

Glendale Ranch

Conceptual Scheme

March 27, 2019

Pt. W1/2, SW16-26-3-W5M



ROCKY VIEW COUNTY
Cultivating Communities



BYLAW C-7897-2019

A Bylaw of Rocky View County known as the Glendale Ranch Conceptual Scheme

The Council of Rocky View County enacts as follows:

PART 1 – TITLE

This Bylaw shall be known as Bylaw C-7897-2019.

PART 2 – DEFINITIONS

In this Bylaw the definitions and terms shall have the meanings given to them in the Bearspaw Area Structure Plan (Bylaw C-4129-93), Land Use Bylaw C-4841-97, and the Municipal Government Act.

PART 3 – EFFECT OF BYLAW

THAT Bylaw C-4129-93, known as the “Bearspaw Area Structure Plan”, be amended in accordance with amendments contained in Schedule ‘A’, attached to and forming part of the Bylaw; and,

THAT Bylaw C-7897-2019, being the “Glendale Ranch Conceptual Scheme”, affecting a portion of SW-16-26-03-W05M, be adopted as defined in Schedule ‘B’, which is attached to, and forms part of this Bylaw.

PART 4 – TRANSITIONAL

Bylaw C-7897-2019 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: 9

File: 06716013/PL20180152

PUBLIC HEARING WAS HELD IN COUNCIL this

9th day of July, 2019

READ A FIRST TIME IN COUNCIL this

9th day of July, 2019

READ A SECOND TIME IN COUNCIL this

9th day of July, 2019

UNANIMOUS PERMISSION FOR THIRD READING

9th day of July, 2019

READ A THIRD TIME IN COUNCIL this

9th day of July, 2019

Reeve

CAO or Designate

Date Bylaw Signed

EXECUTIVE SUMMARY

Country Residential Land Use - Glendale Ranch is envisioned as a larger-parcel country residential retreat comprising seven single-family residential parcels of approximately 4.05 hectares (10 ac) each within a Plan Area of 30.354 hectares (74.99 acres). The single-family parcels offer couples and growing families the opportunity for a rural lifestyle with potential for additional general agricultural uses and home-based business uses as provided in the County's R3 District of the Land Use Bylaw. The generous lot sizes and low density provides a transition between higher rural densities to the east and south and lower residential densities to the west and north.

Transportation and Access - The Plan Area is located at the northeast intersection of two paved roads - Glendale Road and Township Road 262. Internal access is proposed to be a paved, public, single access crescent road off Glendale Road and designed to County standards. A recent Transportation Impact Assessment concluded that the Glendale Ranch residential subdivision is expected to generate a very low volume of traffic in the future, which will not have a significant effect on traffic operations at buildout. A potential second access will be reserved through a road acquisition agreement at subdivision approval stage.

Water Supply - Each proposed parcel contains a production water well that meets County standards. The developer has also retained an existing "capacity unit" from the Rocky View Water Coop (RVWC) for each proposed parcel. This provides the option for each lot owner to connect to a looped waterline system extension west along Township Road 262 and south along Glendale Road at some point in the future.

Wastewater Management - In terms of wastewater management, engineering studies confirm individual private sewage treatment systems are suitable for each parcel. A conceptual stormwater management plan concludes that the anticipated low level of development will ensure the predevelopment and post development flows remain the same.

Emergency Services – The developer will work with the County to provide a fire suppression strategy that meets County needs. As a fire protection measure, sprinkler systems will be required for each home as part of the developer's architectural design guidelines. The subject parcel is within the 8-minute response zone of the Bearspaw Fire Station #103.

Design, Landscaping and Conservation - Each homesite has the opportunity for views, privacy, ease of access to the internal road and proximity to existing water wells. Architectural design guidelines at subdivision approval stage will ensure the high-quality development standards expected by the Bearspaw community. Dark sky principles will reduce unnecessary glare. The developer will work with lot owners to ensure appropriate, native vegetation landscaping. Moreover, water conservation measures will be specified in design guidelines for each residential parcel, including in-ground rainwater cisterns for landscape irrigation.

Community Consultation – The proponent conducted an open house on January 17, 2019 at the Bearspaw Hall. An invitation/ notification letter was sent through Rocky View County mailing services to 87 landowners within 1 mile radius of the application. The meeting was also publicized in 2 issues of the Rocky View Weekly.

Approximately 18 people attended the open house. The landowners and consultant were on hand to listen to visitor comments and answer questions. A comment sheet was available for landowners to either fill out at the open house or return at a later date by mail or electronic means. Two written comments were received by the applicant.

Rocky View County

GLENDALE RANCH CONCEPTUAL SCHEME

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Figure 1
Glendale Ranch Plan Area looking north

1.0 INTRODUCTION

1.1 Organization of the Conceptual Scheme

This Conceptual Scheme is divided into three Sections:

- The Background information (Sections 1,2,3);
- An explanation of the Plan Concept and a set of specific Policies that will guide the subdivision and development authorities in their decisions (Section 4);
- A description of the community engagement process (Section 5).

1.2 Conceptual Scheme Purpose

The Glendale Ranch Conceptual Scheme serves as a guide to the future development of land in Part of Southwest 16-26-3-W5M. The planning area is located on the northeast corner of Glendale Road and Township Road 262. The Conceptual Scheme is a document approved as a bylaw by Rocky View County Council that describes the future allocation of land-use and servicing provisions on the quarter section. The document is also in conformity with the existing Bearspaw Area Structure Plan, 1994. The Conceptual Scheme informs the land use redesignation application, the subdivision application and future development permit applications. Land-use policy statements in the Conceptual Scheme provide direction for approving authorities and the developer to ensure relevant planning issues and considerations are addressed and implemented to the satisfaction of Rocky View County.

1.3 Glendale Ranch Vision

Glendale Ranch proposes to subdivide the existing parcel into seven single-family residential parcels with on-site servicing. Each parcel will be approximately 4 hectares (9.88 acres). The design will reflect traditional, low-density, high-quality development typical throughout the Bearspaw community. The residential concept will be consistent with the current Residential Three (R-3) land-use bylaw district.

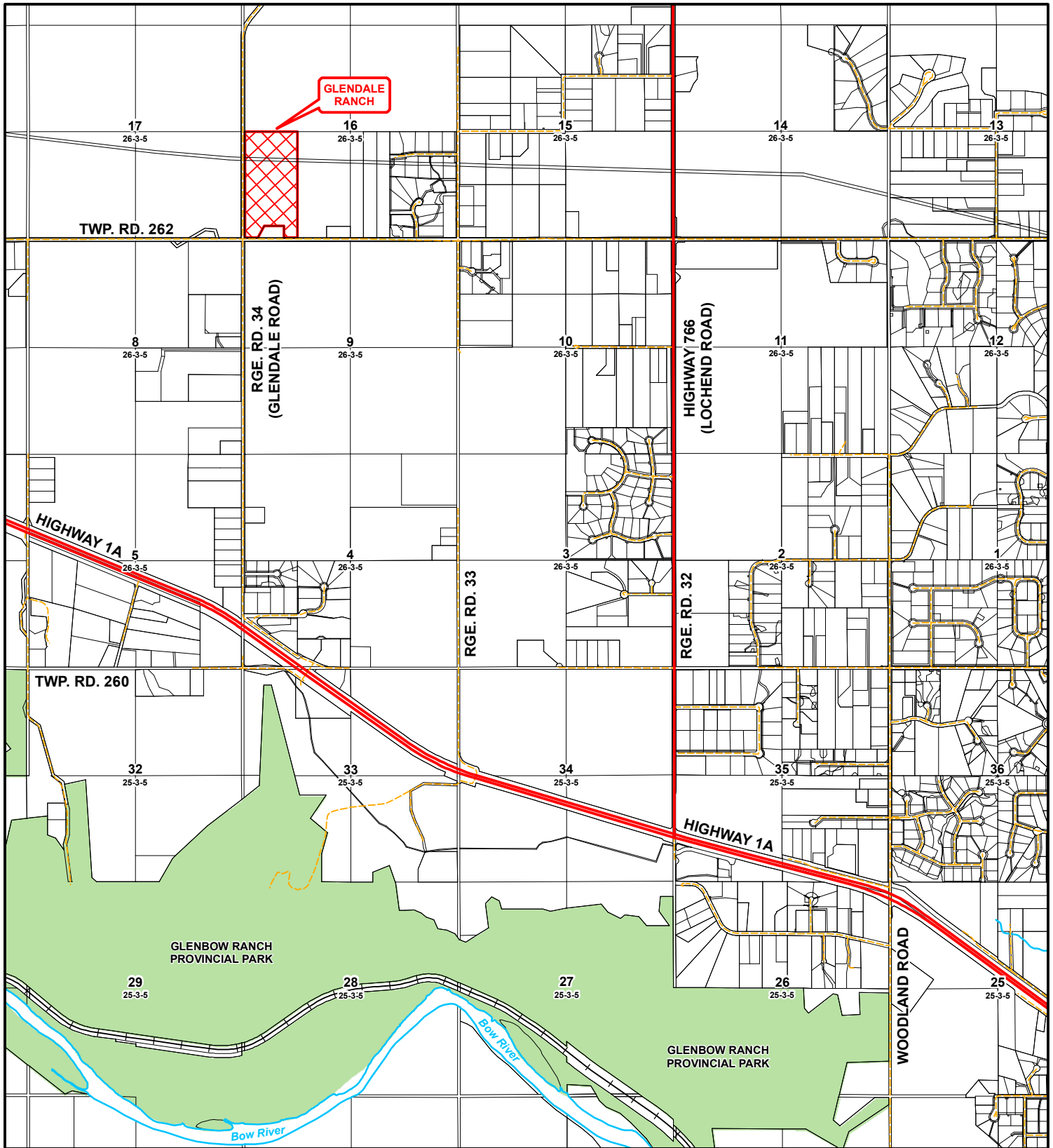
1.4 **The Glendale Ranch Context** (Map 1)

The Conceptual Scheme area is in Rocky View County in SW16-26-3-W5M on the northeast corner of Glendale Road and Township Road 262, 2.4 kilometres (1.5 miles) west of Lochend Road. The residential planning area comprises part of the west half of SW16-26-3-W5M, contained under a separate title, comprises 30.255 hectares (74.76 acres).






