

ROBINWOOD AREA STRUCTURE PLAN

44

County of Vermilion River

January 13, 2023

Bylaw No. 23-05

ACKNOWLEDGEMENTS



County of Vermilion River

Council

Administration

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CITATIONS & RELATED STUDIES:

- 1. Desktop Hydrogeological Assessment, June 2014 (Thurber Engineering)
- 2. Assessment of Soil and Groundwater Conditions, July 2014 (Solid Earth Geotechnical)
- 3. Phase 2 Groundwater Potential Study, 2015 (Waterline Resources Inc.)
- Phase 1 Environmental Site Assessment, May 2014 (McElhanney Consulting Services)
- 5. Separation distances from the current Alberta Private Sewage Systems Standard of Practice 2015 Standard of Practice (SOP)

1 | ASP VISION AND GOALS

1.1 Vision

The Robinwood Area Structure Plan (ASP) envisions an upscale country residential development located in the County of Vermilion River, that fosters serene rural living with the convenience of being in close proximity to the City of Lloydminster and its amenities.



The proposed development will incorporate high-quality design elements to ensure seamless integration into the existing fabric of the community.

The ASP envisions country residential development with lot sizes ranging from 1.6 – 6.1 acres (0.65 – 2.47 hectares) for this area. This attractive, high-quality country residential community will provide residents with an opportunity for rural living while in close proximity and convenient access to Highway 16 and the City of Lloydminster.

1.2 Goals

The following ASP goals guide the ASP policy framework and have been incorporated into the development plan:

- Provide a clear vision and direction for future country residential development in the Plan area;
- Create future development that is compatible and complementary to the existing community within and adjacent to the Plan area; and
- Establish a cohesive community character that is designed around its natural surroundings.

2 | INTRODUCTION

2.1 Summary

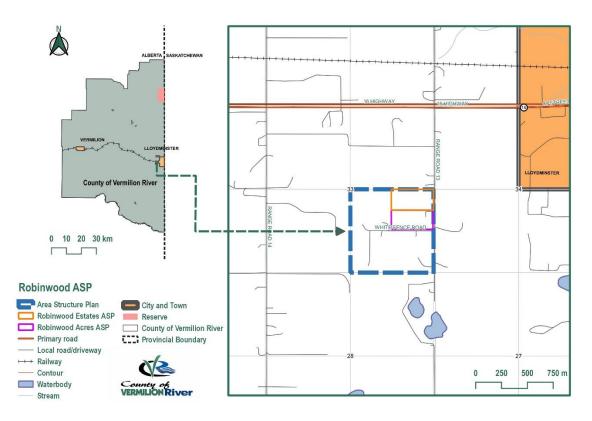
The Robinwood Area Structure Plan (hereinafter referred as "the Plan" or "ASP") is a statutory plan approved by the County of Vermilion River (hereinafter referred as "the County") and adopted as a bylaw to provide guidance for future country residential development within SE-33-49-1-W4M in the County of Vermilion River, Alberta.

The Plan describes future allocation of land use and servicing provisions on the site, and provides citizens, developers, County staff and Council with a road map while considering applications for land use redesignation, subdivision and development in the Plan area. The Plan does not predict the rate or pace of development within the plan area, market forces will determine when and if a parcel of land develops.

2.2 Location

The Plan area is located approximately 0.7 kilometres south of Highway 16 and approximately 1.6 kilometres west of the City of Lloydminster, on the west side of Range Road 13 (**Map 1** | **Plan Context**).

The Plan area is approximately 158.7 acres (64.2 hectares) in size, including the existing Robinwood Estates Area Structure Plan (Bylaw 14-32) at Lot 1, Block 1, Plan 1218TR in SE-33-49-1-W4M.



Map 1 | Plan Context

2.3 Municipal Government Act

The Municipal Government Act (MGA) outlines the requirements of an Area Structure Plan, as follows:

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

(2) An ASP

(a) must describe:

- *i.* the sequence of development proposed for the area,
- ii. the land uses proposed for the area, either generally or with respect to specific parts of the area,
- *iii.* the density of population proposed for the area either generally or with respect to specific parts of the area, and
- *iv.* the general location of major transportation routes and public utilities, and
- (b) may contain any other matters the council considers necessary, including matters relating to reserves, as the council considers necessary.

The Robinwood Area Structure Plan (ASP) was prepared in accordance with the MGA and is consistent with the applicable statutory plans and policies, including the Intermunicipal Development Plan (IDP) and the Municipal Development Plan (MDP).

2.4 Interpretation

The purpose of the ASP is to provide the overall vision and policy guidance for future land use, subdivision, and development within the Plan area. The ASP policies are written as "SHALL", "SHOULD", and "MAY" statements:

- "Shall", "Must, and "Is" statements mean the action or actions outlined are imperative or mandatory and therefore must be complied with, without discretion;
- "Should" statements mean that, in order to achieve the established goals and objectives, it is strongly advised that the action be taken. Exceptions shall be made only under extenuating circumstances. When the regulation is directed to the Developer, the onus to justify is on the Developer; and
- "May" statements mean that a choice is available, with no particular direction or guidance intended, and is usually dependent on the particular circumstances of the specific Parcel of land or Lot and application that are under consideration at any given moment. When the regulation is directed to the Developer, the onus to justify the exception is on the Developer.
- "Developer" means the applicant or developer of a subdivision or development application.

The Robinwood ASP should be read in conjunction with other applicable statutory plans, bylaws, policies and supporting technical documents, such as the Intermunicipal Development Plan, the Municipal Development Plan, as well as other federal, provincial, Acts and municipal Bylaws and policies.

3 | PLANNING CONTEXT

3.1 Planning Framework

Effective land use decisions that support sustainable growth require plans and the planning process to operate at different geographic scales: Provincial, Regional, Intermunicipal, and Municipal.

At the Provincial level the Municipal Government Act (MGA) is the law that empowers Alberta municipalities to make the land use decisions that shape their communities. This document also requires that all municipalities in Alberta have statutory plans to regulate land use and development. In addition, the MGA establishes that statutory plans must comply with the Alberta Land Stewardship Act (ALSA), including its Land Use Framework and Regional Plans.

Regional Plans outline regional growth management strategies as established in the ALSA. The Province of Alberta is pursuing the development of a series of regional plans as part of the Provincial Land Use Strategy. The County of Vermilion River is within the North Saskatchewan Regional Plan currently under way. The County of Vermilion River Regional Growth Management Strategy provides recommendations and strategy options for sustainable growth and development within the County.

The County of Vermilion River has a Planning Framework that guides development within its boundary, including Intermunicipal Development Plans and Intermunicipal Collaboration Frameworks with adjacent municipalities, Municipal Development Plan, Area Structure Plans, Land Use Bylaw, General Municipal Servicing Standards, Functional Storm Water Drainage Plan for several basins, Master Storm Water Management Plan, and a Transportation Master Plan. The aforementioned documents, plans, and policies are available at the Planning & Development section of the County's website:

www.vermilion-river.com.



