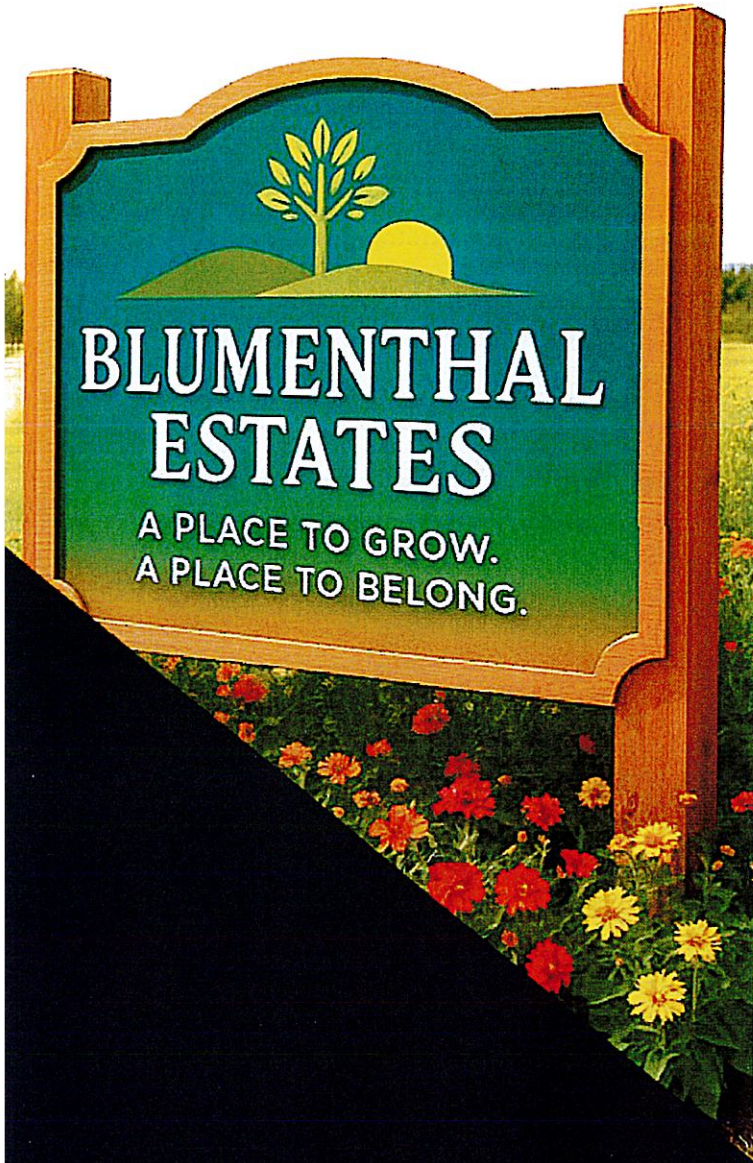




BLUMENTHAL ESTATES

COUNTY OF TWO HILLS

AREA STRUCTURE PLAN



Prepared for:
Crissel Enterprises Ltd.

Prepared by
CORE Geomatics
core@coregeomatics.com
www.coregeomatics.com

September, 2025

TABLE OF CONTENTS

1. INTRODUCTION.....	3
2. CONTEXT.....	13
3. DEVELOPMENT CONCEPT.....	20
4. PLAN IMPLEMENTATION	27

APPENDIX A – SUBDIVISION PLAN

APPENDIX B – SITE TOPOGRAPHICAL SURVEY

APPENDIX C – PHASE I ENVIRONMENTAL SITE ASSESSMENT

APPENDIX D – GEOTECHNICAL INVESTIGATION



1. INTRODUCTION

1.1. Location and Plan Area

The Blumenthal Area Structure Plan (ASP) plan area is located northeast of the Town of Two Hills, in the County of Two Hills (Figure 1). The County of Two Hills is located along Highway 45, approximately 140 kilometres northeast of the City of Edmonton, Alberta.

The County of Two Hills has a population of approximately 3,412 (2021 Census of Population—Statistics Canada) and an area of over 2,600 square kilometres. It is mainly an agricultural community with multiple opportunities for economic diversification, economic growth and conservation.

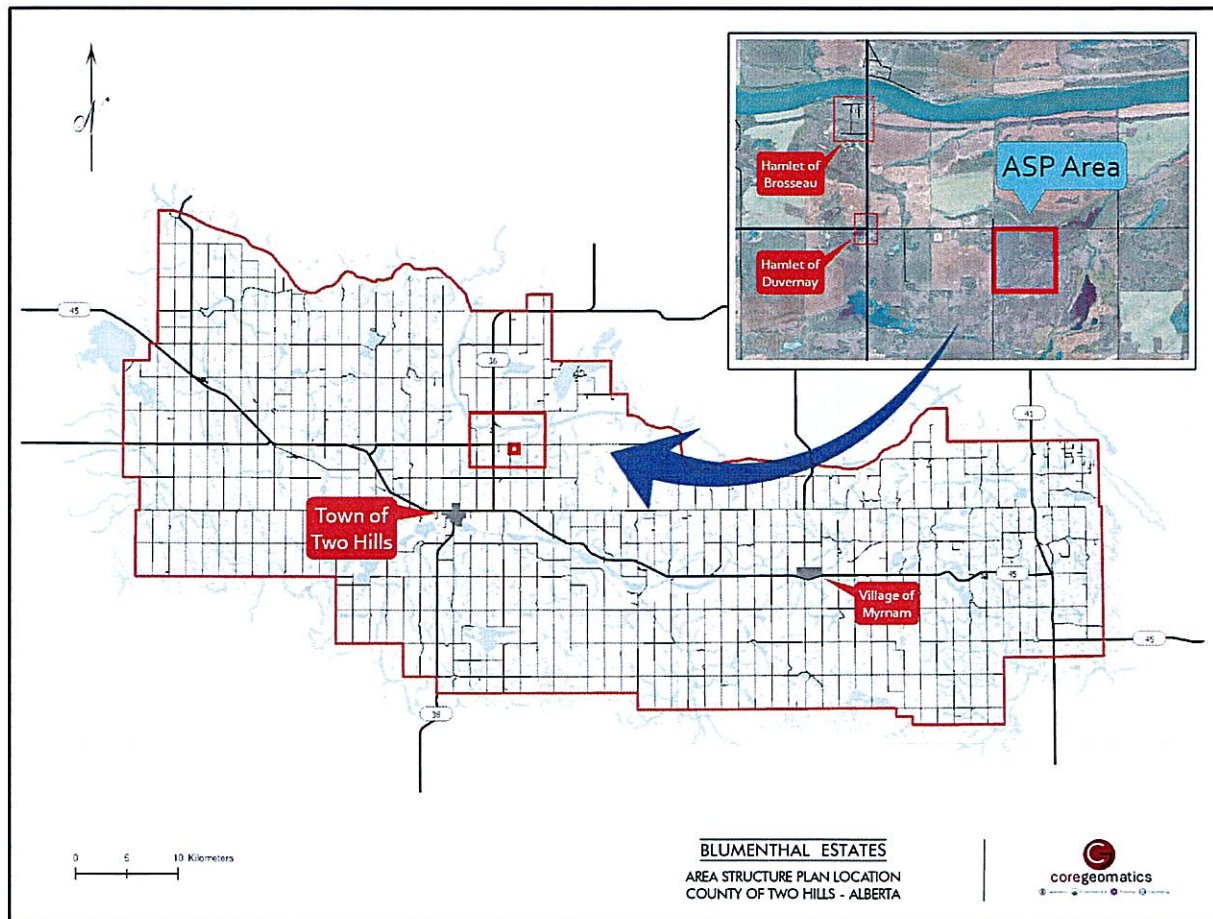


Figure 1. Blumenthal Estates Location

The ASP includes the lands shown in Figure 2, mainly accessed through connection to Highway No. 36 and Township Road 554. The lands are currently forested lands (Tree Farm) and surrounded by cultivated farmland and forested lands, combined with various low-lying areas in the adjacent quarter sections. The entire plan area occupies approximately 64.74 hectares (ha) or 160 acres (ac) at the intersection of Township Road 554 and Range Road 121, more specifically described as NW ¼ 24-55-12 W4M. The primary land use of the area is to be country residential development, as supported by this ASP.

