

GLENDALE MOUNTAIN VIEW CONCEPTUAL SCHEME

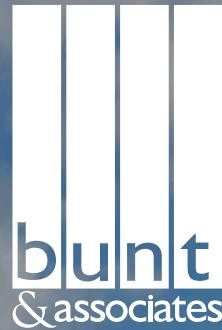
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ROXBURY VIEW
COUNTY

URBANSTAR ™

CIVICWORKS
PLANNING + DESIGN



InfraCor

GLENDALDE MOUNTAIN VIEW CONCEPTUAL SCHEME

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1.0 INTRODUCTION

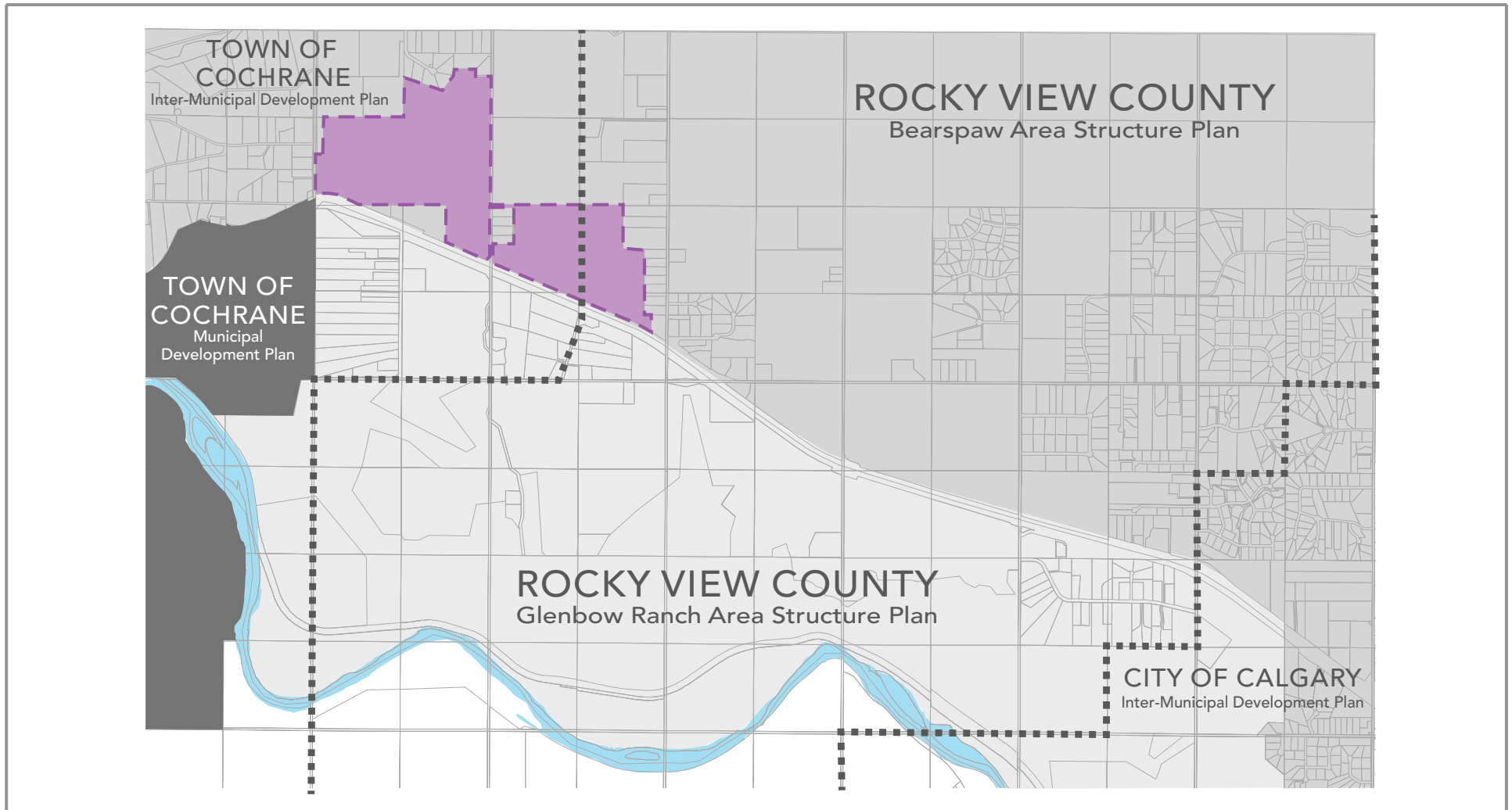
1.1 Purpose and Layout of the Conceptual Scheme

