

Camden Heights



Conceptual Scheme

SE-26-26-04-W5M, being Plan 9412290, Block 21, Lot 7

municipally known as 264040 Range Road 41

Carswell Planning 

Submitted to Rocky View County, September 2018 (rev. May 2019)

BYLAW C-7942-2019

A Bylaw of Rocky View County known as the Camden Heights Conceptual Scheme

The Council of Rocky View County enacts as follows:

PART 1 – TITLE

This Bylaw shall be known as Bylaw C-7942-2019.

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-7942-2019, being the “Camden Heights Conceptual Scheme,” affecting Lot 7, Block 21, Plan 9412290, SE-26-26-4-W5M, be adopted as defined in Schedule ‘A’, which is attached to, and forms part of this Bylaw.

PART 4 – TRANSITIONAL

Bylaw C-7942-2019 comes into force when it receives third reading, and is signed by the Reeve/Deputy Reeve and CAO or Designate, as per the *Municipal Government Act*.

Division: 9

File: 06826028 - PL20180113

READ A FIRST TIME IN COUNCIL this

22nd day of October , 2019

PUBLIC HEARING WAS HELD IN COUNCIL this

10th day of December , 2019

READ A SECOND TIME IN COUNCIL this

10th day of December , 2019

READ A THIRD TIME IN COUNCIL this

10th day of December , 2019

[Signature]

Reeve

[Signature]

CAO or Designate

December 10, 2019

Date Bylaw Signed

SCHEDULE 'A'

FORMING PART OF BYLAW C-7942-2019

A Conceptual Scheme affecting Lot 7, Block 21, Plan 9412290, SE-26-26-4-W5M, herein referred to as the Camden Heights Conceptual Scheme.

ACKNOWLEDGEMENT PAGE

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Cover photo credit: www.hikingwithbarry.com, "snow-capped mountains from Glenbow Ranch Prov. Park"

Contents

Camden Heights Conceptual Scheme	1
1.0 INTRODUCTION.....	1
1.1 Proposal Overview	1
1.2 Purpose of this Plan	1
1.3 Development Rationale	3
1.4 Primary Development Considerations.....	3
1.5 Conceptual Scheme Objectives.....	3
2.0 POLICY CONTEXT.....	4
2.1 County Plan.....	4
2.2 Cochrane North Area Structure Plan	4
2.2.1 ASP Direction for CS.....	8
2.2.2 ASP Residential Infill Policies.....	8
2.2.3 ASP Other Considerations	9
3.0 GUIDING PRINCIPLES.....	9
4.0 <i>PLAN AREA DESCRIPTION</i>	9
4.1 Location.....	9
4.2 Legal Descriptions & Ownership.....	10
4.3 Local Development Context.....	11
4.4 Adjacent Lands.....	12
4.5 Existing Transportation Infrastructure	12
4.6 Existing Groundwater Supply.....	12
4.7 Existing Soils and Wastewater Servicing	13
4.8 Existing Land Use.....	14
4.9 Existing Site Conditions	15
4.10 Existing Protective and Emergency Services.....	16
5.0 DEVELOPMENT CONCEPT	17
5.1 Development Concept	17
5.2 Land Use Concept.....	19
5.3 Residential Area	19
5.4 Municipal Reserves	20
5.5 Environmental Considerations	20
5.6 Historic Resources Considerations	20
5.7 Transportation Considerations.....	21
5.8 Utility Services - Stormwater.....	23
5.9 Utility Services – Water.....	24
5.10 Utility Services – Sanitary Wastewater	25
5.11 Shallow Utilities	25
5.12 Solid Waste and Recycling	26
5.13 Protective and Emergency Services	26

6.0 IMPLEMENTATION FRAMEWORK.....	26
6.1 The Conceptual Scheme Implementation Process	26
6.2 Land Use Redesignation	26
6.3 Agriculture Boundary Design Guidelines.....	27
6.4 Architectural Design Considerations	27
7.0 PUBLIC ENGAGEMENT	28
7.1 Open House	28
7.2 Potential Surrounding Development	29

List of Figures

Figure 1: Context of Camden Heights Conceptual Scheme (CS)	2
Figure 2: Land Use Concept - Cochrane North ASP	5
Figure 3: Natural Areas and Conceptual Regional Pathways - Cochrane North ASP	6
Figure 4: Future Land Use Scenario - Cochrane North ASP	7
Figure 5: Location	10
Figure 6: Survey.....	10
Figure 7: Aerial Image of Adjacent Lands.....	12
Figure 8: Existing Subwatershed Boundary.....	13
Figure 9: Current Land Use Bylaw Districts	14
Figure 10: Photo west across southern slope of property	15
Figure 11: Photo south across property	15
Figure 12: Fire Halls in the Vicinity of the Site	16
Figure 13: Development Concept.....	17
Figure 14: Aerial for <i>Camden Heights</i>	18
Figure 15: Potential Country Residential Dwelling on an Acreage.....	19
Figure 16: Aerial of <i>Camden Heights</i> showing Twp. Rd. 264 and Range Rd. 41	22
Figure 17: Post - Development Drainage Conditions.....	23
Figure 18: Private Water Servicing on Each Lot.....	24
Figure 19: Photo of Open House On-Site.....	28
Figure 20: Storyboards of Open House.....	29
Figure 21: Shadow Plan.....	30

List of Tables

Table 1: Development Concept Calculations.....	17
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Camden Heights Conceptual Scheme

1.0 INTRODUCTION

1.1 Proposal Overview

The subject site is located approximately 1.5 km west of Cochrane Lake, it is a single country residential property with a single private access. The proposed subdivision will result in six 6 lots; there is one existing. The proposal is in keeping with the low density residential on acreages, typical of Rocky View County (RVC).

1.2 Purpose of this Plan

The Conceptual Scheme (CS), named **Camden Heights**, has been prepared pursuant to the Rocky View County (RVC) Plan (Bylaw C-7280-2013) and Cochrane North Area Structure Plan (ASP) Bylaw C-6388-2006, adopted July 3, 2007. It provides supporting rationale for redesignation and subdivision of ±10.37 ha (±25.62 ac) comprising approximately one-sixth of SE-26-26-04-W5M, being Plan 9412290, Block 21, Lot 7. The site is municipally known as 264049 Range Road 41. It is located north of Camden Lane (Township Road 264) and west of Range Road 41. For the purposed of the CS, the subject lands are referred to as the *Plan Area*.

The Conceptual Scheme is a non-statutory plan intended to describe the developer's rationale and motivation to establish a new subdivision with associated land uses. The policies of this Plan have been prepared to provide direction regarding subsequent land use redesignation, subdivision, and development permit applications required to implement the **Camden Heights** development.

"A non-statutory plan, subordinate to an area structure plan, and may be adopted by bylaw or resolution. To ensure the opportunity for public input, the County will continue its practice of adopting a conceptual scheme by bylaw with a public hearing. If an area structure plan is amended to include a conceptual scheme, the conceptual scheme becomes a statutory plan. Conceptual schemes provide detailed land use direction, subdivision design, and development guidance to Council, administration, and the public. Conceptual schemes are meant to be developed within the framework of an area structure plan." (RVC County Plan).

It is the intent to apply the policies and design of this plan to guide development as one phase. Land use and subdivision for the development will be applied for following adoption of this CS.

Figure 1: Context of Camden Heights Conceptual Scheme (CS)