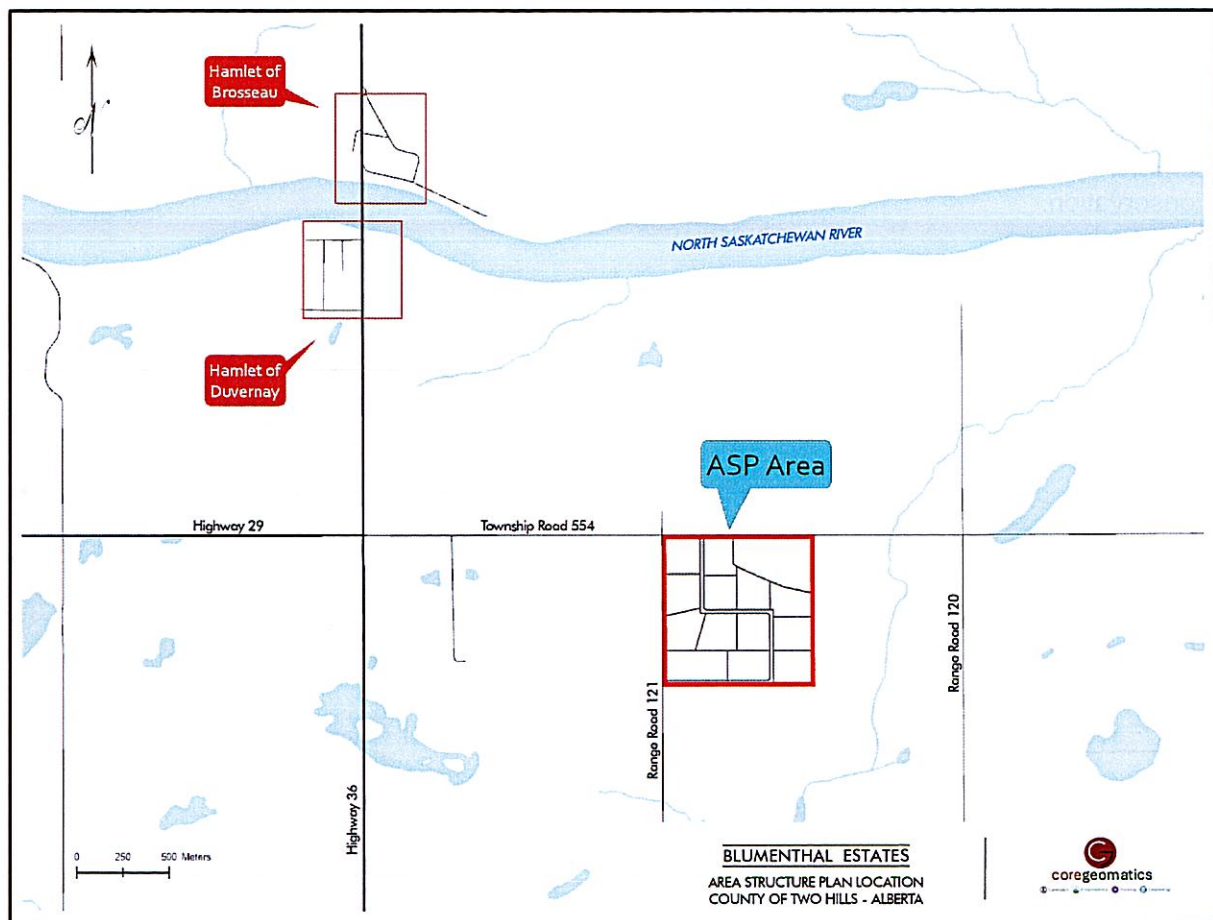


Figure 2. Blumenthal Estates NW ¼ 24-55-12 W4M Location

1.2. Purpose

The purpose of the ASP is to further focus and refine the existing planning policies, objectives, and requirements of the municipal statutory plans on a more detailed and local level. Applicable legislation includes *The Municipal Government Act* and the County of Two Hills Municipal Development Plan Bylaw No. 3-2018 (MDP) and the Land Use Bylaw, Bylaw No. 2-2018. To

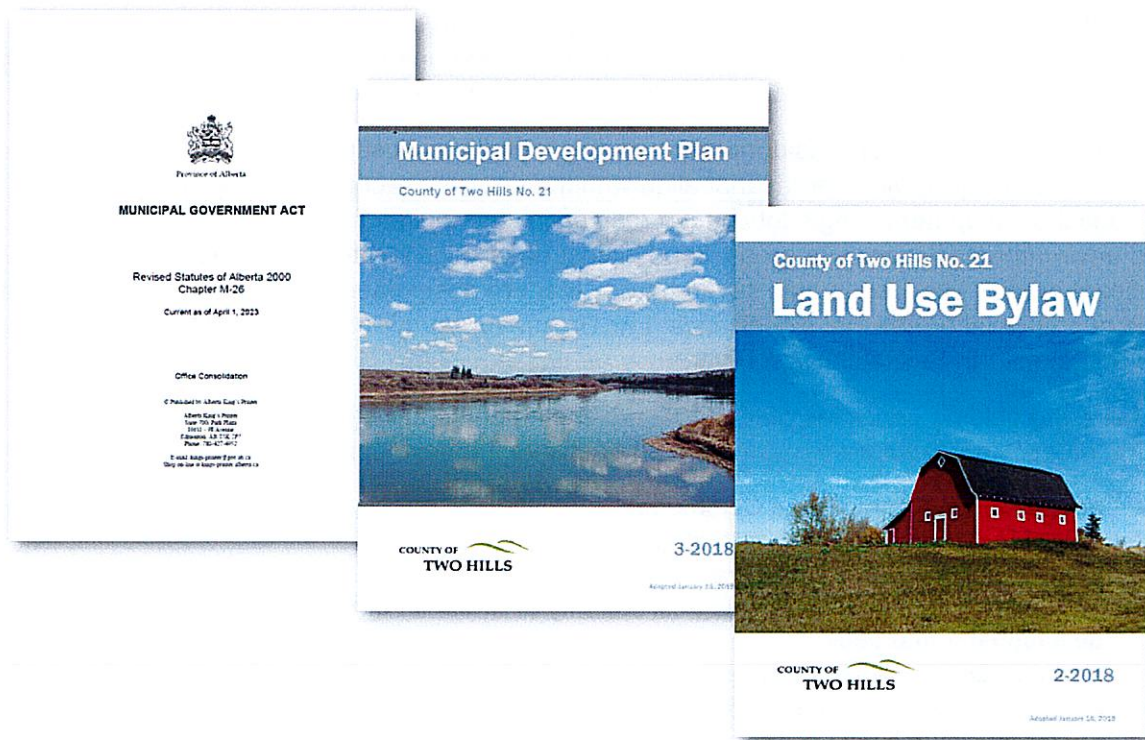
achieve this, the ASP establishes a land use planning framework to guide the future residential development and the provision of services and amenities in the development.

The ASP has been prepared in response to the landowner's aspirations to develop the lands as country residential. It illustrates an appropriate development configuration that respects and complements the county's rural character and is in line with the future growth and direction of the community. See Appendix A for the Tentative Plan of Proposed Subdivision.

1.3. Legislative Compliance

This ASP has been prepared in accordance with and in consideration of the following Bylaws and Statutes of the County of Two Hills and the Province of Alberta:

- Alberta's Municipal Government Act
- County of Two Hills Municipal Development Plan
- County of Two Hills Land Use Bylaw



1.4. Municipal Government Act and Land Use Policies

Section 633 of Alberta's Municipal Government Act sets out the requirements for the adoption of municipal development plans and area structure plans. An area structure plan must address the following:

- *the sequence of development proposed for the area;*
- *the land uses proposed for the area, either generally or with respect to certain parts of the area;*
- *the density of population proposed for the area, either generally or with respect to certain parts of the area; and*
- *the general location of major transportation routes and public utilities.*

1.5. The County of Two Hills Municipal Development Plan

The County of Two Hills MDP, Bylaw No. 3-2018, was adopted in January 16, 2019. The MDP outlines the County's development direction by promoting environmentally sound and sustainable agriculture and economic growth compatible with the rural environment of the County. The MDP encourages controlled residential development that avoids the fragmentation of high-quality agricultural land and minimizes environmental and community impacts.

The MDP encourages future residential growth in proximity to existing Community Areas or hamlets, and easily serviced areas that align with the growth direction of the County. Residential development, single lot country residential and multi-lot country residential must avoid environmentally sensitive areas, flood plains, hazardous locations or environmentally significant areas. The County has several areas that are designated Environmentally Significant Areas of provincial or national significance: Lac Brosseau, Vermillion Lakes, Watt Lake, Bens Lake and the North Saskatchewan River.

The following guiding principles of the MDP are implemented through specific policies of the MDP in order to guide future development and achieve the development vision of the County.

- **Supporting the Agricultural Community.**
- **Embrace Cultural Diversity & Heritage.**
- **Ensure Environmental Preservation.**
- **Ensure the protection and ecological stability of wetlands through sustainable development practices.**
- **Promote Economic Development.**
- **Provide Recreational and Tourism Opportunities.**
- **Foster Intermunicipal Co-operation.**

The following development policies and criteria of the MDP are deemed relevant to all proposed development within the County and to the plan area of this ASP:

1.5.1. Residential Development

The MDP defines multi-lot country residential development as “*more than two residential lots within a quarter section.*” Country residential development has been limited in the County, with most of it taking place in the Sandy Lake and Lac Sante areas. The MDP encourages country residential development “*in such a manner as to limit the removal of higher capability agricultural land and not cause unacceptable adverse effects on the agricultural economy and community, or the natural environment.*”

A. Residential Development General Policies:

- Country residential subdivisions should be located in proximity to gas, electrical, and telephone lines, which have existing spare capacity to sustain the additional usage. Subdivisions shall have direct access to existing graded, gravelled, or paved roads.

The proposed development area has direct access to existing services and all-weather roads. The lands are mainly accessed via Highway No. 36, Township Road 554, and Range Road 121, all of which are maintained as all-weather roads capable of supporting residential traffic. In addition, the site is located near existing gas, electrical, and telephone infrastructure with sufficient capacity to serve the proposed subdivision.

- Country residential subdivision or development **shall not** be permitted:
 - a. Within an area likely to be subjected to high levels of noise from industry, transportation facilities, or other sources of noise;
 - b. In close proximity to a resource extraction operation;
 - c. Within a 1 in 100 year flood plain;
 - d. Within the minimum distance separation between a single dwelling and a confined feeding operation as determined through the use of schedule 1 of the standards and administration regulation adopted pursuant to the Agricultural Operation Practices Act; or
 - e. Adjacent to riverbanks unless the banks are certified as stable by an engineer prior to development.

