

Atkins

Conceptual Scheme



PREPARED FOR

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Rocky View County

FOR SUBMISSION TO

Rocky View County



BYLAW C-7755-2018

A Bylaw of Rocky View County pursuant to Division 12 of Part 17 of the Municipal Government Act to amend Bylaw C-5354-2001, known as the “Central Springbank Area Structure Plan”, and adopt a Conceptual Scheme known as the “Atkins Conceptual Scheme”.

The Council of Rocky View County enacts as follows:

PART 1 – TITLE

This bylaw shall be known as Bylaw C-7755-2018.

PART 2 – DEFINITIONS

In this bylaw, the definitions and terms shall have the meanings given to them in Land Use Bylaw C-4841-97 and the Municipal Government Act.

PART 3 – EFFECT OF BYLAW

THAT Bylaw C-5354-2001, known as the “Central Springbank Area Structure Plan”, be amended in accordance with the amendments contained in Schedule ‘A’, attached to and forming part of the Bylaw; and

THAT the “Atkins Conceptual Scheme” be adopted to provide a policy framework for future redesignation, subdivision, and development proposal within Lot 2, Block D, Plan 1415LK within NE-18-24-02-W05M and Block 1, Plan 7811222 within SE-18-24-02-W05M, consisting of an area of approximately 16.54 hectares (\pm 40.85 acres), as defined in Schedule ‘B’ attached to and forming part of this Bylaw.

PART 4 – TRANSITIONAL

Bylaw C-7755-2018 is passed when it receives third reading, and is signed by the Reeve/Deputy Reeve and the Municipal Clerk, as per Section 189 of the *Municipal Government Act*.

Division: 3

File: 04618004/04618019 – PL20170158

PUBLIC HEARING WAS HELD IN COUNCIL this	22	day of	May	, 2018
READ A FIRST TIME IN COUNCIL this	22	day of	May	, 2018
READ A SECOND TIME IN COUNCIL this	22	day of	May	, 2018
UNANIMOUS PERMISSION FOR THIRD READING	22	day of	May	, 2018
READ A THIRD TIME IN COUNCIL this	22	day of	May	, 2018



ROCKY VIEW COUNTY
Cultivating Communities

Reeve

CAO or Designate

Date Bylaw Signed



SCHEDULE 'A'
FORMING PART OF BYLAW C-7755-2018

Schedule of Amendments to Bylaw C-5354-2001:

1. Amend the Table of Contents by adding a reference to Section 3.3 and numbering accordingly:
 - 3.3 Adopted Conceptual Schemes
 2. Atkins Conceptual Scheme (C-7755-2018)
2. Attach the "Atkins Conceptual Scheme" as defined in Schedule 'B' attached to and forming part of this Bylaw.



ROCKY VIEW COUNTY
Cultivating Communities

SCHEDULE 'B'
FORMING PART OF BYLAW C-7755-2018

A Conceptual Scheme affecting the area within Lot 2, Block D, Plan 1415LK within NE-18-24-02-W05M and Block 1, Plan 7811222 within SE-18-24-02-W05M, consisting of an area of approximately 16.54 hectares (\pm 40.85 acres), herein referred to as the "Atkins Conceptual Scheme".

PREPARED BY

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T3H 4G5

IN ASSOCIATION WITH

Bunt & Associates Engineering (Alberta Ltd)

Westhoff Engineering Resources Inc

Almor Testing Services Ltd

Groundwater Information Technologies Ltd

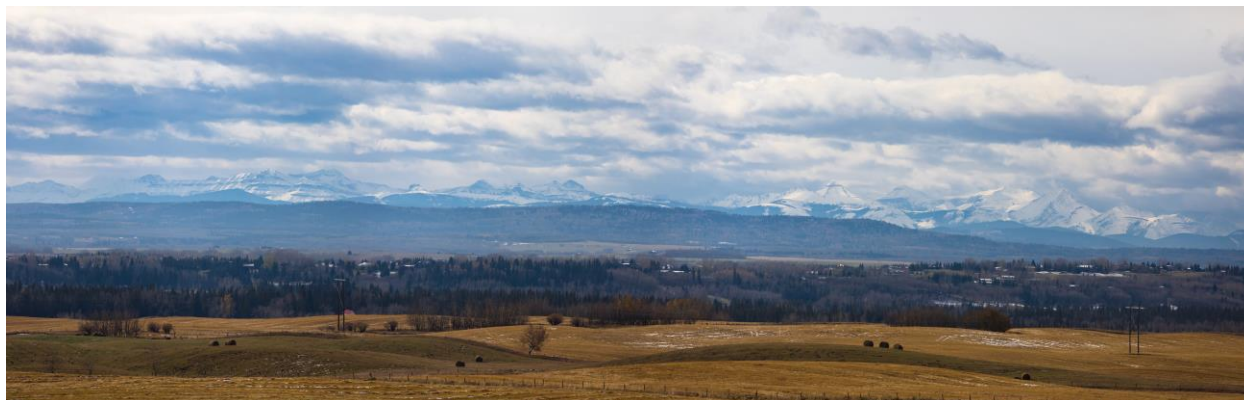


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1. Introduction

The Rocky View County Central Springbank Area Structure Plan (ASP) adopted in 2007 requires the preparation of Conceptual Schemes within specified areas. This Conceptual Scheme is prepared as a result of this requirement.

It is noted that the proposed conceptual scheme area for this document is smaller than that noted in the Central Springbank ASP. The rationale for the smaller area is addressed in this document.

2. Plan Interpretation

Discussion sections within this conceptual scheme are provided for information to clarify policies within this document. Policies take precedence over inconsistencies that may be found in the discussion section.

The word “shall” is a directive term that indicates the actions outlined are mandatory and therefore must be complied with, without discretion, by administration, the developer, the Development Authority and the Subdivision Authority.

The word “should” is a directive term that indicates or directs a strongly preferred course of action by Council, administration and/or the developer but one that is not mandatory.

3. Purpose and Objectives

3.1. Purpose

The purposes of this conceptual scheme are to:

- Provide a rationale for reducing the conceptual scheme area from that identified in the Central Springbank ASP;
- Identify a conceptual scheme area specific to the land area in this document;
- Identify the planning issues that may affect the subdivision and development of the plan area;
- Identify a land use concept with associated servicing and development strategies for the subdivision and development of the plan area;
- Identify a planning policy framework that addresses the planning issues and supports the land use concept and associated servicing and development strategies; and
- Establish an implementation strategy for the subdivision and development of the plan area.

3.2. Objectives

The objectives of this conceptual scheme are to:

- Identify the rationale for reducing the conceptual scheme area identified in the Central Springbank ASP Map 11;
- Establish the appropriateness of the conceptual scheme and plan area in a comprehensive format for the subdivision and development for the land;
- Examine the implications of development proceeding within a reduced conceptual scheme boundary;
- Identify existing constraints and opportunities within the plan area for subdivision and development;
- Establish a land use concept with servicing and development strategies and policy framework for the plan area; and
- Accommodate the subdivision and development of the plan area.

4. Existing Rocky View Planning Framework

4.1. Rocky View County Plan (Bylaw C-7280-2013)

The County Plan identifies that residential development should occur within an approved Area Structure Plan area. The subject lands are within the Central Springbank Area Structure Plan.

4.2. Central Springbank Area Structure Plan (Bylaw C-5354-2001)

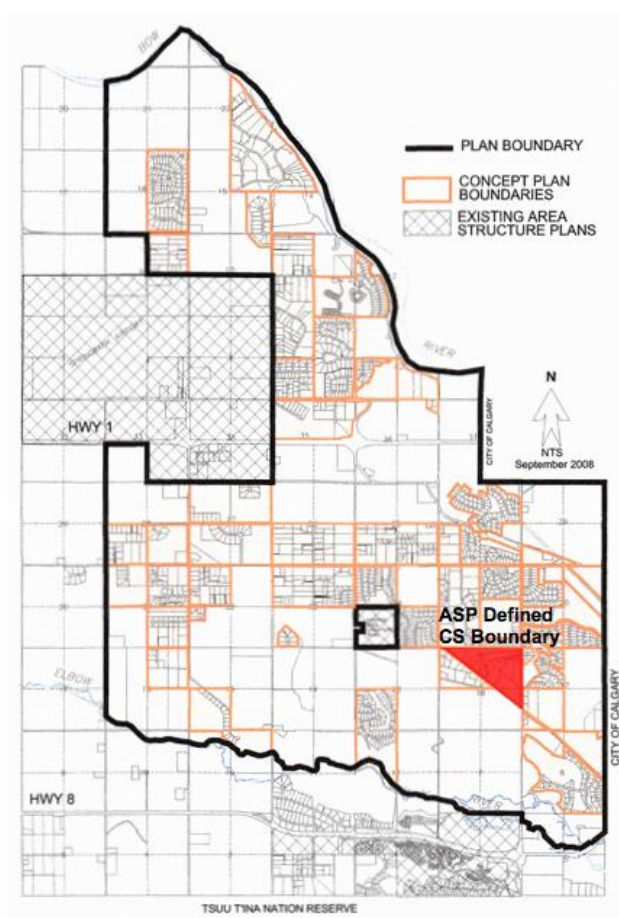
The Central Springbank ASP identifies the subject lands as Infill Residential Area, with a concept plan boundary bounded by Lower Springbank Road on the south, Range Road 25 on the east and the north section line of Section 18 (Figure 1 – Boundary shown in red). The conceptual scheme area shown on Figure 1 is approximately 87.8 hectares (217 acres) in size.