Figure 1 | Hierarchy of Planning Documents

3.2 Intermunicipal Development Plan (IDP)

The County of Vermilion River and the City of Lloydminster Intermunicipal Development Plan (IDP) was adopted in 2006 (Bylaw 06-05 amended in 2007 and 2008) prior to the recent annexation and the June 2019 Joint Regional Growth Study. The purpose of an IDP is to establish a regional framework for attracting economic opportunities and managing development in an IDP area. This ASP will be consistent with an IDP.

The anticipated growth on surrounding lands is primarily residential in use with some opportunity for retail commercial, secondary commercial, and minor industrial uses.

An IDP requires that interim subdivision and development occurs in a manner that will be compatible with eventual urban densities and land uses.

3.3 Central Urban Expansion Area Structure Plan

The County and City of Lloydminster adopted the Central Urban Expansion Area Structure Plan (ASP) in 2008 (Bylaw 07-28) to guide approximately five sections of land at the western edge of City of Lloydminster, which are identified as Urban Expansion areas in the Intermunicipal Development Plan (Map 2 | Policy Context). This ASP pre-dates the 2019 Joint Regional Growth Study and recent annexation.

3.4 Joint Regional Growth Study (JRGS)

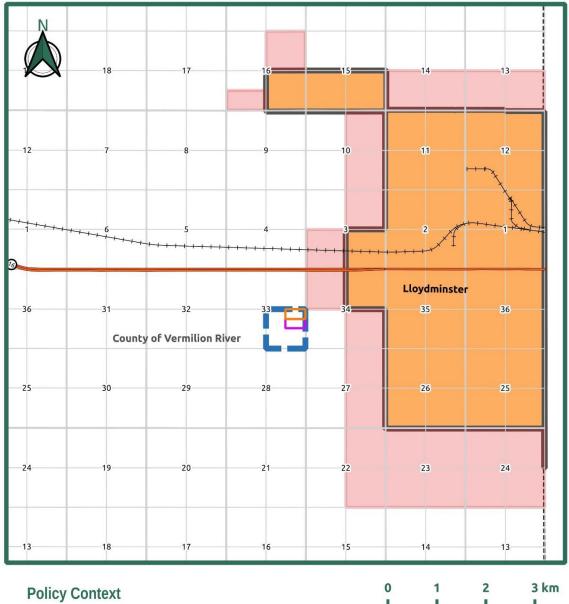
The Joint Growth Management Strategy (JRGS) is a non-statutory document prepared in 2019 to guide future development in both the County and the City within lands that are either within or around the City of Lloydminster.

3.5 Municipal Development Plan (MDP)

The County of Vermilion River Municipal Development Plan provides guidance for the future growth and development of the County. The MDP envisions a 'Sustainable, Vibrant, and Diversified Community with Opportunities for All', with four key guiding principles:

- 1. Community Resiliency,
- 2. Growth Management,
- 3. Sustainable Development, and
- 4. Responsible Governance.

Map 2 | Policy Context





- Robinwood Area Structure Plan
- Robinwood Estates Area Structure Plan
- **Robinwood Acres Area Structure Plan**



3.6 Robinwood Estates Area Structure Plan

The Robinwood Estates Area Structure Plan (Bylaw 14-32) was adopted in 2015 to provide guidance for the development of a 12 lot county residential development in the northeast portion of the Plan Area as shown on **Figure 2** | **Robinwood Estates Area Structure Plan** (legally known as Lot 1, Block 1, Plan 1218TR). The ASP envisions a country residential development with lot sizes ranging from 1.4 – 1.9 acres, with direct access from Range Road 13. At the time of this Plan, legal subdivision of these lots as per the Robinwood Estates ASP had not occurred.



Figure 2 | Robinwood Estates Area Structure Plan

3.7 Lot 2 Robinwood Acres Area Structure Plan

The Lot 2 Robinwood Acres ASP (Bylaw 11-33) was adopted in 2012 to provide guidance for the subdivision of an existing 19-acre lot at Lot 2, Block 1, Plan 1218TR. The Lot 2 Robinwood Acres ASP was created to establish three (3) new country residential lots with access from the south, and the remaining country residential lot with the existing dwelling and access from Range Road 13 (see **Figure 3** | **Lot 2 Robinwood Acres ASP Development Concept Plan**). The three lots have been legally subdivided, thus fulfilling the purpose of the Robinwood Acres ASP.

Figure 3 | Lot 2 Robinwood Acres ASP Development Concept Plan



3.8 County of Vermillion River Land Use Bylaw

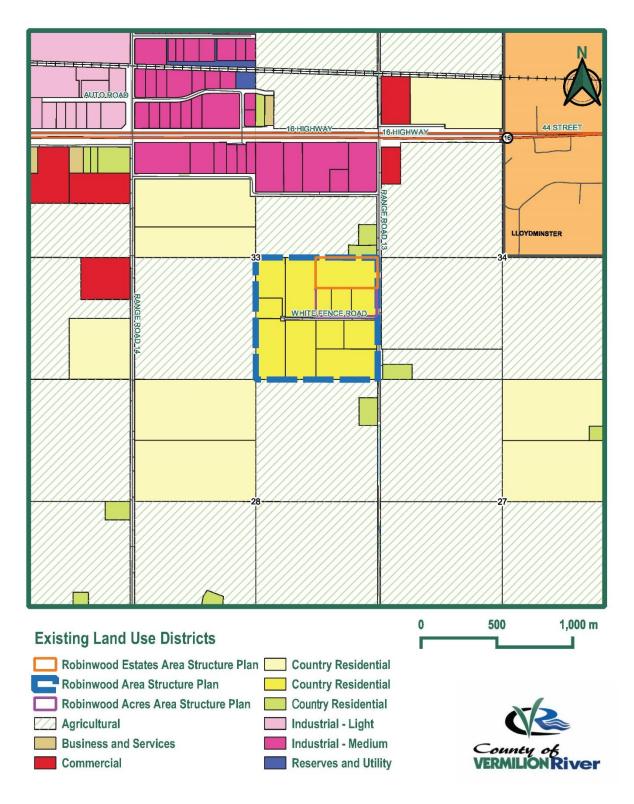
The Plan Area consists of a mix of agricultural lands and country residential properties. Presently they are designated as Country Residential-Multi Lot (CR-M) District in the County's Land Use Bylaw No 19-02 (See **Map 3** | **Existing Land Use Districts**). Several single lot county residential developments are located immediately to the north, east, and south of the Plan area with industrial districts to the north.

According to the Land Use Bylaw, the purpose of CR-M District is to allow multi-lot country residential Conservation Development on large lots. The County defines Conservation Development as:

"The Subdivision of land for Residential Use Development that dedicates at least 80% of the gross-developable area as Open Space, recreation, environmental, or agricultural uses, and which may have a higher net density than conventional multi-lot residential developments by means of clustering. Conservation development incorporates Low-Impact Development practices and requires preparation and approval of a Site Development Plan or Area Structure Plan for development of more than four (4) lots or parcels".

Permitted uses within the CR-M district include modular, single-family, or single-detached dwellings, and secondary suites. Discretionary uses include, but are not limited to, existing dwellings, care facilities, home occupations, agriculture (e.g. hobby farms), and recreational buildings.