Three other parcels are located on the quarter section, but these parcels are owned separately and are not part of the Conceptual Scheme. Part of the East half of SW 16-26-3-W5M comprises 30.6 ha (75.6 acres). A second 1.63-hectare (4.02-acre) parcel is located at the south end of the west half of SW16-26-3-W5M. Another 1.63-hectare (4.02-acre) parcel is located at the south end of the east half of SW16-26-3-W5M. All three parcels currently contain dwellings and have direct access onto Township Road 262.

Table 1 - Glendale Ranch Planning Areas in Title

Legal Description	Certificate of Title #	Titled Area In Hectares (acres)
Pt. West half of SW16-26-3-W5M	051 384 548	30.255 ha (74.76ac)
Road PLAN 8410764		0.416 ha (1.028ac)
Road PLAN 9911043		0.099 ha (0.25 ac)



Legend

-  GLENDALE RANCH
-  PROVINCIAL PARK
-  PRIMARY ROAD
-  OTHER ROAD
-  RAILWAY



GLENDALE RANCH
MAP 1
GLENDALE RANCH LOCATION
Pt. W1/2 SW16-26-3-W5M

0 0.25 0.5 1 1.5 2 km

1:40,000

File: GlendaleRanch_001

Date: 2018/10/09

1.5 **Existing Policy Framework and Land-Use Districts**

The Glendale Ranch Conceptual Scheme was prepared in consideration of the County's two major statutory plans: the Rocky View County Plan, 2013 (being bylaw C-7280-2013) as amended and the Bearspaw Area Structure Plan, 1994 (ASP). Both policy documents are reviewed for conformity by the Glendale Ranch Conceptual Scheme.

1.5.1 **Municipal Development Plan, 2013 (The County Plan)**

The County Plan generally recognizes the continuation of rural residential subdivision and development in appropriate locations. Specifically, Policy Section 10.3 states *“Encourage and support country residential communities in providing a high-quality built environment while maintaining rural character.”*

With respect to the Bearspaw area, The County Plan 2013 (Section 5.0 Goal) directs... *“the majority of residential growth to those areas identified on Map 1, over the time frame of this Plan”*. Section 5.8 of the County Plan supports *“...the development of existing country residential communities (identified on Map 1) in accordance with their area structure plan”*. As such, the County Plan identifies the Plan Area as part of a “Country Residential” community area in Map 1.

The Planning Framework of the County Plan (Section 4) provides guidance on the hierarchy of plans used in Rocky View County. Section 4 states; *“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.”*

In concert with this policy direction, Section 24 (Key Directions) of the County Plan states; *“Direct new multi-lot residential development to existing area structure Plan Areas, as described in the County Plan.”* Within the Glendale Ranch Conceptual Scheme Plan Area, the existing Bearspaw Area Structure Plan (1994) is located within the “Country Residential” community in Map 1 of the County Plan. The Bearspaw ASP is therefore identified as the most detailed expression of policy intent to guide the Conceptual Scheme.

Appendix C of The County Plan 2013 identifies specific Technical and Conceptual Scheme Submission Requirements. The Glendale Ranch Conceptual Scheme is written to meet these requirements. Technical reports supporting the requirements of Appendix C have been prepared and submitted for County review as a separate Appendices document.

With the Conceptual Scheme being in conformity with Appendix C of the County Plan and the Bearspaw ASP requirements, it is anticipated that no amendment is required to the Bearspaw Area Structure Plan and therefore the Conceptual Scheme would not be required to become a statutory plan.

1.5.2 Bearspaw Area Structure Plan

The Glendale Ranch Conceptual Scheme is within the boundaries of the Bearspaw Area Structure Plan, 1994, that being bylaw C-4129-93. The following policy sections of that plan are relevant:

- *Section 8.1, Country Residential* contains policy for the evaluation of lands identified as appropriate for country residential use and the preparation of Concept Plans.
- *Section 8.1.1* states that country residential land uses may be considered appropriate within the ASP area subject to the provisions of the ASP.
- *Section 8.1.20* states that within the country residential areas identified in Figure 7, the minimum parcel size should not be less than four (4) acres.
Figure 7, Future Land-Use Scenario identifies SW16-26-3-W5M as suitable for country residential use.
- *Figure 3, Concept Plans* identifies SW16-26-3-W5M as requiring the preparation of a Concept Plan.
- *Figure 8, Phasing* identifies SW16-26-3-W5M as Development Priority Area 3. The map further notes... “*this map is a general indication of development priority only*”. This statement assigns flexibility for development phasing on a case by case basis. In the case of Glendale Ranch, the following points are offered for consideration;
 - ✓ Glendale Ranch is a low-impact land use plan that provides a reasonable density transition between the traditional 2-4 acre country residential parcels to the east and lower density residential uses to the west.
 - ✓ The Silverhorn residential subdivision is located 2 miles to the east. Approved in

2009, Silverhorn is a significantly more intensive project that covers 93 hectares (230 acres), contains 85 residential parcels and the land use district allows a minimum parcel size of 0.40hectares (0.98 ac). This Concept Plan is also located within a Priority 3 Area.

- ✓ Southbound Glendale Road is fronted by at least a dozen or more existing parcels of similar size to what is being proposed. These areas all lie within Priority Area 3.
- ✓ The Glendale Ranch quarter section is adjacent to a Priority Area 1 quarter section, which contains approximately 24 parcels and which had in the past been approved by the County for a total density of 35 parcels on the quarter section.
- ✓ The Plan Area is bounded by paved roads on both sides. Access is excellent and dust concerns are minimized.
- ✓ Each of the seven parcels is provided with one 'Capacity Unit' with the Rocky View Water Coop (RVWC). The RVWC has identified plans to extend a piped water line from Lochend Road (Hwy 766) west along Twp. Road 262 and south along Glendale Road to loop their existing distribution system. This capacity unit incentive aligns with the County Plan goal to *"Provide for a long-term, safe, and reliable potable water supply"* (sec. 17.0 Utility Services, third goal).
- ✓ Availability of 4 hectare (10 acre) parcels in the Bearspaw area is at a premium compared to the existing inventory of much smaller country residential parcels. Within a three mile radius of Glendale Ranch, there are approximately 11 parcels with an R-3 designation.

The Glendale Ranch Conceptual Scheme is prepared in accordance with the policies of the Bearspaw Area Structure Plan.

1.5.3 Rocky View County Land-Use Bylaw Districts (Map 2)

Map 2 shows the land-use bylaw district for the Glendale Ranch planning area as Ranch and Farm District (RF).

A 1.63-hectare (4.02-acre) parcel is designated R-2 in the west half of SW16-26-3-W5M while a second 1.62-hectare (4-acre) parcel is designated R-1 in the east half of the quarter section. To the east, the Mountain Glen subdivision is designated R-2. All other land-use districts adjacent to the Glendale Ranch planning area are designated as RF.

Along Twp. Road 262, two quarter sections of land 2 miles to the west of the Plan Area are designated R-2 while a heavy density of mostly R-1 and R-2 zoning starts 2 miles to the east. A third cluster of larger, multi-parcel country residential zoning lies south of the Plan Area along the west side of Glendale Road. This strip contains a wide range of land use districts including AH, RF-2, RF-3 to R-1, R-2 and R-3.

In summary, to the east, west and south, the Plan Area vicinity contains heavily subdivided quarter sections along major roads interspersed with blocks of un-subdivided quarter sections.



Legend

RF	RANCH AND FARM DISTRICT
R1	RESIDENTIAL ONE DISTRICT
R2	RESIDENTIAL TWO DISTRICT
R3	RESIDENTIAL THREE DISTRICT
RF-2	RANCH AND FARM TWO DISTRICT
RF-3	RANCH AND FARM THREE DISTRICT
AH	AGRICULTURAL HOLDING DISTRICT