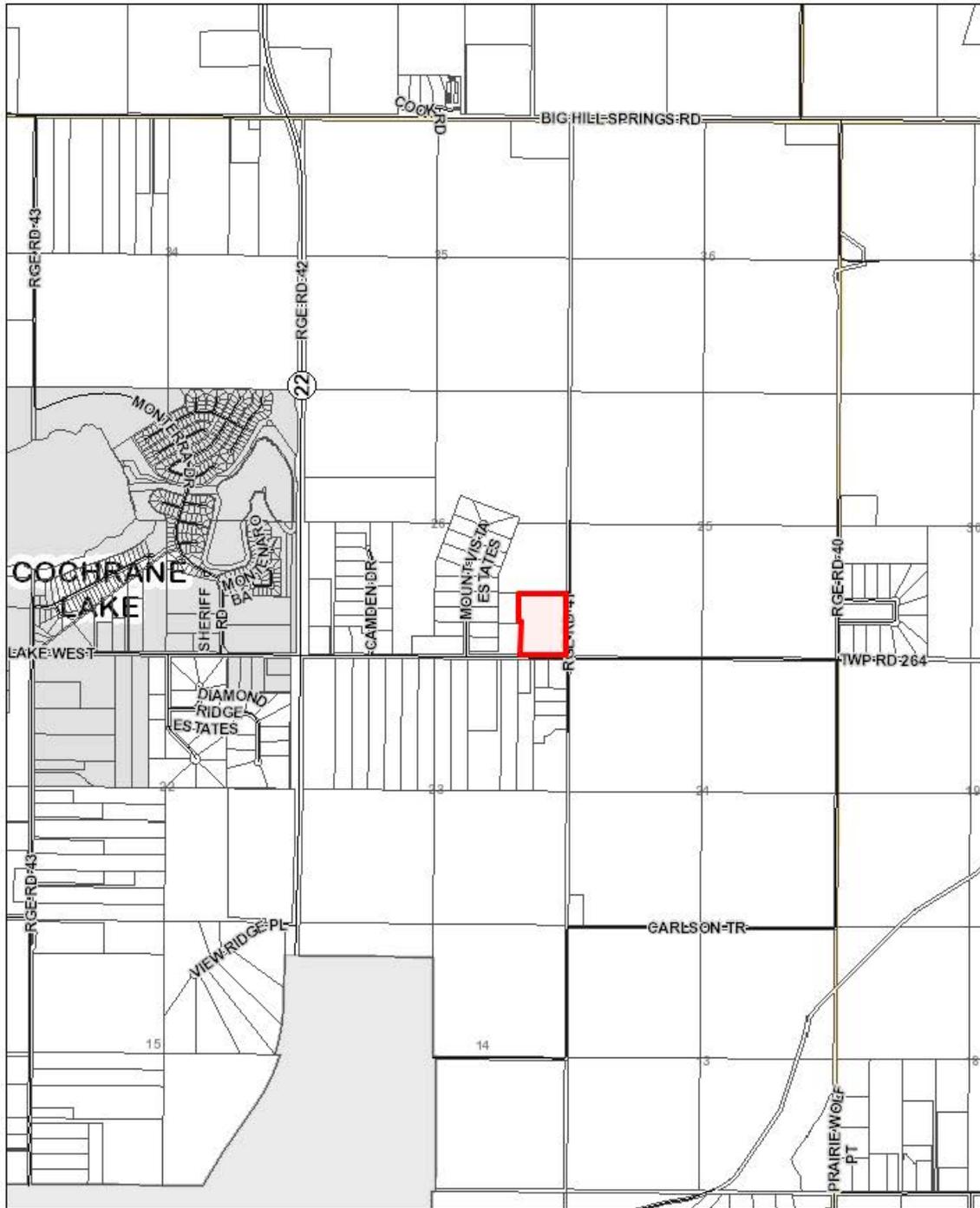


Figure 1: Context of Camden Heights Conceptual Scheme (CS), shows the context of Camden Heights CS where residential development in the quarter section has already occurred for most of SE 26. Lands to the east on the other side of Range Road 41 are agricultural in nature and outside of the ASP.

1.3 Development Rationale

The subject lands of this Conceptual Scheme are referred to as **Camden Heights** or the *Plan Area* in this document. The Cochrane North Area Structure Plan (ASP) is located adjacent to the northern limits of the Town of Cochrane and has Range Road 41 as its eastern boundary and where **Camden Heights** is located. The Hamlet of Cochrane Lake is separate from the ASP. As stated throughout the Cochrane North ASP, the next stage in the implementation of the ASP policies is through the preparation of Conceptual Schemes.

The Cochrane North area will continue to experience development pressures due to its proximity to the Town of Cochrane, City of Calgary. It also caters to those seeking to be close for excursions such as Kananaskis (K Country), Banff National Park and the Canadian Rockies.

1.4 Primary Development Considerations

Primary development considerations include:

- Compatibility of residential uses to adjacent land uses;
- Transportation access;
- Open space features and connectivity to pathways;
- Storm water management;
- Provision of potable water;
- Sanitary wastewater treatment;
- Shallow utilities of telecommunications, phone, cable, fiber optics (where available), electrical and natural gas services;
- Solid waste disposal and recycling;
- Protective and emergency services;
- Architectural design; and
- Capital and operational considerations.

1.5 Conceptual Scheme Objectives

The intent of the **Camden Heights** Conceptual Scheme is to:

- a) Provide a comprehensive summary of existing conditions within the *Plan Area* to identify development opportunities and significant constraints which require appropriate mitigation strategies;
- b) Present a subdivision and development concept that will comprise an appropriate subdivision pattern and density;
- c) Investigate and conclude whether any post development mitigation is necessary to address traffic, environmental, or other identified issues;
- d) Present a public open space to provide connections to adjacent lands; and
- e) Provide a utility servicing strategy that will include stormwater management, potable water and sewage collection and disposal.

2.0 POLICY CONTEXT

The Municipal Government Act, RVC's County Plan, Agriculture Master Plan, Parks and Open Space Plan, and the Cochrane North Area Structure Plan all provide guidance to the **Camden Heights** CS. These documents establish a policy framework to ensure that development respects rural character, promotes open space and recreational opportunities, respects the natural environment, implements cost-effective servicing.

2.1 County Plan

The County Plan sees country residential communities as a form of rural living. RVC has a number of country residential communities, some formally defined by area structure plan policy, as in the Cochrane North ASP. The goals and policies specific to Country Residential development support a safe, healthy, and attractive development that provides a strong sense of community. There is encouragement and support of country residential communities providing a quality-built environment while maintaining rural character. There is encouragement for alternative residential development forms that retain rural character and reduce the overall development footprint on the landscape. There is support for an orderly, efficient, cost effective development of fragmented quarter sections in agricultural areas.

Camden Heights aligns with the County's Plan by concentrating rural development in an ASP favouring the land use proposed. Cochrane North is enhanced and strengthened as integral part of RVC through the provision of smaller traditional Country Residential development within it.

2.2 Cochrane North Area Structure Plan

The Cochrane North ASP (Bylaw C-6388-2006) was approved in 2007 and is the timeframe or planning horizon for the Cochrane North ASP for approximately 15 to 20 years.

Figure 2: Land Use Concept – Cochrane North ASP

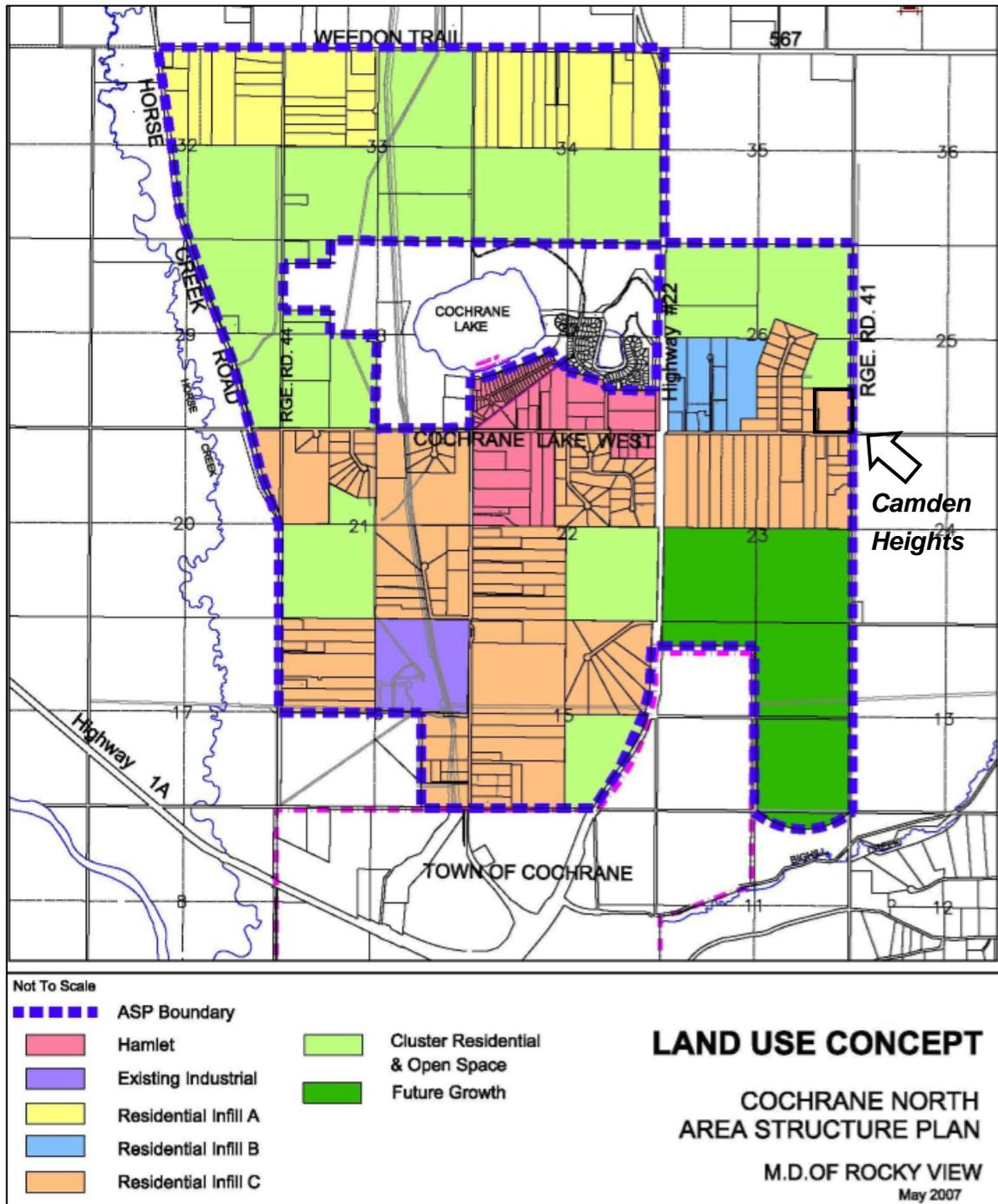


Figure 2: Land Use Concept – Cochrane North ASP, shows the land use concept for the ASP with the site being in Residential Infill C. Consideration is given to individual on-site wastewater servicing; and private, individual on-site water servicing for new lots. Small scale stormwater management systems are also suited to residential infill development. Cluster Residential and Open Space is designated to the north of the site. Residential Infill C is designated to the west and south of the site.