The proposed development site is not exposed to high levels of noise from industry, transportation facilities, or other sources, and it is not located near any resource extraction operations. The lands are outside the 1 in 100 year flood plain and away from riverbanks, or any banks, ensuring safe development, stable building sites, and no risk to future residents. The proposed development plan fully respects the minimum separation distances from any confined feeding operations as required under the Agricultural Operations Practices Act.

- Country residential development will be prohibited in those areas which are too close to sour gas facilities, in accordance with Provincial legislation and regulations.

No source gas facilities have been identified in proximity to the proposed development site.

- Country residential lots shall not be less than 0.4 ha (1 ac.), and normally no more than 4.04 ha (10 ac.) in size.

The proposed development plan is to accommodate a maximum of 12 residential parcels (lots) ranging in size between 3.32 ha (8.20 ac) and 3.95 ha (9.76 ac).

- Country residential development will be cognizant of the need to preserve critical wildlife habitat, resource extraction, recreation, and historical and archaeological features.

The proposed development is designed to respect and preserve the natural environment. Critical wildlife habitat, environmentally sensitive areas, and any historical or archaeological features on the site will be protected, ensuring that important natural and cultural resources are maintained. The plan aims to create a peaceful country residential community that harmonizes with the natural landscape and the rural character of the County.

1.5.2. Multi-Lot Country Residential Subdivisions

The MDP sets development criteria for multi-lot country residential subdivisions. The following are deemed relevant to the proposed development and addressed accordingly:

- *Multi-lot country residential developments will be discouraged from locating on good quality agricultural land, and shall be encouraged to locate on poorer quality agricultural land.*

The farmland assessment rating for the subject lands is 35%, which is well below the 60% threshold identified in the County's MDP. This confirms that the lands are not considered high-quality agricultural land. The soils in the area are primarily dark gray chernozems developed on medium-textured till, with some minor coarse-textured soils, which further indicates limited agricultural potential. Given these conditions, the use of the land for country residential purposes is consistent with the planning policies and will not result in the loss of prime farmland.

- *Multi-lot country residential development proposals shall be in accordance with applicable LUB regulations.*

This ASP aims to facilitate the redistricting of the NW ¼ 24-55-12 W4M from the Agricultural (A) District to the Country Residential (CR) District in accordance with applicable statutory and regulatory frameworks.

- *The Council of the County of Two Hills No. 21's consideration of Land Use Bylaw amendments for multi-lot country residential use development will include the following criteria:*
 - a. The site should possess landscape features such as trees, ravines, hilly terrain or other topographical features that are not unstable, erosion prone, or otherwise hazardous, but which would provide an attractive residential environment. Where a site is fully or partially treed, all possible means will be undertaken to retain the maximum amount of tree cover.*
 - b. Environmentally sensitive lands, including but not limited to riparian areas, should be incorporated into the overall development concept but left undisturbed wherever possible. Wildlife corridors or connections between habitat areas should be maintained wherever possible.*
 - c. The density of development shall be directly related to the development capability of the land resources, such as potable water supply, topography, vegetation, soil and drainage. In this regard, development proposals shall include a detailed analysis of any environmental constraints on the site, the means whereby the development will harmonize with the natural environment, and the means whereby any negative impact on the natural environment will be mitigated.*
 - d. Development will be directed to lands that the County deems to be of lesser environmental significance.*
 - e. The development shall be located and designed so as not to negatively impact the residential and/or natural amenity enjoyed by existing residential lot owners.*

- f. Access to individual lots will be provided by internal roads or service roads developed to standards acceptable to the County of Two Hills No. 21, and not directly onto highways or County roads.*
- g. Each proposed multi-lot subdivision shall have two access intersections from the proposed internal subdivision road to the County range or township road, as the case may be.*

The site of the proposed development contains natural features, including tree cover and rolling terrain, that create an attractive setting for residential lots while remaining stable and not prone to hazards such as erosion. Tree cover will be maintained wherever possible to preserve the natural character of the land.

Environmentally sensitive areas, such as low-lying or wet areas, will be respected and left undisturbed, with attention to maintaining natural connections for wildlife. The overall density of the subdivision is designed to match the land's ability to support development. The layout directs development to areas of lower environmental value, while protecting natural features that contribute to the quality of the site. The plan also ensures that new homes will not negatively affect the enjoyment of nearby properties and minimize its potential impact on current activities such as agricultural and ranching. Internal subdivision roads will provide safe access to each lot, with two planned connections to the County road system in accordance with County standards.

- *Multi-lot country residential developments should be clustered or grouped to reduce potential land use conflicts and minimize service costs.*

The proposed development is designed in a clustered layout limited to the subject property. This approach reduces potential land use conflicts with surrounding agricultural and ranching operations, helps preserve larger open areas, and minimizes the costs of providing roads and services. The development makes efficient use of the land while maintaining the rural character of the area.

- *No proposal for a multi-lot residential subdivision shall be allowed within the minimum separation distance between residential uses and a CFO as outlined in the Agricultural Operations Practices Act.*

The proposed development is located outside the minimum separation distance required from any Confined Feeding Operation (CFO) under the Agricultural Operations Practices Act. These separation distances are in place to reduce potential conflicts between residential uses and agricultural operations, such as odour, noise, or other impacts. By respecting this setback, the development avoids land use conflicts, protects the long-term viability of agriculture in the area, and ensures that future residents will enjoy a safe and comfortable living environment.

1.5.3. Reserve Lands

The MDP sets development criteria for the provision of reserve lands. The following are deemed relevant to the proposed development and addressed accordingly:

- *The County shall generally take the full amount (10%) of Municipal Reserves owing as a result of subdivision, in accordance with Section 666 of the Act.*

The proposed development complies with the County's requirements for municipal reserve dedication under Section 666 of the Municipal Government Act. This section allows the County to require up to 10% of the developable land as municipal reserve, once environmental or

conservation reserve areas have been subtracted. In the proposed development plan, approximately 25 acres are dedicated as environmental reserve and more than 13 acres are dedicated as municipal reserve. When the environmental reserve lands are excluded from the calculation, the municipal reserve dedication represents about 13% of the developable area, which exceeds the 10% requirement.

- *Development will not occur on lands which are unsuitable for development because of environmental hazard such as flood susceptibility or steep slopes. During the subdivision process, such lands shall normally be placed within Environmental Reserves or protected via Environmental Reserve Easements, depending on whether the lands would form part of an overall park for a particular area and at the discretion of the Subdivision Authority.*

The development area has a large, low-lying wet area with evidence of intermittent water levels in the northeast portion of the property. This area has been designated within the subdivision plan as an environmental reserve in conformity with this environmental reserve allocation policy.

1.6. County of Two Hills Land Use Bylaw

This ASP has been prepared in conformance with the applicable requirements of the County of Two Hills LUB Bylaw No. 2-2018, adopted on January 16, 2019. The LUB divides the municipality into land use districts and regulates use and development in those districts by setting local standards for the use of the land or specific developments.

The plan area is currently designated as Agricultural (A) District (See Figure 3. below). The purpose of the Agricultural (A) District is to *“permit activities associated with primary economic production, and to preserve valuable agricultural land from inappropriate development. This District comprises almost all of the land in the municipality.”*

Particular attention was given to the Country Residential (CR) District, its purpose, permitted and discretionary uses and regulations as the most suitable land use district to facilitate the development of Blumenthal Estates. This ASP aims to facilitate the redistricting of the NW ¼ 24-55-12 W4M from the Agricultural (A) District to the Country Residential (CR) District in accordance with applicable statutory and regulatory frameworks.