Section 2.3.2.2 of the ASP provides a list of requirements for the preparation of Conceptual Schemes as follows:

“In order to provide a wholistic, efficient and through approach to community development in Central Springbank, conceptual schemes will be required to guide future land use changes and subdivision within predetermined conceptual scheme boundaries shown on Maps 11 and 12. A conceptual scheme will include, but not be limited to:

- A future land use scenario including lot design and configuration, parcel size, on and off-site visual impacts, open space connections, servicing strategic and compatibility with adjacent land use
- A scenario for the integration of the proposed development with existing and adjacent development including the preservation or improvement of existing site lines
- Development phasing including full build-out
- Any and all constraints to development including, but not limited to topography, environmentally sensitive areas as determined by a biophysical inventory, archaeological or historical sites
- Architectural controls to guide structural style, building materials and structural siting
- A landscaping plan
- A Master Drainage Plan and/or Site Implementation Plan including possible alternatives for Best Management Practices for storm water management
- The location of municipal, school and if necessary, environmental reserve areas
- The provision of open areas for the purposes of habitat preservation, archaeological or historical sites, regional Best Management Practices, agricultural uses, recreation, highway interface, and/or City of Calgary interface
- A Traffic Impact Assessment that addresses the location of existing and future transportation networks detailing traffic generation and its cumulative impacts on the road network including the necessary improvements
- Utility servicing strategies
- Population densities and projections
- Input from all directly and indirectly affected landowners within and adjacent to the conceptual scheme boundary throughout the preparation of the conceptual scheme, including a minimum of one (1) open house for the proposal
- The support of the proposed conceptual scheme by the majority of affected landowners
- Road names incorporating neighbourhood themes or heritage name.”

Figure 1 –Infill Residential identified in the Central Springbank Area Structure Plan



The Atkins Conceptual Scheme proposes a smaller area bounded by Lower Springbank Road on the south, Range Road 25 on the east and the half section line of Section 18. Details of the rationale for a smaller conceptual scheme area are included in the following sections.

Section 2.9.2 of the ASP states the following:

“Notwithstanding the defined conceptual scheme boundaries as defined on Maps 11 and 12, future conceptual scheme boundaries may be altered without amendment to this Plan, at the discretion of Council, provided:

- the alternate conceptual scheme area is comprehensive in nature;
- the implications of development proceeding within an alternate conceptual scheme boundary have been examined; and
- the Municipality determines that any on-site planning issues have been resolved pursuant to the provisions of this Plan.”

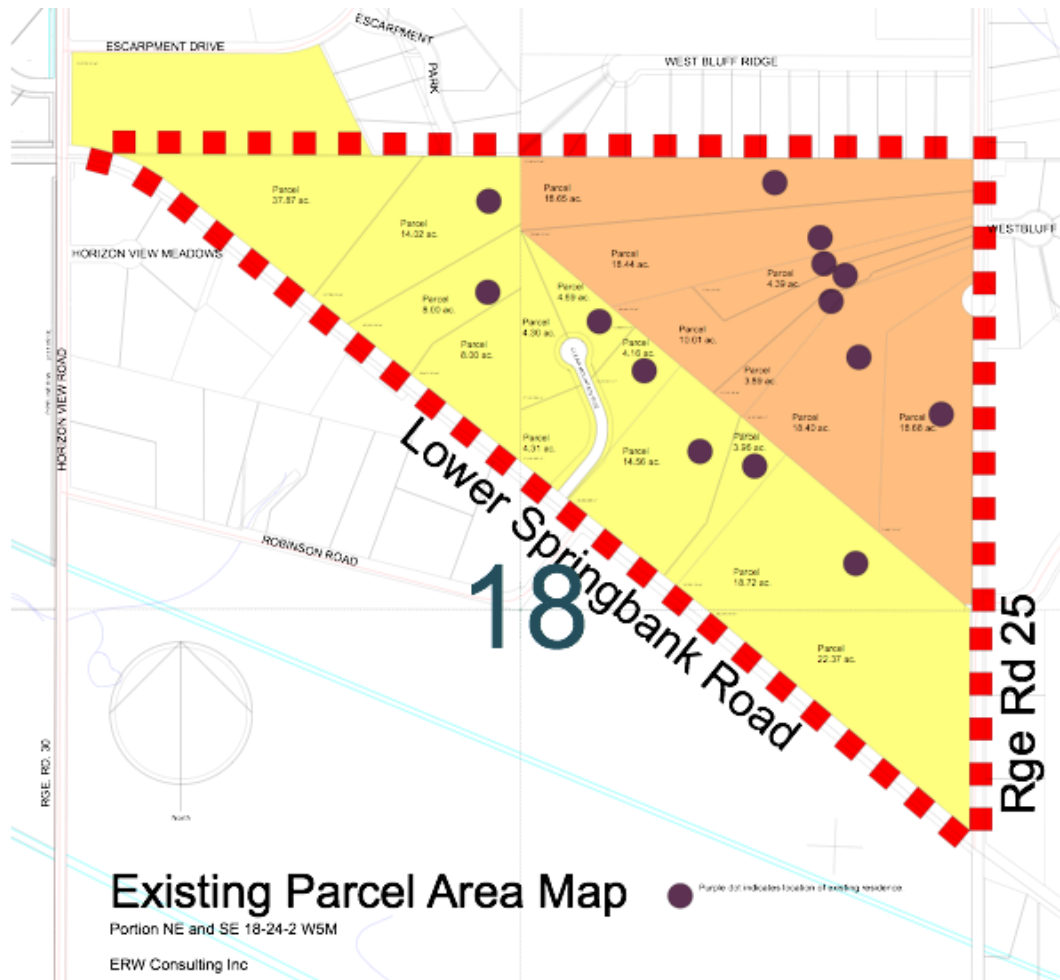
Section 2.9.3 of the ASP states that:

“Lots in Infill Residential Areas as shown on Map 11 are found in quarter sections that have been previously subdivided or have been developed to their current potential as 2 - 4 acre communities. Through the conceptual scheme process, the re-development of larger parcels into 2 - 4 acre lots is envisioned provided the interface considerations between existing and new residential lots have been comprehensively addressed.”

- a) Lands identified on Map 11 will not be eligible for further subdivision unless a conceptual scheme is prepared in accordance with the provisions of this plan, is approved by the Municipality, and is appended to the Central Springbank Area Structure Plan.”

- b) Future residential lots in the Infill Residential Area as defined on Map 11 will range between \pm 0.8 to 1.6 ha (\pm 2 to 4 acres) in size or whatever is most prevalent on adjacent lots or in the immediate area."

Figure 2 - Existing Parcels Area Map shows the existing infill parcels and existing residences around the subject lands.

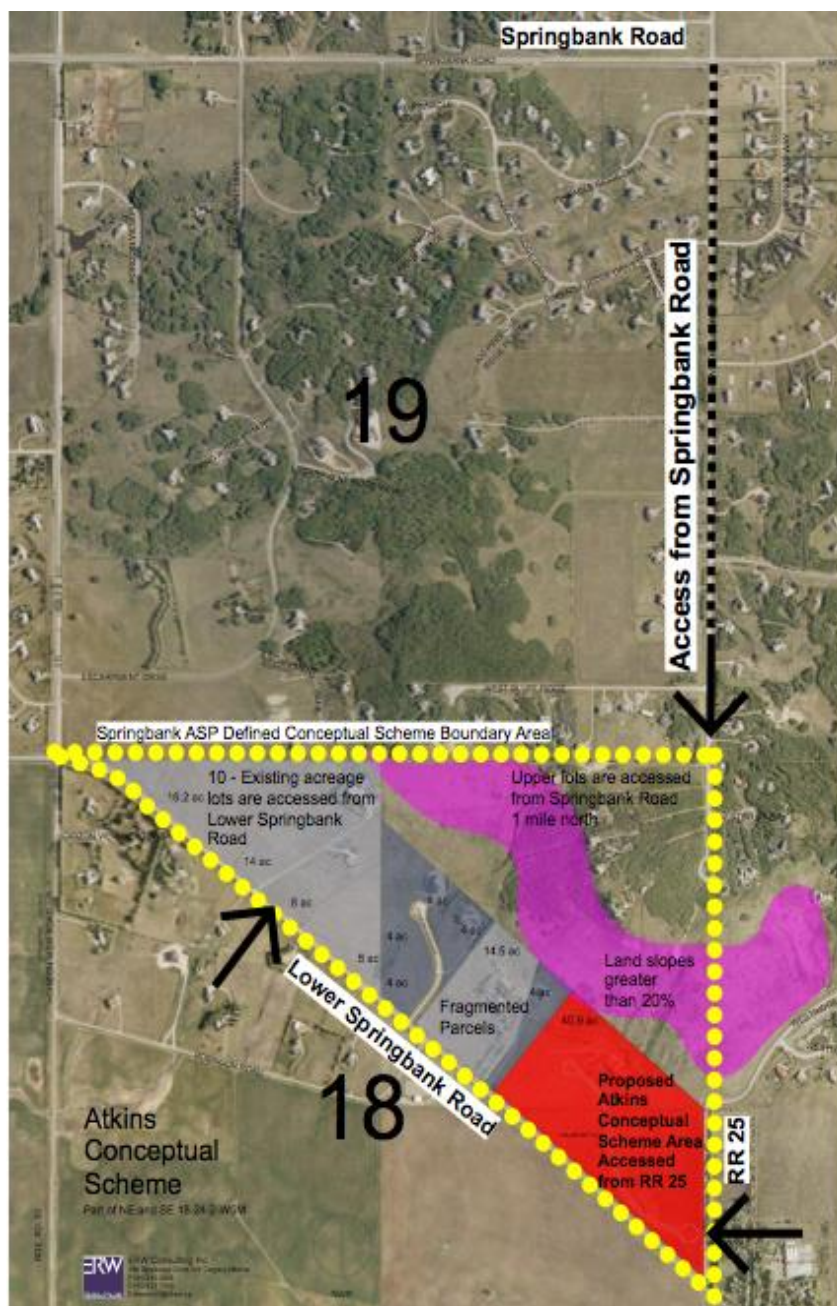


5. Atkins Conceptual Scheme Smaller Area Rationale

5.1. Regional Development Constraints

Regional Development Constraints (Figure 3) identifies the constraints within the Conceptual Scheme area identified in the Central Springbank ASP. Several important factors make it impractical to develop a logical Conceptual Scheme for all the lands contained in the area.

Figure 3 –Regional Development Constraints Map



5.2. Existing Development Fragmentation Constraints

The lands outside the proposed Atkins Conceptual Scheme Plan Area are already developed into 17 parcels in such a way that it is impractical to overlay a new plan that would satisfy the varied interests of owners that may or may not want further development of their land.