Figure 3: Natural Areas and Conceptual Regional Pathways – Cochrane North ASP

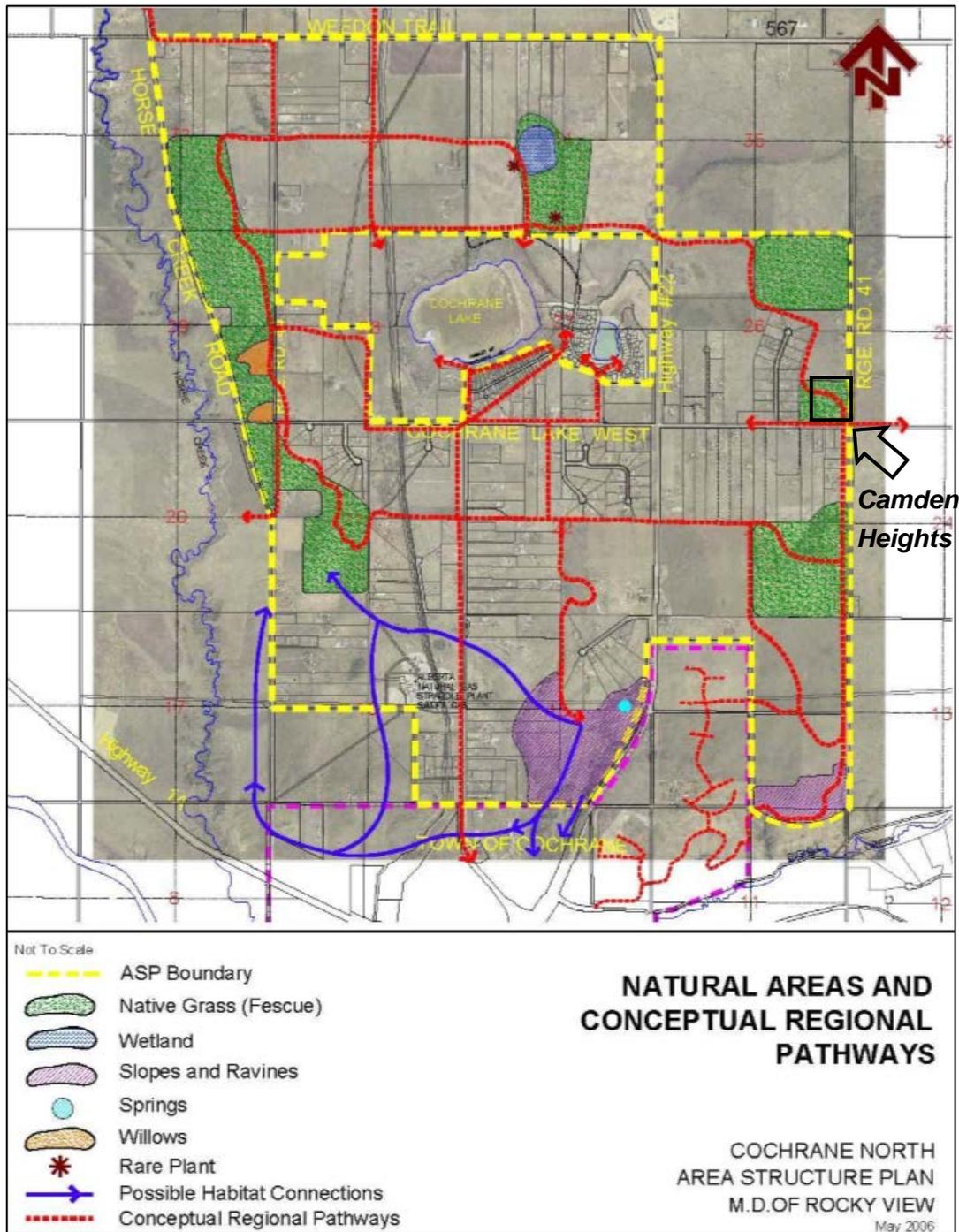


Figure 3: Natural Areas and Conceptual Regional Pathways – Cochrane North ASP, shows the site is native grass (Fescue). A conceptual regional pathway is expected to connect to Camden Lane (Township Road 264) and Range Road 41. Despite the map, RVC indicates there is no apparent need for Municipal Reserve acquisition to support public park, open space, or development of an active transportation network inclusive of pathway or trail development through the property.

Figure 4: Future Land Use Scenario – Cochrane North ASP

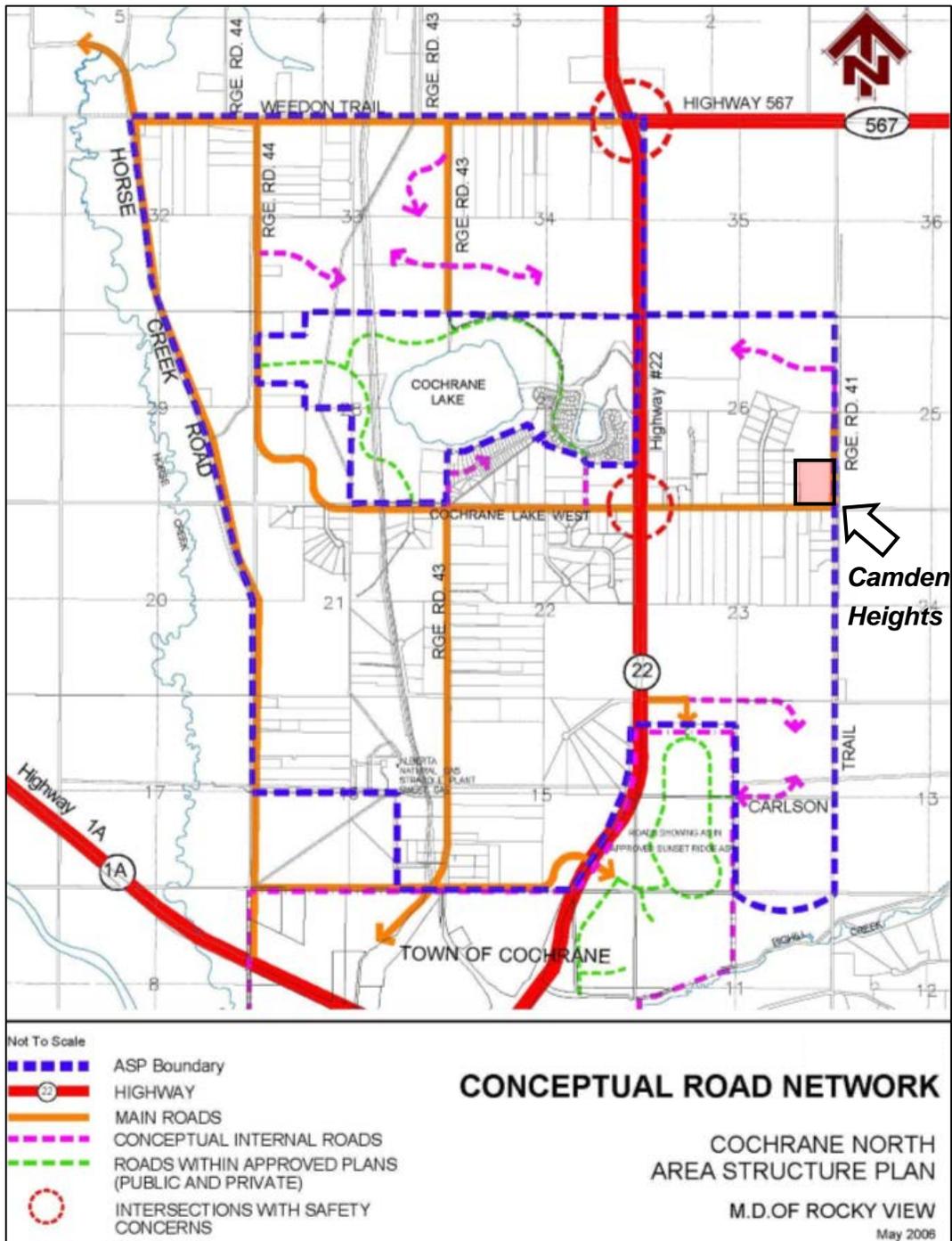


Figure 4: Future Land Use Scenario – Cochrane North ASP, shows the conceptual road network in the ASP based on the information available at the time. It promotes connectivity with adjacent road systems. A conceptual internal road is shown outside the *Plan Area* and would not require two entrances for this development for six lots.

2.2.1 ASP Direction for CS

The **Camden Heights** Conceptual Scheme (CS) and implementation through land use designations, subdivisions and development permits shall be consistent with the relevant policies of the Cochrane North ASP discussed as follows. CSs usually include surrounding lands to address potential impacts and long-term planning implications of the proposed development. Given that the areas to the west and south are developed, lands to the north shall be considered in the context of the CS. RVC has determined that a CS is required for the site.

Any constraints to development, may include but not be limited to: geotechnical, environmental, and hydrogeological conditions; and archaeological or historically significant features may be included in this CS. Stormwater management, traffic impact assessments (TIA), landscaping plan, and architectural guidelines may also be included.

As part of the CS, input from all directly and indirectly affected landowners within and adjacent to the CS area throughout the preparation of the CS, including a minimum of one (1) open house to gain feedback on the proposal. Public consultation involves input from affected community stakeholders, including community organizations (stewardship, maintenance and operation of open space and reserves), social service agencies, and the Local Recreation Board (open space and pathways).

2.2.2 ASP Residential Infill Policies

Cochrane North ASP policies guide residential infill development for the CS. The intent is to protect the existing rural acreage character while providing for comprehensively designed infill development of lower density residential uses. The minimum residential parcel size within the “Residential Infill C Policy Area” shall be four (4) acres and the CS will reflect that. Parcel size and density are part of this CS.

Within the Residential Infill Policy Areas, the Municipality may consider private, individual on-site water servicing solutions for new lots. The Municipality may require that deferred servicing agreements be secured in order to ensure that new lots do connect to regional, municipal or co-op water utility systems, when those systems become available. In addition, each Conceptual Scheme shall contain a staged site implementation plan for stormwater management. Solid waste servicing shall be accordance with the current Solid Waste Master Plan.