The Glendale Mountain View Conceptual Scheme serves as a guide to the future development of +/- 673.73 acres (+/- 272.64 hectares) of subject lands within Sections 5, 6, and 7-26-3-W5M in Rocky View County, referred to as the Plan Area. Its boundaries are reflected in **Figure 1: Regional Location of the Plan Area**. The Conceptual Scheme is a document approved by bylaw following a public hearing of Rocky View County Council that details future land use and servicing provision for the Plan Area.

The Conceptual Scheme is organized as follows:

- Alignment with relevant Provincial and County policy.
- Plan Area details regarding current land use and a description of its physical characteristics.
- A Land Use Concept that includes specific policies for implementation regarding land use, transportation, open space, and site servicing.
- A timeline of community engagement outlining how feedback was received and integrated into the Conceptual Scheme.
- A compilation of the supporting technical reports completed on the site.

In order to achieve the goals as outlined in this Conceptual Scheme, the existing Bearspaw Area Structure Plan will require a minor amendment.



 GLENDALE MOUNTAIN VIEW



1.2 Vision

The Glendale Mountain View Conceptual Scheme will showcase a community that is amenity rich and fully embodies the natural environment and character of Bearspaw. This community will celebrate the complexity of its natural surroundings through an organic neighbourhood design that is dedicated to maintaining open space through interconnected pathways and parks. Public amenities, a quaint commercial node, and variety of housing opportunities are envisaged for this community. Glendale Mountain View will strive to be socially, economically, and most importantly, environmentally sustainable.

1.3 Objectives

The objectives of the Glendale Mountain View Conceptual Scheme are as follows:





- To inform how the Conceptual Scheme adheres to requirements of applicable municipal policy including The County Plan, Bearspaw Area Structure Plan, the Land Use Bylaw, and a number of other relevant statutory and non-statutory documents. To accommodate this Conceptual Scheme, the Bearspaw Area Structure Plan will require amendment. The Conceptual Scheme closely aligns with the principles within The County Plan.
- To define all lands contained within the Conceptual Scheme, including current and adjacent land use. Additionally, to provide a planning and development framework that will guide the implementation process for Rocky View County.
- To identify existing environmentally and historically sensitive areas to be maintained. Also, to demonstrate sustainability principles in the implementation and integration of the community design in order to foster long term preservation of these areas.
- To introduce a series of controls for landscaping and architecture to maintain the naturally oriented and aesthetically pleasing open space community theme.
- To establish a Direct Control land use designation and development standards for all lands contained within this Conceptual Scheme.
- To identify and describe the multi-modal transportation and mobility network, which includes internal pedestrian circulation, a regional park and ride, and connections to neighbouring communities.
- To outline a sustainable community servicing policy that properly sets the stage for connections to regional stormwater, wastewater,

and potable water servicing opportunities.

- To establish phasing guidelines for development, including the naming of subdivisions, transitioning and edge treatments.
- To summarize the community engagement strategy and illustrate how stakeholder feedback was received, documented, and integrated into the Conceptual Scheme.

