Figure 11: Catchment areas

3.3.2 Storm Water Management Policies:

- Policy 3.3.2.1** Future storm water management shall conform to the County's Master Stormwater Management Plan (2009) and provide seamless connection into the Northwest Functional Storm Water Management Plan.
- Policy 3.3.2.2** A detailed storm water management plan (including design), prepared by a qualified professional engineer, shall be completed prior to subdivision endorsement in accordance with provincial regulations and the County's approved functional storm water management plans.
- Policy 3.3.2.3** As per Alberta Environment storm water management guidelines, future development shall not increase water flows from the ASP area onto neighbouring lands. Riparian flow rates will be the same as pre-development flow rates as per Provincial policy. Development shall minimize off site impacts with future storm water management facilities.
- Policy 3.3.2.4** Lot drainage shall be designed to direct drainage to public roadways or public drainage collection systems. Cross-lot drainage across adjacent private lots shall not be permitted.

Potable Water

Municipal potable water is not available to the lands in the Plan area. Each parcel within the Plan Area shall therefore be required to provide a proven source of potable water at the time of subdivision. Acceptable sources of potable water include: on site well water obtained through a Provincially approved drilling program or a cistern in which hauled potable water may be stored for onsite distribution subject to provincial regulations.

3.3.3 Potable Water Policies:

- Policy 3.3.3.1** The Developer may consider interim servicing solutions, including servicing via trucked in water and trucked out waste (from/to approved municipal facilities).
- Policy 3.3.3.2** Water Well Tests will be compiled within a one mile radius that are no more than five (5) years old to confirm water well supply capacity at the time of subdivision.
- Policy 3.3.3.3** Water wells shall be drilled in accordance with County and Alberta Environment and Sustainable Resource Development policies.
- Policy 3.3.3.4** Water diversions shall comply with the Alberta Water Act.

Waste Water

Municipal waste water collection services are not available to the properties within the Plan area. Future owners of subdivided lots will be responsible for providing these services in a manner that meets municipal and provincial standards. Servicing is to be provided on-site for each lot created to the satisfaction of the County, Alberta Municipal Affairs, Safety Codes Council, and Alberta Environment and Parks.

It is proposed that sanitary sewerage systems will utilize septic tanks for pump and haul. Individual Lot owners will be responsible for the collection and disposal sewage.

3.3.4 Waste Water Policies:

- Policy 3.3.4.1** Individual lot owners will be responsible for the collection and disposal of sewage utilizing septic tanks for pump and haul.
- Policy 3.3.4.2** Servicing shall be provided to the satisfaction of the County, Alberta Environment and Sustainable Resource Development.
- Policy 3.3.4.3** All sewer systems shall meet standards set out by the Safety Codes Council of Alberta.
- Policy 3.3.4.4** Human waste shall be pumped and hauled to the Lloydminster treatment facility.
- Policy 3.3.4.5** Industrial waste shall be contained and hauled to appropriate and approved containment and treatment site.

Utilities

Energy and telecommunications utilities are available to the Plan area through main feeds along Range Road 14.

Electrical utility distribution and servicing will be coordinated by Atco Electric at the request of the developer.

Provision for natural gas distribution and servicing is designed and coordinated by the gas company at the request of the developer. Atco Gas will provide natural gas distribution to the proposed development.

Telus Communications is the service provider for communication services the Plan area.

3.3.5 Utilities Policies:

- Policy 3.3.5.1** The developer is responsible for the installation of shallow utilities that follows the County of Vermilion River General Municipal Standards and meets the regulations of the industry at the time of subdivision.
- Policy 3.3.5.2** Shallow utilities shall be located within a shallow utility Right-Of-Way.
- Policy 3.3.5.3** Electric power will be provided through overhead distribution lines.

Emergency Services

The plan area will rely on services available in the County of Vermilion River. Ambulance and police services are available in the County. The County is a member of the East Central Health District. Fire protection will be the responsibility of the County.