The seven parcels in the upper north east corner are of various sizes, and are configured so that additional subdivision is difficult due to the shapes and topography of the parcels.

The ten parcels on the southwest corner are fragmented into 4 acre and larger parcels configured to make an overall conceptual plan difficult to work with many different owners. Access to these parcels is only from Lower Springbank Road.

The Atkins Conceptual Scheme is the only land that is not fragmented by development in a way that precludes logical planning. It consists of two parcels containing approximately 41 acres. These two parcels will be consolidated into one to facilitate subdivision of lots for the proposed development.

The elevation difference from the Atkins north boundary to the top of hill is 96 meters (315 ft.) and is separated by 300 meters distance. The escarpment area has 20 to 35% slopes and is not suitable to be used for residential development.

Figure 4 -Aerial Photo of subject lands shows the sloped escarpment, upper parcels and fragmented lands to the northwest and east of the Atkins Land.



Figure 5 - Aerial Photo of subject lands shows the fragmented lands to the west and to the east and the sloped escarpment to the north.



5.3. Regional Traffic Access Constraints

The Conceptual Scheme area identified in the Springbank ASP is split into two regional road access areas.

The seven properties to the north are at a higher elevation (96 meters), and are accessed from Springbank Road one mile to the north. This area cannot be accessed by Lower Springbank Road or RR 25.

The lower properties are each accessed from Lower Springbank Road and do not connect with roads to the properties to the north.

Access to the proposed Atkins development will be from RR 25, and will eliminate the two existing access points from Lower Springbank Road when the development proceeds.

5.4. Topographic Constraints

Approximately 27.7 hectares (68.5 acres) that is 32% of the lands in the Conceptual Scheme area identified in the Springbank ASP is not developable due to slopes between 20 to 35% in an elevation change of 96 meters (Figure 6). The slope splits the land from upper properties and lower properties, and eliminates any potential development connection between the two areas.

Figure 6 - photo of the subject lands looking to the Northeast from Lower Springbank Road showing the sloped escarpment.

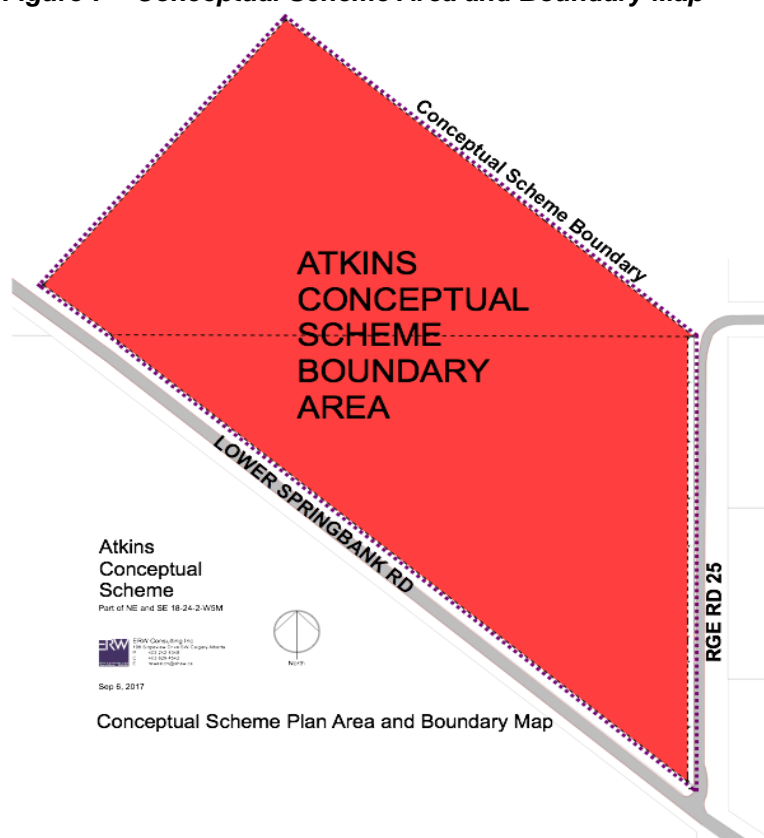


7. Atkins Conceptual Scheme Plan Area

7.1. Plan Area Map

The Atkins Conceptual Scheme Plan Area is approximately 41 acres in size (Figure 7), and provides a logical land base for development of a private community comprising nine lots with a single road access from RR 25.

Figure 7 – Conceptual Scheme Area and Boundary Map



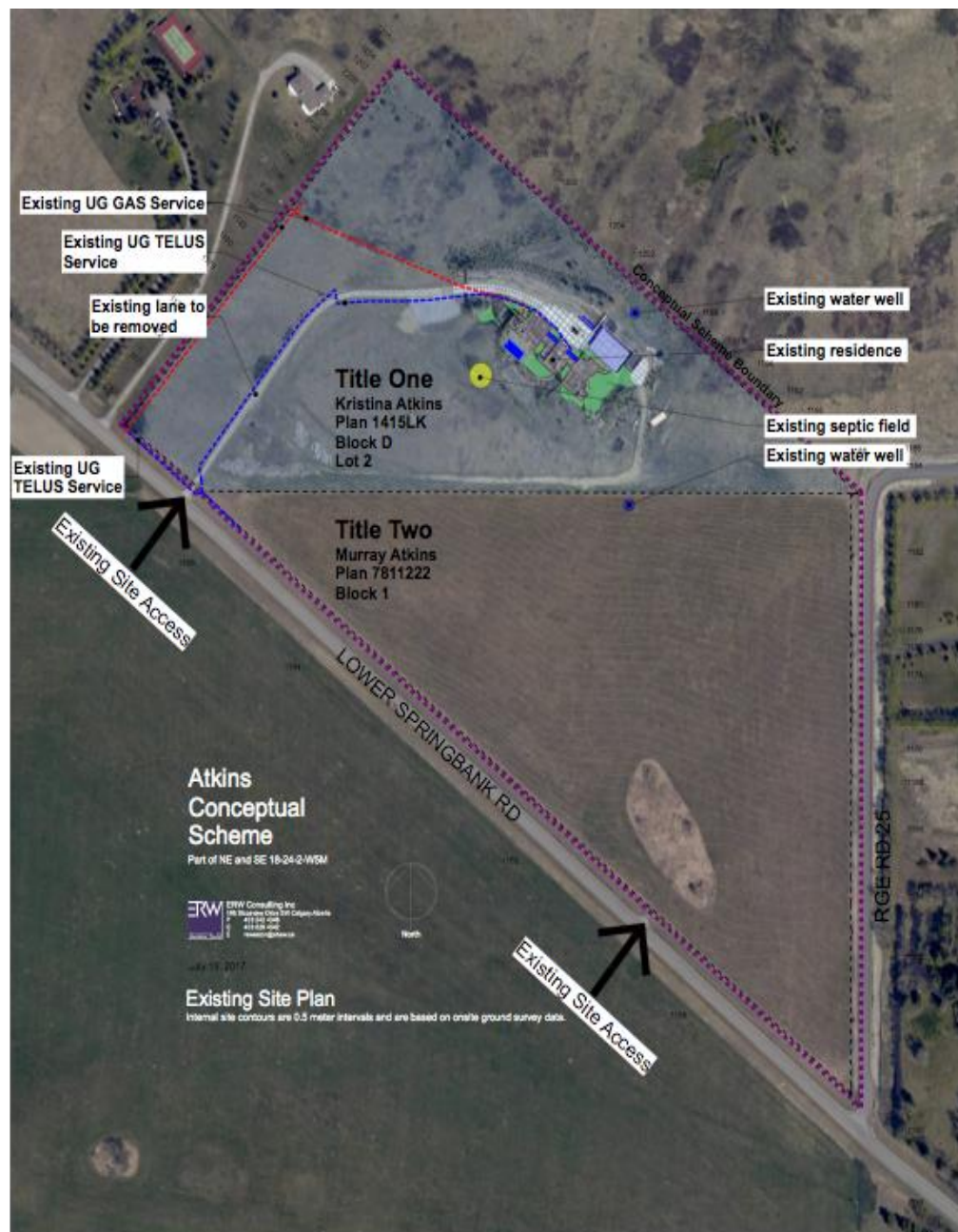
8. Existing Conditions

8.1. Location

The Atkins Conceptual Scheme Plan area is located at:

- North of and contiguous to Lower Springbank Road SW
- East of and contiguous to Range Road 25
- Within portions of the SE and NE-18-24-02-W5M

Figure 8 – Existing Conditions



8.2. Legal Description

The plan area includes two parcels with titles described as follows, and shown on Figure 8. The total area is 16.54 hectares (40.85 acres).

- Title 1: Lot 2, Block D, Plan 1415LK within NE-18-24-02-W5M owned by Kristina Atkins, and containing 7.54 hectares (18.62 acres); and
- Title 2: Block 1, Plan 7811222 within SE 18-24-02-W5M owned by Murray Atkins, and containing 9 hectares (22.23 acres)

8.3. Historical Context

The plan area has been used as ranch and farm land starting in the late 1800s. The surrounding area began to develop into residential parcels starting in the 1970s, and continues to fragment with mainly country residential developments of varying parcel sizes.

Country Residential development near the Atkins Conceptual Scheme include Residential Two District (R-2) and Residential One District (R-1) with parcel sizes ranging from 2 acres, 4 acres and larger. Ranch and farm operations continue to operate in the area.

8.4. Current Land Use

Lot 2, Block D, Plan 1415LK within NE-18-24-02-W5M (Title One) and a portion of Block 1, Plan 7811222 within SE-18-24-02-W5M (Title Two) are designated as Residential Two District (R-2). The remaining portion of Title Two is designated as Ranch and Farm District (RF).

In order to facilitate the proposed subdivision, land use redesignation to Residential Two District would be required.