GLENDALE RANCH

MAP 2 EXISTING LAND USE DISTRICTS Pt. W1/2 SW16-26-3-W5M

0 100 200 400 600 800 1,000 Meters

1:20,000

File: GlendaleRanch_002

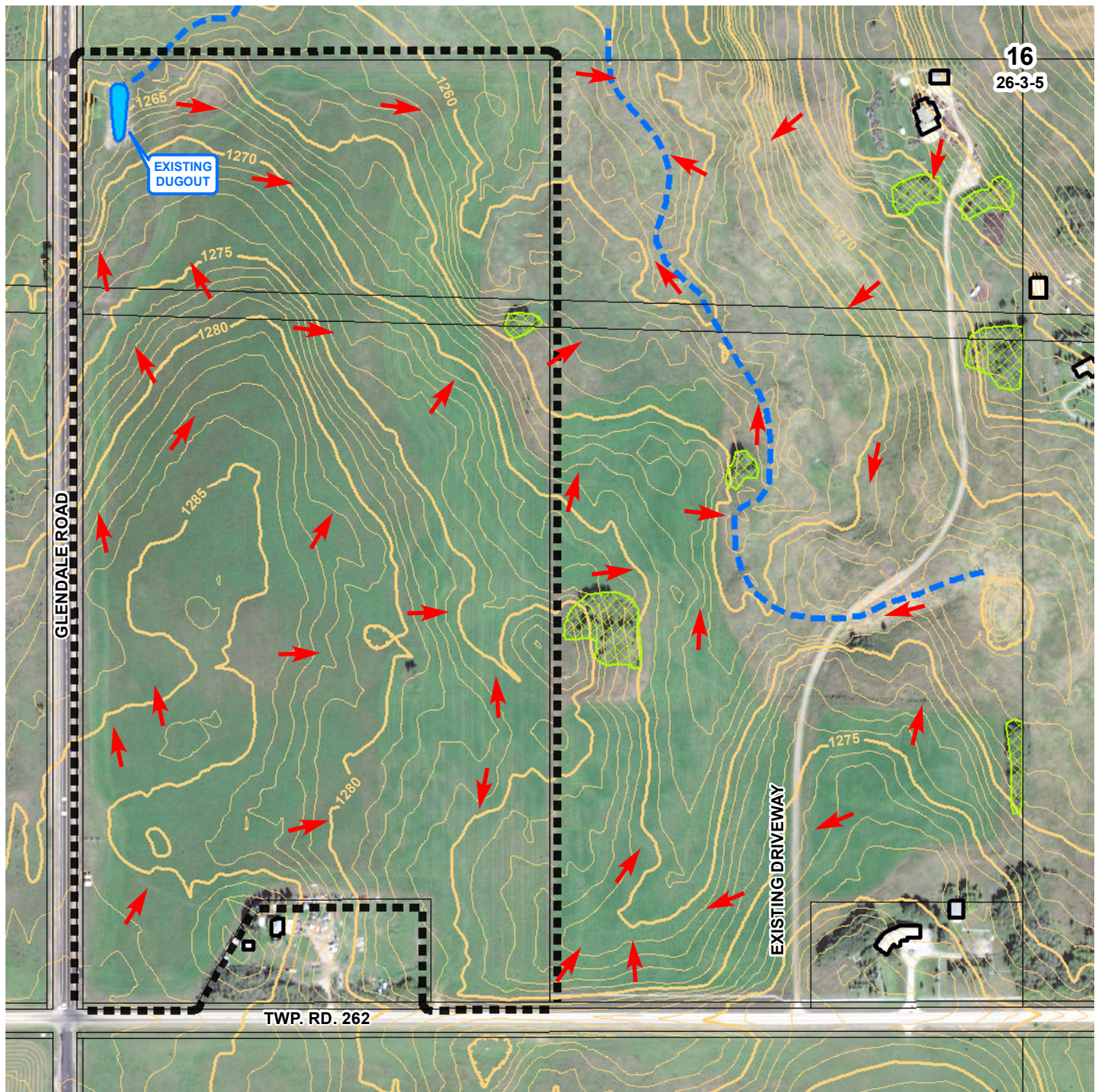
Date: 2018/10/09

2.0 EXISTING PHYSICAL SITE CHARACTERISTICS







2.1 Topography (Map 3)

The planning area for Pt W1/2, SW16-26-3-W5M is composed of gently rolling topography. The overall elevation difference across the site is approximately 28 metres (92 feet). The Plan Area is located on a ridge plateau in the south and west half of the parcel and provides excellent mountain views to the west. This ridge slopes down gently to the north and east property line, providing pleasant views eastward across a valley (referred to as “the Vale”). Small remnant poplar clusters are in the central portion of the quarter section east of the Plan Area. The Plan Area has been seeded to hay for many years.

A slope assessment was prepared for the Conceptual Scheme and is identified in Map 4. Most of the Plan Area contains slopes of less than 10 per cent. Minor slopes in excess of 15 per cent occur in the northeast sector of the Plan Area. Overall, 0.934ha (2.31 ac), of the Plan Area contains slopes of 15% or greater. This represents approximately 3 percent of the Plan area.



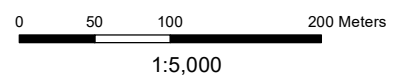
Legend

-  OVERLAND FLOW DIRECTION
-  PLAN AREA BOUNDARY
-  EPHEMERAL DRAINAGE COURSE
-  EXISTING DUGOUT
-  ASPEN VEGETATION
-  EXISTING BUILDING



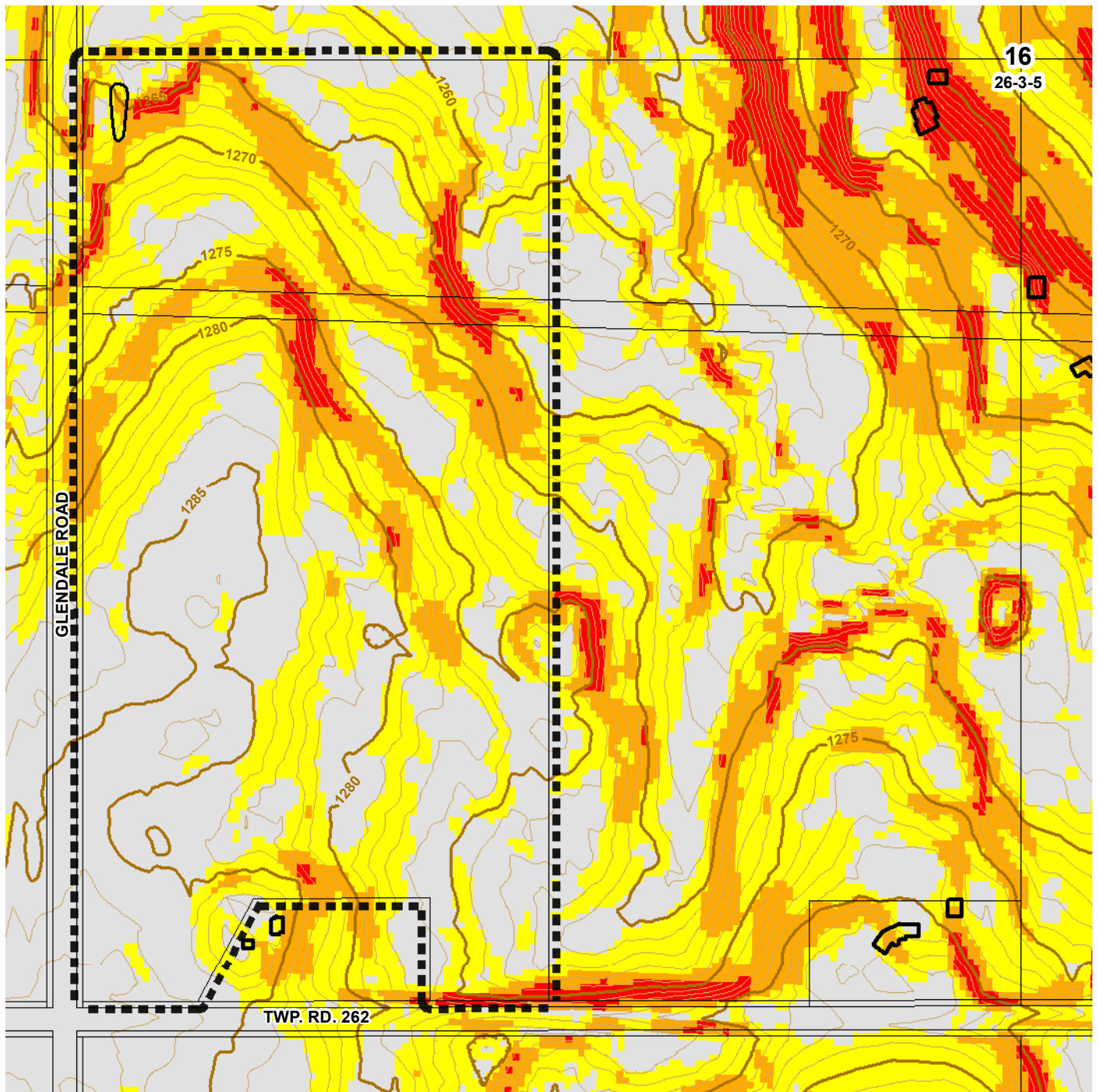
GLENDALE RANCH

MAP 3 TOPOGRAPHY AND DRAINAGE Pt. W1/2 SW16-26-3-W5M







File: GlendaleRanch_003





Date: 2018/11/06



Legend

-  CONTOUR (5m)
-  CONTOUR (1m)
-  PLAN AREA BOUNDARY
-  EXISTING BUILDING

Slope Analysis

-  0 - 5%
-  >5% to 10%
-  >10% to 15%
-  >15%

GLENDALE RANCH

MAP 4 SLOPE ASSESSMENT Pt. W1/2 SW16-26-3-W5M

0 50 100 200 Meters

1:5,000



File: GlendaleRanch_004

Date: 2018/11/05

2.2 Existing Drainage

Based on vegetation, drainage patterns and the landowner's recollection, little or no naturally occurring standing water collects on the parcels from year-to-year. On the east half of the quarter section, a natural draw runs downhill to the north and forms part of the West Nose Creek watershed. Most of the natural drainage is channeled north through this gentle valley known as the Vale. Some natural drainage is contributed to the Vale (located east of the Plan Area) from a minor draw located in the east-central portion of the quarter section coming from the Mountain Glen subdivision in SE16-26-3-W5M.

The County's Bearspaw Glenbow Master Drainage Plan 2010 (prepared by Worley Parsons) and the Nose Creek Watershed Water Management Plan 2008, (compiled by Palliser Environmental Services Ltd.) were reviewed for the Plan Area. On a watershed scale, drainage is contributed from the south and east of the Plan Area largely from Section 9-26-3-W5M. In a storm event, two culverts (one adjacent to the Vale and the other adjacent to SE16-20-6-W5M) would channel drainage under Township Road 262. Part of the mapping of the County Nose Creek Watershed drainage plan indicated that the Glendale Ranch planning area was neither part of an 'ineffective sub-watershed' (ie. prone to standing water) nor considered an area of potential flooding.

An existing, man-made dugout located in the far northwest corner of the planning area collects water upstream and west of Glendale Road through a culvert under Glendale Road. The dugout then channels water downstream to the northeast and meets the Vale on the next quarter section to the north. This pond volume is estimated at 600m³ of water at normal full volume.

A conceptual stormwater management Plan was prepared by McElhanney Consulting in October 2018. This engineering report is referenced in greater detail in section 4 of this Plan.

2.3 Biophysical and Historical Resources

2.3.1 Historical Resources Impact Assessment (HRIA) and Biophysical Resources Impact Assessment (BRIA)

A Biophysical Impact Assessment (BIA) was undertaken for the Plan Area by Corvidae Consulting.

The BIA provides the following:

- Comprehensive assessment of the biophysical features;
- Historical resources present in the project area;
- Correlation of the project to existing policies; and
- Mitigations for the potential impacts of the project.

The BIA was prepared in accordance with the requirements of the Rocky View County Servicing Standards 2013, Section 900 - Environmental and Historical Assessments.

A series of field inspections was conducted in the summer of 2010 by the consultants. They assessed the biophysical aspects of the entire SW 16 quarter section in 2010, 2011, 2014 and subsequently the current, reduced Plan Area in 2017. The most recent wildlife assessment for SW16 was completed on July 29, 2017 to reflect the currently proposed Conceptual Scheme terms of reference.

It should be noted that since the submission of the revised BIA in November 2017, the Conceptual Scheme was revised to be serviced by on-site sewage disposal and individual wells rather than a piped water and sewage system. Seven production wells have subsequently been drilled and evaluated under a separate report. This change does not have a material impact on the BIA content or conclusions.