All roads located within the Plan area are designed to accommodate emergency vehicles. Emergency Vehicles will be able to access the site from the north, the south and through roads

to the east and west. In the event of an emergency, private vehicles will also be able to evacuate the area using the multiple access points.

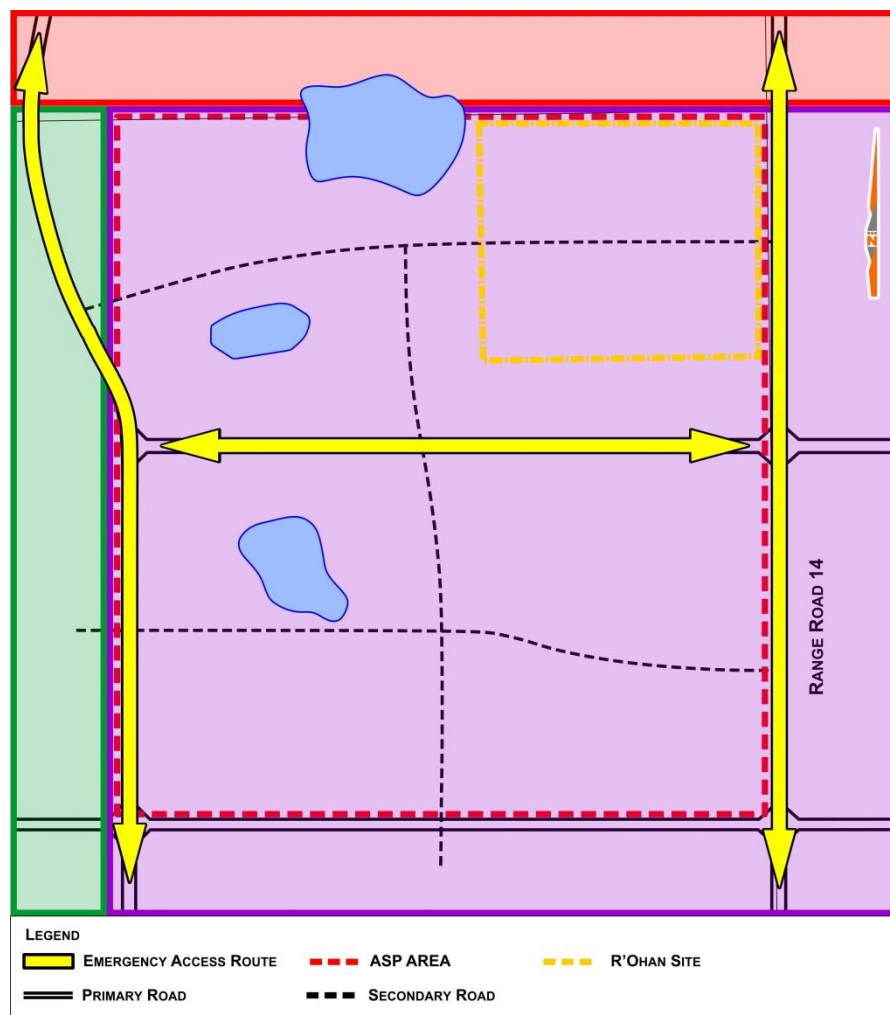


Figure 12: Emergency Access Routes

3.3.6 Emergency Services Policies:

- Policy 3.3.6.1** An emergency response plan, emergency evacuation plan, and emergency access routes may be required at the time of subdivision.
- Policy 3.3.6.2** Fire Protection shall be provided by the Blackfoot Fire Department with back up from the City of Lloydminster.
- Policy 3.3.6.3** Law enforcement services shall be provided by the County of Vermillion River Bylaw Enforcement staff and the RCMP.
- Policy 3.3.6.4** Capacity for local fire suppression shall be designed into the storm water management ponds, or alternately provided by individual storage tanks.

Development Sequence / Phasing

Following the approval of the ASP, the developer will submit a subdivision application for Phase 1, the R'Ohan site. The remainder of the site will develop at future dates and times as the market demands..