Pathway connections would normally be coordinated as per Figure 7 on Municipal Reserves (MR). MRs should be provided through dedication of land; cash-in-lieu of reserve should only be taken in Residential Infill Policy Areas where necessary to contribute to the improvement of public open space systems or recreation facilities. Discussions with RVC administration indicate that a pathway through the property is not envisioned in the CS.

For the purposes of illumination, exterior lighting should be directed and focus on relevant on-site features to protect against any off-site light pollution. In order to ensure aesthetically coordinated development, design guidelines and architectural controls should be implemented by the developers or landowners. The establishment of Homeowner Associations, Community Associations, or similar organizations is encouraged in order to assume responsibility for common amenities and to enforce agreements such as registered architectural guidelines.

2.2.3 ASP Other Considerations

Transportation considerations may include road widening (i.e., land dedication) that could be accommodated at the subdivision stage and accounted for in the proposed lot layout of the CS. A Traffic Impact Study will be provided as part of the CS. RVC's offsite levies shall apply at time of subdivision. Servicing and utilities shall be considered as part of this CS and whether opportunities could exist for connections. Community, protective and emergency services are to be addressed in the CS. Developers are encouraged to incorporate the principles of Crime Prevention Through Environmental Design (CPTED) in the development. Phasing is not anticipated in this small CS. The CS and implementation through land use designations, subdivisions and development permits shall be consistent with the policies contained in the Cochrane North ASP.

3.0 GUIDING PRINCIPLES

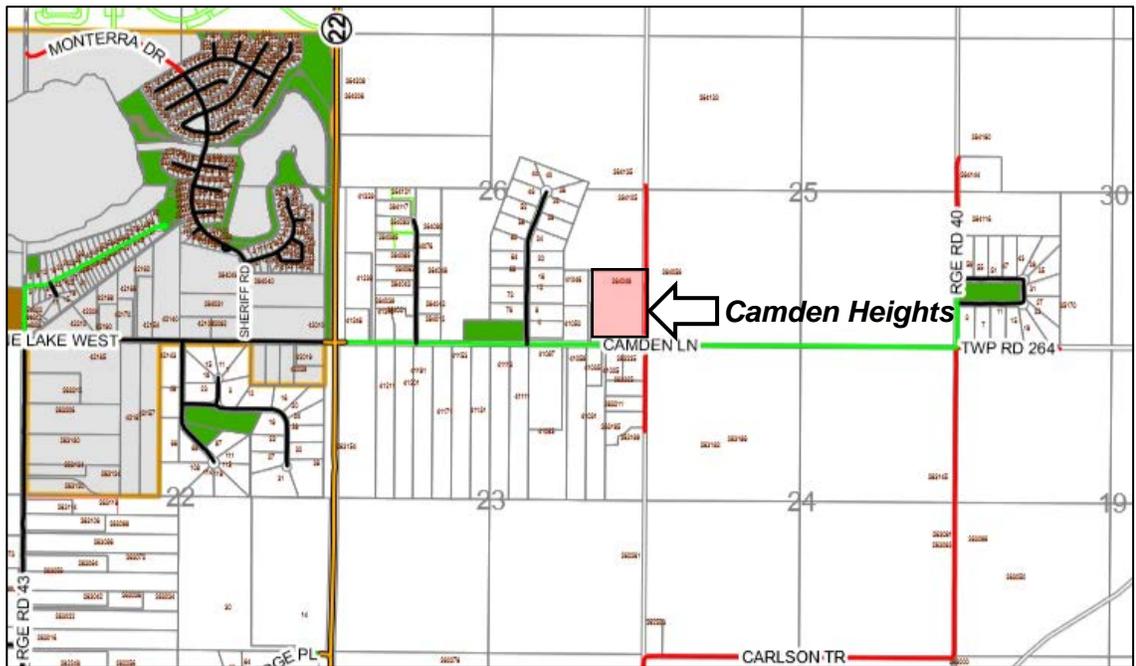
Guiding principles for **Camden Heights** include a safe, healthy, and attractive development that provides a strong sense of community. Being adjacent to other country residential neighbourhoods, this proposal is for orderly, efficient, cost effective development that is compatible with the residential land use to the west and buffered to the agricultural land use to the east. It is an infill development within a fragmented quarter section and seeks to optimize the land use within the Cochrane North ASP.

4.0 PLAN AREA DESCRIPTION

4.1 Location

Camden Heights is on a ±7.98 ha (±19.73 ac) parcel comprising one-eighth of SE-13-26-03-W5M, being Block 7, Plan 1501 LK. The site is municipally known as 262053 Cochrane North Road, located approximately 200 m north of the intersection with Township Road 262. Geographically, residence within the *Plan Area* is centred on 51.22° N, 114.28° W at elevation 1268 m (4160 ft.) above sea level (asl). It provides contiguous development to neighbouring properties as shown in Figure 5: Location.

Figure 5: Location

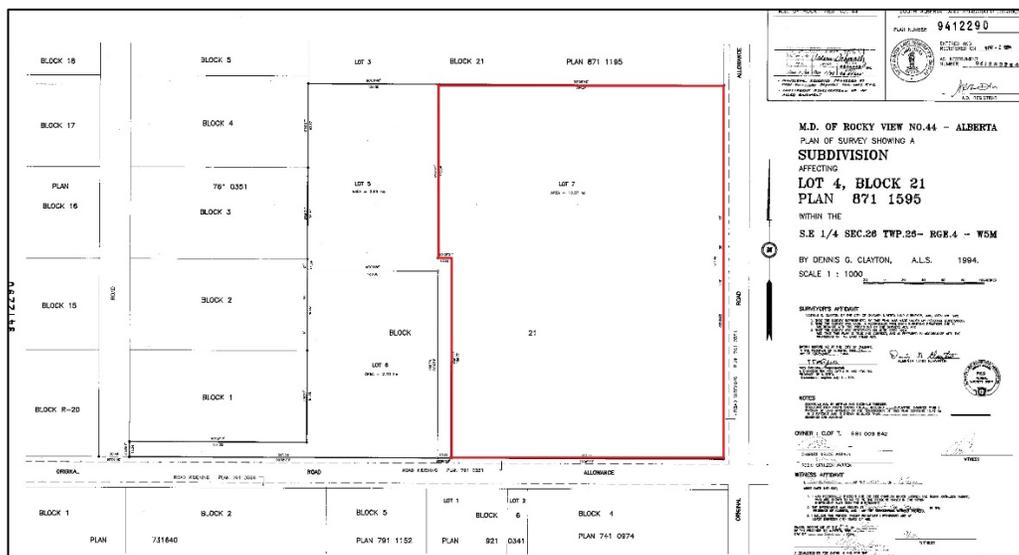


(Source: RVC Cochrane Map, 2018)

4.2 Legal Descriptions & Ownership

As shown below in Figure 6: Survey, ownership of Plan 9412290, Block 21, Lot 7 of SE-26-26-04-W5M is under separate title and under multiple ownership to the developers Karamjit Gill and Harjit Gill with an undivided 67% interest; and Balvinder K Sohal with an undivided 33% interest.

Figure 6: Survey



4.3 Local Development Context

Currently, community and recreational facilities in Cochrane North are served mostly by Cochrane and include:

- Spray Lake Sawmills Family Sports Centre (curling rink, gymnasium and gymnastic facilities, three indoor ice surfaces, and indoor sports field and running track, several meeting rooms, concession, weight room and a large fitness centre),
- Cochrane Curling Club (four ice sheets, private members lounge and onsite restaurant),
- Cochrane RancheHouse (hall, meeting rooms, dining room, and theatre for conferences and events),
- Cochrane Agricultural Grounds, and
- Dartique Hall (community events and rentals for special occasions).

The nearest disposal site is Springhill Chuck Wagon (located at SpringHill RV Park near the intersection of Highways 22 and 567). Airdrie Transfer Site is operated by a neighbouring municipality and can be used by Rocky View residents for garbage.

Police services are provided by the R.C.M.P. enforcing the law through a detachment located at 359 1 St E, Cochrane, or RVC Peace Officers.

Among the fire stations serving the area are:

- Bearspaw Fire Station 103 on Highway 1A, specifically 31211 Lochend Place, approximately 20 km by road southeast from the *Plan Area*
- Springbank Fire Station 102 at 128 MacLaurin Drive, approximately 25 km by road southeast from the *Plan Area*

Among the acute care hospitals with emergency services serving the area are:

- Alberta Children's Hospital, Calgary
- Foothills Medical Centre, Calgary, and
- Cochrane Community Health Centre, 60 Grande Blvd., Cochrane, approximately 9.5 km by road or ten minutes driving time.

The nearest schools are also in Cochrane.