Map 3 | Existing Land Use Districts



4 | SITE ANALYSIS

4.1 Legal Parcels

The Plan area consists of 12 legal parcels, ranging from 4.7 acres (2.0 hectares) to 19.48 acres (7.88 hectares) in size as listed in Table 1 | Legal Parcels and shown on Map 5 | Legal Parcels.

Table 1 | Legal Parcels

Plan Area Legal Descriptions							
Index #	Title #	Legal Description	Owner	Area (Acres)	Area (Hectares)		
1	0036067007	7-1-1218TR	Private Landowner	13.5	5.4		
2	0017172404	8-1-1218TR	Private Landowner	19.48	7.8		
3	0017172305	1-1-1218TR (Robinwood Estates ASP - Bylaw 14-32)	Private Corporation	20.0	8.0		
4	0036067015	10-1-1421054	Private Landowner	5.79	2.4		
5	0035587915	1-2-1320731 (Lot 2 Robinwood Acres ASP - Bylaw 11-33)	Private Landowner	4.7	2.0		
6	0035587923	2-2-1320731 (Lot 2 Robinwood Acres ASP)	Private Corporation	6.05	2.4		
7	0035587931	3-2-1320731 (Lot 2 Robinwood Acres ASP)	Private Landowner	7.72	3.1		
8	0017172355	6-1-1218TR	Private Landowner	19.27	7.8		
9	0017172347	5-1-1218TR	Private Landowner	19.48	7.8		
10	0017172339	3-1-1218TR	Private Landowner	8.72	3.6		
11	0017172321	3-1-1218TR	Private Landowner	10.27	4.2		
12	0013759733	4-1-1218TR	Private Landowner	19.98	8.1		
Total of Ti	tled Lots	154.9	62.7				
Roads / N	Non-titled land	3.8	1.53				
Total Plar	n Area		158.7	64.2			

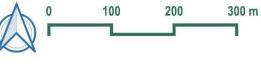




Parcels Ownership Index



Robinwood Area Structure Plan Parcels with Index

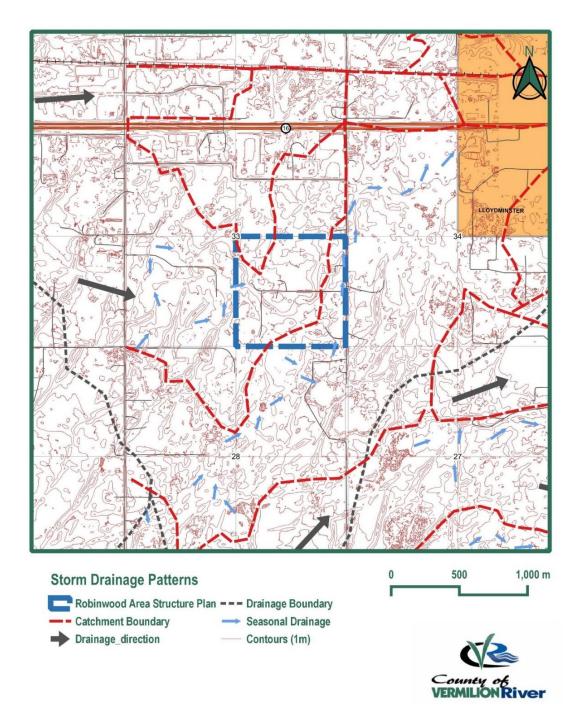




4.2 Topography and Stormwater Drainage

The Plan area is relatively flat with a gentle topography (see **Map 5** | **Stormwater Drainage Patterns**). The subject lands are crossed by a meandering drainage feature that extends from the northwest corner across the central Plan area and maneuvers back to the north east area. This drainage feature does not appear to have a defined channel and travels through diffuse flow. Other, smaller, ephemeral drainages are also present within the subject lands.

Map 5 | Stormwater Drainage Patterns



4.3 Existing Wetlands and Vegetation

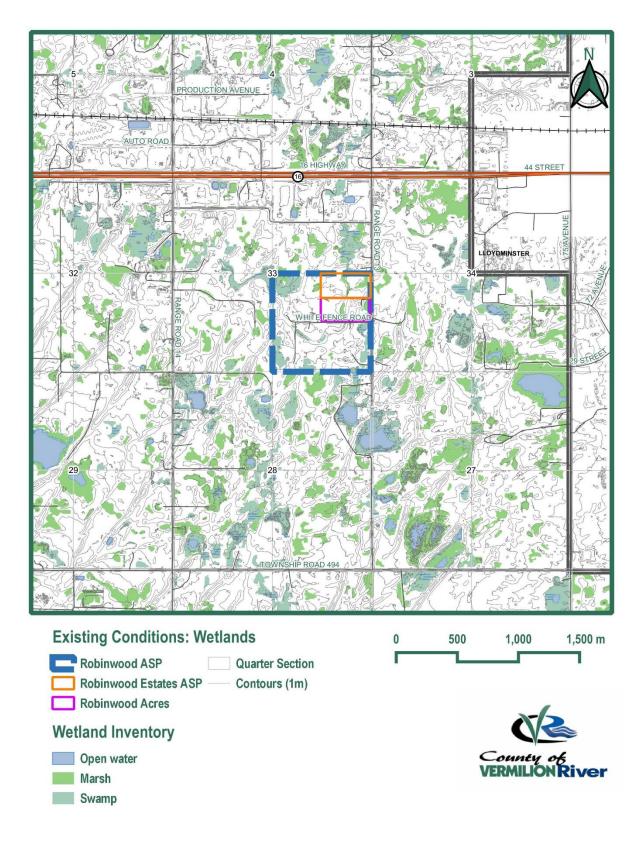
The Robinwood ASP is located within the Central Parkland Natural Subregion – a heavily populated region consists largely of cultivated lands with some forested and grassland areas.

A series of temporary, seasonal and permanent marshes and shallow open water wetlands as well as shrubby and wooded, deciduous swamp wetlands are found throughout the Plan area (see **Map 6** | **Existing Conditions (Wetlands**) Some of these wetlands have been modified historically through the excavation of dugouts to hold more surface water.

Vegetations along the drainage channels and wetlands include willows and sedges. There are shrubs and trees throughout the Plan area, both natural nearby the wetlands as well as ones planted along the properties for wind breaks.

4.4 Environmental Assessment

Existing background information was reviewed to assess potential for site contamination in the Plan Area. In 2014 a Phase I Environmental Site Assessment was completed for the Robinwood Estates ASP and that report reviewed both the 20 acres of that ASP and issues that might extend to the quarter section level, which equates to the Plan area. The Phase I ESA for Robinwood Estates (McElhanney, 2014) concluded that current and historical activities were unlikely to have impacted the environmental media at the site. For this reason, no further environmental assessment was recommended and no areas of concern were flagged for the Robinwood Estates ASP. Given the previous investigation, it is anticipated that there are no major environmental concerns for the rest of the Plan area due to similar current and historical activities at the northeast portion of the Plan area (i.e., agricultural and residential land uses). However, the County may wish to confirm this at the subdivision stage with a requirement for a Developer to submit a Phase 1 ESA for the applicable subdivision area.