3.3.7 Phasing Policies:

- Policy 3.3.7.1** Subdivision and Development Permit applications shall be submitted to the County, and receive approval from the Development Authority, prior to the commencement of any development.
- Policy 3.3.7.2** The County and the developer will enter into a Development Agreement at the time of subdivision approval.
- Policy 3.3.7.3** An application to commence stripping and grading of any development phase may be approved by the Development Authority prior to the signing of a Development Agreement where the applicant agrees to bear all financial liability associated with site restoration in the event that the development does not proceed to completion.

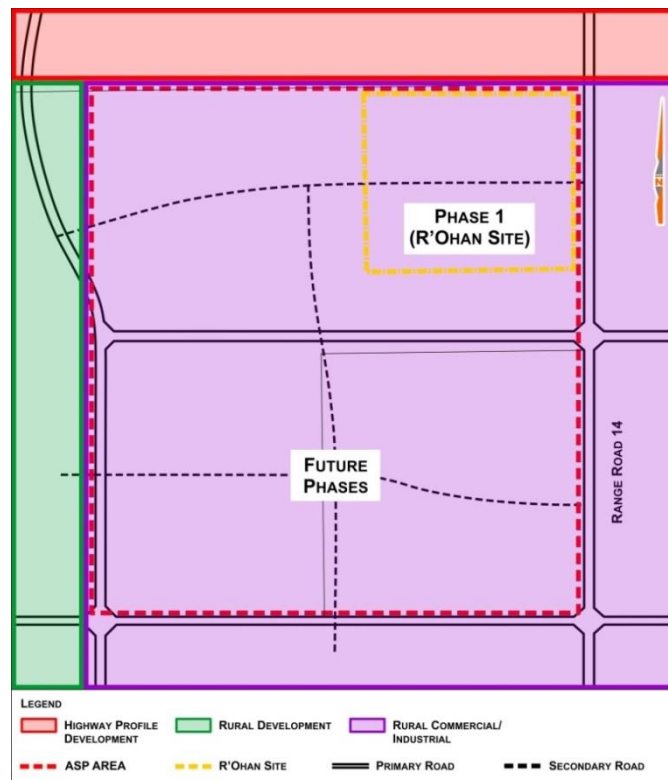


Figure 13: Phasing

4.0 PART 4: R'Ohan Site

4.1 Risk Assessment

Recent economic forecasts indicate that Alberta's GDP is returning to a healthy 2.2% growth rate in 2017. The stabilization of oil prices in the \$50 range is also a positive indicator that the oil industry is in a position for positive growth. The recent approvals of additional pipeline capacity both to the west coast of Canada and south through the USA are also positive indicators for oilfield services and production.

The City of Lloydminster's employment growth projection "Medium Scenario" predicts that the City will require 13,422 additional jobs for a total of 31,508 jobs by 2041, an increase of 74%. The City of Lloydminster, prior to annexation, has only a 5 year land supply for industrial growth. The R'Ohan development, calculated at a rate of 24 persons per hectare, is estimated to generate 178 jobs when fully developed and occupied. With its close proximity to the City and its favorable location on RR 14, the R'Ohan site will be seen as a desirable location for light industrial development. This will compliment both the County of Vermilion River's Growth Management Plan and the City of Lloydminster's demand for industrial sites.

Three of the proposed 7 sites are already occupied. There is immediate demand for 1 additional site to be developed in 2017, leaving only 3 lots available for future absorption. If the absorption takes place at a modest rate of 1 lot per year, the entire development will be absorbed by 2020. The servicing requirements of the proposed R'Ohan subdivision are minimal, including a short roadway and turnaround, surface drainage and a small storm water pond. R'Ohan has already upgraded the power service and telephone service for the existing and future lots. Roadway access will be constructed in a single phase.

In light of the above and the fact that the R'Ohan site has an established industrial base with 3 lots already occupied, the risk of creating 4 additional lots for a total of 7 lots is minimal.

4.2 Existing Uses

The R'Ohan site is 7.410 ha (18.31 acres). The site is bounded on the east by Range Road 14. The land to the north includes an acreage development and small tank farm. The land to the west and south is agricultural use.