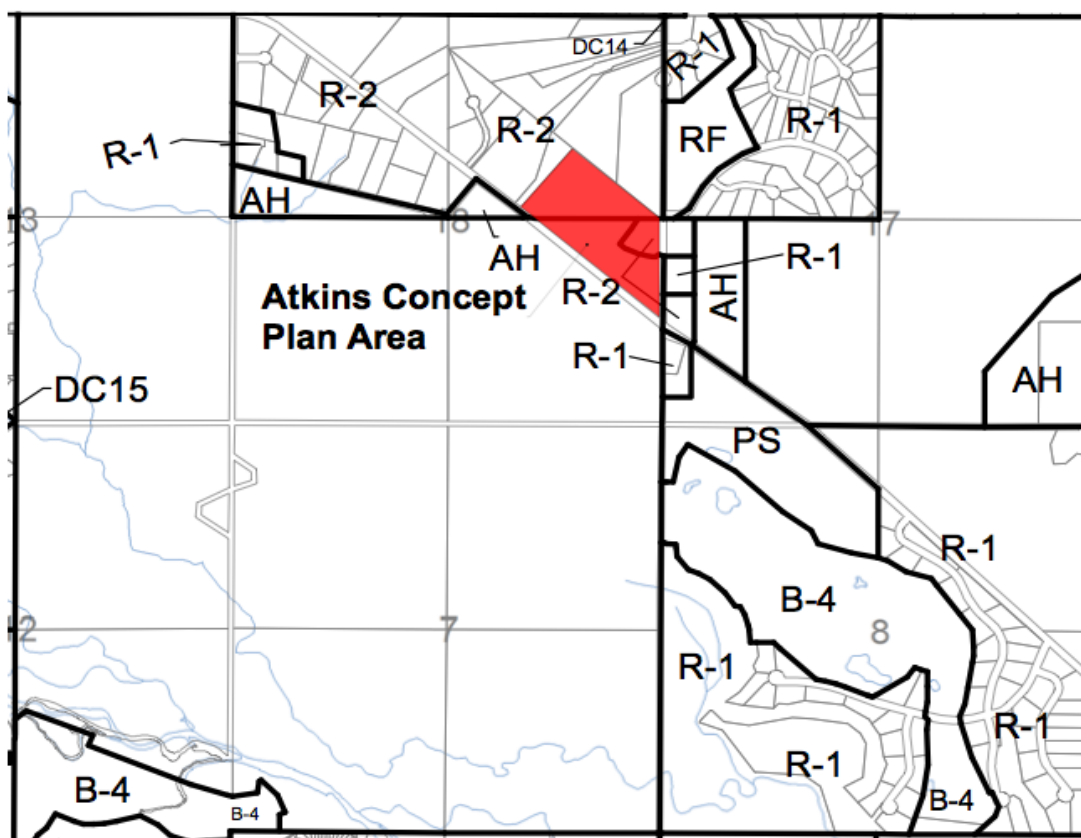
8.5. Surrounding Context

Lands in proximity and contiguous to the plan area mainly consist of Country Residential developments with parcel sizes range from 2-4 acres and larger.

Lands to the south and west of Lower Springbank Road are designated Ranch and Farm District (RF). Lands north and east of the proposed Atkins Conceptual Scheme are designated as Residential One District (R-1), with parcels sizes 2 acres and larger.

The land use mix in the surrounding area is shown on Figure 9.

Figure 9 – Existing Land Uses in the Area



8.6. Terrain

The plan area slopes downward from the north to the west and south. Maximum slopes at approximately 20% occur on a small portion of the north boundary. Most of the slopes are below 15%.

8.7. Existing Development

The plan area has a large single family residence developed within the Title 1 area, and is occupied by the Atkins family as shown on Figure 8. This residence will continue to be occupied, and will form part of the overall Bare Land Condominium.

The current access from Lower Springbank Road will be removed and a new private road will be created from Range Road 25 that will service all the proposed subdivision.

9. Atkins Land Use Concept

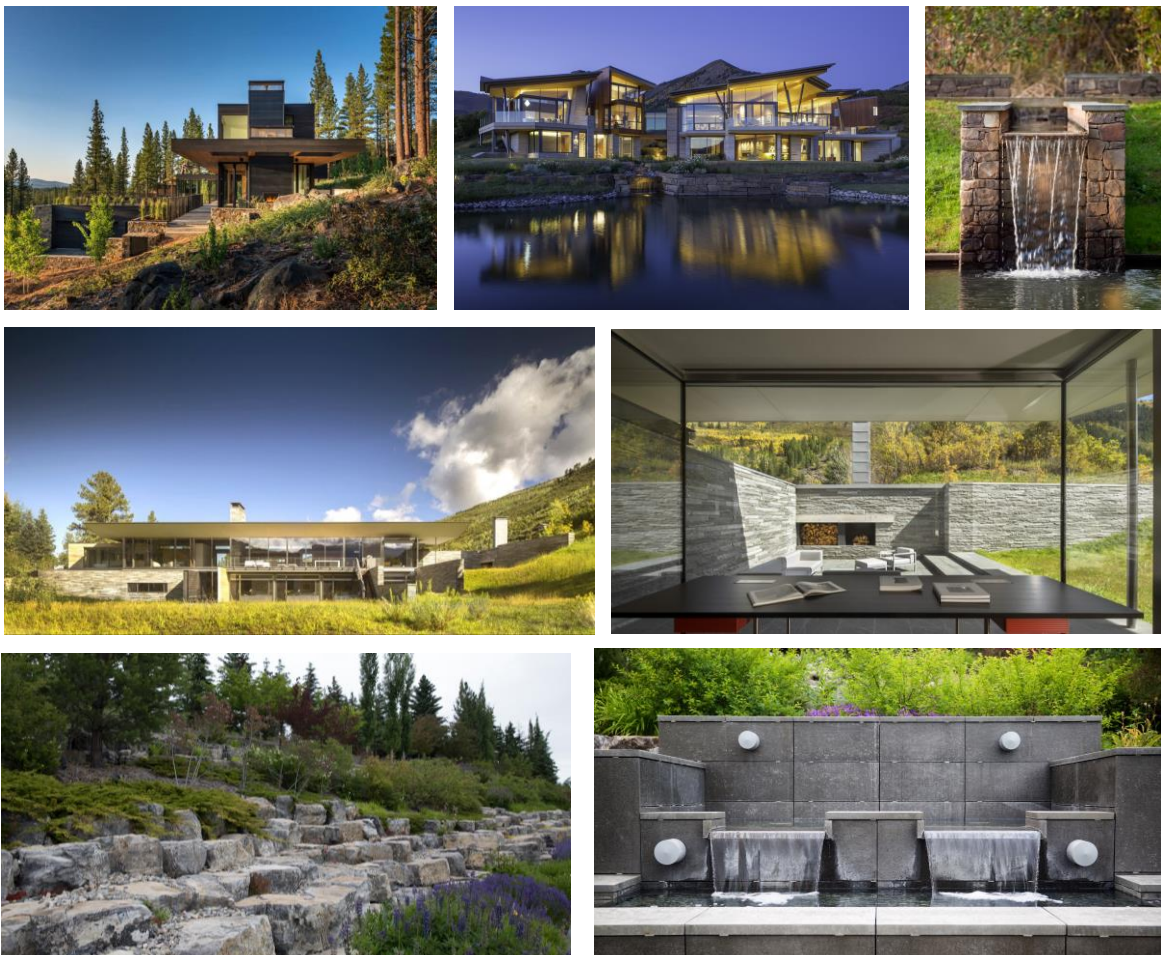
9.1. Vision

The vision of the Atkins Conceptual Scheme is to develop a small nine (9) lot private community for a select group of owners who wish to create upper end contemporary single family homes and amenities on a site with spectacular views to the Elbow River Valley and have close proximity to regional amenities and transportation infrastructure.

The community will be set up as a Bare Land Condominium under the Alberta Condominium Property Act. Ownership and management of the internal road and entry, the storm pond, green space, stormwater management systems, pathway systems, as well as the landscaping features and plantings will be the responsibility of the Bare Land Condominium Corporation. Eight (8) new lots will be created.

The existing 20,000 square foot estate home, landscaping and amenities will set the standard for quality and design for development of the new lots.

Significant soft and hard landscaping will be integrated with homes that will be designed specifically to be placed into each site to take advantage of slopes and protect panoramic views.



These images reflect the palette of siting design features to be considered for the development.

9.2. Proposed Site Plan

The Site Concept Design Plan (Figure 10) shows the proposed site layout and proposed landscaping. Lots 1 through 8 are new lots to be created by subdivision. Lot 9 (the existing home site) will be subdivided as a balance parcel around its existing amenities.

Figure 10 – Proposed Site Concept Design Plan



A private gated road owned and maintained by the Bare Land Condominium Corporation will provide access to the development from Range Road 25. The road will have a series of internal planted boulevards, and will be lined with trees on both sides.

Site perimeter landscaping will be provided by the developer and maintained by the Bare Land Condominium corporation and will include berming and tree/shrub planting to buffer the development from adjacent roads.

9.3. Municipal Reserve

Municipal Reserve (MR) has been dedicated for Lot 2, Block D, Plan 1415LK within NE-18-24-02-W5M, and is outstanding for Block 1, Plan 8711222 within SE-18-24-02-W5M.