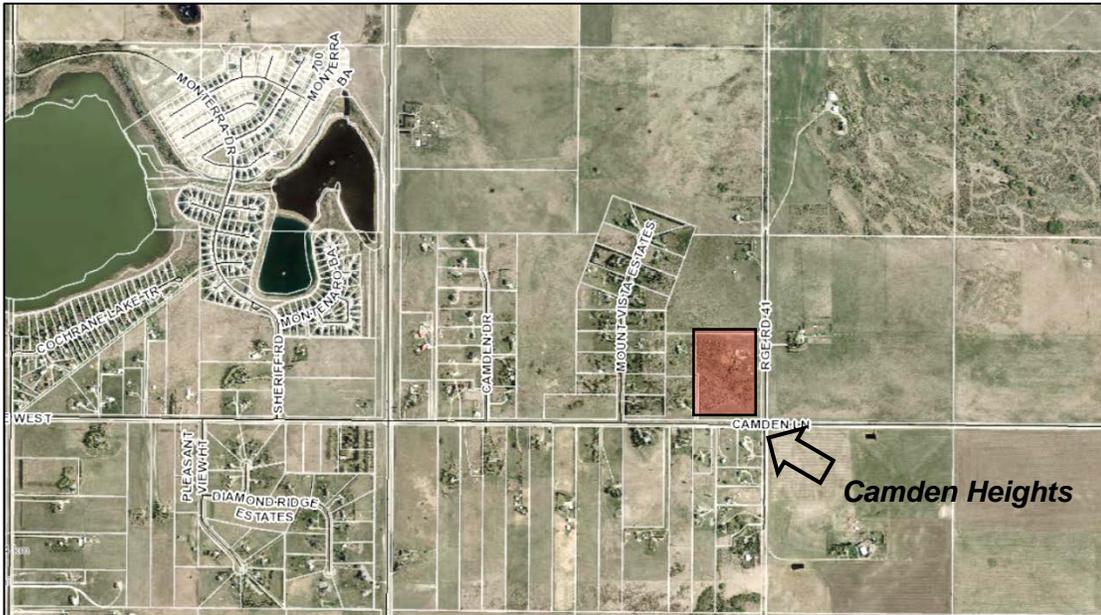
For parks and outdoor recreation, the following short trips are suggested:

- Cochrane North Loop (natural municipal reserve area with an interpretive pathway),
- Big Hill Springs Provincial Park to the east,
- Ghost Reservoir Provincial Recreation Area,
- Glenbow Ranch Provincial Park along the north shore of the Bow River, and
- Town of Cochrane (24 playgrounds, 11 soccer pitches, 8 ball diamonds, 2 tennis courts, 2 outdoor rinks, swimming pool, skateboard park, and 30 km of pathways).

4.4 Adjacent Lands

The area is located north of the Town of Cochrane on a plateau. The valleys of the Bow river, Big Hill Springs Creek and Horse Creek bound the area to the south, east and west. Locally, the topography is flat to undulating. **Camden Heights** is immediately west of Range Road 41 and north of Camden Lane (Township Road 264). The Camden Heights *Plan Area* is located in an area characterized as country residential infill. The lands are in proximity to country residential development to the west and south, with agricultural lands to the east as shown in Figure 7: Aerial Image of Adjacent Lands.

Figure 7: Aerial Image of Adjacent Lands



(Source: Urban Systems, 2018, Cochrane North Conceptual Scheme)

4.5 Existing Transportation Infrastructure

The transportation system serving the area is primarily north-south Highway 22 from the Town of Cochrane to east-west Highway 567 (Weedon Trail/Big Hill Springs Road). For **Camden Heights**, east-west Township Road 264 (Cochrane Lake West/Camden Lane/Rock Butte Road) and north-south Range Road 41 serve the site. Twp. Rd. 264 is a two lane, paved roadway from the intersection with Highway 22 to the intersection with Range Rd. 41 where it becomes a gravelled surface roadway. Range Rd. 41 is gravel surfaced north of the intersection with Twp. Rd. 264, approximately 2 lanes in width, and ends in a cul-de-sac north of the subject property. Roads are under the control and jurisdiction of the County.

4.6 Existing Groundwater Supply

The site is on private water services. The relatively high elevation compared to the neighbouring valleys typically lead to deep static water levels for well in the area. Wells obtain their water from sandstone and shale aquifers of the Paskapoo Formation from depths of 30 to 75 m (Groundwater

Information Technologies Ltd. (GRIT), 2017, *Phase 1 Groundwater Supply Evaluation: Proposed 5 lot subdivision in SE026-26-4-W5M, County of Rocky View*). Pumping test records from several nearby wells calculated an average 20-year safe yield of 33 m²/day or 12,000 m³/year. There are over 112 well records within 1.6 km of the site with most test rates between 15 and 80 liters per minute, indicating productive aquifers in the area.

Figure 8: Existing Subwatershed Boundary shows the *Plan Area* in a separate watershed than Cochrane Lake with generalized drainage to the southeast towards agricultural lands.

Figure 8: Existing Subwatershed Boundary



(Source: Urban Systems, 2018, Cochrane North Conceptual Scheme -modified to show *Plan Area* drainage)

4.7 Existing Soils and Wastewater Servicing

The site is underlain by approximately 10 m of clay, silt and gravel which are glacial till deposits called Spy Hill Drift. The tills are supraglacial and ice margin fine grained deposits. Underlying this are unconsolidated sedimentary deposits of shales and siltstones interbedded with sandstones with an average thickness of 300 m and a maximum of 899 m. Limited bentonite and coal seams are also present. Soils for the *Plan Area* are within an area mapped as Dunvargan 1 (DVG1). The site consists of typical prairie uplands and patches of remnant aspen woodland patches on southern slopes.

In this area of Cochrane North, wastewater servicing is through a private sewage treatment system. Percolation rates for on-site sewage disposal systems are favourable in the silt-gravel soils of the area.

4.8 Existing Land Use

Camden Heights Plan Area is currently designated Ranch and Farm (RF) in accordance with RVC Land Use Bylaw C-4841-97, as shown in Figure 9: Current Land Use Bylaw Districts. The *Plan Area* is bordered by Residential Two District (R-2) to the west and south. Being at the edge of the Cochrane North ASP, RF is to the east and north.

Figure 9: Current Land Use Bylaw Districts



Legend

AGRICULTURAL HOLDING DISTRICT	AH
RANCH AND FARM DISTRICT	RF
FARMSTEAD DISTRICT	F
RESIDENTIAL ONE DISTRICT	R-1
RESIDENTIAL TWO DISTRICT	R-2
RESIDENTIAL THREE DISTRICTS	R-3
HAMLET RESIDENTIAL SINGLE FAMILY DISTRICT	HR-1
DIRECT CONTROL DISTRICT	DC

(Source: RVC Land Use Map No. 67-SE, 2014, as amended)

As the following photos show, the land has been used for residential use and some minor grazing purposes. Crop production and further agricultural capability is impaired by existing vegetation, poor soil, terrain characteristics and the proximity of residential development.

Figure 10: Photo west across southern slope of property



Figure 11: Photo south across property



4.9 Existing Site Conditions

Existing site conditions of geology, wetlands, soils, vegetation, and overland drainage are described in this section. The Camden Heights *Plan Area* consists of rolling and hilly terrain with the subject lands on the southwest slope of a prominent hill. Topography is a hummocky, low relief landform with a general slope approaching 6%.

Soils for the Plan Area are within an area mapped as Dunvargan 1 (DVG1). This area is generally mapped on undulating to gently sloping or rolling morainal topography. The land surface is smooth, slopes are uniform, and there are generally few wet depressions. The soil unit is comprised of approximately: 70% well drained, 20% slightly leached and 10% imperfectly to poorly drained soils. The parent material underneath is a glacial till with limited textural range. The underlying bedrock is comprised of sandstone, siltstone, and mudstone.

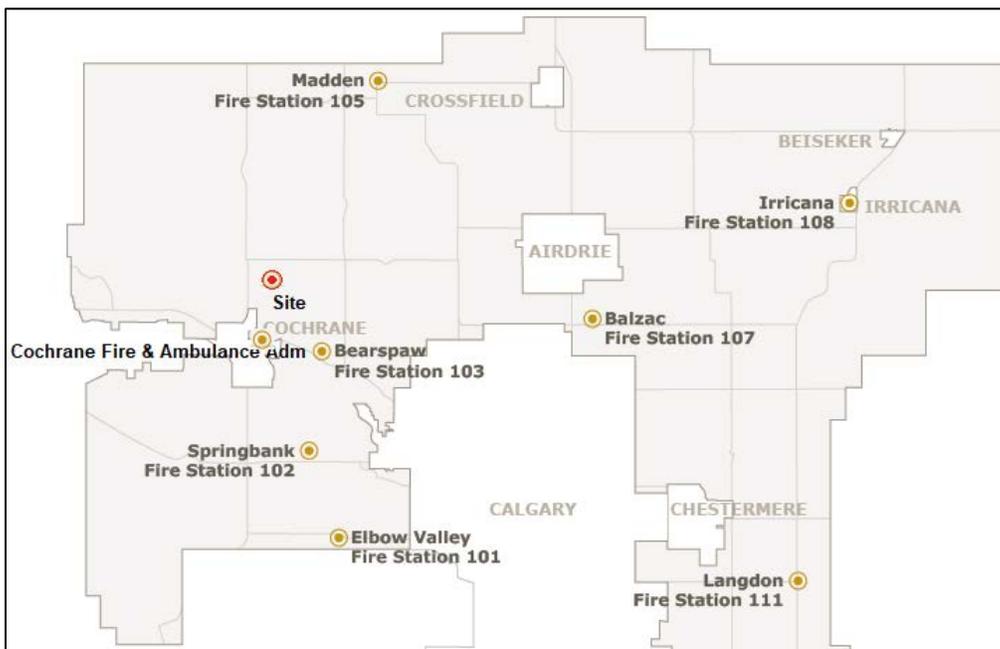
Vegetation supported on the soils is largely under a typical parkland type of vegetation and typical prairie upland. Open areas are typically fescue and other grasses. Periodic forested areas generally consist of: aspen, poplar, willow, white birch and spruce.

This area is located in the Foothills Parkland Subregion of the Parkland Natural Region. The closest watercourse is Bighill Creek which is approximately 2.5 km SE of the subject lands. The confluence of Bighill Creek and the Bow River is approximately 7 km to the south.

4.10 Existing Protective and Emergency Services

A number of fire halls are found in the area.

Figure 12: Fire Halls in the Vicinity of the Site



5.0 DEVELOPMENT CONCEPT

5.1 Development Concept

The following figure and calculations form the development concept for **Camden Heights**.