From the assessments and review of the project plans, the consultant provided this Biophysical Impact Assessment with recommendations to minimize project impacts and preserve the environment. The consultant's earlier reports included an Historical Resources Impact Assessment (HRIA) in November 2011. The listing of historical resources (formerly known as the listing of significant historical sites in areas) revealed that the entirety of SW16-26-03 W5M

has a historical resource value of 5. Over half the property has been ploughed and seeded to agricultural crop species. The ploughed areas are on the ridge and hilltops. If there were historical artifacts in these locations, they would have been destroyed during the ploughing. This triggered the need for a detailed historical resources impact assessment (HRIA) of the site. The HRIA was submitted and no archaeological artifacts were found. Subsequently, the Province provided a clearance letter in 2011.

2.3.2 Vegetation

The entire SW16 quarter section is characterized by open grasslands and grass-shrub communities interspersed with shrub and Aspen/conifer tree stands. There are patches of Aspen and spruce forest areas, open grasslands and rocky outcrops (Downing and Pettapiece, 2006). During field assessment, a series of soil pits were prepared. Soils in the project area are well to imperfectly drained clay loam to silty-clay loam textured Chernozems with horizons averaging 23 centimetres (9 inches) in depth. This generally indicates good but not excessive moisture percolation through the soil. During the site inspections, five common vegetative communities were identified: improved pasture, Aspen forest patch, coulee, red fescue/cinquefoil and a dugout. No rare plant species were identified during the vegetation survey.

2.3.3 Wildlife

The literature search and subsequent field inspection resulted in identification of several common bird, amphibian and mammal species. The immediate surrounding area consists of fragmented landscapes and pre-existing disturbances. No sightings or evidence of endangered species or species at risk were observed nesting or burrowing on the site. The project is not considered to be within a wildlife corridor.

2.3.4 Wetlands

The field assessment surveyed for the presence of wetlands. One dugout was identified as a Class V wetland in the far northwest corner of the quarter section. Other surficial water features are limited, as there are no identifiable active channels within the quarter section. The property is located within the Big Hills Creek drainage area. It is characterized by a series of ephemeral

draws sloping predominantly downward to the north and originating in the southeast corner of the quarter section. Ephemeral drainages were completely vegetated with no sign of a defined channel present throughout. A culvert located on the existing access driveway on the east half of the quarter section likely maintains hydraulic conductivity on the property during periods of heavy rainfall and snowmelt. Additionally, the property was surveyed for the existence of groundwater recharge areas and seepages, but none were identified.

As a result of the absence of a channel and suitable fish habitat in the man-made dugout located in the northwest of the site, the Plan Area was determined to be unsuitable for supporting resident populations of fish. Therefore, fish habitat mapping and a characterization of the channel was not undertaken as part of the assessment. There will be no cumulative effects to wetlands, hydrology and aquatic resources as a result of project activities.

The BIA identified potential impacts and associated mitigations that should be considered during the construction phases of the project.



Figure 2
Looking northwest from Mountain Glen Estates;
Aspen stand in centre right of photo forms east boundary of plan area



Figure 3
SW corner of Plan area looking northeast across the Ridge from Glendale Rd.
towards the Roger Laing residence on the east half of the quarter section.

2.4 Geotechnical Assessments

2.4.1 Private Sewage Treatment System Report (PSTS)

In the fall of 2018, A Private Sewage Treatment System Report (PSTS) was undertaken specifically for the current Conceptual Scheme by Groundwater Information Technologies Ltd. (GRIT). The PSTS assessment was completed following the 2015 Alberta Private Sewage Systems Standard of Practice (SOP) and the Model Process for Subdivision Approval (Alberta Association of Municipal District and Counties, 2011).

On October 10, 2018 personnel from GRIT logged the soil profile in fourteen test pits (TP-1 to TP-14) within accessible areas of the quarter. Locations were selected to provide the best coverage to assess the type of soil at the site. Test pits were completed to a maximum depth of 2.5 m below grade. Generally, one soil sample was collected from each test pit for grain size analysis. Subsequent measurements of the depth to shallow groundwater were completed. All test standpipes were dry, indicating a shallow water table will not be a barrier to installation of traditional septic field systems on the Site.

Soil texture and structure within the areas investigated indicate that the Site is acceptable for traditional septic fields with primary or secondary treated effluent. No impervious soils that would limit infiltration capacity were identified during the site assessment. No shallow groundwater that would limit vertical separation was encountered. All Site Suitability Variables were rated as 'moderate' or 'very' suitable for Private Sewage Treatment Systems.

The report concluded that the Plan Area is suitable for conventional treatment fields using pressure distribution.

As additional supporting information, multiple subsurface soil, groundwater and hydrogeological assessments were undertaken between 2010 and 2014 for the entire quarter section. These reports as described below, were submitted to the County for review as part of a former Concept Plan. All past and current reports repeatedly confirmed the Plan area suitability to accept development. While these historical supporting reports are available for review upon request, they are not submitted as part of this Conceptual Scheme.

In 2010, Levelton Consultants (formerly Sabatini Earth Technologies Inc.) prepared a geotechnical investigation on SW16-26-3-W5M and for NE8-16-26-3-W5M. In 2011, Levelton consultants undertook a further study to further evaluate wastewater treatment capacity on the two quarter sections. At the same time, Levelton undertook a desktop assessment of potential groundwater aquifers. Finally, in 2014, SD Consulting Group built on the previous reports and undertook an even more detailed hydrogeological assessment.

The purpose of these studies was to provide in-depth information on the suitability of onsite wastewater treatment and disposal serving the Glendale Ranch project. Of particular interest was the suitability of soils to accept treated wastewater in an environmentally safe and sustainable manner. These multiple studies repeatedly confirm that treated sewage will not negatively affect surrounding surface and groundwater resources.

2.4.2 Geotechnical Assessments

In 2010, Levelton Consultants (formerly Sabatini Earth Technologies Inc.) prepared a geotechnical investigation on SW16-26-3-W5M and for NE8-16-26-3-W5M. The purpose of this report was to assess the suitability of the ground to accept asphaltic and concrete pavements for road construction and building foundations. This report (prepared for an earlier project) indicated 10 test holes across SW16-26-3-W5M, of which 3 were drilled within the current Plan Area. In general, all test holes were drilled to practical refusal in bedrock to depths ranging from 5.2 metres to 7.6 metres below ground surface. The soil profile generally consists of a thin layer of topsoil followed by clay till overlying siltstone and/or sandstone bedrock. Near-surface groundwater levels within the standpipes were recorded approximately 20 days after drilling completion. All test holes measured dry to depths ranging from 4.1 metres to 6.7 metres below ground surface.

Subgrade conditions are generally considered acceptable for construction of conventional asphaltic/ concrete pavements. For preliminary design purposes, conventional pavement design can be used. Grain-size analysis for septic treatment systems indicated that adverse conditions for conventional septic fields are not expected. Finally, there were no signs of slope instability noticed during the investigation.

2.4.3 Groundwater Supply Evaluation

In spring 2018, Aaron Drilling Inc. completed 7 production water wells - one for each of the 7 proposed lots. While previous aquifer assessments were undertaken in 2011, the actual drilling of production wells is intended to prove water volumes to the satisfaction of the County. The well data was subsequently submitted to Groundwater Information Technologies Limited (GRIT) for their review and interpretation. While more detailed groundwater results are provided in Section 4 of this Conceptual Scheme, the quantity of water available is considered sufficient by the consultant's report to meet County and Provincial requirements. Household treatment is recommended to improve aesthetic concerns surrounding total dissolved solids (TDS), manganese and address fluoride levels in some wells.

3.0 EXISTING HUMAN FEATURES

3.1 Existing Land Use and Surrounding Ownership Context (Map 5)

3.1.1 Land Use and Ownership Context on Pt W1/2 SW16-26-3-W5M

On the west half of the quarter section, the current landowner is LSHall Ltd, a consortium that includes landowners who have lived on the parcel next door to the quarter on NE8-26-3-W5M for 40 years. The owners of the east half of SW16-26-3-W5M (not part of the Plan Area) currently live on the land in a single-family house located in the northeast corner of the quarter section. The dwelling is accessed by a driveway extending the length of the quarter section down to Township Road 262.

Two smaller parcels of approximately 1.63 hectares (4 ac) have each been previously subdivided from the quarter section along Township Road 262 and are not part of the Glendale Ranch Plan Area. The southwest parcel and southeast parcels both contain dwellings.