The R'Ohan site presently contains a residential house, an old barn, and four shop structures. The house has been moved from the site to another location. The Quonset and old red barn will be demolished. Future infrastructure development, as outlined within the Plan, has been designed to provide access and services to the shop structures that will remain.

The minimum front yard setbacks required in the Land Use Bylaw is 71 meters from the center line of any adjacent arterial road or 40 meters from the arterial road right-of-way, whichever is

greater. The future subdivision has been designed to accommodate these minimum setbacks as required in the Land Use Bylaw. Furthermore, setbacks for all future proposed buildings shall comply with the requirements as outlined in the Land Use Bylaw.

The following are photographs of the existing structures. The current site layout is outlined in Figure 14.



Photo 1: Site Photo R'Ohan Shop (house to be moved)



Photo 2: Site Photo Building 'C'



Photo 3: Site Photo Building 'G'



Photo 4: Site Photo Quonset (to be demolished)



Photo 5: Site Photo Barn (to be demolished)

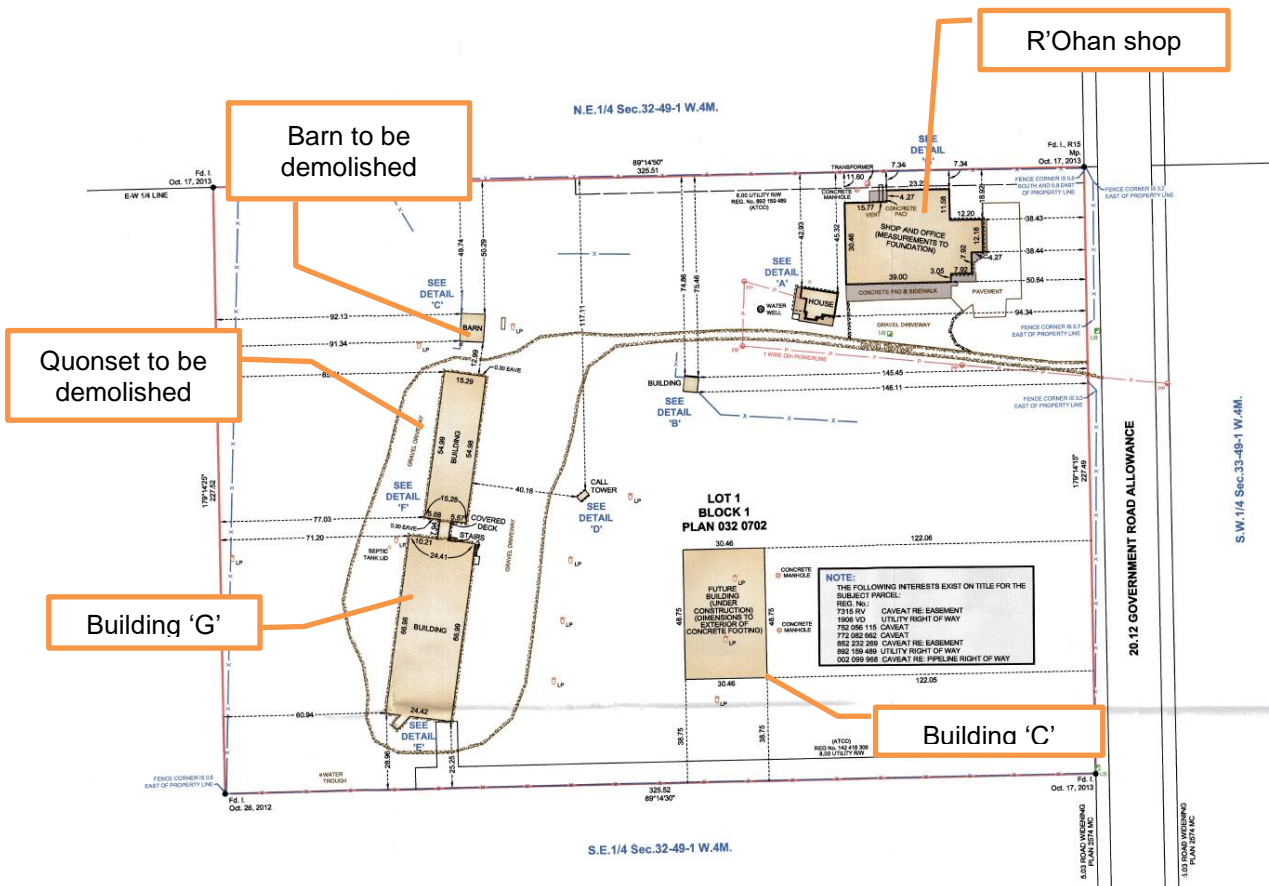


Figure 14: Real Property Report Plan (Midwest Surveys)

Natural Environment

The topography of the land is essentially flat with a gentle grade sloping from west to east. The elevation difference west to east is from 672 m on the west boundary to an elevation of 670 m on the east boundary. There is an existing dugout near the west boundary on the southerly half of the site which is approximately three meters deep.