1.4 Key Principles

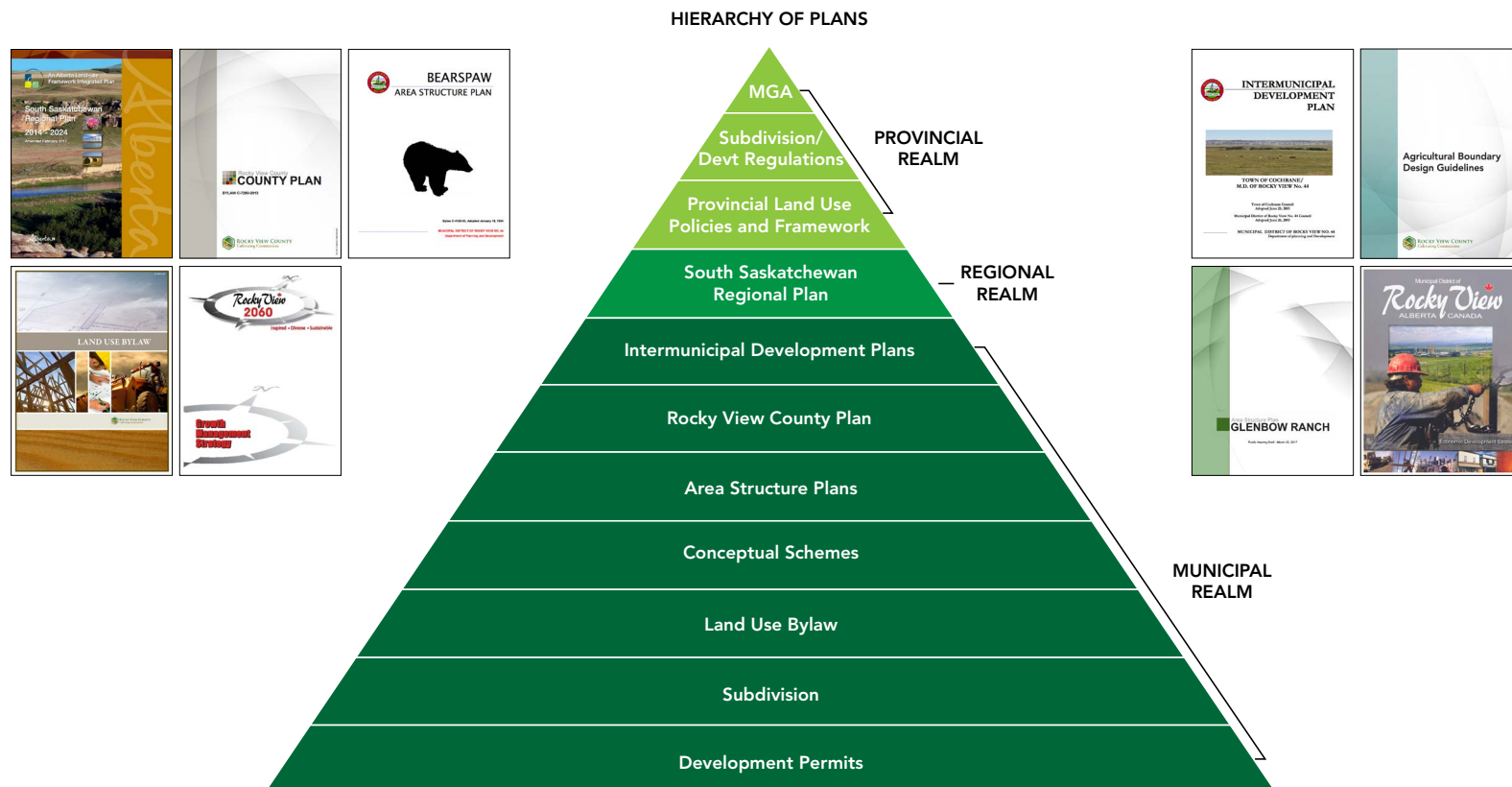
At the inception of the design and planning process, the landowner established key principles for the Glendale Mountain View community. These principles were shared with the public during engagement sessions and became targets to achieve in design. Every community stakeholder discussion held and every decision made centred around these key principles. References to these key principles can be found throughout the remainder of this document. Their corresponding colours act as headers on pages where content aligns with the principle category. Please see these principles on the next page.