3.1.2 Surrounding Land Use and Ownership

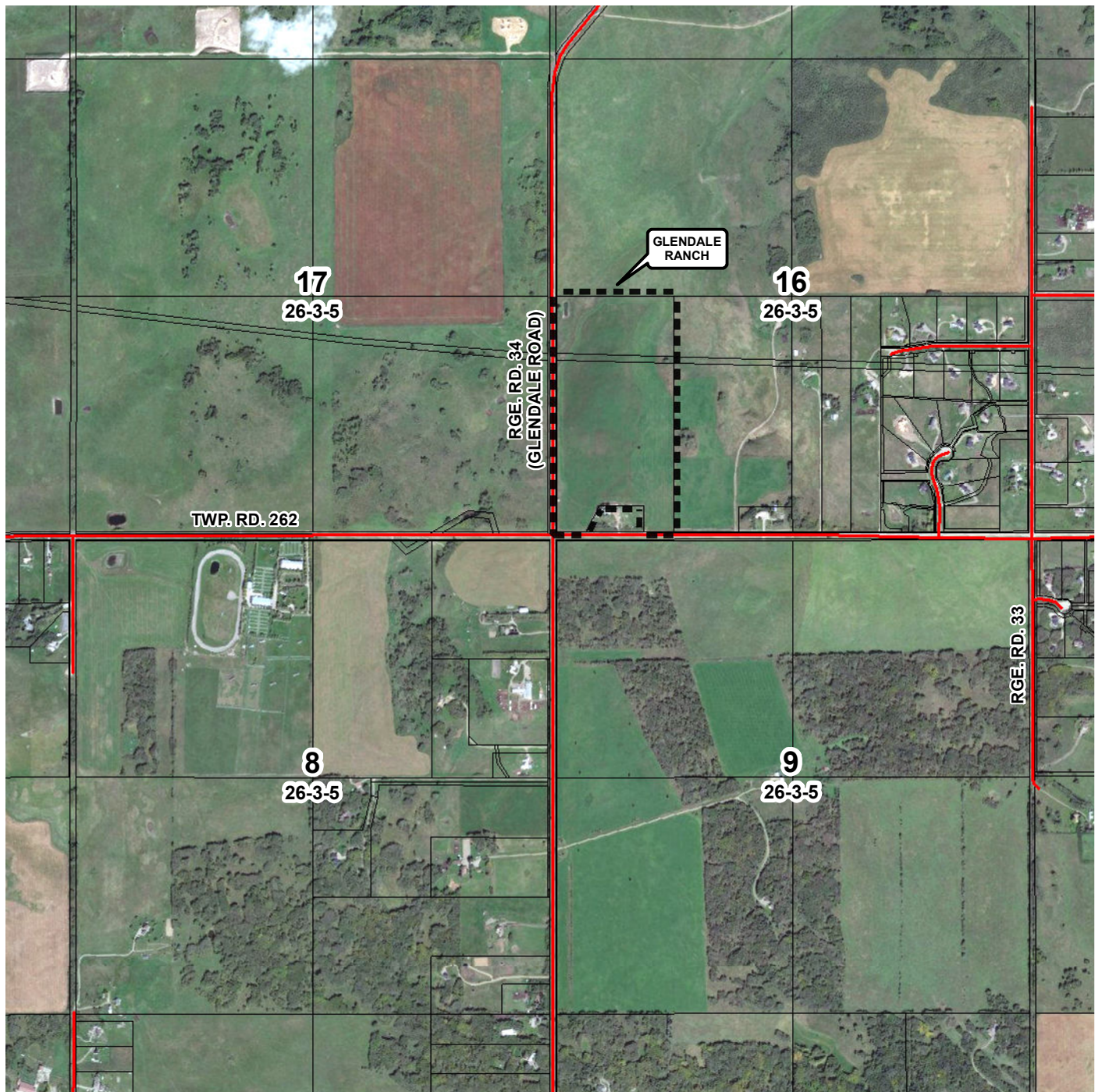
The surrounding area is located within the Bearspaw ASP area and is a mix of country residential development, grazing and crop land. The quarter sections to the north, south and west are owned by a single owner who currently graze cattle on the land as part of a larger operation on other quarter sections in the area. In addition, the northeast of NE15-16-26-3-W5M has historically been crop land.

The Mountain Glen multi-parcel country residential subdivision (R-2 district) is located on the quarter section to the east. In 2004, Council approved the re-designation and subdivision of 23 residential lots on 100 acres of this quarter section. In October 2006, Council approved the re-subdivision of the three remaining 20-acre parcels into 13 additional residential parcels of approximately four acres each, thereby creating a total of 36 parcels on the quarter section. As of October 2013, the most recent of numerous time extensions had lapsed and no additional lots had been registered with land titles. The subdivision approval required several conditions, including the provision of piped water to the new parcels. Currently, the subdivision is serviced with water by the Rocky View Water Co-op (RVWC) for the original 23 lots.

Further east on Township Road 262 toward Lochend Road, the land is subdivided into country residential parcels of various sizes. Quarter sections have been subdivided into AH (Agricultural Holding District), R-2 and R-3 country residential parcels, including the Silverhorn Residential District and the most recent R-1 Indigo Hills Conceptual Scheme has been approved for 55 residential parcels located on NW-11-26-3-5.

Along the west side of Glendale Road and south of the Plan Area, the east half of section 8-16-26-3-W5M has been subdivided into 11 country residential parcels variously designated as RF-2, R-3 and AH.

A gas transmission line located within Plan 355 JK crosses the Plan area in SW16-26-3-W5M. The certificate of title identifies ATCO gas as the holder of a caveat on title. The pipeline does not contain sour gas and no additional development setbacks are required outside the existing right-of-way. The current owner of the pipeline, TransCanada Pipelines, has requested that a seven-metre building setback be established from the pipeline right-of-way and that no development be allowed over top of the right-of-way. Discussions are underway with the landowners to re-develop and expand the diameter of the pipeline and to upgrade existing distribution lines in the vicinity. Discussions include the provision for future driveway access across the proposed pipeline.



Legend

- PLAN AREA BOUNDARY
- ROADS



GLENDALE RANCH

MAP 5

**SURROUNDING LAND
OWNERSHIP CONTEXT
Pt. W1/2 SW16-26-3-W5M**

0 100 200 400 600 800 1,000 Meters

1:20,000

File: GlendaleRanch_005B

Date: 2019/03/08

3.2 Existing Transportation Networks

3.2.1 Existing Access Points

Current access to the Glendale Ranch Plan Area is by way of three access points. One is located along Township Road 262 located adjacent to the southeast corner of the existing residential parcel. Glendale Road provides two additional approaches to access the Plan Area. The first one is located immediately north of Township Road 262. The second approach is located further north on Glendale Road approximately 600 metres north of the Township Road 262 intersection, providing an approach for the existing ATCO gas heater station. Other approaches along Township Road 262 provide access for the two existing country residential parcels located in SW16-26-3-W5M.

3.2.2 Existing Regional Transportation System

Access to the Plan Area is by way of Glendale Road. The intersection of Glendale Road and Township Road 262 is controlled by a two-way stop, with the stop control on Glendale Road. No turning lanes are provided and there is no illumination at this intersection. South of Township Road 262, Glendale Road is a paved, two-lane road on a nine-metre carriageway. To the north of Township Road 262, Glendale Road is also paved. In both cases, direct residential access is permitted. There is no illumination and there are no pavement markings.

Township Road 262 is designated as a two-lane, paved, primary collector road. It provides two travel lanes of 3.5 metres per lane and shoulders that are 0.5 metres (1.6 feet) wide. Illumination is not provided and direct residential access is permitted. The posted speed limit is 80 km/h.

Highway 1A is approximately three kilometres to the south of the subject site and Highway 766 (Lochend Road) is approximately 2.4 kilometres to the east. The intersection of Glendale Road and Highway 1A has been upgraded to a major/minor divided highway intersection in conjunction with ongoing Highway 1A twinning.

According to the Highway 1A Transportation Functional Study, 2010 prepared by ISL Engineering for Rocky View County, Township Road 262 is identified as a future four-lane primary collector for a future population scenario of 15,000 people. Glendale Road is identified

as a two-lane collector road up to the northwest corner of the Plan Area. North of SW16-26-3-W5M, the future road designation reverts to local road status. The study further shows Township Road 262 as a potential long-range transit route.

A Transportation Impact Assessment (TIA) was prepared by McElhanney Consulting in September 2018. The existing background traffic operations indicate that the intersection of Glendale Road and Township Road 262 currently operates at level of service (LOS) 'A' for all intersection approaches. This represents an average delay for intersection movements of 10 seconds or less per vehicle according to the Highway Capacity Manual (TRB, 2010). A site visit to the study intersections was carried out on August 14, 2018. A cursory review of sight lines from each approach at both intersections indicated that adequate sight lines are available in all directions.

4.0 *PLAN CONCEPT AND POLICIES*

4.1 Concept Evolution

The Glendale Ranch development evolved for years before being submitted for approval as a Conceptual Scheme. In 2014, the landowner submitted a Conceptual Scheme for a multi-lot subdivision complete with piped water and sewer for the entire quarter section. However, the original project was withdrawn in 2016. The current, proposed 2018 Conceptual Scheme proposes large lot country residential subdivisions in keeping with the surrounding rural residential character.

4.2 Future Land-Use Concept (Map 6)

4.2.1 Overall Concept

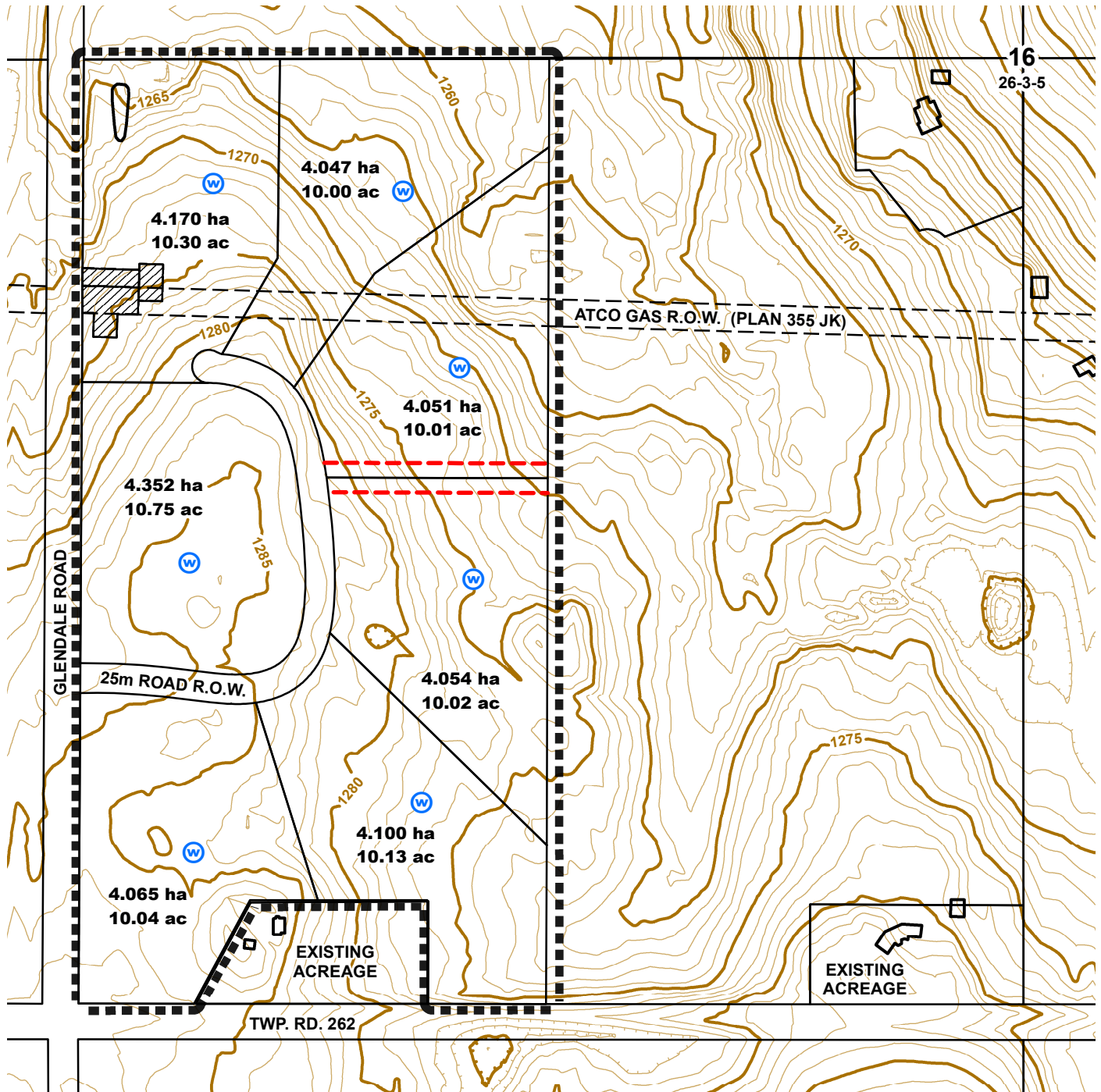
The concept proposes subdividing seven parcels of approximately 4.05 hectares (10 acres) or slightly larger, each to be serviced by individual wells and on-site sewage disposal systems in accordance with Provincial requirements and County standards. Proposed access is from Glendale Road by way of a public, internal road designed to County standards. Each parcel has been identified with an approximate home location (as a suggestion for potential purchasers). A production water well currently exists within 50 metres of each suggested homesite.