4.5 Soil and Geotechnical Analysis

The Agricultural Region of Alberta Soil Inventory Database (AGRASID) identifies Chernozemic soil at the Site, with high relief, undulating landscape in the area. The dominant soil is the Elnora soil series, a well drained, medium textured (loam to clay loam) till.

A Geotechnical Assessment was undertaken for Lot 1, Block 1, Plan 1218TR in SE-33-49-1-W4M (Solid Earth Geotechnical Inc., 2014), which indicated that the subsurface conditions at the north east portion of the Plan area were considered reasonably favourable for site grading, roadway construction, and for the construction of single-family residential units. However, the assessment recommended that future developments should consider elevating the building footprints above the current grades to allow future residences to be constructed with the basement floor above the groundwater table. For areas where the water table is higher, basement developments may not be possible.

A Geotechnical Assessment has not been conducted for the entire Plan area. The requirement for a soil and geotechnical analysis will be addressed through future subdivision and development stages.

4.6 Water and Wastewater Servicing

The Plan area currently has no piped municipal water and wastewater servicing at this time. Until such time as piped services are available, onsite groundwater wells and Private Sewage Treatment Systems will be used to service subdivision and development in the Plan area. Onsite water wells and sewage treatments systems must meet the County's minimum standards and comply with all provincial legislation. Technical reports assessing the water quality and quantity must be provided to the County prior to approval of any subdivision application. Future servicing and capacity are addressed in sections **6.2 Water Servicing Policies** and **6.3 Wastewater Servicing Policies** of this ASP.

4.7 Existing Transportation Network

The Plan area is located approximately 800m south of Highway 16, a major east-west highway connecting the City of Lloydminster to the City of Edmonton (see **Map 7** | **Existing Transportation Network**). Locally the Plan area shares its eastern boundary with Range Road 13, which accesses Highway 16 at an unsignalized intersection.

Highway 16 is a four-lane divided highway located approximately 800m north of the Plan area. The Highway 16 Functional Planning Study (Alberta Transportation, 2002) indicated that the highway re-alignment would relocate Highway 16 to approximately 2.4 kilometres to the south of the Plan area; However, the timing of the Highway 16 realignment is unknown at this time (**Figure 4** | **Proposed Highway 16 Alignment**). In the meantime, upgrades are required to Highway 16 and Range Road 13. Contributions from individual developments may be required by the County to ensure these upgrades can be completed and traffic flows as necessary in the area.

Map 7 | Existing Transportation Network

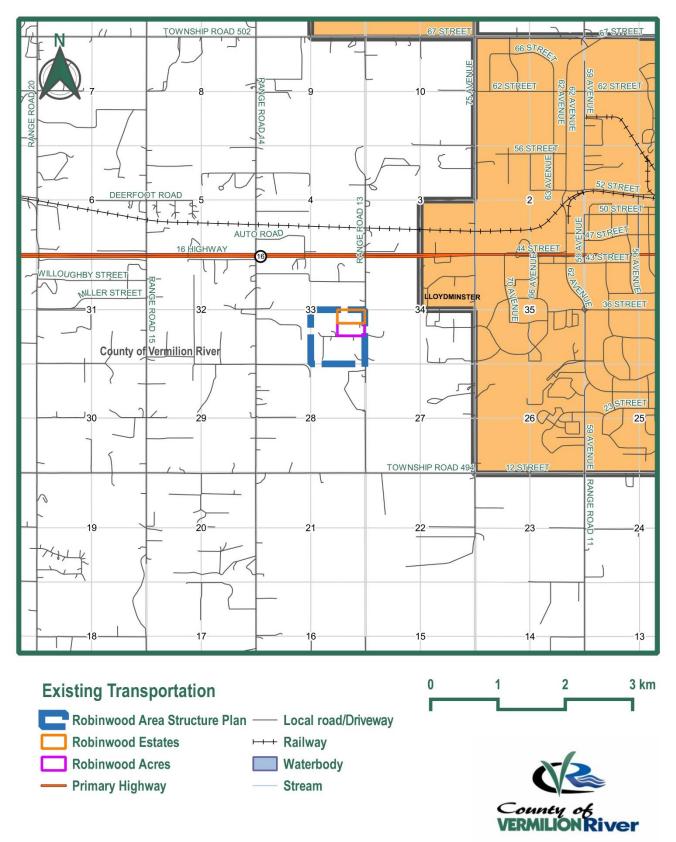
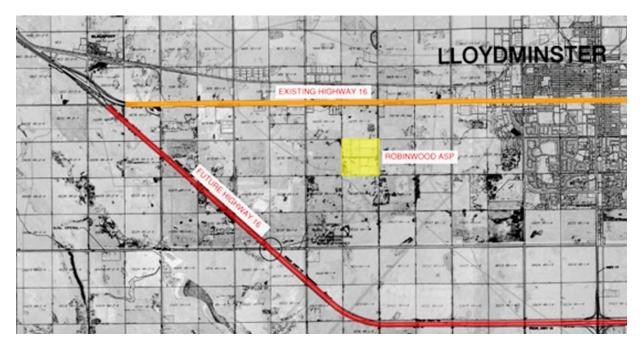


Figure 4 | Proposed Highway 16 Alignment



At the time of this Plan, the only access to Highway 16 is through an unsignalized intersection at Range Road 13 to the north. The latest traffic data indicates the southbound approach at Range Road 13 and Highway 16 intersection is failing due to the peak hour volumes and the current intersection configuration.

Alberta Transportation indicated that future upgrades at the Range Road 13 and Highway 16 intersection would be required to support the potential annexation and growth in the Urban Expansion area; however, the Highway 16 and Range Road 13 intersection upgrade is not anticipated at this time as this Plan only allows for limited scope interim subdivision and development.

4.8 Utility Servicing

The adjacent and surrounding lands have access to natural gas, telephone and power. A lowpressure ATCO natural gas line extends along the White Fence road Right-of-Way. There are ATCO gas mains in the vicinity, however the gas mains will need to be extended to service undeveloped portions of the Plan area at the subdivision and development stages.

ATCO Electric provides power to the residences in the area through a north-south three phase overhead power line network along the east side of Range Road 13. Additional coordination and overhead power line extension into the Plan area will be needed at the subdivision and development stages. Internet and cable services are available within the vicinity of the plan area. Coordination with these service providers will need to be undertaken during the subdivision and development stages to extend services to the Plan area. Wireless data providers are also available in the area.

4.9 Oil and Gas: Wells & Pipelines

According to the Alberta Energy Regulator Abandoned Well Map Viewer and Abacus Data graphics Ltd.'s database, there are no oil and gas well sites within the Plan area.

Active low pressure ATCO gas lines are located along the north and south portions of the Plan area, extending through the centre of the ASP with active and abandoned branches off the main lines (See **Map 8** | **Oil and Gas Infrastructure**).