KEY PRINCIPLES	OBJECTIVE TIED TO PRINCIPLE		ACHIEVED?
	SUSTAINABLE SERVICING	Piped Water and Wastewater Servicing Low Impact Development Zero Discharge of Stormwater	✓ ✓ ✓
	MULTIMODAL TRANSPORTATION	Regional On-It Park & Ride Pathway Network Highway 1A Improvements	✓ ✓ ✓
	VARIED HOUSING FORMS	30% Single Family and 70% Villa Critical Mass to Support Servicing	✓ ✓
	RESPECT EXISTING RESIDENTS AND NEIGHBOURS	30m Vegetated Perimeter Buffer Transparent and Ongoing Communication	✓ ✓
	RESPECT THE NATURAL ENVIRONMENT	50% Open Space Conserved Preserve and Enhance Natural Features (ie tree stands, overland drainage courses, and major wetlands) Naturalized Trails and Pathways	✓ 47.42% ✓ ✓
	PROVIDE LOCAL COMMUNITY AMENITIES	School Site Small Scale Local Commercial Sports Fields/Courts, Parks and Recreation Spaces Public Spaces Celebration of Historical Features	✓ ✓ ✓ ✓ ✓

2.0 REGULATORY PROCESS

Numerous policy documents were consulted in the creation of the Glendale Mountain View Conceptual Scheme, both statutory and non-statutory. They are as follows:

- The Provincial Land Use Framework/South Saskatchewan Regional Plan;
- Rocky View County Plan, Bylaw C-7280-2013 (2013)
- Bearspaw Area Structure Plan, Bylaw C-4129-93 (1994)
- Rocky View County Land Use Bylaw, Bylaw C-4841-97 (1998)
- Rocky View 2060 Growth Management Strategy (2009)
- Rocky View County Economic Development Strategy (2003)
- Glenbow Ranch Area Structure Plan First Reading Draft (2016/2017)
- Intermunicipal Development Plan between the Town of Cochrane and M.D. of Rocky View No. 44, Bylaw C-5369-2001 (2001)
- Rocky View County Agricultural Boundary Design Guidelines



2.1 The County Plan

Glendale Mountain View Conceptual Scheme shall align with the vision and principles of The County Plan. In a manner consistent with The County Plan, Glendale Mountain View is proposed as a compact development form tied to both piped water and wastewater servicing. The community shall be designed with a rural feel, employing landscaping guidelines that maximize natural views, rural road standards, and architectural controls that ensure residential and commercial forms comply with and enhance the existing vernacular styles in the area. The community offers institutional uses, open space, recreational areas, amenities and pedestrian connections. The proximity of the Plan Area to the Glenbow Ranch ASP area allows for the participation in a regional piped water, stormwater and wastewater strategy that is fiscally responsible and sustainable in the long-term per County Plan principles.

A key direction of The County Plan is to use land efficiently by directing growth to defined areas, thus conserving the remaining large blocks of land for agricultural use. The Glendale Mountain View Plan Area is located within the boundaries of the Bearspaw Area Structure Plan, identified as one such a growth area in The County Plan. The County Plan encourages efficient use of land by reducing the development footprint through the use of compact residential development. It supports conservation design and allows for conservation communities within existing country residential areas. The County Plan emphasizes the importance of retaining rural character through the use of adjacent open space, and community design.

2.2 Bearspaw Area Structure Plan

The Bearspaw ASP Plan Area originally consisted of approximately 40,000 acres extending north and south of Highway 1A between Calgary and Cochrane. The Plan Area was recently amended and downsized considerably by the exclusion of all the lands south of Highway 1A that now form the Glenbow Ranch ASP Plan Area. The entirety of Glendale Mountain View falls within the Bearspaw ASP boundaries. This Conceptual Scheme more clearly aligns with the

compact development forms outlined in the The County Plan. As a result, the Bearspaw ASP will require amendment to accommodate the Glendale Mountain View Conceptual Scheme. Over the past decade, there have been a number of applications within the Bearspaw Area Structure Plan for developments with lots smaller than two acres, due to the decreased demand for traditional sized acreages but the continued desire of residents for a rural lifestyle. Section 8.1.21 of the Bearspaw Area Structure Plan states:

“Notwithstanding Policy 8.1.20 and Figure 3, the Municipality may consider redesignation proposals and/or application contemplating parcel sizes of less than four (4) acres in size, provided these proposals are supported by a Concept Plan that is prepared and adopted pursuant to the provisions of this Plan.”