The single-family parcels offer couples and growing families the opportunity for a rural lifestyle with potential for additional general agricultural uses and home-based business uses as provided in the County's R3 District of the Land Use Bylaw. The generous lot sizes and low density provides a transition between higher rural densities to the east and south and lower residential densities to the west and north.

Proposed parcels offer mountain view potential, privacy and proximity to the internal subdivision road. Wherever possible, development has been designed to reduce the need for cut-and-fill for road construction. Individual residences are able to utilize slopes for residential walkouts to enhance views, privacy and architectural innovation.

4.2.2 Population and Staging

Based on the anticipated form of single family dwellings, the 2016 Statistics Canada Census reports an average of 3 people per private household within the Rocky View County Census Subdivision. Therefore, the population of the Plan area is expected to be approximately 21 persons at full build out. Staging is expected to occur as a single Phase.



Legend

- PLAN AREA BOUNDARY
- ▨ ATCO GAS HEATER STATION (PROPOSED APPROX. LOCATION)
- ⊙ EXISTING WATER WELL
- CONTOUR (5m)
- CONTOUR (1m)
- LAND SUBJECT TO POTENTIAL FUTURE ROAD ACQUISITION
- == UTILITY ROW



GLENDAL RANCH

MAP 6 FUTURE LAND USE CONCEPT Pt. W1/2 SW16-26-3-W5M

0 50 100 200 Meters

1:5,000

File: GlendaleRanch_006

Date: 2019/04/01

4.2.2 Overall Land-Use Policy

- a) The future land-use concept map is identified in Map 6. Future subdivision and development will be in accordance with the policies within this Plan and Maps 6 and 7.***
- b) The ASP Future Land-Use Concept Map is conceptual. Lot configuration and final road alignments will be designed prior to the subdivision approval stage. The actual size of lots will be determined at the subdivision approval stage in conformity with R-3 Land Use Bylaw Regulations.***
- c) Major deviations to the Conceptual Scheme design and policies will require an amendment to this Plan. Relaxations may be considered without an amendment where the reconfiguration of parcels, stormwater management options or road design would, in the opinion of the approving authority, maintain the overall intent of the plan policies.***

4.2.4 Single-Family Residential Policy

- a) Unless there is an amendment to this Plan, the Glendale Ranch concept will contain a maximum of 7 parcels, individual water wells and individual, on-site sewer service.***
- b) The internal access road will be maintained as a public road.***
- c) Single-family residential parcels will be a minimum of 4 hectares (9.88 acres) in size.***

4.3 Transportation Network

4.3.1 Onsite Access and Circulation

The internal subdivision road is designed to work with the existing topography and minimize the need for cut and fill, while retaining logical and convenient road access. The internal road will be on a 25-metre right-of-way with an 8-metre (26-foot) paved surface. Access from the County road system will be through one access point on Glendale Road just north of Township Road 262.

The access to Glendale Road is located approximately 260 metres (853 feet) north of Township Road 262. Based on Rocky View County's Servicing Standards, 2013 (Road Design Guidelines, sec. 400), a separation of at least 45 metres between the road approach and adjacent road is required.

4.3.2 Regional Traffic Assessment

As noted in Section 3 of this plan, a Transportation Impact Assessment (TIA) was prepared by McElhanney Consulting in September 2018. The study assessed the traffic impacts associated with the new concept plan for the Glendale Ranch development in order to identify potential deficiencies on the road network and recommend improvement options.

The TIA concludes that based on the results of the analysis conducted for this study, the proposed future development of the Glendale Ranch residential subdivision is expected to generate a very low volume of traffic in the future, which will not have a significant effect on traffic operations. Therefore, improvements to the existing road network are not required based on the additional traffic volumes generated by the planning area.

4.3.3 Transportation Policy

- a) The public, internal subdivision road will be constructed by the developer to Rocky View County standards.**
- b) Access to the development will be provided as per Rocky View County requirements and the recommendations of the Transportation Impact Assessment (TIA).**
- c) At the time of subdivision approval, the developer will enter into an agreement to ensure that the road concept, as generally shown in Map 6, is constructed to County standards.**
- d) A potential second access to the east will be reserved through a road acquisition agreement at subdivision approval stage.**

4.4 Reserve Land and Rights of Way

The County has indicated that it prefers to take Municipal Reserve as cash in lieu at subdivision stage. Discussions to date with County staff have not identified land that could be considered as creditable municipal reserve land for trails or open space. No Environmental Reserve land has been identified in the Conceptual Scheme.

4.4.1 Reserve Policy

- a) Municipal Reserve (MR) will be dedicated as cash in lieu as provided for in the Municipal Government Act.***

4.4.2 Existing Gas Pipeline Right-Of-Way

As noted in Section 3 of this plan, a gas transmission line (Plan 355JK) crosses the planning area in SW16-26-3-W5M. The certificate of title identifies Atco Gas and Pipeline Limited as the holder of a caveat on title. In addition, regardless of whether the pipe is decommissioned, Atco will retain the right-of-way and continue to request a seven-metre building setback from the edge of the right-of-way. Therefore, the gas line right-of-way will be considered open space.

The gas line operator is planning to increase the current capacity of the pipeline, upgrade the existing heater station and relocate existing service lines in the Plan area. The resulting line expansion will require protection of driveway access for the two most northerly proposed lots in order to allow crossing the pipeline by vehicles including emergency vehicle access. This is currently under discussion between the developer and the pipeline operator.

4.4.3 Existing Gas Pipeline Policy

- a) All buildings will require a minimum seven-metre setback from the edge of the gas transmission line right-of-way (Plan 355JK).***
- b) Development will not be allowed over Plan 355JK. except for driveway construction suitable for emergency vehicles and other large vehicles.***

4.5 Water Well Analysis

As noted in section 2, Aaron Drilling completed 7 production water wells in the spring of 2018. This represented one well for each of the 7 proposed lots. Thereafter the data was submitted to Groundwater Information Technologies Limited (GRIT) for their review and interpretation. In summary, the quantity and quality of water available is sufficient to meet Provincial requirements.

Pumping tests were undertaken on newly installed water wells within the Plan area in order to determine if the aquifer underlying the site can provide water at a sustained rate of at least 3.4 m³/ day, for an annual volume as defined in the Water Act, of 1250 m³. The 7 wells vary between 47m and 115 m in depth. The wells obtain water from sandstone aquifers of the Paskapoo Formation. The aquifers are overlain by a significant amount of shale and glacially deposited tills and clays, which aid in preventing surface water migration into the underlying aquifer. There are no existing groundwater licenses in the area. There is a moderate amount of residential development in the area, so the groundwater use in the area can be described as minimal. Based on water well drilling reports, the channel volume is such that hydraulic communication between aquifers is not expected.

Results of pump tests among the 7 wells varied between 1.2 to 93 imperial gallons per minute (IPGM). The consultant report states that all wells are in excess of the 1250m³ per year and each well can supply the necessary amount as required by the Water Act. In some parcels, cisterns will be recommended to ensure uninterrupted water supply. No adverse effects to existing domestic, licensed or traditional agricultural groundwater users should result due to production of water from these wells for domestic purposes.

The report states that levels of total dissolved solids (TDS) was elevated in some wells and that treatment is recommended for iron, manganese and fluoride in some of the wells. Overall, with appropriate treatment, water quality will meet acceptable concentrations (MAC) for drinking water standards.

4.5.1 Piped Water Supply Potential

While Glendale Ranch is serviced by individual wells, the Rocky View Water Co-op (RVWC) has indicated a long-term plan to extend a potable waterline from Lochend Road west along Township Road 262 to the Plan Area boundary and thence south along Glendale Road to loop the back line to the existing Glendale Booster station. The proponent has retained 7 capacity units (CU's) from the RVWC to be part of the purchase agreement should this long term water line extension be constructed. Map 7 identifies potential easement locations that can be established in favour of the RVWC at subdivision stage as needed.

4.5.2 Water Servicing Policies

- a) Water service to the Glendale Ranch development will be provided by individual wells in accordance with Provincial requirements.*
- b) The applicant will enter into a Deferred Servicing Agreement as a condition of subdivision approval outlining that future lot owners will be required to connect to County wastewater, storm water and potable water servicing if and when such services become available.*
- c) While each water well meets requirements of the Water Act, a caveat will be registered on title at subdivision stage for parcels with wells producing below a defined yield.*

4.6 Wastewater Servicing

The proposed lots are intended to be serviced by individual, on-site sewage disposal systems in accordance with Provincial requirements.