Figure 13: Development Concept



Table 1: Development Concept Calculations

Land Use	Hectares	Acres	Percentage
Road	0.55	1.36	5.3%
Lot 1 Residential	1.60	3.95	15.4%
Lot 2 Residential	1.60	3.95	15.4%
Lot 3 Residential	1.82	4.50	17.6%
Lot 4 Residential	1.60	3.95	15.4%
Lot 5 Residential	1.60	3.95	15.4%
Lot 6 Residential	1.60	3.95	15.4%
Total	10.37	25.62	100.0%

5.2 Land Use Concept

Cochrane North is a highly sought-after community that offers a rural lifestyle with natural areas within driving distance from urban areas utilizing access to major highways. The area will continue to experience development pressures due to its proximity to the Town of Cochrane and the City of Calgary. It also caters to those seeking to be close for excursions such as Kananaskis (K Country), Banff National Park and the Canadian Rockies. The properties offer space for storing recreational-related RVs, trailers and those sorts of things in garage spaces of their country residence. **Camden Heights** has its identity as a country residential neighbourhood in the Cochrane North ASP with proximity to both Cochrane and Calgary.

5.3 Residential Area

As guided by the Cochrane North ASP, the minimum residential parcel size within the “Residential Infill C Policy Area” shall be four acres and the CS reflects that. Figure 15: Potential Country Residential Dwelling on an Acreage, shows how landscaping, driveway configuration and architecture can influence the look of a lot in the *Plan Area*.

Figure 15: Potential Country Residential Dwelling on an Acreage



Policy

- 5.3.1** Single family dwelling units shall be the dominant land use for residential development.
- 5.3.2** The lot sizes of the residential development shall be approximately 1.60 ha (3.95 ac).
- 5.3.3** Private lighting, including security and parking area lighting, shall be designed according to the County's “dark sky” Land Use Bylaw requirements for residential lighting in outdoor areas to be directed downward.

5.3.4 The lots which are adjacent to Range Road 41 should incorporate mitigation measures such as fencing, landscaping or other buffering to ensure compatibility with adjacent agricultural land uses to the east.

5.3.5 Home-based businesses may be pursued in accordance with the provision of the Land Use bylaw.

5.4 Municipal Reserves

The MGA notes that any combination of land or money for a municipal reserve may be provided. The aggregate amount of land or cash-in-lieu that may be required is 10% of the developable land that is the subject of a proposed subdivision. Discussions with RVC administration imply that a regional trail is not envisioned through the property.

Policy

5.4.1 Municipal Reserve will be provided as cash-in-lieu to contribute to the improvement of public open space systems or recreation facilities in the County. The amount will be based on a market value appraisal, determined at the time of subdivision, in accordance with the MGA and the County Plan.

5.5 Environmental Considerations

Pinchin Ltd. prepared a Phase 1 Environmental Site Assessment, dated July, 2018 for the site. The Phase I ESA was completed in general accordance with the Canadian Standards Association (CSA) document entitled "Phase I Environmental Site Assessment, CSA Standard Z768-01". Based on the results, nothing was identified that is likely to result in potential subsurface impacts at the site and no subsurface investigation work (Phase II ESA) is suggested.

Policy

5.5.1 Any environmental concerns found in the Plan Area shall be addressed to the satisfaction of Rocky View County.

5.6 Historic Resources Considerations

Pinchin Ltd. submitted an historic resource statement of justification under the Alberta *Historical Resource Act*. The lands affected by the proposed development have an Historic Resource Value (HRV) of 5 for archaeology (Listing of Historic Resources April 2018), due to proximity to the Bighill Creek valley to the east/south and Cochrane Lake to the west, where previously recorded historic resources have been found along the valley uplands and flood plain of the creek and elevated terrain overlooking the waterbody.

At the moment, most of the land is improved pasture with a residence. During a site visit on July 10, 2018, many areas of broad elevated terrain were observed in the southern and western sections of the footprint. Ground disturbance is anticipated to include stripping and grading for construction of the proposed road entrance, shallow trenching for installation of utilities to individual residential buildings, as well as excavation for foundations of future houses within the

lots. Additional grading for driveways from the main access road to future homes is also anticipated.

Given the project location appears to be pasture on elevated terrain having views to the south, east and west, including views of the Rocky Mountains, as well as being within the general vicinity of the Bighill Creek valley, there may be potential for a buried prehistoric site.

Policy

5.6.1 Any historic resources found in the Plan Area shall be addressed to the satisfaction of the Historic Resources Management Branch, Alberta Culture and Tourism.

5.7 Transportation Considerations

A *Transportation Impact Assessment* was completed to satisfy consideration of **Camden Heights** CS and future redesignation and plan of subdivision (JCB Engineering, Feb 2018). It addresses the location of existing and future transportation networks detailing traffic generation and its cumulative impacts on the road network, including necessary improvements based upon traffic volume and engineering advice.

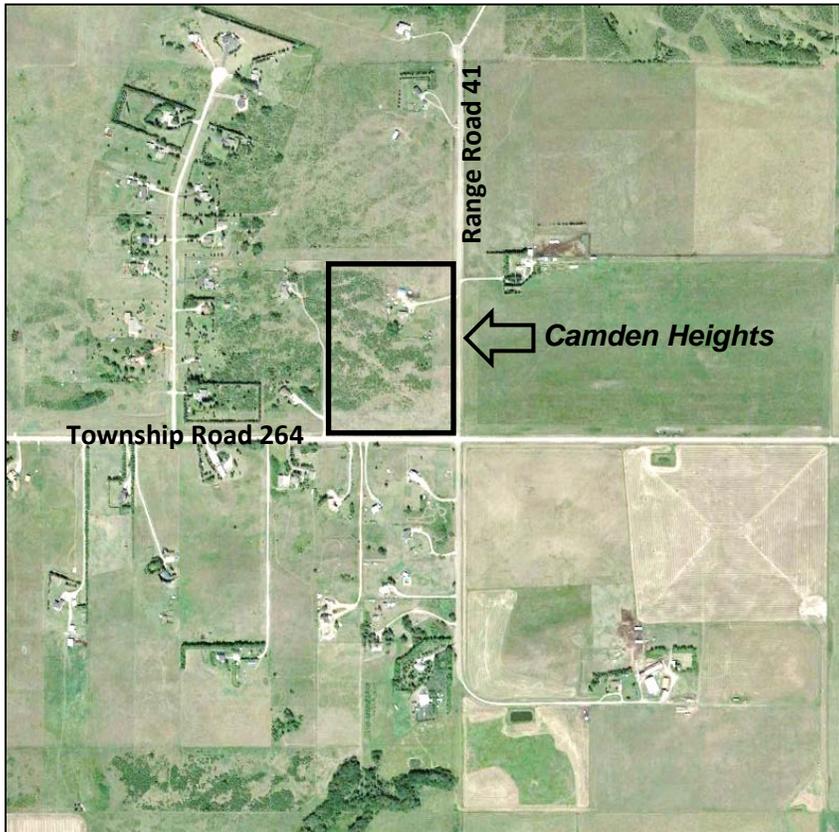
The east-west Township Road 264 (Camden Lane) and north-south Range Road 41 serve the site. The five new residential lots will have a single access to Range Rd. 41, three lots north and three lots south of the proposed cul-de-sac.

Using the Institute of Transportation Engineers (ITE) Trip Generation Manual 10th Edition for a single-family detached housing, additional trip generation is based on the five new dwellings. A typical weekday is 9.44 trips per dwelling with 50% of the vehicles entering and 50% exiting. This calculates to 48 total trips, 24 entering and 24 exiting.

Alberta Transportation conducted a count in 2016 at the intersection of Highway 22 and Twp. Rd. 264. The annual average daily traffic is 630 vehicles on Twp. Rd. 264 to the east of the highway. At the intersection of Highway 22 and Twp. Rd. 264 there are left turn auxiliary lanes in both directions on the highway to assist vehicles turning in and out of Twp. Rd. 264 and minimize impact on the through traffic. Given that Twp. Rd. 264 is a regional collector roadway it can handle well above the AADT to 2,500 vehicles per day. Twp. Rd. 264 is paved west of Range Rd. 41. Daily traffic volumes on Twp. Rd. 264 will not increase such that the classification of the Twp. Rd. 264 will change.

There is no traffic data on Range Rd. 41, but this is a dead-end roadway to a cul-de-sac with currently only 5 residential / agricultural accesses, so it can be expected that volumes will be very low. Range Rd. 41 is a low volume road that can handle 200 vehicles per day and with only 10 lots accessing it with the existing lots, it is at half capacity after the proposed development. It is recommended that Range Rd. 41 should also be upgraded to the 'Country Residential' standard from the intersection with Twp. Rd. 264.

Figure 16: Aerial of Camden Heights showing Twp. Rd. 264 and Range Rd. 41



The pre and post development traffic volumes are essentially the same with no significant change. As such, there should be no requirement for future expansion of the existing transportation network to accommodate traffic generated from the proposed development. Further, there should be no mitigation measures needed to ensure the function and integrity of the transportation network (ie. noise attenuation measures, buffering or screening, setbacks).

The Traffic Impact Study concluded the development will not make an appreciable impact on the existing road network. In addition, the design and length of the cul-de-sac sufficiently accommodates emergency vehicle access.