Two abandoned low vapour pressure hydrocarbon pipelines are located in the area, approximately 50 m southwest of the ASP. Of the surrounding well sites, two horizontal wellbores terminate within the Plan area with a third terminating at the western edge of the Plan area.

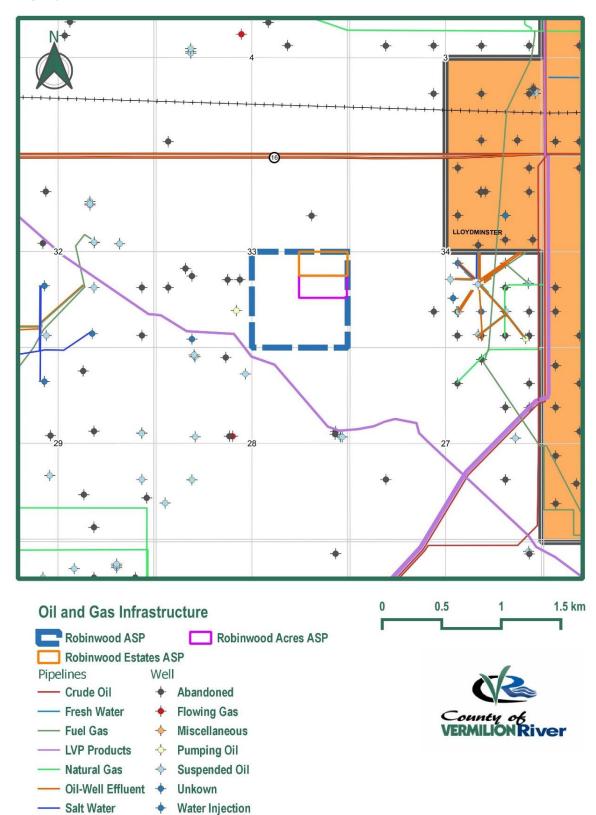
Wellsite Unique ID	Surface Location	Well Type	Distance from Plan area*	Comments
100/07-33- 049-01 W4	06-33-049-01 W4	Abandoned oil well	100 m west	Horizontal well; downhole terminates within site (LSD 7)
100/02-33- 049-01 W4	03-33-049-01 W4	Producing oil well	130 m west	Horizontal well; downhole terminates within site (LSD 2)
100/06-33- 019-01 W4	06-33-049-01 W4	Abandoned oil well	200 m west	
100/14-28- 049-01 W4	14-28-049-01 W4	Suspended oil well	220 m southwest	
100/03-33- 049-01 W4	14-28-049-01 W4	Abandoned oil well	230 m southwest	Horizontal well; downhole terminates at western edge of site (LSD 3)

Table 2 | Wellsite Information within 300m of Site

*Wellsite Information within 300 m of the Site (Measured from Plan area to well centre at surface location)

Future development and subdivisions should be set back from these well sites in accordance with the distance requirements set forth in the Subdivision and Development Regulations. The setback is a minimum of 5 metres for abandoned wells, dependent upon requirements of the Alberta Energy Regulator.

Map 8 | Oil and Gas Infrastructure



4.10 Fire Protection

Fire Services response to this area is from the Blackfoot Fire department. Onsite fire protection servicing requirement is to be confirmed by the County at the subdivision and development stages.



The County of Vermilion River Enforcement Services Program provides enforcement services to the area. This service consists of two Community Peace Officers and one Administrative Assistant. The RCMP provides policing services for the area.

4.12 Health Services

The site is located in close proximity to the City of Lloydminster Health District, where possible Alberta Health Services (AHS) will be used first, with the closest AHS facility being the Vermillion Health Centre (5720 50 Avenue, Vermillion, Alberta, T9X 1K7).

4.13 Education

The subject site is within the Buffalo Trails Public Schools Division, with the Kitscoty Elementary School and the Kitscoty Jr/Sr High School located in proximity to the Plan area. Opportunity to access Lloydminster schools also exists if permission is granted.

5 | DEVELOPMENT CONCEPT

5.1 Development Concept

The Robinwood Area Structure Plan envisions a high-quality country residential community that blends together existing and future properties. The Development Concept Plan shown on **Map 9** | **Development Concept Plan** includes:

- Approximately 35 Country Residential Lots, inclusive of 7 lots with existing dwellings.
- Rationale road network that builds on the rural grid framework by minimizing dead-ends and provides convenient connections to surrounding areas in the future, as required;

Note: the proposed lot layout configuration in this Plan is conceptual in nature. The final subdivision lotting scheme will be configured to reflect detailed engineering design at the subdivision stage as landowners apply for subdivision of their land.

5.2 **Development Statistics**

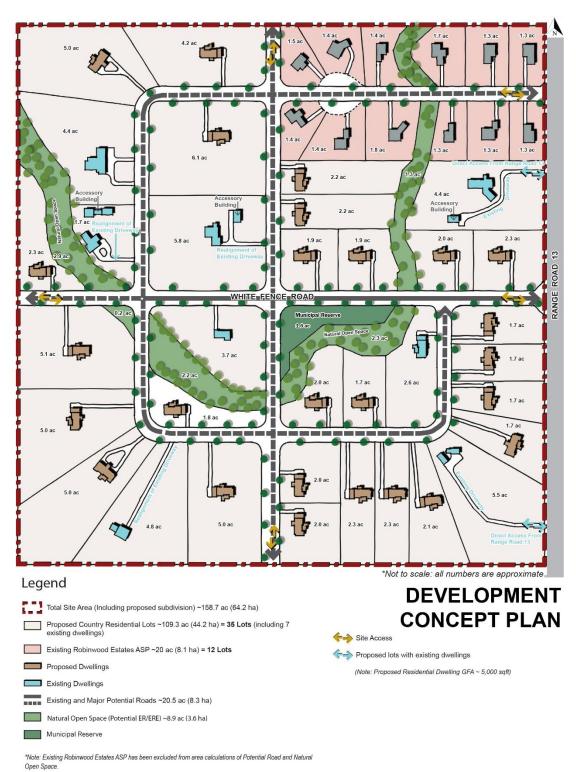
The Development Concept Plan consists of approximately 158.5 acres (64.1 hectares) of total land, including 20 acres (8.1 ha) of the existing Robinwood Estates ASP area. Detailed development statistics are provided in **Table 3** and **Table 4** below.

Land Use	Area (acres)	Area (ha)	% of ASP	(Note: Existing
Existing Robinwood Estates ASP	20.0	8.1	12.6	Robinwood Estates ASP has been
Proposed Residential Lots (35)	107.7	43.6	67.9	excluded from area calculations of
Existing and Major Potential Roads	20.5	8.3	12.9	Potential Roads and
Natural Open Space Area (ER/ERE)	8.9	3.6	5.6	Natural Open Space)
Municipal Reserve (MR)	1.6	0.6	1.0	
Total	158.7	64.2	100	

Table 3 | Development Statistics

Table 4 | Residential Development Statistics

Land Use	Area (acres)	Area (ha)	% of ASP	# of Lots	Lot Size Range	Density	Pop. Estimate
Existing Robinwood Estates ASP	20.0	8.1	12.6%	12	1.4 - 1.9 acres	0.6 units per acre	24 - 32 pop.
Proposed Residential Lots (35)	107.7	43.6	67.9%	35	1.6 – 6.1 acres	0.3 units per acre	70 – 93 pop.
Total	127.7	51.7	80.47%	47	-	-	94 - 125



Map 9 | Development Concept Plan

Note: This drawing is conceptual in nature. Actual development will vary from what is shown.