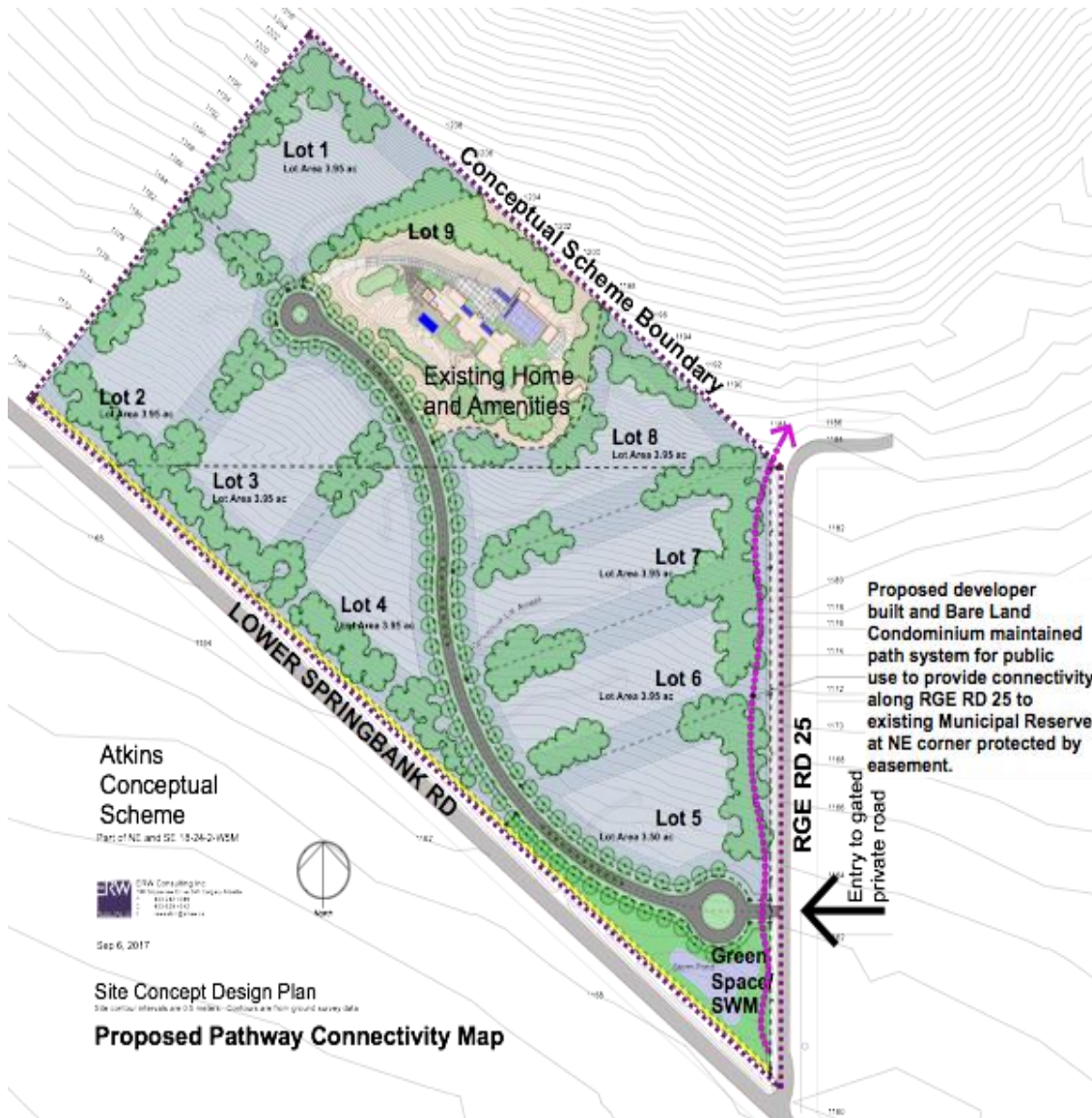
The Rocky View West Recreation Board recommended taking land for MR dedication along Range Road 25 to connect to the existing MR at the north east corner of the subject land for the purpose of providing access and connectivity within the region. Instead of dedicating land as MR along Range Road 25, the developer would provide the access and connectivity desired by the West Recreation Board via a pathway along Range Road 25.

The proposed pathway on land owned and maintained by the Bare Land Condominium Corporation, and will be for public use protected by easement (Figure 11).

Policy

- 9.3.1. The method of Municipal Reserve dedication on Block 1, Plan 8711222 within SE-18-24-02-W5M shall be determined at the future subdivision stage.

Figure 11 – Proposed Pathway Connectivity Map

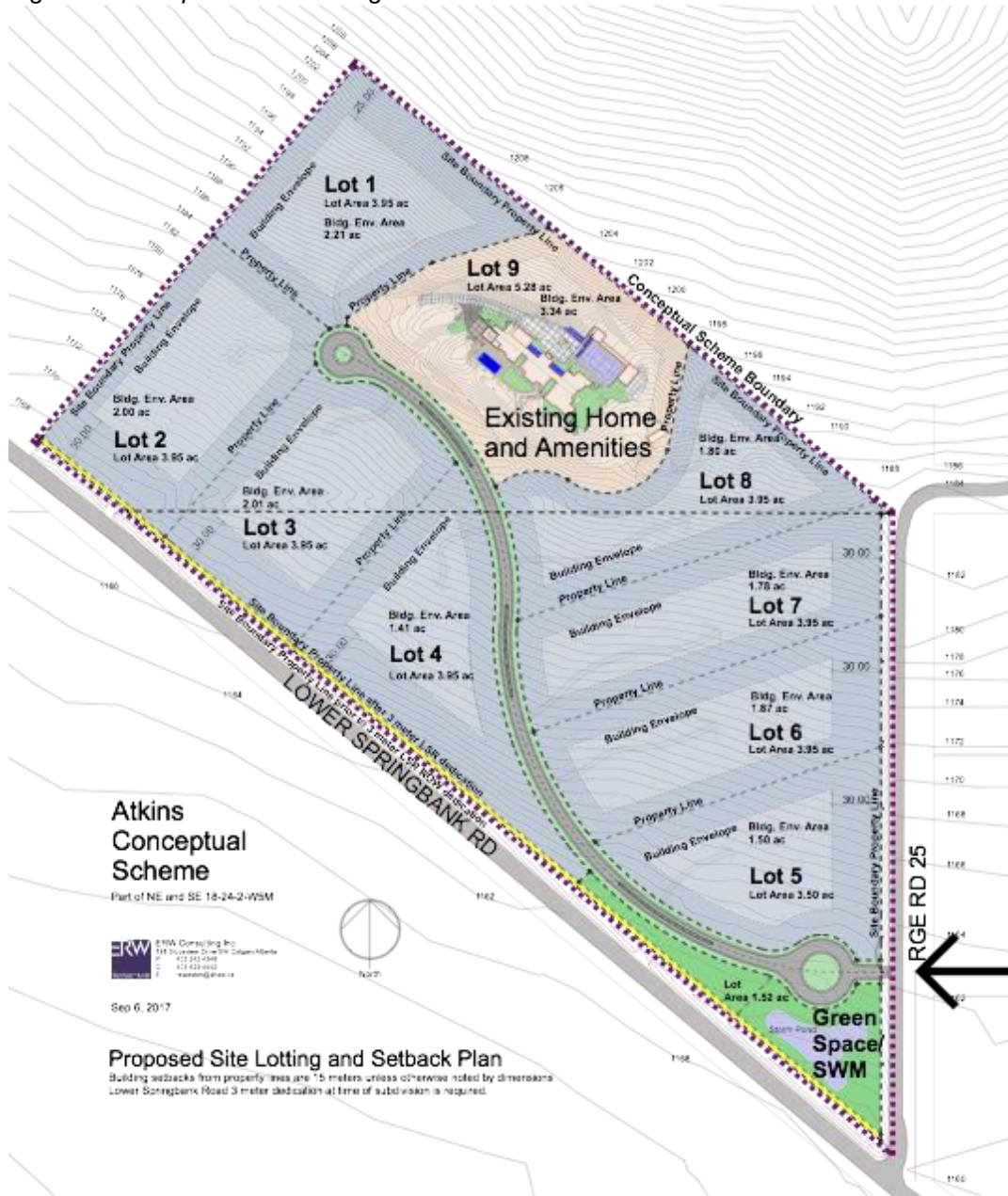


10. Proposed Subdivision Layout

10.1. Site Lotting and Setback Plan

Site Lotting and Setback Plan (Figure 12) shows the proposed lot sizes and building setback envelopes for the site. The detailed design may be subject to changes at future subdivision stage.

Figure 12 – Proposed Site Lotting and Setback Plan



Policy

- 10.1.1. Development areas and dimensions identified in this Conceptual Scheme shall be considered approximate only, and are subject to change at the subdivision stage without the need to amend this Conceptual Scheme.

Table 1 shows the approximate lot sizes and building envelope for each lot, as well as the area allocated for the internal road, green space, and Lower Springbank Road dedication. The internal side yard setback may be reduced at the discretion of the developer on a site specific basis to match the Land Use Bylaw requirements.

Table 1 – Proposed Lot Area, Building Envelope and Setbacks

Proposed Lots	Lot Area	Building Envelope	Proposed Setbacks (Metres)			
			Front	Rear	Side 1	Side 2
Lot 1	± 1.60 ha (± 3.95 ac)	± 0.89 ha (± 2.21 ac)	15	25	15	15
Lot 2	± 1.60 ha (± 3.95 ac)	0.81 ha (± 2.00 ac)	15	30	15	15
Lot 3	± 1.60 ha (± 3.95 ac)	0.81 ha (± 2.00 ac)	15	30	15	15
Lot 4	± 1.60 ha (± 3.95 ac)	0.57 ha (± 1.41 ac)	15	30	15	15
Lot 5	± 1.42 ha (± 3.50 ac)	0.61 ha (± 1.50 ac)	15	15	15	30
Lot 6	± 1.60 ha (± 3.95 ac)	0.76 ha (± 1.87 ac)	15	15	15	30
Lot 7	± 1.60 ha (± 3.95 ac)	0.72 ha (± 1.78 ac)	15	15	15	30
Lot 8	± 1.60 ha (± 3.95 ac)	0.73 ha (± 1.80 ac)	15	15	15	15
Lot 9	± 2.14 ha (± 5.28 ac)	1.35 ha (± 3.34 ac)	15	15	15	15
Green Space	± 0.62 ha (± 1.52 ac)	-	-	-	-	-
Internal Road	± 1.00 ha (± 2.48 ac)	-	-	-	-	-
Lower Springbank Road 3 meter Dedication	± 0.20 ha (± 0.50 ac)	-	-	-	-	-

10.2. Subdivision Lot Size Considerations

All but one of residential lots in the plan area are proposed to be 1.60 ha (3.95 acres) or greater, which meet the Land Use Bylaw minimum parcel size requirement for Residential Two District.