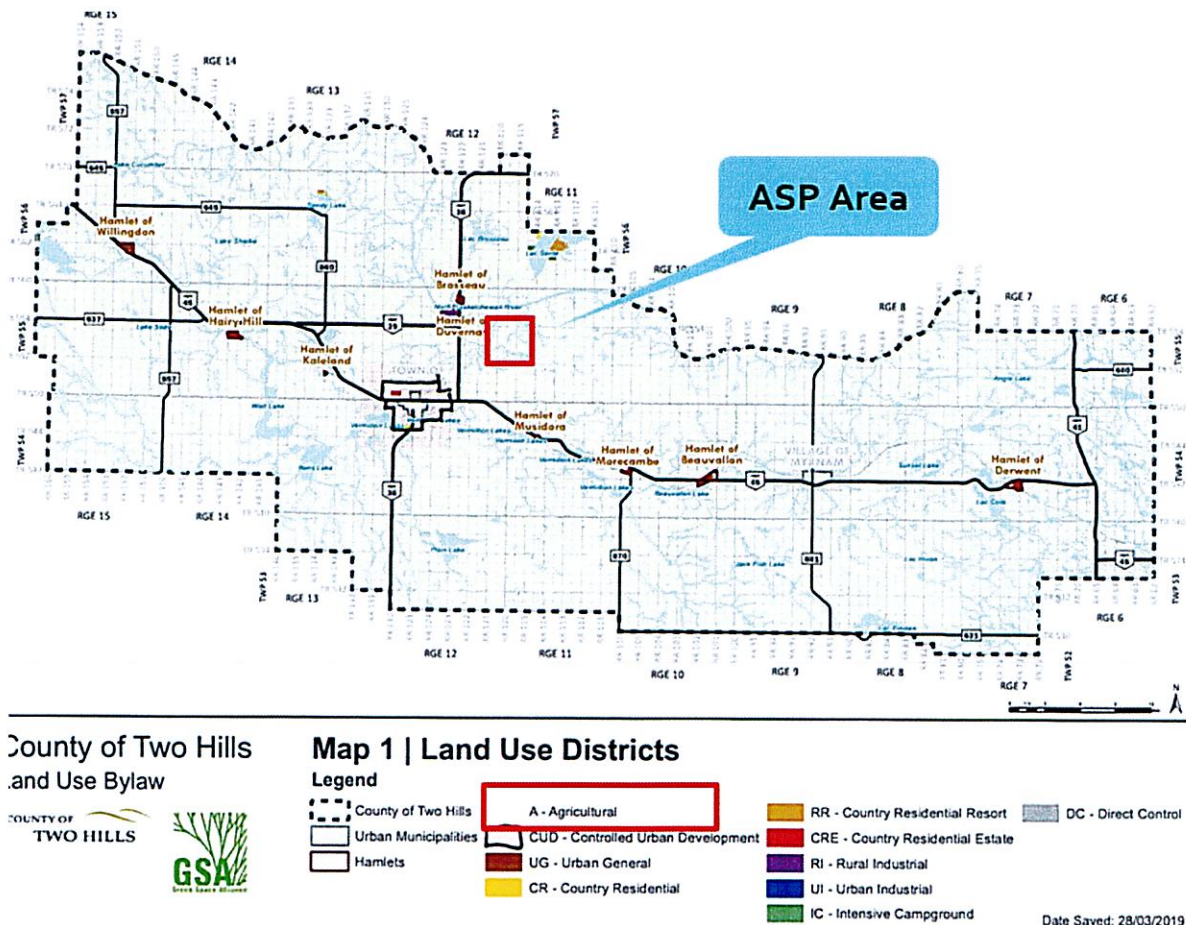


Figure 3. County of Two Hills – Map 1 | Land Use Districts

1.7. Interpretation

All map symbols, locations, and boundaries contained in the Blumenthal Estates ASP shall be interpreted as approximate unless otherwise specified in the plan or coincide with clearly recognizable physical features or fixed (i.e. legal) boundaries.

2. CONTEXT

2.1. ASP Area Land Use

The ASP area currently consists of forested land or tree farm, with gently sloped to flat lands. The entire plan area occupies approximately 64.74 hectares (ha) or 160 acres (ac) at the intersection of Township Road 554 and Range Road 121, more specifically described as NW ¼ 24-55-12 W4M.

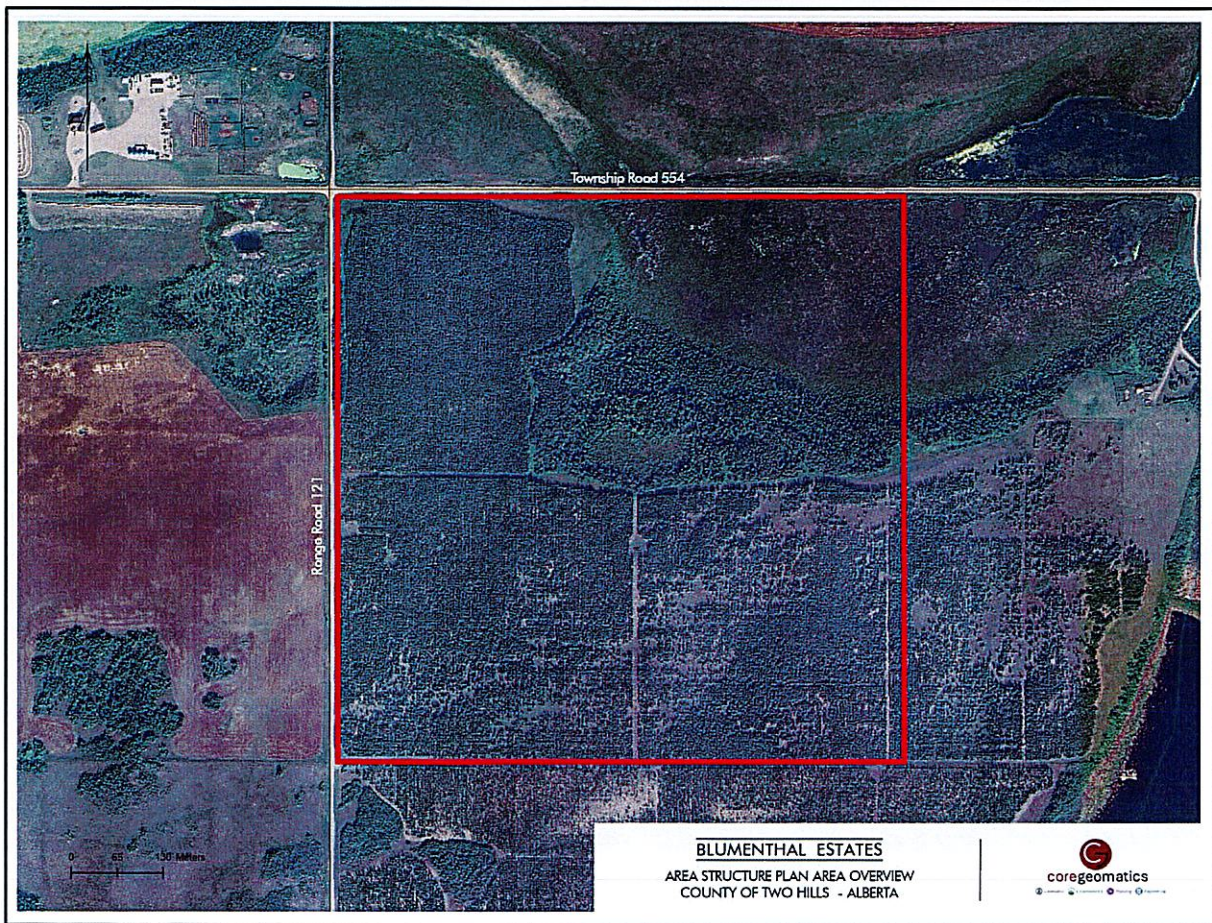


Figure 4. Blumenthal Estates - NW ¼ 24-55-12 W4M Area Overview

The area is primarily surrounded by cultivated farmland to the north and west, forested lands to the south and forested lands with various low-lying areas to the east and southeast. The area appears to have transitioned from cultivated farmland to a tree farm between 2006 and 2015. (See Phase I Environmental Site Assessment - Summary of reviewed Imagery).



Figure 5. Blumenthal Estates - March, 2025

There are no buildings or structures within the property. However, there are three existing residential sites in the vicinity. An old dumping site was previously located near the southwest corner of the property (SW ¼ 24-55-12 W4M), which no longer exists.