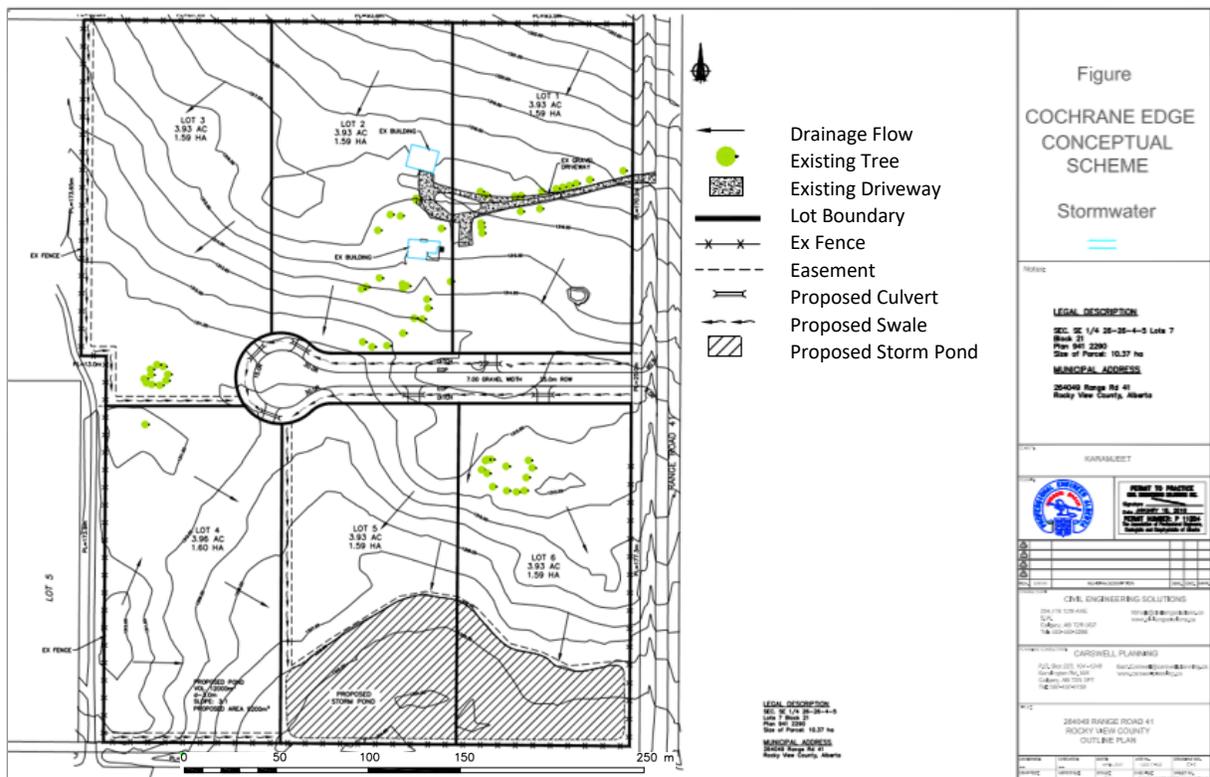
Policy

- 5.7.1** Roads shall be constructed in accordance with Rocky View County Servicing Standards.
- 5.7.2** Consideration will be given to an internal local road system that provides a minimum of two access points for vehicular traffic.
- 5.7.3** Consideration will be given to coordinate future development and access patterns and shall address relationships and linkages with lands beyond the *Plan Area* in order to promote integrated connections.
- 5.7.4** Road names, in accordance with approved municipal policy, will be determined at subdivision stage.

5.8 Utility Services - Stormwater

Civil Engineering Solutions conducted a Stormwater Management Plan for the *Plan Area* and environs. The report is available under separate cover. The storm water management plan takes into account both upstream (contributing) lands and downstream (receiving) lands in order to ensure that no negative impacts are caused by the development of the land under consideration. RVC has mandated that post development peak discharges will not exceed the pre development peak discharge rate. A proposed storm pond for the area shown on the southern portion of the property in Figure 17: Post – Development Drainage Conditions.

Figure 17: Post - Development Drainage Conditions



(Source: Civil Engineering Solutions, 2019)

Policy

- 5.8.1** Development within the *Plan Area* shall generally conform with the stormwater management plan referenced in this Conceptual Scheme that takes into consideration: best management practices.
- 5.8.2** Development shall minimize extensive stripping and grading, while also protecting natural depressions in the landscape as part of the overall design of the stormwater management.
- 5.8.3** An easement within the *Plan Area* shall generally ensure the storm pond will have the area to function within the stormwater management plan referenced in this Conceptual Scheme.

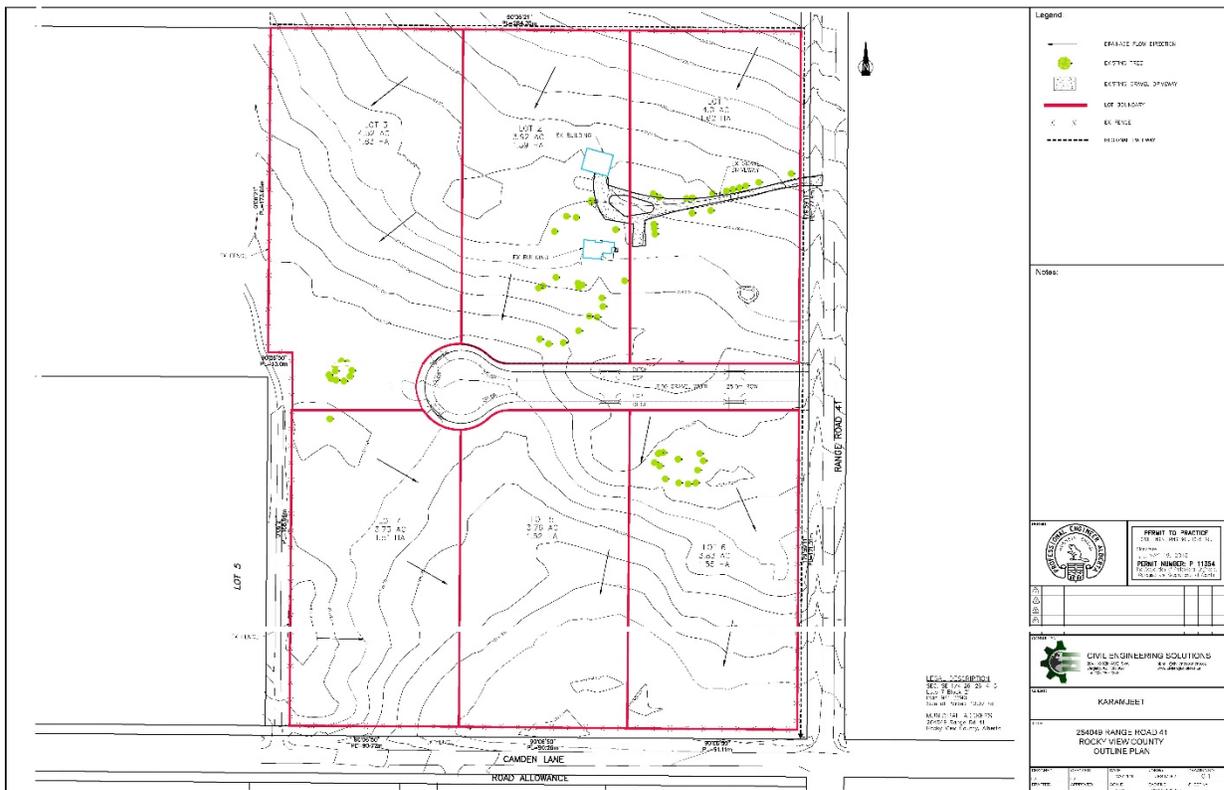
5.9 Utility Services – Water

Camden Heights will be provided with potable water via private wells. A review of existing water well drilling reports of 16 wells in SE-26-26-4-W5M determined the underlying site can provide water at a substantial rate of at least 1 imperial gallon per minute (4.55 L/min) for an annual volume, as defined in the Water Act, of 1250 m³/year. Pumping test records from several nearby wells calculated an average 20-year safe yield of 33 m²/day or 12,000 m³/year. (Groundwater Information Technologies Ltd., 2017, *Phase 1 Groundwater Supply Evaluation: Proposed 5 lot subdivision in SE026-26-4-W5M, County of Rocky View*). In terms of litres per minute, wells had a test rate of 18.18 to 81.83 L/min.

“Calculations based on average aquifer parameters show that no significant water level decline in the aquifers would be expected based on the addition of five (5) more wells”, (Idem). A review of historic water levels shows no decline with time. The proposed subdivision should have no adverse effects to existing licensed or domestic groundwater users.

Water quality shows the aquifer is a calcium bicarbonate type with relatively low total dissolved solids concentration and is generally acceptable as a drinking water source.

Figure 18: Private Water Servicing on Each Lot



Policy

- 5.9.1** Consideration will be given to private, individual, on-site water servicing solutions for new lots. The County may require that deferred servicing agreements be secured in order to ensure that new lots do connect to regional, municipal or co-op water utility system, when those systems become available, as a condition of subdivision approval.
- 5.9.2** Water quality testing of the groundwater from wells installed on the subdivisions prior to use as a drinking water source is recommended.
- 5.9.3** The water system will take into account fire protection standards and best practices for water distribution.

5.10 Utility Services – Sanitary Wastewater

Sewage treatment and disposal will be managed on site with individual septic tank and tile field installations. Rocky View County prefers a minimum of 0.4 ha (1 acre) of developable land on each lot proposed through subdivision to facilitate the proper siting of tile fields. The proposed conceptual subdivision scheme has been designed to accomplish this.

Policy

- 5.10.1** Consideration will be given to private, individual, on-site wastewater servicing solutions for new lots. The County may require that deferred servicing agreements be secured in order to ensure that new lots do connect to regional or municipal utility systems, when those systems become available, as a condition of subdivision approval.
- 5.10.2** Sewage treatment shall be by individual septic tank and tile field for each lot proposed for residential development to meet Alberta Private Sewage Systems Standard of Practice and Rocky View County standards.
- 5.10.3** Additional Geotechnical Evaluations including percolation and near surface water table testing confirming suitability for on-site septic field sewage treatment systems shall be required, as a condition of subdivision approval.