Lot 5 would be approximately 1.42 ha (± 3.50 acres) in size, which is slightly less than what is required in the Land Use Bylaw. The proposal for slightly smaller residential lot is made for the following reasons:

- Section 654(2) of the Municipal Government Act allows the subdivision authority to approve an application for subdivision even though the proposed subdivision does not comply with the Land Use Bylaw, so long as the following criteria are satisfied, in the opinion of the subdivision authority:

a) *The proposed subdivision would not:*

- (i) *Unduly interfere with the amenities of the neighbourhood, or*
- (ii) *Materially interfere with or affect the use, enjoyment, or value of the neighbouring parcels of land.*

b) *The proposed subdivision conforms with the use prescribed for that land in the Land Use Bylaw.*

- The master plan layout of the lots follows a logical progression along the internal road which creates a variety of lot configurations. The creation of a lot which is less than 1/2 acre smaller than the balance lots does not negatively impact the overall development and its amenities.
- Lot 5 is being created as part of and at the same time the master planned community is designed and sold thereby not creating a negative unknown condition for the purchasers of the lots.
- Landscaping and green space adjacent to Lot 5 make the smaller size unnoticeable.
- Configuration of Lot 5 provides a building envelope area within setbacks that meets bylaw requirements and provides adequate space for septic field construction.
- Lot 5 is a residential lot and thereby conforms to the residential use prescribed by the Land Use Bylaw.
- Architectural Design Guidelines will apply to every lot in the development. The size of Lot 5 will not negatively impact the overall quality of development through the use of the design principles and guidelines that will be implemented.
- A requirement of the Architectural Design Guidelines will be no continuous perimeter fencing along the internal lot property lines. This will have the impact of no visual determination of lot boundaries with the overall development being open. The smaller lot is not definable visually.
- Residential One (R-1) zoned lots, which are approximately 2 acres in size, exist near this lot on the east side of Range Road 25.

10.3. Lot Development Design Principles

Each site will be designed and developed with the following design principals:

- The design of the homes and amenities will be specific to each site and will be informed by topography, view lines, landscaping and sun angles in such a way to fit buildings, structures, courts into the natural features of the site with minimal site disturbance.
- Building design will be “rocky mountain contemporary” with emphasis on the use of natural materials including stone, wood, metal, concrete and large expanses of glass.
- Roof structures will range from flat to low pitch depending on site conditions.
- Hard and soft landscaping features and finishes are as important as building design and will be compatible with building design to create consistency of design with all amenities developed on the lot.
- Internal lot landscaping with berms and planting will be professionally designed and is intended to be a significant part of the development of each lot.

10.4. Architectural Design Guidelines

Architectural design guidelines will be prepared prior to subdivision, and will be consistent with the development vision and lot design principles in this Conceptual Scheme. The guidelines will require creative site specific design solutions, and will be used to maintain an overall high standard of excellence for home, amenity and landscaping construction over the lifetime of the development.

Architectural design guidelines will be implemented by a Design Committee initially provided by the developer with ongoing responsibility to be turned over to the Bare Land Condominium Corporation when all the lots have been developed.

Policy

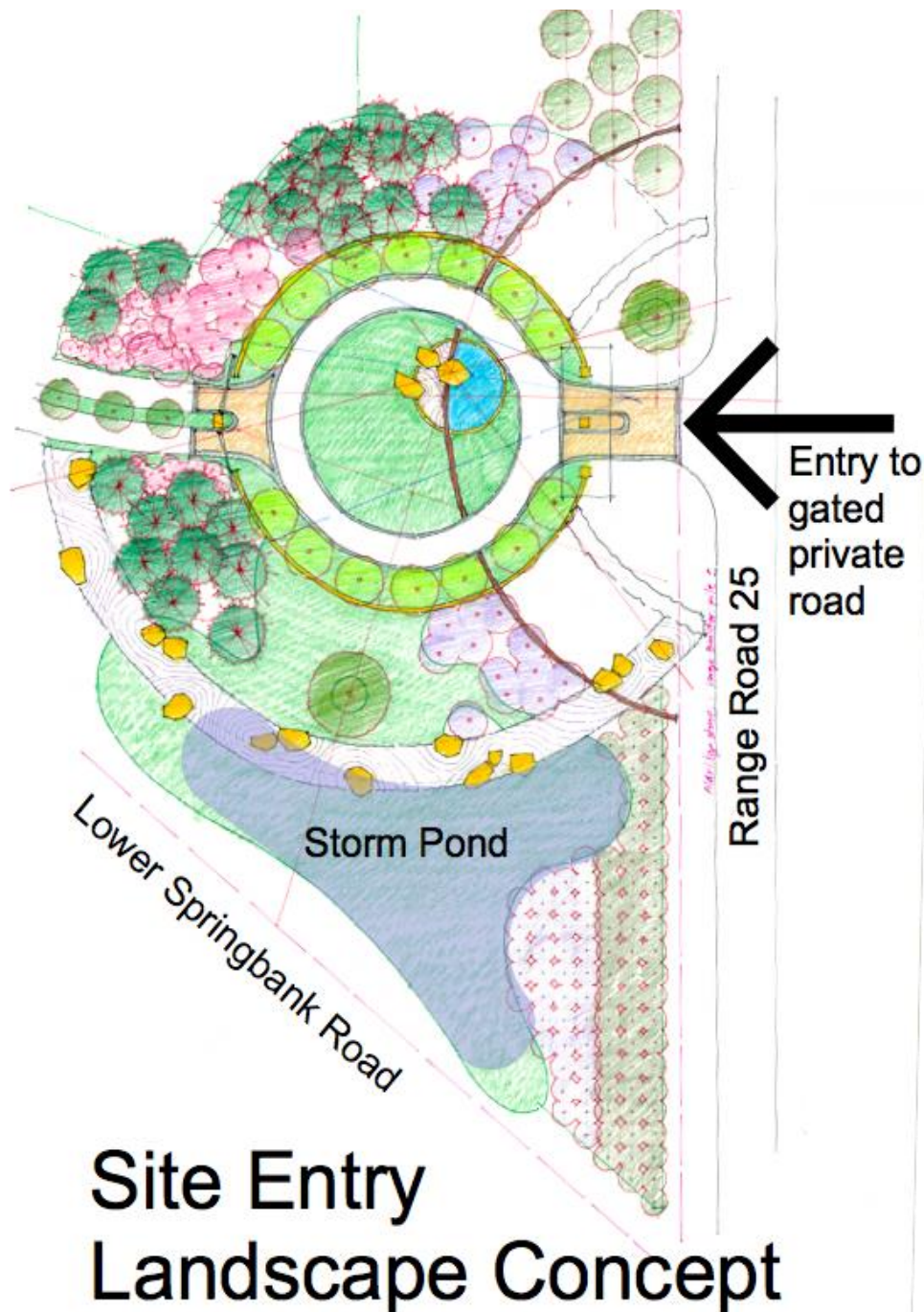
- 10.4.1. Architectural Design Guidelines shall be prepared at the subdivision application stage by the Developer, and be registered by as a restrictive covenant against individual titles at the time of plan of subdivision registration.
- 10.4.2. Implementation and enforcement of the Architectural Design Guidelines shall be the sole responsibility of the Developer and/or a Bare Land Condominium Corporation.
- 10.4.3. Architectural Design Guidelines should include requirements restricting perimeter fencing.
- 10.4.4. Architectural Design Guidelines should encourage and recommend the owners to adopt technologies that may include solar heating, grey water recycling and the use of environmentally sustainable building materials identified as acceptable in the guidelines.

11. Transportation

11.1. Site Entry Landscape Design Concept

Entry to the site will be from Range Road 25. The entry concept will be designed as an amenity to the site, and will provide a landscaped transition from Range Road 25 with roundabout, water features, stone and/or metal sculptural devices, and entry gates. The following preliminary sketch illustrates the proposed site entry landscape design concept (Figure 13):

Figure 13 – Proposed Site Entry Landscape Concept



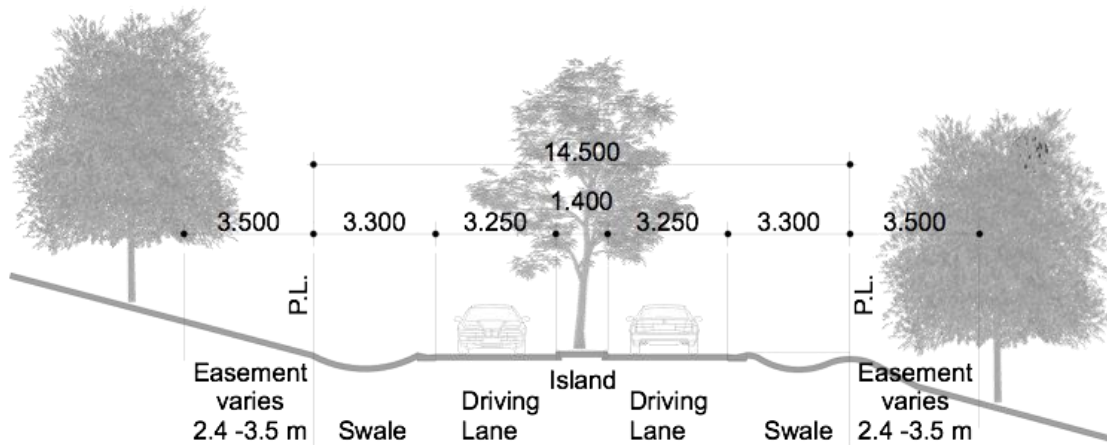
11.2. Internal Private Road Design

The internal road will be privately owned and maintained by the Bare Land Condominium Corporation, and forms part of the design vision for the community. It will contain a series of internal curbed planted islands and will also have a corridor of trees planted on both sides of the road. The entry feature for the road will contain a landscaped island along with entry/exit gates and entry structures.

Design and construction standards will generally follow those published in Rocky View County Road Guidelines 800.2 Residential Local (RL1) within a 14.5 meter right of way and 6.5 meter paved road surface.

Road and curb construction standards will be designed and certified by a qualified engineer and shall be acceptable to the County.

Figure 14 - Internal Road Profile shows the proposed cross section of the road right of way.



Policy

- 11.2.1. The Developer shall be responsible for any road upgrades and intersection improvements as required to serve the proposed subdivision and development.
- 11.2.2. Internal road and curb construction standards should generally follow the County Servicing Standards Section 800, be designed and certified by a qualified professional in accordance with the County Servicing Standards to the County's satisfaction.
- 11.2.3. The Developer and/or the Bare Land Condominium Corporation shall be responsible for the operation and maintenance of the private gated road and associated infrastructures including site entry feature and its landscaping, and private gate.