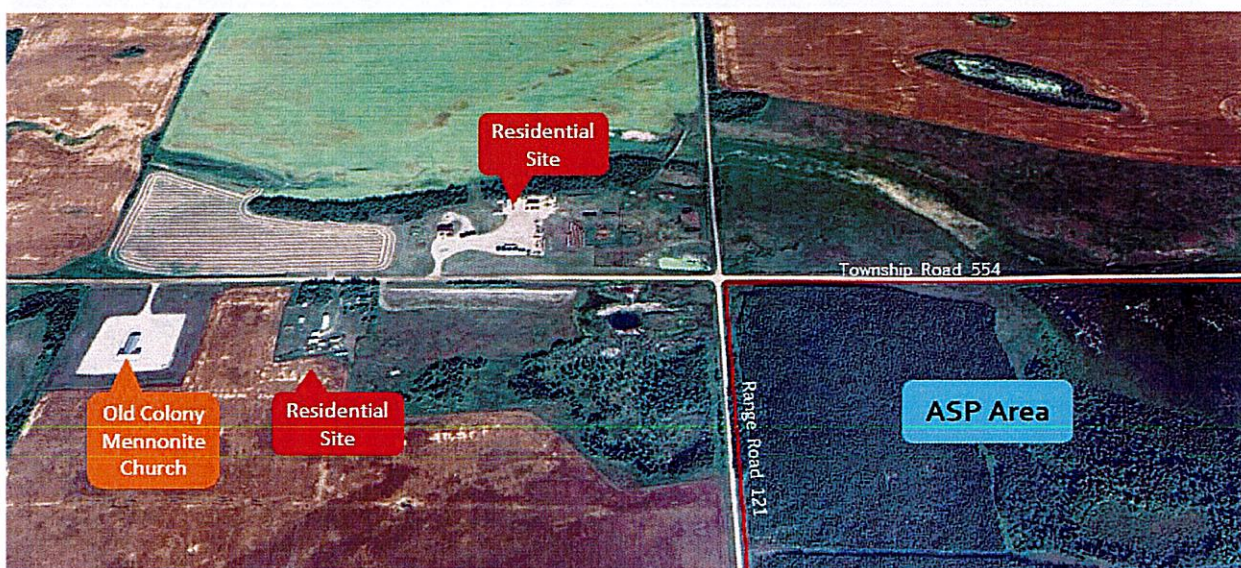


Figure 6. Existing Residential Sites – West of ASP Area

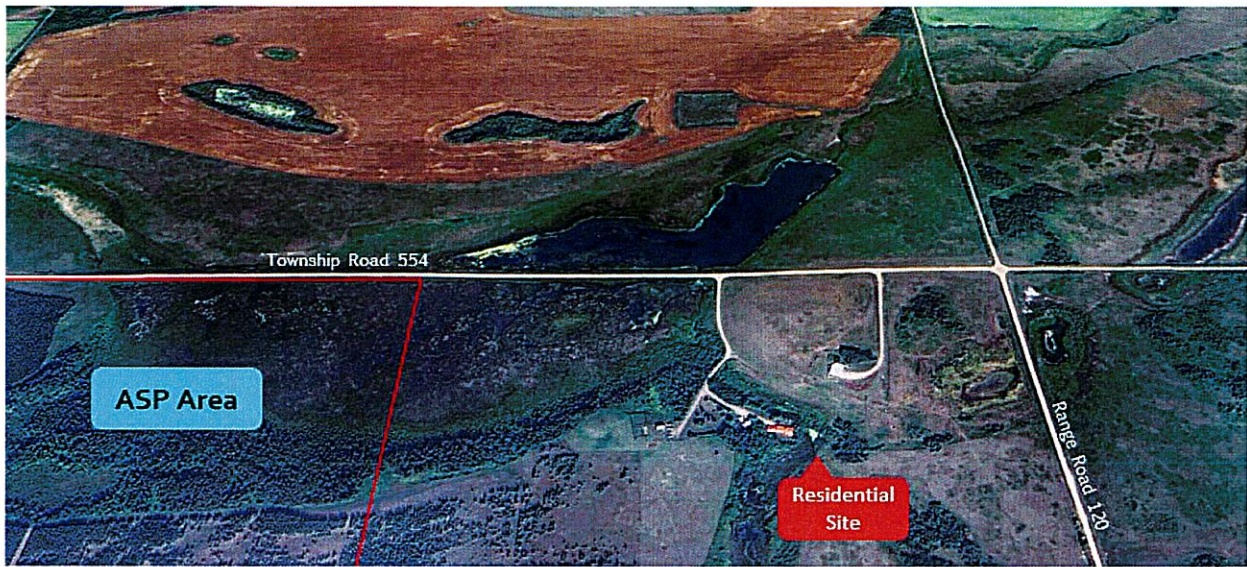


Figure 7. Existing Residential Sites – East of ASP Area

2.2. Topography

For the most part, the plan area currently consists of forested lands with a few access areas or trails throughout the property. The northeast corner of the property presents a large low-lying area, which is meant to be preserved and incorporated into the development plan as an environmental reserve. As per the MDP, *“development will not occur on lands which are unsuitable for development because of environmental hazards such as flood susceptibility or steep slopes.”*

The plan area is relatively flat and consists of rolling terrain, with the lowest elevation on the property being around 573 metres above sea level. The plan area has an overall slope direction from south and west down toward the northeast, with its higher elevations in the southeast, west and northwest. There are no dugouts or lagoons located within the quarter section. Marsh and swamp-type low-lying areas dominate the northeast of the property, draining into an unnamed watercourse that flows into the North Saskatchewan River, which is approximately 2.7 kilometres northeast of the property (See Phase I Environmental Site Assessment). This area has been designated within the subdivision plan as an environmental reserve in conformity with the environmental reserve allocation policies of the County, and is intended to be untouched and kept natural.

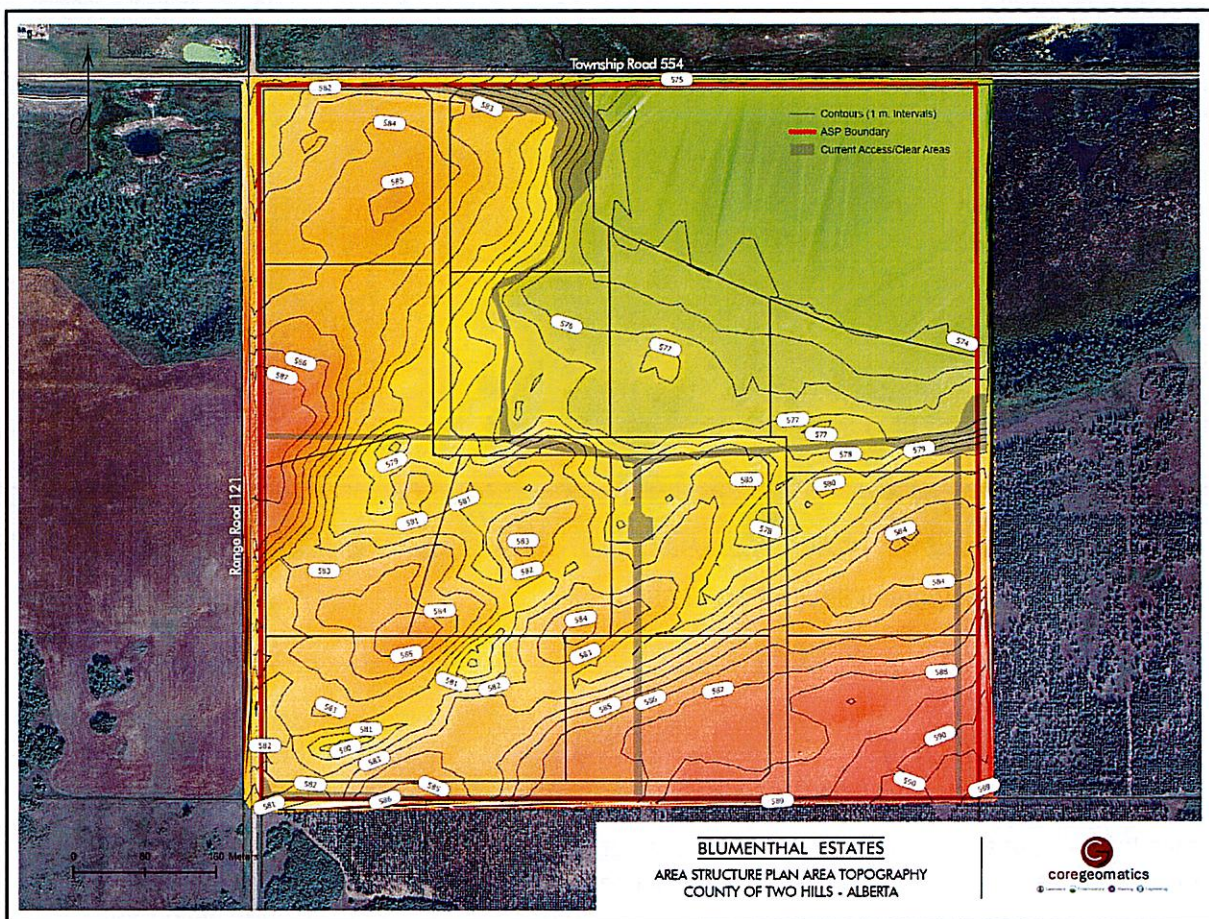


Figure 8. Site Topography

See Appendix B for Site Survey Plan and detailed topographical information.

2.3. Development Constraints

The land contains a few development constraints, both natural and man-made, as described below:

- About 75% of the plan area is comprised of now forested lands or planted hybrid poplars in different stages of development. As described in the Phase I Environmental Site Assessment, evidence shows that the use of the lands transitioned from agricultural production to a tree farm sometime between 1996 and 2006. As much as possible, these trees are to be preserved in order to contribute to the already existing natural beauty of the area and to serve as natural tree canopy for the development and natural buffers between future yardsites and roads.
- The land has a large, low-lying wet area with evidence of intermittent water levels in the northeast portion of the property. This area has been designated within the subdivision plan

as environmental reserve in conformity with the County's environmental reserve allocation policies highlighted in Section 1.5.4 of this ASP.

- A dumping site was previously located near the southwest corner of the property, which no longer exists. While no evidence can be found of the old dumping site in the area, the site is suspected as a potential source of contamination since the details of any reclamation in the early 1990s are unknown. Therefore, the proposed development has been designed to allow for a 300 metres buffer between the site and any future residences as required by Section 17 of the Subdivision and Development Regulation under the *Municipal Government Act* (See Figure 10). Furthermore, a Phase II Environmental Site Assessment will be required if a residence is proposed within 300 metres of the old dumping site, or if water wells are proposed within 450 metres.

2.4. Historic Resource Review

No known historical resources have been identified within the land or represented in the Alberta Listing of Historic Resources.

2.5. Phase I Environmental Site Assessment

CORE Environmental, a division of CORE Geomatics Group Inc. was retained to conduct a Phase I Environmental Site Assessment (Appendix C). The goal of the Phase I Environmental Site Assessment is to identify potential sources of contamination on the subject property through a comprehensive review of historical records, aerial photographs, past land ownership, and adjacent land use. The assessment includes an on-site inspection to observe any visible signs of environmental concern, such as hazardous materials, storage tanks, or disturbed vegetation, as well as an evaluation of surface hydrology. Based on the findings, the report provides recommendations for any necessary further investigation or action.

The Phase 1 Environmental Site Assessment identified that the property has primarily been utilized for agricultural purposes, and no evidence suggests that historical uses on the property pose a risk of potential contamination.

However, an old dump site/nuisance ground associated with a historical residence immediately southwest of the property appears to have been removed in the early 1990s (Parcel A, Plan No. 5873 NY). With no record of a reclamation certificate for this site or information regarding the materials that may have been disposed of at the site, it is unclear if the dump site/nuisance ground could be a source of contamination.

Therefore, within the context of the Phase I Environmental Site Assessment, it is recommended that a Phase II Environmental Site Assessment be completed if a residence is proposed within 300 metres of the old dump site, or if water wells are proposed within 450 metres. Further investigation may be required to assess potential contamination from the old dump site.