4.6.1 Wastewater Management Policy

- a) Individual wastewater treatment systems shall be constructed in accordance with Provincial requirements.*

4.7 Stormwater Management Concept (Map 7)

4.7.1 Stormwater Drainage Flows

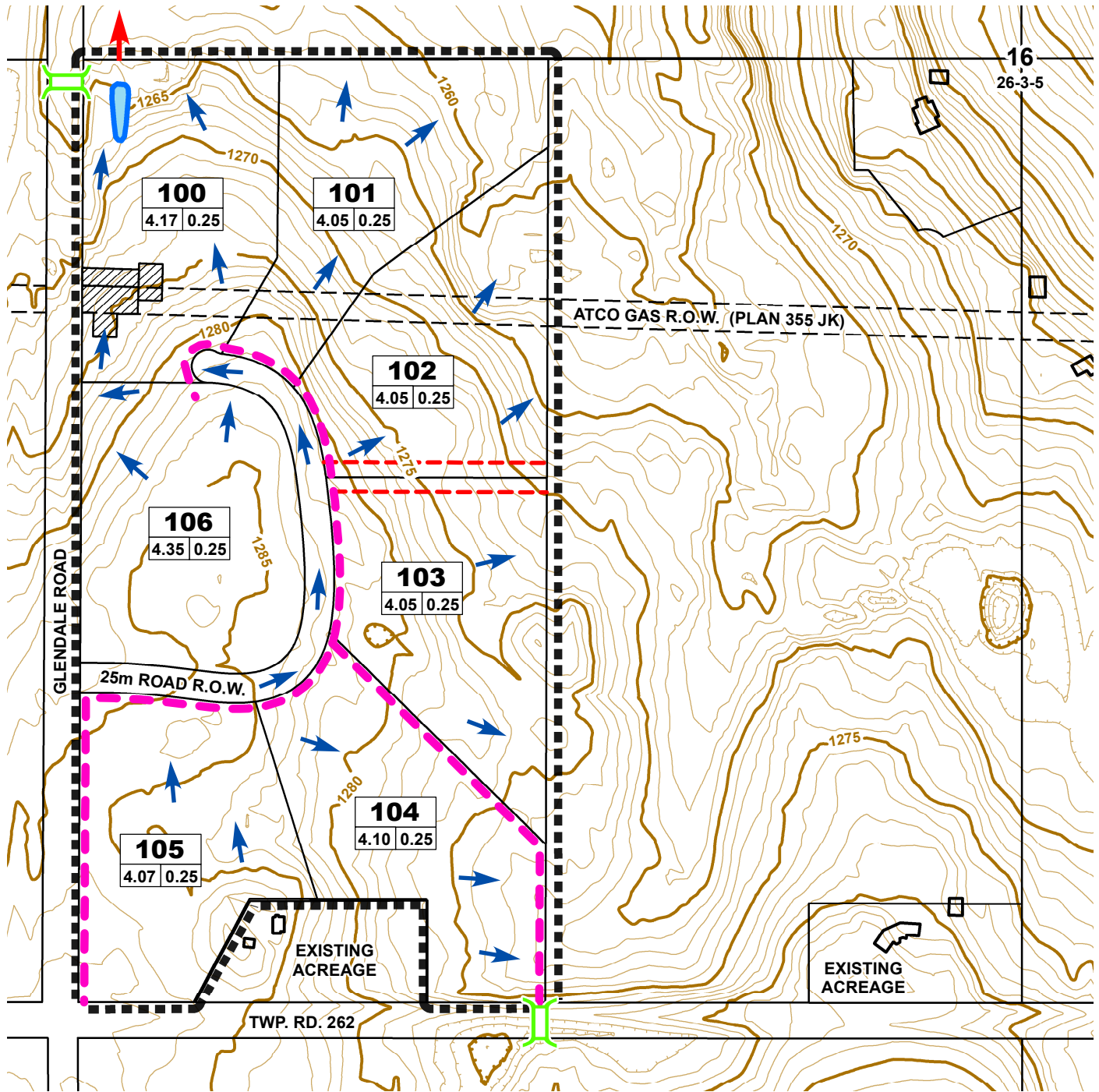
Map 7 shows the conceptual subdivision design, natural topography of the site and the conceptual stormwater management in accordance with County requirements. A conceptual stormwater management plan was prepared in October, 2018 by McElhanney Consulting Services. The Conceptual Stormwater plan is designed in accordance with the Nose Creek Watershed Water Management Plan (2008) and the Glenbow Ranch ASP Master Drainage Plan (2017). This conceptual SWM Plan covers the functional level design for SWM Plan at conceptual stage as required by Rocky View County. The civil design will be finalized at the subdivision stage with more input from other disciplines. The SWM Plan will also be updated and re-issued to include the finalized storm system infrastructure at the subdivision level.

Due to the relatively permeable soil horizon and low-density development proposed on this 30 hectare (74 acre) site, the stormwater concept plan will be able to match pre-development flows and post-development flows. Based on the subdivision location in the overall watershed, should the majority of the runoff be captured onsite, natural drainage to the Nose Creek will be considerably reduced. As a result, potential risk of starving the natural wetland system downstream will be increased. It will also increase the requirement of an extensive onsite stormwater storage facility.

Therefore, a low-impact development strategy is proposed for this subdivision. According to the Nose Creek Water Shed Water Management Plan, a development is considered “low impact” when the post-development runoff conditions mimic the pre-development rates and volumes. The release rates and volumes of the new subdivision will be equivalent to predevelopment, therefore reducing the impacts on the existing storm system which discharges to the West Nose Creek.

While the specifics will be determined during detailed subdivision design, one “green infrastructure” feature to be implemented is capture of roof drainage from each dwelling. Captured runoff will be stored in a stormwater storage facility (such as a cistern, rock garden or on site pond) for reuse, (e.g. irrigation), or encouraged to filter back into the ground, as it would have pre-development. A sample cistern system is shown in Figure 4 below.

The runoff generated on Map 7 at “DA200” (being the internal access road) will be directed towards the existing dugout on the northeast corner of the property. A stormwater conveyance system will consist of road-side ditches/culverts and vegetated swales as necessary. This will be more closely defined at the subdivision stage. The existing dugout can be utilized as a stormwater detention facility if required. Captured runoff can be released or returned to the original, natural hydrologic pathways through infiltration and evapotranspiration.



Legend

- PLAN AREA BOUNDARY
- EASEMENT OPTIONS FOR FUTURE RVWC PIPED WATERLINE EXTENSION
- LAND SUBJECT TO POTENTIAL FUTURE ROAD ACQUISITION
- == UTILITY ROW
- ➔ DESIGN EMERGENCY SPILL LOCATION (FUTURE)
- ➔ DESIGN OVERLAND DRAINAGE DIRECTION
- ⌋ EXISTING CULVERT
- CONTOUR (5m)
- CONTOUR (1m)
- ⌋ EXISTING DUGOUT
- 106**
4.07 | 0.25 CATCHMENT NUMBER/
AREA (ha)/
RUNOFF COEFFICIENT



GLENDAL RANCH

MAP 7

STORMWATER & POTENTIAL WATER SERVICING CONCEPT Pt. W1/2 SW16-26-3-W5M

0 50 100 200 Meters

1:5,000

File: GlendaleRanch_007

Date: 2019/04/01

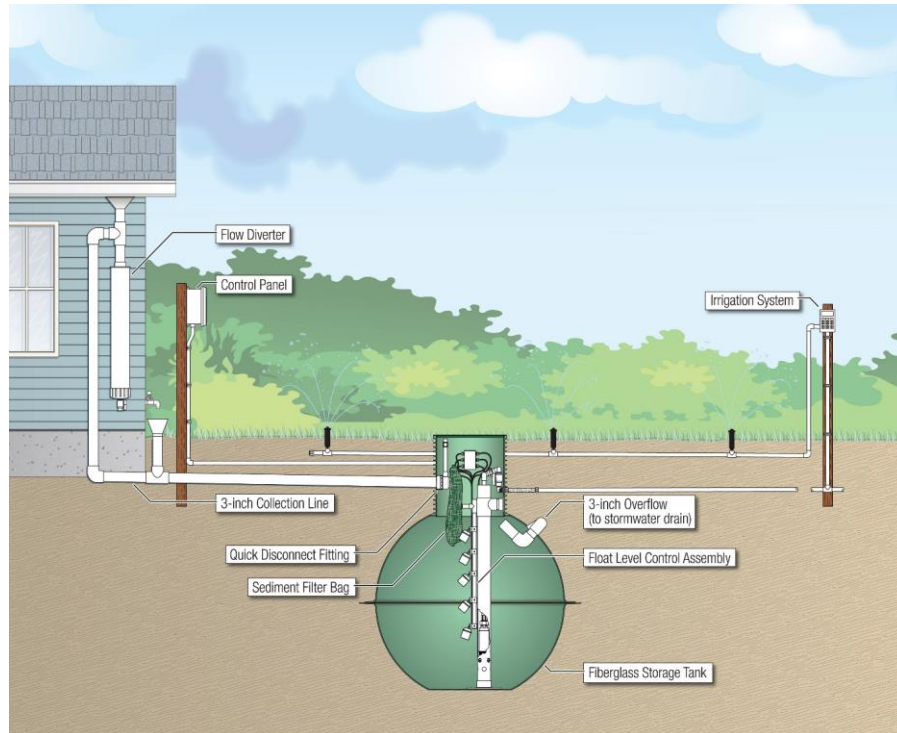


Figure 4 - sample water cistern

4.7.3 Stormwater Management Policies

- a) A more detailed stormwater management plan will be prepared at subdivision approval stage. The plan will detail the drainage conveyance system and detention facilities as generally identified in Map 7 of this Conceptual Scheme.**
- b) Provisions will be made so that pre-development runoff rates and volumes from offsite areas through the development parcel will continue to flow through the site in its post development state.**
- c) Low Impact Development (LID) techniques and Best Management Practices (BMPs) will be implemented into the drainage plan and identified at the detailed subdivision design stage.**
- d) On-lot BMPs will encourage runoff to be filtered into the ground or to be used for irrigation, as it would in a natural state.**
- e) All residential parcels in the planning area will require rainwater storage cisterns for outside irrigation purposes. Each cistern will capture rainwater from residential downspouts and be equipped with frost protection and adequate pumping capacity.**

4.8 County and Private Services

4.8.1 Solid-Waste Management

The provision of solid-waste management within the planning area will be provided through a contract with a solid-waste contractor on individual basis.

4.8.2 Shallow Utility Services

Electrical power, telephone and natural gas utilities are available in the immediate area. There are sufficient capacities to service the planning area.

4.8.3 Emergency Services

Police services will be provided by the Royal Canadian Mounted Police and Rocky View County special constables. Fire services and emergency services will be provided by the Bearspaw fire station #103 located 7.1 km (approximately a 7 minute distance) to the southeast.