5.3 Residential Development Policies

- 5.3.1 Subdivision and development within the Plan area shall comply with the policies of this Plan.
- 5.3.2 Subdivision and development should generally align with the lot layout illustrated in Map
 9 | Development Concept Plan. Final subdivision lot lines and configuration may differ
 from Map 9 | Development Concept Plan, however the road network configuration shall be maintained.
- 5.3.3 The following design criteria shall be considered in the design of dwelling units in the Plan area:
 - a) Dwellings should be situated to take advantage of views to the adjacent natural open space areas;
 - b) Variety of distinctive roof forms, consistent with the architectural style of the dwelling are encouraged;
 - c) High standard of exterior materials, natural colours, and details for wall cladding are encouraged to attain harmonious blend of textures and colours within the proposed ASP;
 - d) Enhanced architectural treatment should be provided to gateway, corner dwellings that have an increased level of public exposure within the ASP;
 - e) All elevations of the dwelling are expected to be given an equivalent level of design treatment (including side and rear elevations). Where side or rear elevations are not publicly visible, these elevations may be simplified; and
 - f) Other additional design requirements at the discretion of County staff as per section 4.5 of the Land Use Bylaw.

5.4 Community Design Policies

In order to achieve a high-quality character for the community, landscape treatments should be incorporated and implemented within the ASP area. The integration of high quality architectural and landscape treatments at gateways, community edges, and focal points will enhance the aesthetic of the country residential community.

- 5.4.1 The County may require community design and landscaping features at the discretion of the Subdivision and Development Authority.
- 5.4.2 The Developer shall submit a landscaping plan at the subdivision stage to provide detailed landscaping guidelines for tree and shrub planting, fencing, screening, and any other features for the proposed subdivision and future development. The landscaping plan may be incorporated into the Architectural Controls to be prepared by the Developer and registered on title for future subdivision in the Plan area.
- 5.4.3 Developers are encouraged to add green spaces to create an attractive residential environment.

5.5 Environmental Policies

- 5.5.1 All subdivision and development shall comply with the applicable federal, provincial, and municipal policies and regulations related to the natural environment.
- 5.5.2 The Developer shall be responsible for completing all necessary pre-disturbance biophysical surveys (e.g., wetlands, watercourses, rare plants, wildlife, etc.) in accordance with municipal and provincial regulatory requirements. The survey results shall be used to refine any subdivision or development designs and identify any areas that may require protection through the implementation of additional setbacks or other measures.
- 5.5.3 All subdivision and development that may impact a wetland shall provide proof to the subdivision authority or development authority, whichever is applicable, of compliance with the Alberta Water Act and Alberta Wetland Policy. Any permanent disturbances to the wetlands on the site will trigger a Water Act application and a Wetland Assessment and Impact Report.
- 5.5.4 If a wetland is identified on-site, the Developer shall use the provincial system to determine wetland classification, relative wetland value and work with the province to complete the process for protection, replacement or compensation as dictated by the Alberta Water Act and Alberta Wetland Policy.
- 5.5.5 Should it be determined during planning and detailed design that disturbance to certain environmental features (e.g., wetlands) cannot be avoided, the Developer shall apply for the appropriate regulatory approvals. Any disturbances to waterbodies will require, at minimum, an approval under the provincial Water Act.
- 5.5.6 For any features that are considered to be a naturally occurring and permanent waterbody, a Public Lands Act request for review from the Water Boundaries Unit will be required to determine if this feature is considered to be Crown-claimable.
- 5.5.7 The natural drainage feature identified as 'Natural Open Space' on **Map 9** | **Development Concept Plan** shall be protected either as Environmental Reserves (ER) or as Environment Reserve Easement (ERE) at the time of subdivision. A minimum setback may be required in accordance with provincial guidelines outlined in Stepping Back from the Water: A Beneficial Management Practices Guide for New Development near Water Bodies in Alberta's Settled Region (Government of Alberta 2012).
- 5.5.8 Additional offsets from a water course and water source to septic field systems shall be considered in accordance to the applicable standards. The separation from a soil-based sewage treatment systems and surface water is 90m unless a principal building or development feature is built between the treatment system and the water source.
- 5.5.9 Municipal Reserve (MR), Environmental Reserve (ER) and/or Environmental Reserves Easement (ERE) requirements shall be determined at the time of subdivision in accordance with the Municipal Government Act (MGA), the County's Municipal Development Plan (MDP) and County policy.

- 5.5.10 After the Environmental Reserve and/or Environmental Reserve Easement dedication, remaining reserves owing on a parcel of land shall be provided as: a) municipal reserve, school reserve or municipal and school reserve; b) cash in lieu of reserve land; or c) a combination of land and cash.
- 5.5.11 Land identified as municipal reserve (MR) on **Map 9** | **Development Concept Plan** should be taken as reserve land for MR purposes. For properties that do not have MR land identified cash-in-lieu of reserve land is the preferred method of reserve dedication after the applicable Environmental Reserve and/or Environmental Reserve Easement dedications are being provided. Deferment of municipal reserve is strongly discouraged.
- 5.5.12 An Erosion and Sediment Control Plan shall be submitted to the County for review and approval prior to the site stripping, grading and construction. Developers shall minimize erosion and silt depositing into existing watercourses and drainage systems during the construction stages (including site clearing, stripping, and grading).
- 5.5.13 The Developer should complete a Phase I Environmental Site Assessment at the time of subdivision to confirm any potential contamination issues.
- 5.5.14 The Developer should complete a Phase I Environmental Site Assessment at the time of subdivision to confirm any potential contamination issues.

5.6 Geotechnical Policies

- 5.6.1 The Developer shall prepare a Geotechnical Assessment at future subdivision and development stages in accordance with the applicable provincial and municipal standards.
- 5.6.2 The Geotechnical Assessment shall confirm ground water levels, sub surface soils of the development area, evaluate and provide guidance as to the acceptable level of foundation, confirm the suitability of the proposed wastewater treatment system, and address any other applicable requirements to the County's satisfaction.

6 | INFRASTRUCTURE

6.1 Transportation Policies

The Robinwood ASP transportation network is based on a road grid network that integrates smoothly with the existing rural road network in the County (see **Map 10** | **Future Road Network**). White Fence Road is used as the east-west spine road through the Plan Area along with a future north-south road that nicely divides the Plan area into quadrants. Additional roads are proposed to ensure adequate access to future parcels, if they are subdivided. Roads will be developed and funded by private developers on an as-needed basis as subdivision occurs within the Plan area. In accordance with County policy, jurisdiction of public roads will be taken over by the County when completed. Contributions by the Developer will be required to pay for the share of the road infrastructure required to service the development.