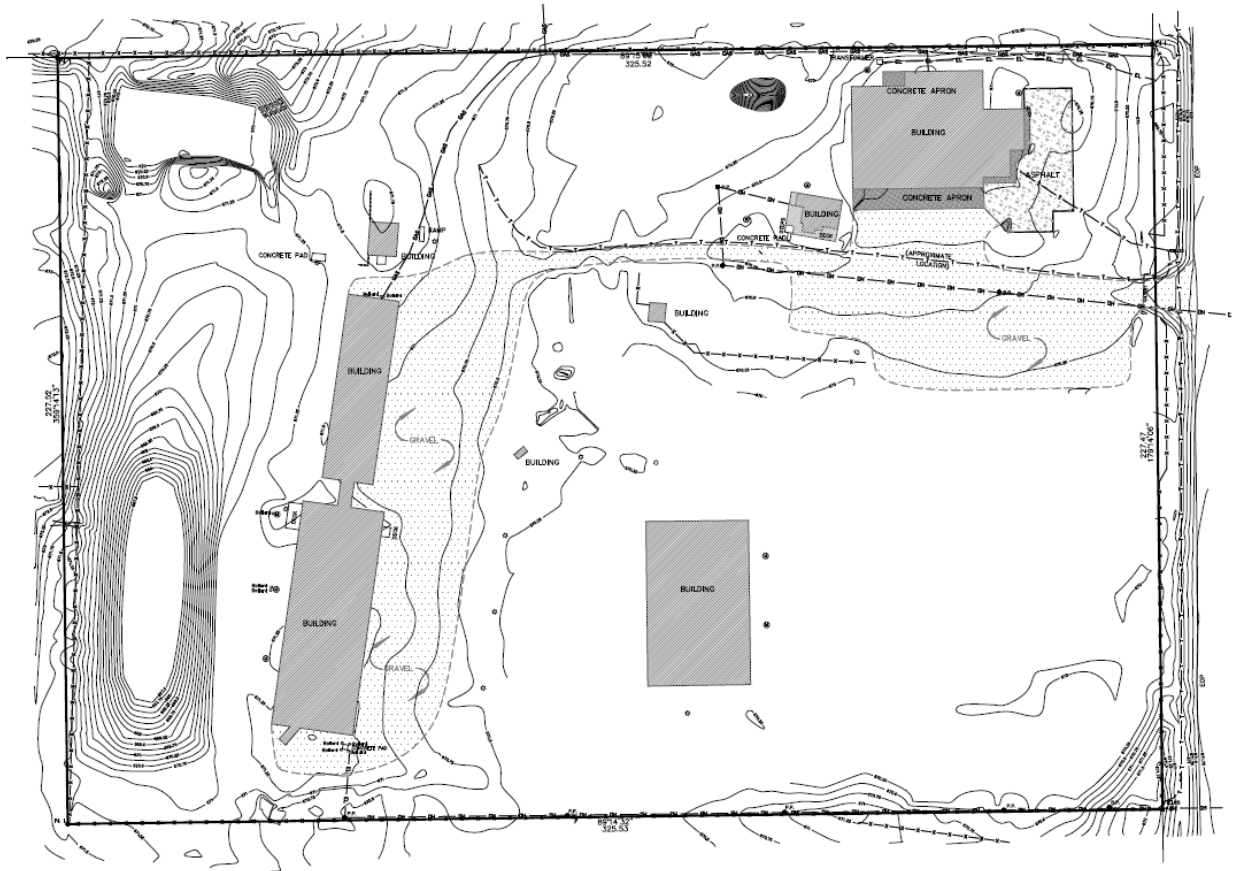


Figure 15: Topography

4.3 Proposed Development Plan

Uses within the R'Ohan site specifically are envisioned to be permitted uses. Specifically including commercial, light industry, and medium industry, with possible accessory buildings. Development on the R'Ohan site will encourage the principles of smart growth, specifically including:

- Compliance with of green building principles and standards;
- Utilization of cost-effective on-site infrastructure;

- Support of the local construction industry through fostering the construction of new industrial buildings and infrastructure; and the
- Support of infill development and intensification of use within an existing industrial area.

The following is an example of quality industrial development that utilized appropriate site design standards. The development pattern of John Deere located in Lloydminster, Alberta (15.2 Acres) will be used as a guideline for future development on the R'Ohan site.



Photo 6: John Deere – Lloydminster, AB (15.2 Acres)



Photo 7: Edge of Property



Photo 8: Landscaping

Open Space

All aforementioned policies will apply to the R'Ohan site. In addition, the R'Ohan site has provided MR compensation to the County in 2002/2003. Since all MR requirements have already been fulfilled additional reserves are not required.

4.4 Implementation

Transportation

The proposed access roadway is on an east-west alignment to provide a 90 degree intersection with Range Road 14. This road is centrally located on the property. During the initial phases of development this access road will terminate in a cul-de-sac. The interim cul-de-sac circle will be registered on title as an easement indicating that the lands will be reclaimed and returned to the lot owner at such time that the through road is developed. The right of way to the remainder of the quarter section will be dedicated at the time of subdivision in order to facilitate the future conversion of the local road to a through access.

Construction of the internal roadway will conform to County standards which are typical of a rural cross-section with drainage swales on both sides and driveway access to individual lots, with the exception proposed road right of way. The R'Ohan development's internal roadway is proposed to have a 20 meter right-of-way as shown on Figure 16, Grading and Transportation Plan. Rural roads are constructed with a gravel base and cold mix surface topping and will have a carriageway width of 8 m. Drainage ditches will be located along both sides of the internal roadway. The roadway will terminate in a cul-de-sac until such time that a future development requires a permanent roadway be built to accommodate through traffic. The long term road is designed by-pass all the existing wetlands, so as not to cause disturbance to these areas. Upon subdivision a future road right-of-way will be dedicated through the entire R'Ohan parcel to provide access to the lands beyond.

The R'Ohan property has already dedicated the additional 5.03 meters required for Range Road 14 future widening. No additional widening will be required on the R'Ohan property.

The transportation network within the R'Ohan site is designed to provide efficient access to existing and future development. The road will not interfere with the existing wetland outside of the site to the northwest of the R'Ohan property. Further, the road alignment does not interfere with existing permanent buildings. All appropriate County transportation policies and standards will apply to the R'Ohan site.