2.6. Geotechnical Site Investigation

J.R. Paine & Associates Ltd. was retained to conduct a Geotechnical Investigation (Appendix D). The goal of the Geotechnical Investigation is to provide recommendations to aid in the design and construction of the subject development.

The investigation included drilling of a total of 8 test holes to a depth of approximately 7.3 m below the existing ground surface. Soil samples were collected at 750 mm intervals for laboratory testing. Standard Penetration Tests (SPT) were completed with split spoon sampling and were done at regular 1.5 m intervals on all test holes. Following the drilling operation, slotted piezometric standpipes were installed in all test holes to facilitate water table measurements. The test holes were backfilled with cuttings, and bentonite was placed near the surface to help prevent surface water infiltration.

The findings and recommendations of the report may be summarized as follows (See report for detailed recommendations):

- The site terrain does not appear to pose any slope stability hazard and/or other limitations that would hinder the proposed development. High groundwater areas may require raising site grades, and soft native soils may need reinforcement or excavation.
- The soils encountered throughout the site and properly placed engineered fill, as may be required, are considered satisfactory for supporting single-family dwellings. These should utilize standard concrete footing foundation and slab-on-grade with an allowable bearing capacity of 75 kPa required in Section 9.15 of the National Building Code – Alberta Edition. All footing excavations should be inspected by qualified geotechnical personnel to confirm the footing bearing capacity.
- Native soils are generally suitable for road construction with proper subgrade preparation and engineered fills, though frost heave risk should be mitigated through ditching and grade raising. A 200 mm crushed gravel surface over properly compacted subgrade is recommended, and regular maintenance will be needed for gravel roads.
- On-site sanitary sewer infrastructure, such as septic mounds, may be acceptable in the area; however, further investigation is required to ensure adequate separation from the water table.
- Holding tanks in areas with a high water table should be constructed with some form of anchor to prevent uplift by their buoyant force.
- In high water table areas, house grades and footings must be kept high; upgraded drainage systems, such as washed rock bases and sump pumps, may be required.
- Soil testing indicated negligible sulphate concentrations, so standard C.S.A. Type GU cement is acceptable for most applications, except underground concrete, which should use Type HS cement. All exterior concrete must be air-entrained and designed for freeze-thaw durability.

The Geotechnical Investigation concludes that the site is generally suitable for the proposed single-family residential development, subject to its development recommendations.

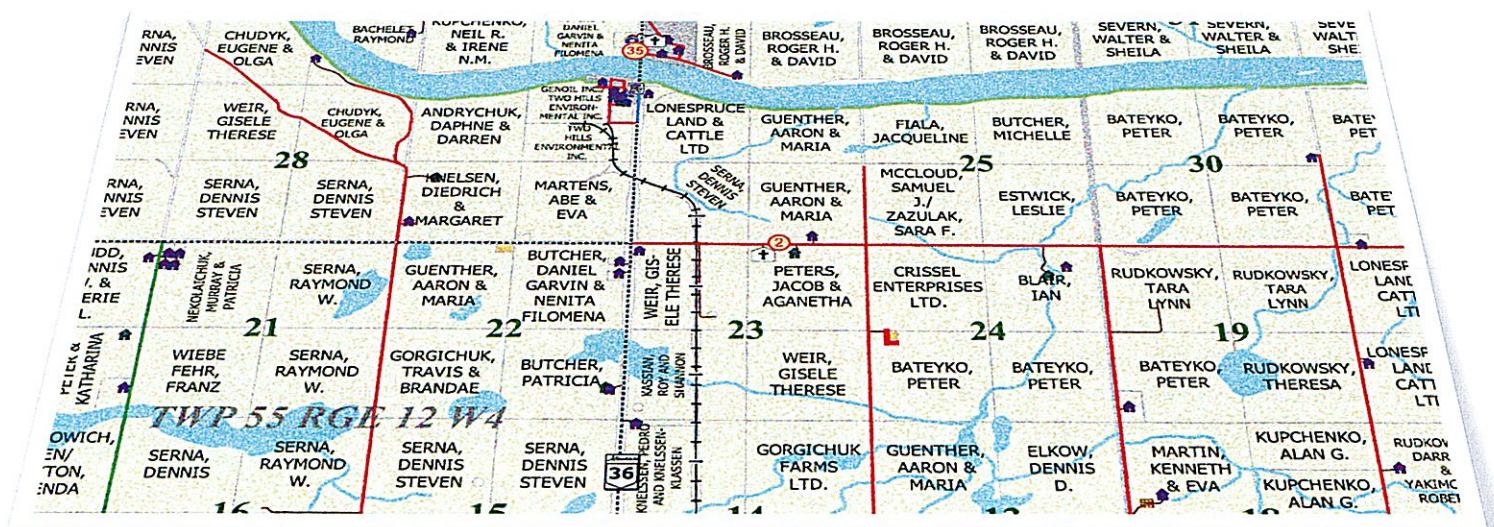
2.7. Consultation

As part of the preparation of this Area Structure Plan, a series of targeted stakeholder informal discussions with adjacent landowners and community members were carried out. While unstructured in format, these conversations were intentionally open-ended to encourage candid feedback and allow stakeholders to raise topics of significant importance to them.

This qualitative engagement process was designed to gauge community interest and evaluate local perspectives, ensuring that the proposed development aligns with community expectations and contributes positively to the broader planning objectives of the County. Feedback obtained through these discussions was uniformly positive, indicating a high degree of support for the proposed development.

The landowner to the south expressed enthusiasm for the project, noting that the anticipated arrival of new families would strengthen the local population base and enhance community vitality. The landowner to the west expressed no opposition to the proposal and confirmed that they had no comments or concerns. This level of acceptance suggests that the development is generally perceived as compatible with its surrounding land uses and is not expected to create adverse impacts on neighbouring properties.

Additional input was provided by a representative from the Old Colony Mennonite Church, who reflected on their experience living in Crissel Estates, where a strong sense of community and social cohesion has developed among residents. They expressed confidence that the proposed development could provide for similar neighbourhood relationships, where families form lasting connections and children benefit from a safe and interactive environment. They further emphasized that the development would serve as a community asset and a long-term benefit to the County, aligning with broader growth management objectives. It was also noted that the advancement of similar projects in the County would significantly contribute to the social and economic well-being of the region.



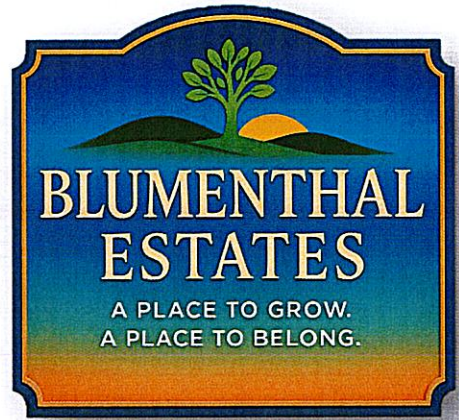
3. DEVELOPMENT CONCEPT

3.1. Vision

The Blumenthal Estates development is envisioned as more than just homes in a random location. Blumenthal Estates is about cultivating a community grounded in nature, nurtured by neighbours, and designed for lasting growth.

Blumenthal, meaning "flower valley" in German, draws inspiration from both its name and its setting. The development is located in a picturesque stretch of Alberta countryside near the banks of the North Saskatchewan River.

Just as the name evokes a sense of natural beauty and peacefulness, so too does the land itself: gently rolling terrain, open skies, and vibrant ecosystems that reflect the harmony of the future community.



3.2. Development Concept

The Blumenthal Estates Area aims to accommodate a country residential development in proximity to the community of Two Hills. The development consists of single-family residential units and reserve lands dedicated to the preservation of the natural environment.

The development plan is to be completed in one phase, and it's to accommodate a maximum of 12 residential parcels (lots) ranging in size between 3.32 ha (8.20 ac) and 3.95 ha (9.76 ac). The plan includes a Municipal Reserve (MR) of 5.49 ha (13.6 ac) and an Environmental Reserve (ER) of 10.17 ha (25.1 ac). See Appendix A for the Tentative Plan of Proposed Subdivision.

The lands are proposed to be developed within the County of Two Hills Country Residential (CR) District and shall conform to the applicable minimum district standards. The purpose of the CR District is to "permit and regulate the development of country residential uses in specific areas within the municipality."

All of the lots will have two direct access points to a municipal-developed road through the internal road network. Any additional accesses onto roads shall be permitted only at locations approved by the Development Authority. Each lot will have on-site parking, including sufficient parking for visitors.

3.3. Land Use

Blumenthal Estates will provide for low-density country residential development in the form of single detached dwellings as permitted within the CR District. The CR District provides for developments with a minimum parcel/lot size of 0.40 ha (0.99 ac) and a maximum area as required or determined by the Development Authority. As noted above, *"country residential lots shall not be less than 0.4 ha (1 ac.), and normally no more than 4.04 ha (10 ac.) in size"*.

Blumenthal Estates is to accommodate a maximum of 12 residential parcels (lots) ranging in size between 3.32 ha (8.20 ac) and 3.95 ha (9.76 ac).

The CR District allows for large country residential lot sizes and limited commercial uses in the form of home occupations, including bed and breakfast establishments.

Blumenthal Estates is anticipated to be home to approximately 42 people at a rate of 3.5 persons per unit and a density of 0.19 units per ha.