Upgrades are required at the Highway 16 / Range Road 13 intersection. Developers shall contribute to these upgrades at the time of subdivision. Unsignalized intersections connecting the Plan area to Range Road 13 are sufficient based on the proposed development density. However, changes to the proposed densities at future subdivision and development stages would require an updated Traffic Impact Assessment to confirm the potential upgrades required for the road network and intersection at Highway 16.

Internal intersections will be in the form of stops signs (or roundabouts if desired), which will be confirmed at the subdivision stage based on the Traffic Impact Assessment and contingent on landowner agreements and other physical constraints of each particular site.





Future Road Network

- Robinwood Area Structure Plan
- Robinwood Estates Area Structure Plan
- Robinwood Acres Area Structure Plan
- Existing Major Road
- 🚥 Potential Major Road
 - Lots
- 📃 Natural Area
- Cul-de-sac (proposed)



- 6.1.1 The Developer shall submit a Transportation Impact Assessment (TIA) for any subdivision that is five (5) lots or more at the time of subdivision application to confirm the traffic impacts on the local and regional road network. The TIA shall confirm the road and intersection improvements required to support the proposed subdivision. For subdivisions of less than five (5) lots a modified TIA for each subdivision shall be required at a minimum.
 - a) At the discretion of County staff, a Transportation memo to update an existing transportation assessment may be accepted in replace of the TIA required in 6.1.1 above.
- 6.1.2 The proposed road network shall be constructed by the Developer and shall adhere to the County's Servicing Standards for rural residential roads. The road network shall support rural road cross-sections in accordance with Figure 5 | Road Cross Section Hard Surfacing two general purpose travel lanes for vehicles as per the County's Servicing Standards. The specific alignment of roadways is to be finalized by the Developer at the time of subdivision.
- 6.1.3 The applicable intersection improvements shall be constructed by the Developer and shall adhere to the County's Servicing Standards.
- 6.1.4 The Developer shall dedicate the applicable portion of land for future road widening in the Plan area, and/or register the applicable restrictive covenant on title to protect future road Right-of-Way at the time of subdivision. A wider road Right-of-Way dedication is encouraged to accommodate active transportation network (e.g., pedestrian and cycling connectivity).
- 6.1.5 Temporary cul-de-sac turnarounds as shown on **Map 10** | **Future Road Network** will be required at the termination of the proposed internal subdivision road on a phase-by-phase basis and shall be protected by temporary easements over the affected subdivision.
- 6.1.6 Future subdivisions are to be accessed from the proposed internal roads to minimize direct access onto Range Road 13. Mutual access should be considered at the subdivision stage, where appropriate.
- 6.1.7 In accordance with the County's Endeavour to Assist policy, the Developer may enter into a cost sharing and/or cost recovery agreement for the applicable transportation infrastructure improvements that would benefit other areas as identified in TIA (e.g., construction of roads and/or intersection upgrades).
- 6.1.8 The Developer shall provide payment of the applicable levies at the subdivision and/or development permit stage in accordance with the requirement prescribed by the County's Off-site Levy Bylaw.
- 6.1.9 In addition to other levies that may be required, the County may require payment from a Developer for a contribution, levied amount, or full upgrades to:
 - a) the Highway 16 and Range Road 13 intersection; and

b) portions of each major road (as shown on Map 11 or otherwise established in the Plan Area)

with the amount being determined at the subdivision approval stage.

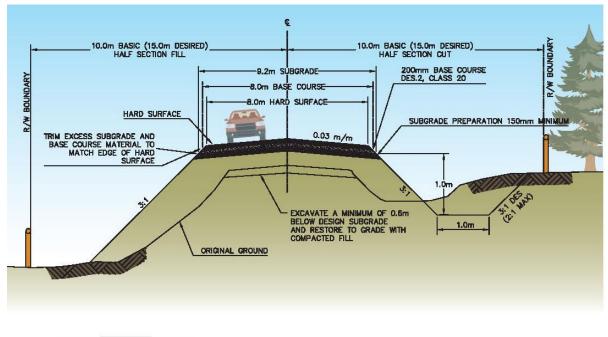


Figure 5 | Road Cross Section - Hard Surfacing

FILL SECTION • 3:1 SLOPE FOR ALL FILLS • ON FILLS GREATER THAN B.OM THE USE OF GUARDRAIL SHOULD BE CONSIDERED • WHERE GUARDRAIL IS INSTALLED A 2:1 SIDESLOPE IS ADEQUATE	NOTE: THIS STANDARD AND SURFACING STRUCTURE IS INTENDED FOR HIGH VOLUME RESIDENTIAL SUBDIVISION ROADS (AADT > 200) WITH MINIMAL TRUCK TRAFFIC.	- Cut Section • Width of Ditch - 1.0m Standard; V-Ditch Minimum • Backslope Variable up to 2:1 Maximum
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6.2 Water Servicing Policies

The Plan proposes on-site water servicing via groundwater wells for each of the residential lots in accordance with the County standards and provincial regulations.

- 6.2.1 The Developer shall submit a groundwater assessment and/or pump test in accordance with the County and provincial standards at the subdivision stage to confirm sufficient water servicing for the proposed subdivision and development.
- 6.2.2 If municipal water servicing capacity and piping is available within 50m of a proposed development the Developer shall connect to municipal piped water services. Any existing groundwater wells shall be decommissioned if no longer needed.
- 6.2.3 A Deferred Servicing Agreement or other such mechanism shall be registered on each new certificate of title (lot) created that is serviced by groundwater. The agreement is to notify landowners of a commitment to decommission the existing groundwater system and connect to a water treatment and distribution system when deemed appropriate by the County.

6.3 Wastewater Servicing Policies

The Plan proposes independent private wastewater services via mounded septic field or a pump out tank in accordance with the recommendations of the Geotechnical Report and the applicable provincial standards and regulations.

- 6.3.1 The Developer shall submit geotechnical studies pertaining to the provision of private sewage disposal and/or a Private Sewage Treatment Assessment at the subdivision stage to confirm the suitability of the proposed private wastewater treatment system on-site (i.e., mounded or conventional septic field system). It is not the responsibility of the County to address cost sharing between landowners.
- 6.3.2 The private wastewater treatment system shall be designed and installed by a qualified professional in accordance with the applicable municipal and provincial standards.
- 6.3.3 If a wastewater pump out tank is used, the placement of the pump out tank shall be done in such a manner that municipal wastewater servicing can be connected in the future.
- 6.3.4 A Deferred Servicing Agreement or other such mechanism shall be registered on each new certificate of title (lot) created that is serviced by a private sewage treatment system. The agreement is to notify landowners of a commitment to decommission the existing wastewater system and connect to a wastewater system when deemed appropriate by the County.

6.4 Stormwater Management Policies

In the Plan area stormwater will be conveyed via overland drainage and directed to ditches within the rural road right-of-way or the natural drainage feature within the Plan area (**Map 11** | **Stormwater Drainage Plan**). No stormwater retention pond is proposed in the plan area due to the minimal hard surfaces and minimal changes to the current storm water flow anticipated post-development.