Fire suppression measures will be applied on the site. These will include a fire suppression strategy to be confirmed at subdivision agreement stage, in conformity with the provincial building code, and other applicable standards and regulations.

4.8.4 Fire Suppression Strategy

The Plan Area currently contains a production well for each of the 7 parcels. Each of these wells contain sufficient water to serve maximum daily demand plus a storage cistern suitable for servicing the water requirements for a residential sprinkler system. It is proposed that each dwelling will be equipped with fire sprinklers. Although not required by the Alberta Building Code, the developer is prepared to register a restrictive covenant at subdivision endorsement stage for each of the 7 lots that requires individual lot purchasers to install a sprinkler system and associated cistern for each residential dwelling as part of specified architectural design guidelines.

Discussions with the County Fire Department indicates sprinklered residences would be the preferred fire suppression strategy. The proponent will work with the County Fire Department to address details and thereafter implement this strategy at the subdivision agreement stage.

4.8.5 County and Private Services Policies

- a) The developer will provide fire protection measures to the satisfaction of the County.***
- b) All residential units will include fire sprinklers as part of architectural design guidelines.***
- c) Shallow utilities will be installed at development permit stage in consultation with all applicable utility providers.***

4.9 Architectural Design and Landscaping

4.9.1 Maintaining High Standards

Area residents that met with the Glendale Ranch proponents at previous landowner meetings recommended that housing quality retain the high standards of the Bearspaw community.

Glendale Ranch, while providing options for design flexibility, must identify a high standard of architectural quality. Preferred building sites have been identified and water wells have been drilled in proximity to these conceptual building footprints.

As part of the effort to reduce the environmental footprint of dwellings, architectural design guidelines will specify residential dwelling to install low-flow water fixtures, a water recovery cistern for irrigation purposes and use specified energy efficient construction techniques to at least a LEED Gold Standard or equivalent.

4.9.2 Night-Time Lighting

Residents want protection from intrusive lighting from neighbours. Therefore, architectural design guidelines will apply strategies and techniques to reduce glare while still maintaining essential property security. A guide for this approach is outlined at www.darksky.org. This website is dedicated to balancing legitimate security and safety needs with the desire to avoid nuisance glare.

4.9.3 Landscaping

The pre-development planning area is largely rolling grassland with little tree cover and drainage percolates easily into a relatively permeable soil horizon. The vision of Glendale Ranch is to encourage reintroduction of native vegetation to create wind breaks, visual privacy, aesthetics and soil conservation. The developer and lot purchasers will work together to establish a detailed landscaping plan to determine which areas are best suited for introduction of native trees, shrubs and grasses, and which areas are best left untouched.

From a resource conservation perspective, the residential and landscaping design on each lot will aim to reduce water consumption, minimize ambient night-time light, specify native vegetation for open spaces and encourage appropriate revegetation of residential properties with native species wherever possible. Best-practices for stormwater management and detention of stormwater from roofs and other hard surfaces on each property for domestic irrigation will be outlined in more detail at the subdivision approval stage.

4.9.4 Architectural, Landscaping and Environmental Policies

(a) Architectural Design Guidelines shall be registered via Restrictive Covenant by the developer prior to final subdivision endorsement. The Guidelines shall include:

- i. Requirements for building sprinkling systems and**
- ii. Site Development Guidelines**

(b) The site development guidelines to be included as an appendix to the architectural design guidelines shall include:

- i. The construction and building envelope for each lot**
- ii. An overall landscaping plan for the development**
- iii. Mitigation measures based on the recommendations of the biophysical review prepared in support of this plan.**

(c) The architectural design guidelines shall be implemented and enforced by the Developer.

4.10 Neighbour Relations

The landowner surrounding three sides of the Plan Area farms the land and grazes cattle. The landowner has expressed concerns about negative effects on his cattle grazing by virtue of trespassing on his land by people and off-leash dogs. Future residents and visitors will need to be particularly aware they are living adjacent to a working ranch and should feel privileged to live in a rural setting. It is of particular importance for the success of Glendale Ranch that residents respect ongoing agricultural operations on their neighbour's land. Therefore, it will be incumbent upon visitors and residents to foster a culture of respect and prepare guidelines for appropriate behaviour in this regard. Appropriate fencing or other mechanisms will be implemented along the north boundary of Glendale Ranch to demarcate the quarter line and to discourage trespassing by humans and their pets.

4.10.1 Community Relations Policies

- a) The developer will, in consultation with the adjacent landowner, provide fencing and/or other effective mechanisms along the north boundary of SW16-26-3-W5M to discourage trespassing by people and off-leash dogs onto adjacent land.***

4.11 Plan Implementation

The actual redesignation, subdivision and development of Glendale Ranch will include discussion with the County and other stakeholders. The Conceptual Scheme and redesignation of the land-use bylaw to the R3 land-use District will be followed by a subdivision application and subsequent subdivision agreement.

Actual lot registration and site development will only occur once the County approves the subdivision agreement. The endorsement of the subdivision will require the following elements: a detailed stormwater management plan and a detailed road plan.

4.11.1 Implementation Policies

- a) Wherever possible site development will adhere to environmental recommendations identified in the Biophysical Review prepared by Corvidae Consulting Ltd.***

5.0 COMMUNITY CONSULTATION PROGRAM

The proponent conducted an open house on January 17, 2019 at the Bearspaw Hall. An invitation/ notification letter was sent to all landowners within 1 mile radius of the application.

Furthermore, the meeting was publicized in 2 issues of the Rocky View Weekly.

Approximately 18 people attended the open house. The landowners and consultant were on hand to listen to visitor comments and answer questions. A comment sheet was available for landowners to either fill out at the open house or return at a later date by mail or electronic means. Two written comments were received by the applicant.

Appendix A

COMPILED CONCEPTUAL SCHEME POLICIES

4.2.2 Overall Land-Use Policy

- a) The future land-use concept map is identified in Map 6. Future subdivision and development will be in accordance with the policies within this Plan and Maps 6 and 7.*
- b) The ASP Future Land-Use Concept Map is conceptual. Lot configuration and final road alignments will be designed prior to the subdivision approval stage. The actual size of lots will be determined at the subdivision approval stage in conformity with R-3 Land Use Bylaw Regulations.*
- c) Major deviations to the Conceptual Scheme design and policies will require an amendment to this Plan. Relaxations may be considered without an amendment where the reconfiguration of parcels, stormwater management options or road design would, in the opinion of the approving authority, maintain the overall intent of the plan policies.*

4.2.4 Single-Family Residential Policy

- a) Unless there is an amendment to this Plan, the Glendale Ranch concept will contain a maximum of 7 parcels, individual water wells and individual, on-site sewer service.*
- b) The internal access road will be maintained as a public road.*
- c) Single-family residential parcels will be a minimum of 4 hectares (9.88 acres) in size.*

4.3.3 Transportation Policy

- a) The public, internal subdivision road will be constructed by the developer to Rocky View County standards.*

- b) Access to the development will be provided as per Rocky View County requirements and the recommendations of the Transportation Impact Assessment (TIA).*
- c) At the time of subdivision approval, the developer will enter into an agreement to ensure that the road concept, as generally shown in Map 6, is constructed to County standards.*
- d) A potential second access to the east will be reserved through a road acquisition agreement at subdivision approval stage.*

4.4.1 Reserve Policy

- a) Municipal Reserve (MR) will be dedicated as cash in lieu as provided for in the Municipal Government Act.*

4.4.3 Existing Gas Pipeline Policy

- a) All buildings will require a minimum seven-metre setback from the edge of the gas transmission line right-of-way (Plan 355JK).*
- b) Development will not be allowed over Plan 355JK. except for driveway construction suitable for emergency vehicles and other large vehicles.*

4.5.2 Water Servicing Policies

- a) Water service to the Glendale Ranch development will be provided by individual wells in accordance with Provincial requirements.*
- b) The applicant will enter into a Deferred Servicing Agreement as a condition of subdivision approval outlining that future lot owners will be required to connect to County wastewater, storm water and potable water servicing if and when such services become available.*
- c) While each water well meets requirements of the Water Act, a caveat will be registered on title at subdivision stage for parcels with wells producing below a defined yield.*

4.6.1 Wastewater Management Policy

- a) Individual wastewater treatment systems shall be constructed in accordance with Provincial requirements.***

4.7.3 Stormwater Management Policies

- a) A more detailed stormwater management plan will be prepared at subdivision approval stage. The plan will detail the drainage conveyance system and detention facilities as generally identified in Map 7 of this Conceptual Scheme.***
- b) Provisions will be made so that pre-development runoff rates and volumes from offsite areas through the development parcel will continue to flow through the site in its post development state.***
- c) Low Impact Development (LID) techniques and Best Management Practices (BMPs) will be implemented into the drainage plan and identified at the detailed subdivision design stage.***
- d) On-lot BMPs will encourage runoff to be filtered into the ground or to be used for irrigation, as it would in a natural state.***
- e) All residential parcels in the planning area will require rainwater storage cisterns for outside irrigation purposes. Each cistern will capture rainwater from residential downspouts and be equipped with frost protection and adequate pumping capacity.***

4.8.5 County and Private Services Policies

- a) The developer will provide fire protection measures to the satisfaction of the County.***
- b) All residential units will include fire sprinklers as part of architectural design guidelines.***
- c) Shallow utilities will be installed at development permit stage in consultation with all applicable utility providers.***

4.9.4 Architectural, Landscaping and Environmental Policies

(a) Architectural Design Guidelines shall be registered via Restrictive Covenant by the developer prior to final subdivision endorsement. The Guidelines shall include:

- i. Requirements for building sprinkling systems and**
- ii. Site Development Guidelines**

(b) The site development guidelines to be included as an appendix to the architectural design guidelines shall include:

- i. The construction and building envelope for each lot**
- ii. An overall landscaping plan for the development**
- iii. Mitigation measures based on the recommendations of the biophysical review prepared in support of this plan.**

(c) The architectural design guidelines shall be implemented and enforced by the Developer.

4.10.1 Community Relations Policies

a) The developer will, in consultation with the adjacent landowner, provide fencing and/or other effective mechanisms along the north boundary of SW16-26-3-W5M to discourage trespassing by people and off-leash dogs onto adjacent land.

4.11.1 Implementation Policies

a) Wherever possible site development will adhere to environmental recommendations identified in the Biophysical Review prepared by Corvidae Consulting Ltd.