	Number of Units/Lots	Min Lot Width (m)	Hectares	Acres	Percent (Area)
GROSS DEVELOPABLE AREA			64.7	160.0	100.0%
RESIDENTIAL AREA					
Block 1 Lots	6	30.0	23.1	57.0	51.5%
Block 2 Lots	6	30.0	21.7	53.7	48.5%
TOTAL AREA			44.80	110.70	100.0%
OPEN SPACE					
Environmental Reserve	1		10.2	25.1	0.6
Municipal Reserve	1		5.5	13.6	0.4
TOTAL AREA			15.7	38.7	100.0%
TRANSPORTATION					
Roads			3.5	8.7	80.8%
Road Widening			0.8	2.1	19.2%
TOTAL AREA			4.3	10.7	100.0%

Figure 9. Blumenthal Estates Land Use Statistics



Figure 10. Blumenthal Estates Development Plan

3.4. Municipal and Environmental Reserve Allocation

The Blumenthal Estates Area provides for municipal and environmental reserve allocation in the form of land dedication of two parcels: a Municipal Reserve (MR) of 5.4 ha (13.6 ac) in the southwest area of the development and an Environmental Reserve (ER) of 10.2 ha (25.1 ac) in the northeast.

The MR parcel is strategically located near one of the primary entrances to the Blumenthal Estates development, providing accessible open space that supports both passive and active recreational uses. The location of the MR ensures high visibility and convenience for local residents, offering opportunities for potential gatherings, informal play, walking trails, and other low-impact recreational activities. The reserve land serves as a buffer between future residences and the old dump site to the southwest of the development.

The ER parcel, situated in the northeastern portion of the plan area, has been designated based on the results of the Site Topographical Survey (Appendix B) and in accordance with Section

664 of the *Municipal Government Act* to protect lands that are unsuitable for development due to environmental constraints, including steep slopes and potential flood susceptibility. The dedication of the ER serves to conserve natural features, maintain environmental integrity, and mitigate risk associated with development in hazard-prone areas. This reserve also supports long-term ecological functions and provides potential for integrated trail connectivity and low-impact public access, where appropriate.

3.5. Infrastructure and Servicing Concept

3.5.1. Transportation

Access to the plan area is provided by a dedicated internal subdivision road that connects directly to Range Road 121 to the west and Township Road 554 to the north. These local rural roads provide primary vehicular access to the development and form part of the broader municipal road network. The internal road layout is designed to ensure safe and efficient movement of vehicles, emergency services, and future residents of Blumenthal Estates.

The development benefits from its proximity to Provincial Highway No. 36, which is located just over 1.6 kilometres west of the plan area via Township Road 554. This regional transportation corridor provides important north–south connectivity for residents, facilitating access to nearby towns, services, and employment areas.

The proposed road network and access points have been planned to provide access to individual lots by an internal road, which is to be developed to standards acceptable to the County of Two Hills, and not directly onto highways or County roads. The proposed road network provides two access intersections from the proposed internal subdivision road to the County range or township road.

Under Alberta Transportation guidelines and County policy, a Traffic Impact Assessment (TIA) may be required for subdivisions that generate significant traffic volumes or that fall within 1.6 kilometres of a provincial highway intersection. The subdivision is expected to have minimal impact on the highway network, as traffic from country residential developments is relatively low and spread out over the day. For these reasons, a formal Traffic Impact Assessment is not anticipated to be required for this development.

3.5.2. Water Supply

Under Section 23(3) of the Alberta Water Act, a report certified by a professional engineer or professional geoscientist is required when a subdivision proposes to be serviced by a communal water supply system drawing from surface water or groundwater sources. In the case of the Blumenthal Estates development, no communal water system is proposed. Instead, each lot will be serviced by an individual on-site cistern system, to be installed and maintained by the property owner. Since the development does not involve a shared water source or distribution system, the requirement for a certified report under the Water Act does not apply.

This decentralized approach is well-suited to the rural, low-density nature of the subdivision and aligns with typical servicing practices for country residential developments within the region.

The use of cisterns offers several key advantages. It allows for a reliable and controlled water supply for each lot, independent of local groundwater conditions or aquifer capacity, thereby minimizing potential impacts on groundwater resources. This approach also avoids the need for communal water infrastructure or licensing of water sources, reducing long-term municipal servicing obligations and costs.

On-site cistern systems are efficient, cost-effective, and straightforward to install, which makes them an attractive option for property owners. Water delivery services are readily available in the area, and cisterns can be sized to accommodate typical household demands while allowing flexibility for future needs.

The requirement for each lot to be serviced by an individual on-site cistern will be secured through a comprehensive restrictive covenant registered on title.

3.5.3. Sanitary Servicing

At present, there is no municipal or regional sanitary sewer infrastructure located within or adjacent to the Blumenthal Estates plan area. In the absence of an existing network to connect to, individual on-site holding tanks will be utilized to provide sanitary servicing for each residential lot.

Holding tanks are a practical and commonly accepted solution for country residential developments in unserviced rural areas. Each property owner will be responsible for the installation and regular maintenance of their system, including pump-out and hauling by a licensed wastewater service provider.

The use of holding tanks minimizes the risk of groundwater contamination, especially for development in such proximity to the tributaries of the North Saskatchewan River. Holding tanks avoid challenges and costs associated with constructing or extending piped sanitary infrastructure in a low-density setting. The system is also scalable and flexible, allowing each lot to operate independently without reliance on shared systems or long-term municipal servicing commitments. The requirement for each lot to be serviced by an individual on-site holding tanks will be secured through a comprehensive restrictive covenant registered on title.

3.5.4. Drainage and Stormwater Management

Stormwater management for the Blumenthal Estates area is guided by the existing natural topography, as shown in Figure 11, below. The site currently drains primarily from the southwest toward the northeast, following the natural topography.

The proposed drainage strategy maintains and builds on these natural overland flow directions through the use of grassed swales, shallow roadside ditches, and potential lot grading. Stormwater will ultimately flow off-site at current outflow locations.

The ER parcel in the northeast provides a suitable location to receive and filter surface runoff, contributing to the protection of downstream lands and watercourses. No regional stormwater infrastructure is proposed, and the development will not rely on storm ponds or engineered outfalls, reflecting the low-density, rural nature of the subdivision.

Under the Municipal Government Act and County servicing standards, subdivision developments are required to provide appropriate stormwater management to ensure that drainage is properly controlled and that no negative impacts occur on surrounding lands. For the Blumenthal Estates development, a detailed stormwater management plan will be prepared at the time of subdivision, in conjunction with the internal road design plan.

This will ensure that natural drainage patterns are respected, runoff is managed in a safe and controlled manner, and appropriate measures are in place to protect both the subdivision and adjacent lands.

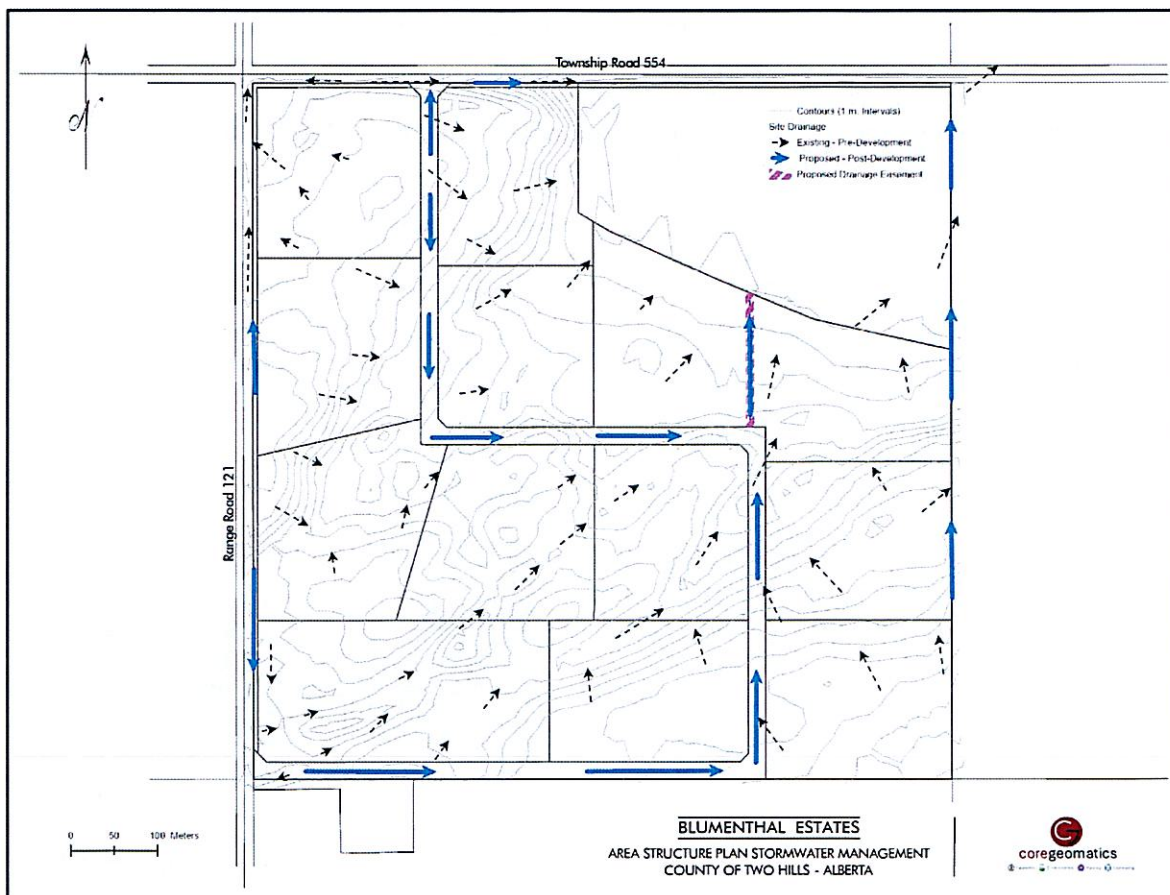


Figure 11. Blumenthal Estates Stormwater Management

3.5.5. Soft Services

Shallow utilities, including electric power, natural gas, and telecommunications, will be extended to service the proposed residential lots in Blumenthal Estates. Given the rural context of the development, these services will be provided by the appropriate service provider through overhead or shallow-buried infrastructure, depending on site conditions and provider standards.