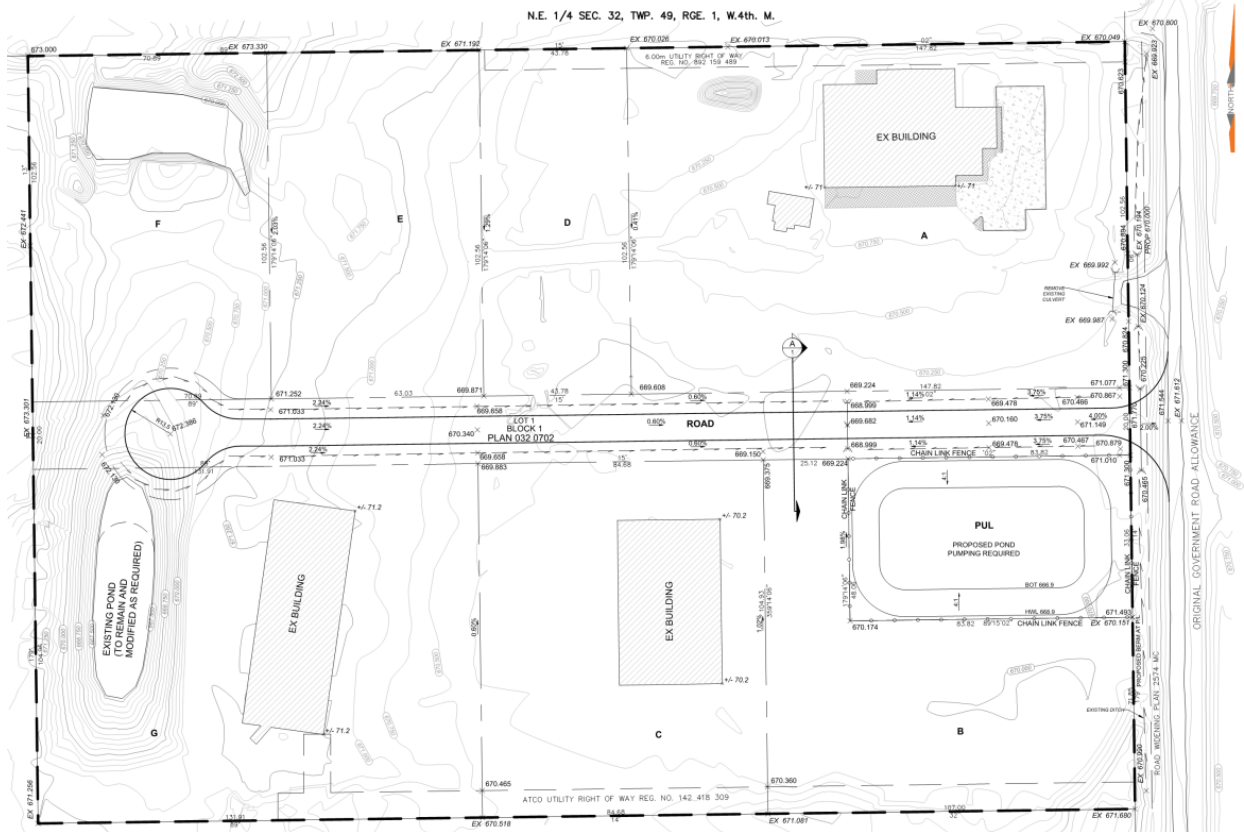


Figure 16: Grading Plan (See Appendix F)

Storm Water

Specifically, the R'Ohan site will be graded to direct flow from the developed lots to the ditches on either side of the internal access road, and subsequently to the on-site storm water pond.

A Storm Water Management Pond is proposed on the east side of the property next to Range Road 14 (Figure 17). Surface water will be directed to the pond through ditches and culverts constructed along both sides of the internal access road. Surplus water will be discharged from the pond to the West ditch of Range Road 14 and will be pumped by the landowner as necessary. The proposed SWM Pond has a storage volume of 4976 cubic meters; the storm water model predicts a required volume of 3,444 cubic meters. The additional storage capacity is required to maintain an onsite firefighting water supply.

Presently, existing water on the east side of R'Ohan site is the result of an improper culvert installation north of the property which has resulted in reverse flows backing up onto the R'Ohan site. Once the infrastructure has been repaired, the issues of the reverse flows will be resolved.