5.11 Shallow Utilities

Telecommunications, phone, cable, fiber optics (where available), electrical and natural gas services will be provided to the *Plan Area* at the subdivision stage, as per utility owner's guidelines and availability.

Policy

- 5.11.1** The development shall be serviced with private shallow utility systems such as electrical, natural gas, and telecommunications.

5.11.2 Locations for easements and line assignments for shallow utility extensions shall be determined at the subdivision endorsement stage.

5.11.3 Shallow utilities will be provided by the appropriate utility company providing service to the *Plan Area* at the sole expense of the Developer. The Developer of the lands will provide easements to any utility company requiring them to provide services to the *Plan Area*.

5.12 Solid Waste and Recycling

Limited solid waste and recycling services Cochrane North, as described early in this Conceptual Scheme under 4.1 Local Development Context.

Policy

5.12.1 A solid waste and recycling management plan in accordance with the current Solid Waste Master Plan shall be provided for the *Plan Area* prior to endorsement of subdivision approval. Implementation of the solid waste and recycling management plan shall be the responsibility of the Developer and/or the Camden Heights Homeowners' Association, at the discretion of the Municipality.

5.13 Protective and Emergency Services

As previously discussed, a number of fire station are in the area as shown in Figure 11: Fire Halls in the Vicinity of the Site. Police services are provided by the R.C.M.P. enforcing the law through a detachment in Cochrane or RVC Peace Officers enforcing selected government acts and municipal bylaws. Medical emergencies are directed to the Cochrane Community Health Centre or facilities in the City of Calgary.

6.0 IMPLEMENTATION FRAMEWORK

6.1 The Conceptual Scheme Implementation Process

Adoption of this Conceptual Scheme will establish specific expectations that will guide the implementation of ***Camden Heights***. The Conceptual Scheme policies must be considered prior to a land use amendment and/or subdivision approval. Consideration of this Conceptual Scheme by Council will occur following a statutory Public Hearing. RVC will consider adoption pursuant to the MGA. Subsequently, consideration of land use amendment, subdivision and development permit applications will follow.

6.2 Land Use Redesignation

Camden Heights intends to work with the County to apply relevant land use districts for a land use redesignation application. A land use amendment is expected to be applied by Council in accordance with the RVC Land Use Bylaw at the time of redesignation.

6.3 Agriculture Boundary Design Guidelines

Agricultural boundary design guidelines would normally apply to the eastern boundary of the proposal for compatibility. The application of the Agricultural Boundary Design Guidelines (ABDG) may be beneficial in buffering the residential land use from the agricultural land uses east of the road. The guidelines would help mitigate areas of concern including concern over fertilizers, dust and normal agricultural practices.

The type of agricultural operation to the east is cultivation/cropping as evident from aerial images. Prevailing winds would have any dust and odours from the neighbouring agricultural operations directed downwind and away from the subject lands.

Recommendations to meet ABDG could include various designs to provide compatibility. Site layout could include setbacks and building placement. Edge treatments could include: landscaping and fencing within the property line next to lands designated as Ranch and Farm (RF).

Comments from public engagement suggested fencing with wire mesh along the perimeters in order to keep dogs contained. This is a good idea and can be incorporated into the site along the eastern and southern perimeter.

6.4 Architectural Design Considerations

The developer will establish and implement specific Architectural and Design Guidelines to ensure all development and landscape design reflects a consistent style and theme.

Policy

6.4.1 In order to ensure aesthetically coordinated development, design guidelines and architectural controls, a document outlining Architecture and Design Guidelines for residential buildings will be submitted at the subdivision stage of the development approval process.

6.4.2 The establishment of Homeowner Associations, Community Associations, or similar organizations is encouraged in order to assume responsibility for common amenities and to enforce agreements such as registered architectural guidelines.

7.0 PUBLIC ENGAGEMENT

7.1 Open House

In order to ensure input from all directly and indirectly affected landowners within and adjacent to the CS are throughout the preparation of the CS, including a minimum of one (1) open house to gain feedback on the proposal. In addition, the CS seeks input from affected community stakeholders. Administration at RVC ensured proper circulation of notices.

An open house was held on the site to engage the neighbours regarding the proposed development. Notices supplied were mailed by RVC. The open house was at the site on July 16, 6:00 – 8:00 pm and eleven attended. Numerous storyboards were on display and the planner, engineer and owners were present to engage in dialogue. Brief surveys were distributed to seek public input and provided with timely responses.

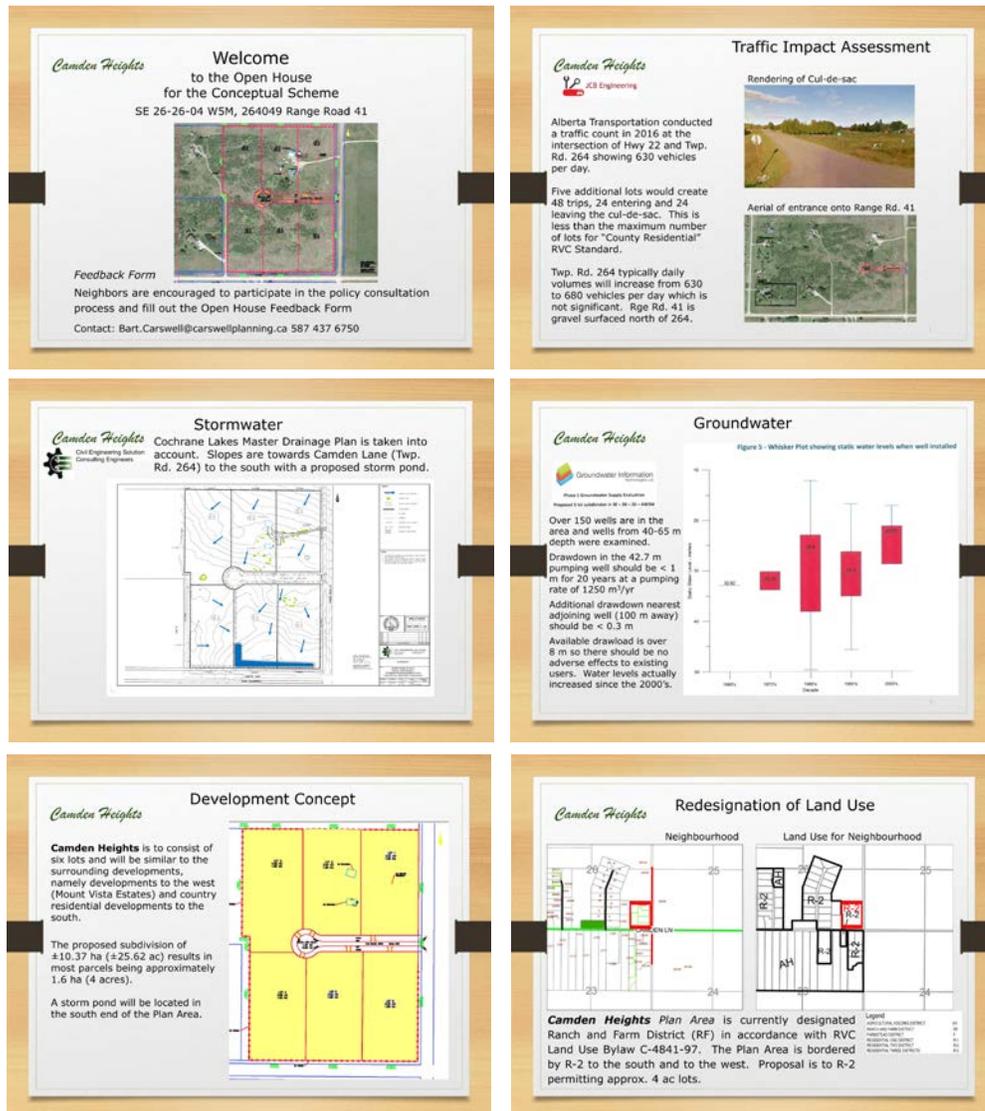
Most comments supported the scheme as it fits within the definition of the Cochrane North Area. Preference was for the cul-de-sac entrance be off Range Road 41 as proposed. If a future pathway was to come to the Cochrane North area, most would prefer it be along roads, such as Camden Lane, not across properties. Most liked the idea of the storm pond on the southern portion of the proposal next to Camden Lane. Most see the redesignation to R-2 for approximately 6 -four acre lots as fitting in with the character of the surrounding lands.

Some comments expressed concern with the intersection of Highway 22 and Camden Lane. Other individual concerns were: limiting height of proposed dwellings to a bungalow, limiting light pollution of yard lights. A neighbouring farmer recommended following RVC Agricultural Boundary Design Guidelines and suggested a fence on the eastern perimeter. This, along with Range Road 41 buffering the land uses, would satisfy his concerns. It was appreciated having the open house on site where most chose to walk to the event.

Figure 19: Photo of Open House On-Site



Figure 20: Storyboards of Open House



7.2 Potential Surrounding Development

Neighbours have been consulted throughout the process on whether they were considering development and how this conceptual scheme may be able to accommodate this. Lands to the west are already developed and no further subdivision of land is envisioned. Being within the eastern boundary of the Cochrane North ASP, lands to the east are agricultural. Parcel size for **Camden Heights** fits the “Residential Infill C Policy Area” of the ASP. This proposal is between existing development and the ASP boundary. Some lands exist to the north and have sufficient frontage for a separate entrance, similar to this proposal, should the property be further developed as country residential. Figure 21: Shadow Plan, shows the existing, proposed and future potential parcels for the quarter section. There is no current interest by the landowner(s) north of the proposal to develop lands in the foreseeable future. This is a rendering produced by Carswell Planning Inc. and does not represent any concept by that owner.

Figure 21: Shadow Plan