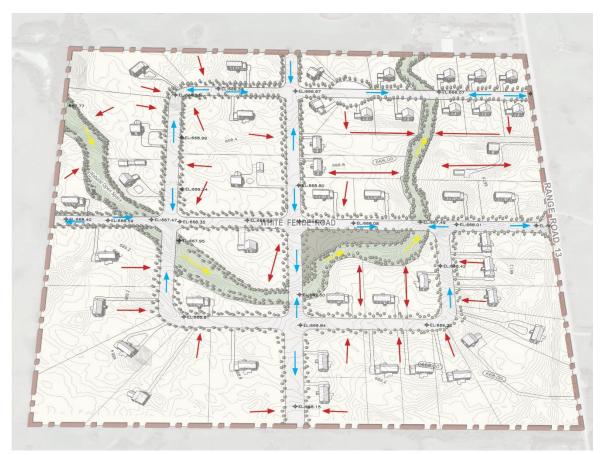
The proposed subdivisions and associated lots can be graded from front to back, back to front or split drainage as required during detailed design to convey water to the road system ditches and natural drainage feature.

If required, during detailed drainage and site grading landscaped easements containing grass swales can be used to direct storm water along the lot property lines to reach the road ditch network or natural drainage feature. The internal roads will need to meet current County Standards for residential roads shown on **Figure 5** | **Road Cross Section - Hard Surfacing**. All roads will have landscaped ditches and culverts sized to convey the storm water to the natural low points such as drainage channels, wetland areas and connections to RR 13 and other.

- 6.4.1 The Developer shall submit a Stormwater Management Report, stormwater memo or grade certificate whichever is required at the discretion of County staff at the time of subdivision application to confirm the subdivision aligns with the Area Structure Plan, the County's Master Drainage Plan and any relevant County Standards.
- 6.4.2 The Stormwater Management report shall demonstrate how additional runoff arising from the site will be managed in terms of both quality and quantity. The report shall confirm that additional runoffs as a result of the proposed development would not adversely affect the surrounding areas and the Environmental Reserve/Environmental Reserve Easement area. Where applicable, the report should also determine the size of the stormwater facility and confirm the size of the Public Utility Lot required in support of the proposed subdivision and development.
- 6.4.3 In general, stormwater should be directed in accordance with Map 11 | Stormwater Drainage Plan in the following ways:
 - a) towards the nearest road system ditch either front-to-back, back-to-front, or split drainage; and/or
 - b) towards the natural drainage feature in the Plan area while adhering to the relevant environmental and/or wetland policies and regulations.
- 6.4.4 The Developer shall be responsible for any relevant licensing and registration requirements as a result of the stormwater impact to the natural drainage features and/or wetlands in the Plan area. Registration of any licensed facility may be transferred to the County.
- 6.4.5 The Developer is to consider on-site Low Impact Development (LID) solutions at future subdivision and development permit stage in accordance with Alberta Environment's Best Management Practices and the County's policies and standards. Example of potential LID solutions include but not limited to: stormwater reuse, bioswales, absorbent landscaping, rain gardens, rainwater harvesting.

6.5 Utility Servicing Policies

- 6.5.1 Each lot shall be serviced with power, gas and communications from the franchise utilities available to the plan area. The Developer shall be responsible for the extension and installation of utilities in consultation with the applicable utility providers.
- 6.5.2 The Developer shall register the applicable easements and right-of-way for the utilities. Utilities constructed within public road allowances shall be subject to the County's review and approval.



Map 11 | Stormwater Drainage Plan

Stormwater Drainage Plan

- Robinwood Area Structure Plan
 - Lot Drainage Direction
 - Road Drainge Direction
- —> Natural Area Drainge Direction
- Existing Spot Elevations
- Contour from LIDAR (0.2M interval)



Disclaimer: Lot Drainage Directions are conceptual only. To be confirmed at subdivision and development stages.

7 | PHASING AND IMPLEMENTATION

Phasing and implementation of the Robinwood ASP will be based on whether landowners within the Plan area choose to subdivide and develop their land. The existing zoning (district) is Country Residential – Multi-Lot (see **Map 3** | **Existing Land Use Districts**), and allows for additional subdivision without the need for re-zoning (land use redesignation). Thus, subdivision applications may occur following adoption of this ASP by Council.

The ASP is not intended to compel any landowners to develop, but rather to provide a logical and cohesive framework if development does occur. There are a variety of existing lot sizes and configurations that may be more or less conducive to future subdivision and development.

The Developer is responsible for the applicable technical studies in support of future subdivisions and must pay for and/or construct the necessary infrastructures, such as on-site servicing and roads to access future lots, in alignment with the directions in this ASP.

7.1 Phasing & Implementation Policies

- 7.1.1 The Robinwood Area Structure Plan may be developed in multiple phases based on developer interest. Following ASP adoption, developers may submit subdivision applications to subdivide lands in accordance with to the Area Structure Plan.
- 7.1.2 At the time of subdivision approval, the Developer will enter into a Development Agreement with the County of Vermillion River to address Developer requirements including construction and costs associated with required roads and any other required infrastructure.
- 7.1.3 Developers who pay for infrastructure upfront that is required by future developments may enter into an Endeavour to Assist agreement (i.e. latecomers agreement) with the County which details the cost recovery arrangements for future developers as defined by County policy.
- 7.1.4 The Robinwood Area Structure Plan should be updated or reviewed every five years, or as required based on the following circumstances:
 - a) Subdivision and development occurs within the Plan area;
 - b) Updates to the County's Land Use Bylaw impact the Plan area;
 - c) Highway 16 is re-aligned or other major transportation network changes occur;
 - d) Annexation occurs of nearby lands by the City of Lloydminster; or
 - e) The County of Vermilion River / City of Lloydminster Intermunicipal Development Plan is updated.

8 | DEFINITIONS

8.1 Definitions

8.1.1 The definitions listed in **Table 5** | **Definitions** apply to this Plan:

Table 5 | Definitions

Area Structure Plan (ASP)	Means an Area Structure Plan as defined in the Municipal Government Act (MGA).
Municipal Government Act (MGA)	Means the current version of the Municipal Government Act, Revised Statutes of Alberta 2000, Chapter M-26.
Intermunicipal Development Plan (IDP)	Means an Intermunicipal Development Plan as described and defined in the MGA.
Municipal Development Plan (MDP)	Means a Municipal Development Plan as described and defined in the MGA.
Plan / the Plan	Means the Robinwood Area Structure Plan.
Plan Area	Means the Robinwood ASP lands as identified on Map 1 Plan Context.
Transportation Impact Assessment (TIA)	Means a study completed by a qualified professional engineer or similarly qualified professional to assess the potential effects of proposed development on the transportation network. The Assessment identifies infrastructure needs to ensure the transportation network will remain at acceptable levels of service and safe for all modes of travel.
Transportation Study	Transportation study means a report or memo similar to a Transportation Impact Assessment (TIA). Prepared, by a professional engineer or similarly qualified professional with more limited analysis and smaller scope than a TIA.