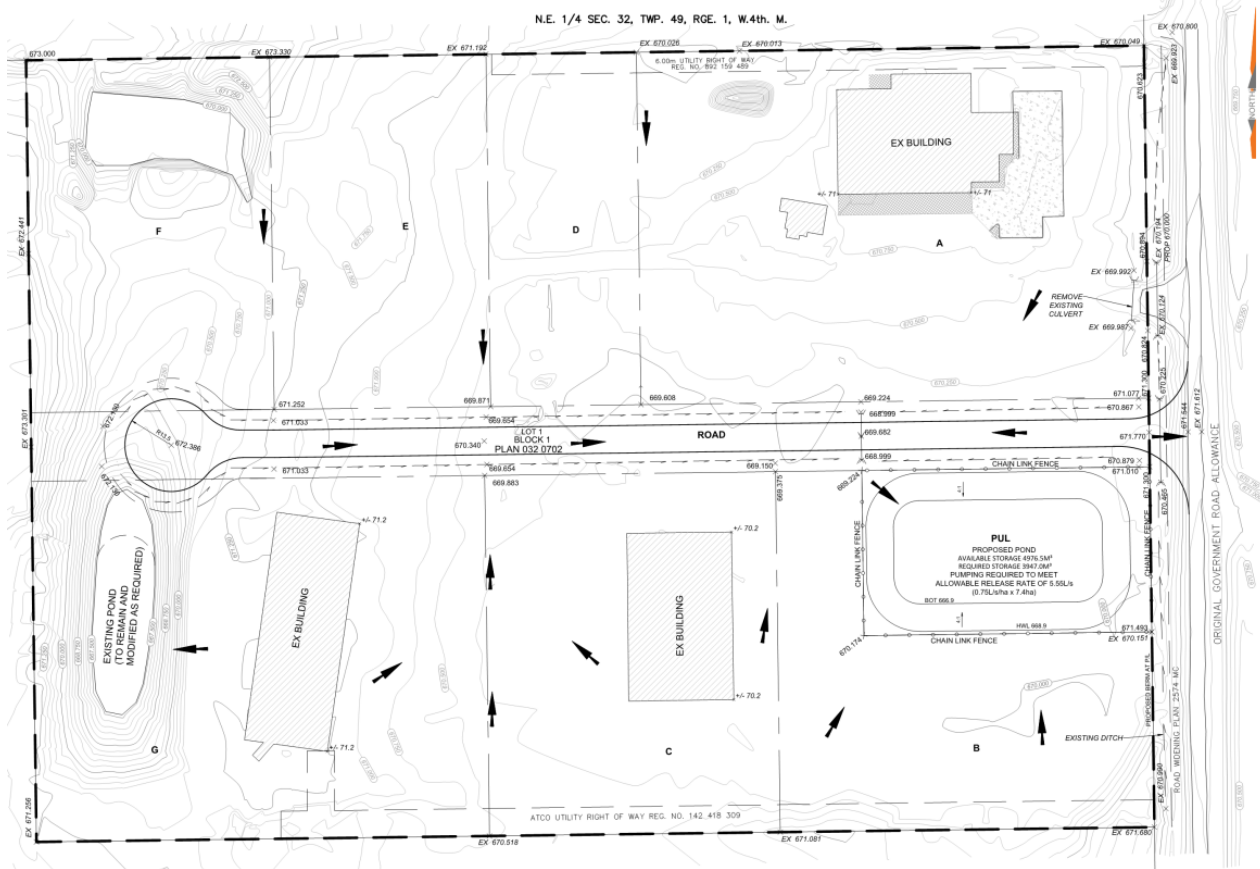


Figure 17: Drainage Plan (See Appendix F)

Potable Water

Three water wells are presently located on the R’Ohan site. These wells shall be utilized until such time that municipal connections become available. Should additional wells be required, they shall be drilled in accordance with County and Alberta Environment and Sustainable Resource Development policies.

Sanitary and Sewer

Current development on the R’Ohan site utilizes septic tanks for pump and haul. Future development will continue to utilize septic tanks for pump and haul until such time that municipal services are available.

Phasing

The R’Ohan Site will be developed as Phase 1 within the Plan, with applications for subdivision and development beginning immediately upon approval of the ASP.