11.3. Transportation Impact Assessment

Bunt & Associates Engineering Ltd. conducted a transportation review at the request of Rocky View County to confirm the impact of the proposed development on the Lower Springbank Road / Range Road 25 intersection for both the opening day and 20 year horizon.

The review also included a requirement to comment on the safety and operational adequacy of the existing intersection geometry. A 24 hour turning movement count was conducted at the Lower Springbank Road / Range Road 25` intersection.

With respect to the safety of the intersection in its current configuration the Bunt report indicates that the limited scope and impact to traffic of the new nine lots development does not contribute to safety issues at the intersection.

Summary and conclusions of the report confirm the following:

Opening Day Conditions

- “The intersection will operate within acceptable capacity and queuing parameters in an unsignalized capacity at the Opening Day horizon.
- Smaller scale improvements to tight lines are necessary to improve safety at this intersection. Improvements include the removal of vegetation in the LSR right of way in the northeast corner of the intersection, relocation of the existing mailboxes approximately 8 to 10 metres further to the north along RR 25, and the addition of a “Concealed/Hidden Intersection” sign along LSR just east of the intersection for the westbound movement.”

Long Term Conditions

- “The intersection will continue to operate within acceptable capacity and queuing parameters in an unsignalized capacity at the Long Term horizon, assuming that LSR is widened to four lanes with requisite turn lanes by that time.
- At such time as RVC widens/twins LSR, the intersection should be re-aligned to improve the approach angle of Range Road 25.”

Policy

- 11.3.1. Smaller scale improvements to sight lines should be provided at opening day as per the recommendations in the Bunt Traffic Review dated June 9, 2017.
- 11.3.2. At future subdivision, the Developer shall dedicate a 3 meter wide portion of land for future road widening along the south boundary of the subject lands adjacent to Lower Springbank Road SW.

12. Servicing

12.1. Attempt To Connect To Regional Water Servicing

County Policy 415 identifies that the County is committed to taking reasonable steps to support long term, safe and reliable potable water supply for its residents.

The Central Springbank ASP Policy 2.8.2 states that connection to an existing water distribution system is required for residential purposes where access is feasible and/or cost effective.

Westridge Utilities has existing water lines near the Atkins Conceptual Scheme area.

Westridge Utilities provided the developer with Letters of Intent to provide one water hook-up to each of the two lots for the previous subdivision applications (two 4 acre subdivisions approved in 2016 and 2017).

However, Westridge Utilities confirmed that they are unwilling to provide additional hook-ups, when the developer decided to prepare a Conceptual Scheme to develop additional lots.

Numerous unsuccessful efforts have been made over a two year period to determine their reasons to not provide additional hook-ups. Email correspondence dated July 6, 2017 confirmed Westridge’s position and their intent to remove the original letters of intent for the previously approved subdivision.

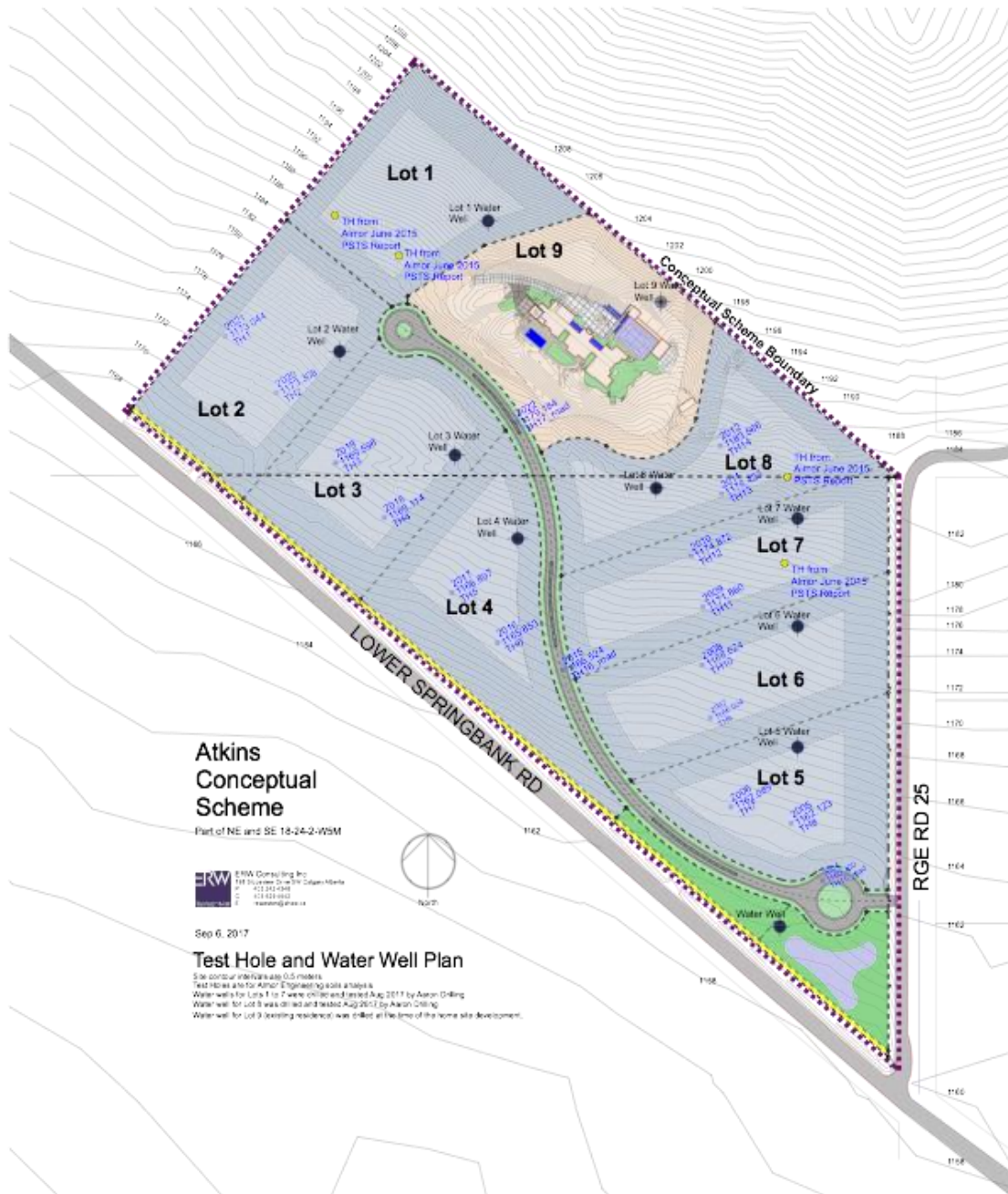
After the Developers best efforts to obtain Westridge water hook-ups for the lots, the Developer proceeded to drill domestic water wells to determine the level of available groundwater supply to meet Provincial and Rocky View standards.

12.2. Proposed Potable Water Wells

The Developer proposed the use of individual water wells to service the proposed subdivision. Proposed lots 1 to 8 have a well drilled and tested by Aaron Drilling as shown on the Test Hole and Water Well Plan (Figure 15). Lot 9 with the existing residence has a functioning well, which was drilled at the time the home was built.

New landowners for lots 1 to 8 will own and be responsible for the maintenance and operation of the well on their property.

Figure 15 – Test Hole and Water Well Plan



Groundwater Information Technologies Ltd. prepared a Groundwater Supply Evaluation report to determine the zone of influence of the wells, and analyze the capacity and viability of the wells to meet Rocky View County requirements.

Pump tests for each well were conducted by Aaron Drilling using a 10 gallon per minute pump. Wells 1 to 8 were each pumped for 24 hours and monitored for 24 hours following the pumping. The well located in the proposed green space at the south east corner of the subdivision will not be used for residential purposes. For this reason this well was pumped to meet Alberta Environment Requirements for 2 hours and monitored for 2 hours. Table 2 identifies the characteristics of each well.

Policy

- 12.2.1. Groundwater Supply Reports shall be prepared by a qualified professional and be submitted to Rocky View County and Alberta Environment at the time of subdivision.
- 12.2.2. The Groundwater Supply Report shall meet the applicable requirements for testing and analysis described in the County's Servicing Standards.
- 12.2.3. A Deferred Servicing Agreement or other such mechanism shall be registered on the title of each new lot and the remainder lot that is serviced by groundwater. The agreement will notify landowners of a commitment to decommission their existing groundwater system and connect to a water treatment and distribution system when deemed appropriate by the County.
- 12.2.4. Notwithstanding Policy 12.2.1 and 12.2.2, the Developer shall continue to explore the possibility of connecting to the existing water distribution system. The method of water servicing shall be confirmed at the subdivision stage.

Table 2 – Proposed Water Well Information

Well Lot	Drilling Well ID	Date Drilled	Depth in feet	Tested Pump Rate GPM	Chemical Test	Drilling Report Date	Groundwater Supply Evaluation
Lot 1	8596	Aug 2017	160	10	Sep 2017	Sep 2017	Oct 2017
Lot 2	8597	Aug 2017	95	10	Sep 2017	Sep 2017	Oct 2017
Lot 3	8598	Aug 2017	80	10	Sep 2017	Sep 2017	Oct 2017
Lot 4	8599	Aug 2017	95	10	Sep 2017	Sep 2017	Oct 2017
Lot 5	8600	Aug 2017	96	10	Sep 2017	Sep 2017	Oct 2017
Lot 6	8601	Aug 2017	90	10	Sep 2017	Sep 2017	Oct 2017
Lot 7	8602	Aug 2017	95	10	Sep 2017	Sep 2017	Oct 2017
Lot 8	8401	Aug 2016	95	20	Sep 2016	Aug 2016	Oct 2017
Green Space	8603	Aug 2016	115	10			
Lot 9 Existing	NA	NA	NA	NA			

12.3. Proposed Private Sewage Treatment Systems

The proposed new lots (lots 1-8) will be installing individual sewage treatment and septic fields to collect, treat, and dispose of sewage. Almor Testing Services Ltd has conducted three technical reports:

- Septic Field Soil Samples, dated June 3, 2015;
- Geotechnical Evaluation and Slope Assessment, dated January 11, 2016; and
- Shallow Subsoil and Groundwater Site Investigation, dated August 2017.