Electricity and natural gas infrastructure is currently available in the surrounding rural road network, and extensions can be accommodated with minimal off-site upgrades. Utility servicing will be coordinated at the subdivision or development permit stage, and all shallow utility installations will be located within dedicated easements or utility rights-of-way.

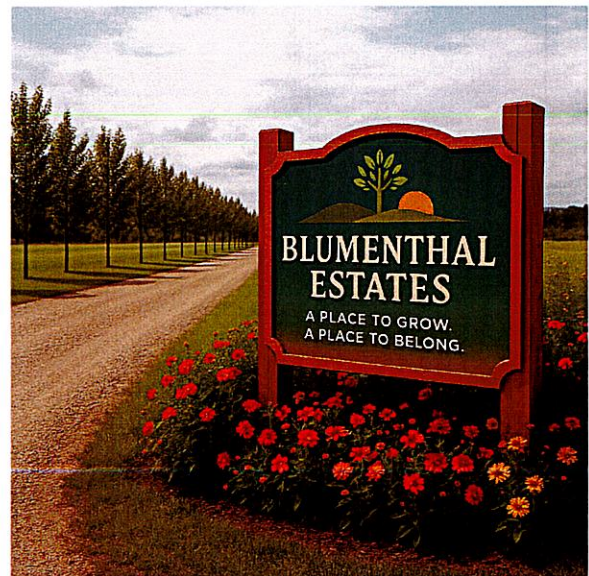
3.5.6. Education, Emergency and Public Safety

The development falls under the jurisdiction of the St. Paul Education Regional Division No. 1, which operates several schools in the region. Nearby educational institutions include Two Hills School (K–12) and Myrnam School (K–12). Additionally, the Two Hills Mennonite School serves the local Mennonite community. These schools provide accessible education options for future residents of Blumenthal Estates, with school bus services typically available for rural students.

Emergency services and public safety are provided through a combination of municipal and provincial resources. Fire protection services are managed by local fire departments, including the Two Hills Fire Department, which responds to emergencies in the area. Emergency Medical Services (EMS) are coordinated by Alberta Health Services (AHS). Law enforcement is provided by the Royal Canadian Mounted Police (RCMP).

3.6. Development Phasing

Development of Blumenthal Estates is planned to proceed as a single-phase subdivision, reflecting the modest scale and straightforward servicing requirements of the project. This approach ensures that all infrastructure, including roadways, shallow utilities, water and sanitary servicing, and stormwater management elements, will be constructed and commissioned concurrently.



4. PLAN IMPLEMENTATION

4.1. Plan Approval

The ASP may be adopted in accordance with Section 633 of the Municipal Government Act, the Municipal Development Plan and any additional requirements of the County of Two Hills.

4.2. Land Use Bylaw Amendments

The ASP has been prepared in conformance with the applicable requirements of the County of Two Hills LUB. A bylaw amendment to accommodate the development as country residential development within the Country Residential (CR) District is required. The purpose, permitted uses, discretionary uses and regulations of the CR are best suited to accommodate the development of Blumenthal Estates.

4.3. Subdivision Process

As part of implementing the ASP, the land described as the NW ¼ 24-55-12 W4M will be subdivided and registered with Land Titles as outlined within this ASP.

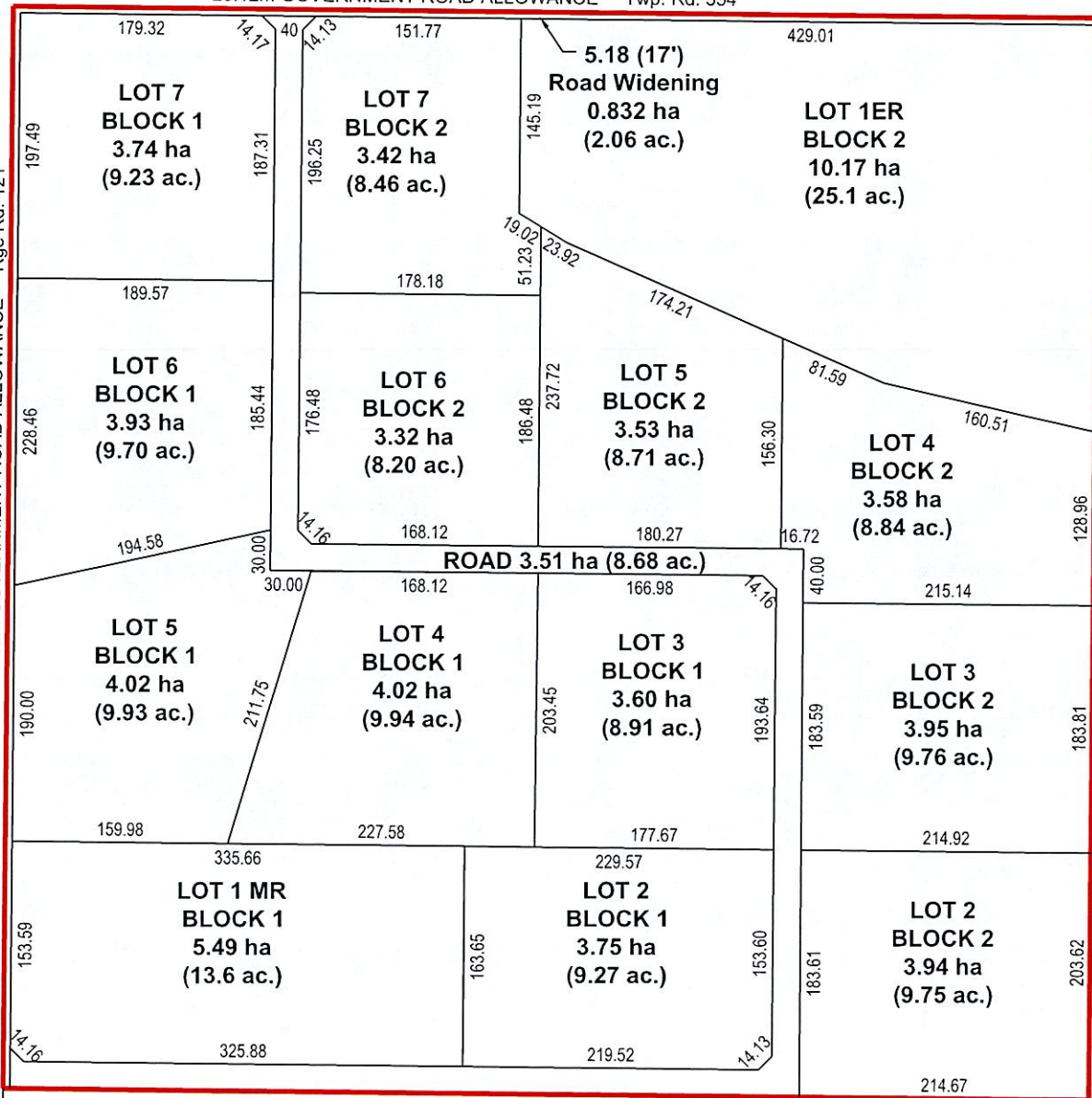
APPENDIX A – SUBDIVISION PLAN

S.W. 1/4 Sec.25 Twp.55 Rge.12 W.4M.

20.12m GOVERNMENT ROAD ALLOWANCE Twp. Rd. 554

N.E. 1/4 Sec.23 Twp.55 Rge.12 W.4M.

20.12m GOVERNMENT ROAD ALLOWANCE Rge Rd. 121



N.E. 1/4 Sec.24 Twp.55 Rge.12 W.4M.

S.W. 1/4 Sec.24 Twp.55 Rge.12 W.4M.

**TENTATIVE PLAN SHOWING
PROPOSED SUBDIVISION OF ALL OF
N.W. 1/4 Sec.24 Twp.55 Rge.12 W.4M.
COUNTY OF TWO HILLS No. 21
ALBERTA**

Legend

Proposed Boundary: ———

Page 1 of 2



coregeomatics

p | 403-648-2772
f | 403-648-2767
www.coregeomatics.com

Scale 1:5000

File: 24-0703-00

Dwg: 24-0703 Tent 2025-06-02

Date: June 2nd, 2025



**TENTATIVE PLAN SHOWING
PROPOSED SUBDIVISION OF ALL OF
N.W. 1/4 Sec.24 Twp.55 Rge.12 W.4M.
COUNTY OF TWO HILLS No. 21
ALBERTA**

Legend

Proposed Boundary: ———

Page 2 of 2


coregeomatics
p | 403-648-2772
f | 403-648-2767
www.coregeomatics.com

Scale 1:5000

File: 24-0703-00

Dwg: 24-0703 Tent 2025-06-02

Date: June 2nd, 2025