The 2015 and 2016 reports completed a Level II PSTS assessment and slope assessment for two 4 acre properties (previously approved subdivision). The reports indicated the land is suitable for residential development for the two subject parcels.

The Shallow Subsoil and Groundwater Site Investigation 2017 report completed 14 test holes and concluded that the soils conditions are suitable for septic fields in the test hole locations with a recommendation that field sizes of 92.64 sq. m (1,000 sq. ft.) for each lot. Packaged sewer treatment system meeting BNQ Standards will be required for each new residence.

It is recommended that a qualified professional conduct additional engineering assessments at the time of building construction.

Policy

- 12.3.1. A Level 4 Private Sewage Treatment System Assessment shall be submitted at the time of subdivision in accordance with the County Servicing Standards to the County's satisfaction.
- 12.3.2. Each new lot shall install a Packaged Sewer Treatment System meeting BNQ Standards in accordance with County Policy 449 and in accordance with the Almor Geotechnical reports.
- 12.3.3. Design and construction of sewage treatment and septic fields shall be acceptable to the County and Alberta Environment.

12.4. Solid Waste Management

A solid waste and recycling management plan would be developed for the community and implemented by the Developer and/or the Bare Land Condominium Corporation, at future subdivision stage.

13. Environmental Study

An Environmental Screening report was prepared by Westhoff Engineering Resources, Inc. in July 2017. The purpose of the report was to:

- Describe the existing environment (including soils, vegetation, landform, hydrology, and wildlife);
- Describe the proposed development;
- Predict the potential effects of the development on the environment;
- Recommend mitigation measures that would reduce or eliminate impacts of the development on the environment; and
- Describe how mitigation measures will be monitored over time to ensure effectiveness.

The Environmental Screening was prepared in place of a Biophysical Impact Assessment due to the lack of Valued Ecosystem Components within the Project Site. Findings of the Environmental Screening include:

- Terrain conditions are relatively low grade slopes on a south aspect.
- Three plant communities were identified on the site and include: non-native grassland, cultivated fields and manicured lawns. Seven species of plants listed as Noxious under the Weed Control Act were identified.
- There are no wetlands or other waterbodies within the site.
- Five species of wildlife were observed during field surveys.
- Due to cultivation and manicured lawn areas, the land provides little or no hiding or security cover for wildlife habitat use and movements.
- Predicted environmental impacts of development include loss of non-native vegetation and potential for damage and disturbance of wildlife.
- Mitigation measures are recommended to reduce or eliminate the predicted negative impacts of the development.

Policy

- 13.1.1. Mitigation measures in accordance with the recommendations of the Westhoff Engineering Environmental Screening Report should be implemented at the time of development.
- 13.1.2. An Erosion and Sediment Control Plan should be submitted in accordance with the County Servicing Standards, to the County's satisfaction.
- 13.1.3. A Weed Management Program should be developed and implemented for the site in accordance with the Weed Control Act.
- 13.1.4. Stripping and grading within treed areas of the site should be completed outside the timeframe of April 1 to August 31.

14. Storm Water Management

A storm water management plan (SWMP) prepared by Westhoff Engineering Resources Inc. dated July 2017 (revised in April 2018) was submitted in support of the Conceptual Scheme to provide information on the drainage strategy for the site.

The SWMP meets the criteria as outlined in the Springbank Master Drainage Plan prepared by MPE Engineering in 2016, and the report on Drainage Strategies for Springbank prepared by Westhoff in 2004.

The storm water management concept provides for an overland drainage system without an underground piping system. Perimeter lot-swales are placed at the boundary of each lot to prevent cross drainage from within the lots. Imperviousness of each lot will be limited to meet the unit area release rate and the maximum annual runoff volume, as per the Springbank Master Drainage Plan.

A trap low on each lot will act as peak flow control from each lot, and a French drain outlet system will limit the release rate from the trap low. Runoff from lots 1, 5, 6, 7, 8 and 9 will be conveyed to the storm pond at the southeast corner of the project site.

The stormwater pond at the southeast corner will serve two purposes, that of stormwater retention and treatment and to provide a water storage reservoir for fire suppression to meet County design and volume requirements for fire-fighting.

Runoff from offsite external areas to the north and west are intercepted by an upland by-pass swale. The terminus of the swale is the existing ditch along the north side of Lower Springbank Road, which is the same runoff conveyance system where the pre-development runoff would leave the project site.

Runoff leaves the project site following the current path via roadside ditches and overland drainage systems. Runoff enters the Elbow River via an existing culvert crossing (PC17-1). The MPE report identifies a capacity of 4L/s/ha for this culvert. The 1:100 year discharge rate from Springbank Sub-catchment E1 is set to 1.715 L/s/ha. An adequate outlet exists and the system capacity of the culvert is adequately sized.

The stormwater drainage system, stormwater pond and facilities will be owned and maintained by the Bare Land Condominium Corporation. All system components for conveyance, access and storage of runoff shall be protected by easements registered with Alberta Environment and Parks.

Low impact development technologies (LID's) and Best Management Practices (BMP's) will be introduced in the ultimate SWMP. Use of absorptive landscaping, bio-swales and trap lows will be incorporated to promote infiltration, evapotranspiration and improvement of water quality and to reduce water volumes for discharge into the Lower Springbank Road ditch.

Conclusions of the report include:

- The proposed stormwater management plan is able to meet the permissible Unit Area Release Rate (UARR) at 1.715 L/s/ha.
- The application of low imperviousness on each lot is essential to maintain the annual median runoff volume target below 40 mm and UARR of 1.715L/s/ha.
- Stormwater runoff retained in the stormwater pond may be used for fire suppression (minimum of 300 m³) and irrigation.

Policy

14.1.1. The Stormwater Management Plan shall be updated and finalized at future subdivision stage to the County's satisfaction. The update shall include but not limited to the method of enforcing the maximum of 35% imperviousness of each lot at the development stage.

14.1.2. At future subdivision stage the Developer shall:

- a) submit a site specific stormwater management plan with details on the infrastructure to be constructed to meet the requirements of the Springbank Master Drainage Plan;
- b) enter into a Development Agreement for any storm water infrastructure required as a result of the development and outlined in the final approved Storm Water Management Plan;
- c) register any required easements; and
- d) obtain AEP approval and licensing for the storm water management infrastructure including registration of the facilities and discharge.

15. Shallow Utilities

Atco Gas provides natural gas services, and recently upgraded their servicing infrastructure in the area. TransAlta provides electrical services. Telus provides phone and CTV.

Policy

15.1.1. Shallow utilities shall be provided by the appropriate utility company at the sole expense of the Developer.

15.1.2. The Developer shall register any necessary easements and right-of-ways related to utilities such as electrical power, gas, telephone, and internet to service the proposed subdivision.

16. Community Service Levels

Fire protection and ambulance services are provided by the County either directly or through agreements with other Municipalities. Protective services are provided to the area by the RCMP and the County's Protective Services.

17. Bare Land Condominium Corporation

The community will be set up as a Bare Land Condominium. A Condominium Corporation will be created under the Alberta Condominium Property Act, and the Corporation will be responsible for ownership, management, operation and maintenance of a range of infrastructures.

Policy

- 17.1.1. The Developer and/or the Condominium Corporation shall be responsible for the ownership, management, operation, and maintenance of the following within the plan area:
- a) the internal road and associated infrastructures;
 - b) Range Road 25 site entry feature, roundabout, entrance gate(s), landscaping, and associated infrastructures;
 - c) All stormwater management infrastructure, including but not limited to the stormwater pond, green space, and the associated conveyance system;
 - d) The pathway along Range Road 25, and the associated landscaping features and plantings.
- 17.1.2. The Developer and/or the Condominium Corporation shall be responsible for the implementation and enforcement the architectural design guidelines.

18. Public Consultation

Consultation with the public has occurred in the format of personal meetings and discussions with adjacent property owners at various times through the preparation of this document. The County also has public notices, which provided opportunity for adjacent landowners to review the conceptual scheme and provide input.

19. Implementation

Development of the land will proceed in a way to minimize the impact of construction activities in the following ways:

- Initial site stripping and grading will be limited to road and utility construction that will be part of the first phase for development of the site.
- Following internal road construction, perimeter landscaping including berms and road landscaping will proceed.
- Lots will remain as much as possible in their natural state until developed. Due to the nature of high expectations for home design and construction it is likely that the sales absorption of the lots will occur over a period of time so the intent is to keep undeveloped lots natural with existing vegetation.
- When lots are developed, owners will be required to prepare a site impact assessment with their construction documents to minimize impacts to the building site and the development. Each lot will prepare a stormwater plan design to manage onsite and overland drainage into the development system.

Policy

- 19.1.1. The County may issue a development permit for stripping and grading in accordance with the following reports as approved by the County and, where necessary, approval by Alberta Environment and Parks:
- a) Stormwater Management Plan;
 - b) Erosion and Sediment Control Plan;

- c) Weed Control Plan; and
- d) A Construction Management Plan

20. Appendices

List of Technical Engineering Reports submitted with the Conceptual Scheme Application:

- Septic Field Soil Samples, Prepared by Almor Testing Services, dated June 3, 2015
- Geotechnical Evaluation and Slope Assessment , prepared by Almor Testing Services, dated January 11, 2016
- Shallow Subsoil and Groundwater Site Investigation, prepared by Almor Testing Services, dated August, 2017
- Traffic Access Review at Lower Springbank Road and Range Road 25, prepared by Bunt & Associates Engineering Ltd., dated June 9, 2017
- Environmental Screening for the Atkins Subdivision, prepared by Westhoff Engineering Resources, Inc., dated September 8, 2017
- Atkins, LSR Development - Stormwater Management Plan, prepared by Westhoff Engineering Resources, Inc., dated July 2017 (Revised April 2018)
- Groundwater Supply Evaluation Reports for Lots 1 to and including Lot 8, prepared by Groundwater Information Technologies Ltd, dated September 2017