Glendale Mountain View Conceptual Scheme diverges from Bearspaw ASP in its residential lot sizes and introduction of commercial land use. To achieve the key principles outlined in **Section 1.4** and to create a complete community, the Plan Area will require a Direct Control (DC) Land Use District.

2.3 Rocky View County Land Use Bylaw

To create the unique, sustainable, and smart growth community that will be Glendale Mountain View, it will be necessary to move away from traditional residential and commercial land use districts found in the Land Use Bylaw. From a residential standpoint, parcel sizes will be smaller than Rocky View County residential districts in order to cluster dwellings and maximize open space. The range of commercial land uses listed in the Land Use Bylaw do not fully align with the desired permitted and discretionary uses for the small scale community node being proposed. There are, however, some parallels that will be drawn with the base district of Commercial Village Centre. As a result of these variances, a DC Bylaw District covering the entirety of the Plan Area shall be submitted concurrently with this Conceptual Scheme. Similar land use and development approaches were utilized in the Rocky View communities of Watermark and Harmony.

2.4 Rocky View County Economic Development Strategy

A number of goals from the Rocky View County Economic Development Strategy have been taken into consideration when developing the Land Use Concept for this Plan. The first regards more efficient delivery of services, which Glendale Mountain View shall achieve through its residential clustering technique. Lots are clustered closer together in the Plan Area to create a density of 2.0 upa. This density justifies the expense of a piped servicing strategy for water and wastewater while lowering the amount of piping required to service the neighbourhood. Another goal Glendale Mountain View aligns with is the appropriate economic planning and development of the neighbourhood to encourage sustainable settlement patterns, covered by the employment opportunities at the small scale commercial site. Finally, the community will be developed with safety as a prime concern, evidenced by full access to County Emergency Services. The neighbourhood will be designed to allow emergency vehicle access across the entirety of the Plan Area and each residence will be built with an emergency locator and a hydrant system.

2.5 Glenbow Ranch Area Structure Plan

The Glenbow Ranch ASP impacts Glendale Mountain View Conceptual Scheme from a servicing standpoint. Glenbow Ranch ASP proposes a regional water and wastewater treatment system which identifies a water supply line connection to the north and wastewater forcemain connections. It is the preferred servicing option that the Glendale Mountain View Developer be a contributor in the creation of the regional utility proposed within the Glenbow Ranch ASP. Alternately, the Glendale Mountain View Conceptual Scheme area can utilize standalone water and wastewater treatment plants and was designed to accommodate this contingency if required.

2.6 Intermunicipal Development Plan between the Town of Cochrane and M.D. of Rocky View No. 44

The County and Town of Cochrane have an Intermunicipal Development Plan (IDP) in place to foster cooperation, coordination, and communication on matters of mutual interest including site servicing, transportation, and watershed protection. The Glendale Mountain View Conceptual Scheme will be referred to the Town of Cochrane by Rocky View County under the intermunicipal referral process. The Landowner/Developer and their agents have met with leadership in the Town of Cochrane to discuss the Conceptual Scheme in 2013 and 2016.

2.7 Rocky View County Agricultural Boundary Design Guidelines

These guidelines aided the project team in making buffering and design decisions in the Plan Area and informed the overall Open Space plan both within and along the boundaries of Glendale Mountain View. Various techniques outlined in this document were employed, such as utilizing the minimum buffer of 15 metres between neighbouring residential uses and the use of vegetation and topography to minimize views of neighbours and maximize natural vistas. These ideas are expanded upon in **Section 5.1.6**.

3.0 CONCEPTUAL SCHEME STUDY AREA

The Glendale Mountain View Conceptual Scheme is composed of +/- 673.73 acres of land in Rocky View County, bound by Highway 1A to the south, Township Road 262 to the north, and Range Roads 34 and 40 respectively to the east and west. To the southwest of its western boundary is the Town of Cochrane, while Glenbow Ranch Provincial Park and the Bow River can be accessed across Highway 1A to the south.

The majority of the Plan Area is currently being used for agricultural purposes and can be characterized as gently undulating, sloping downwards to the north from Highway 1A. There is no longer any intensive livestock use on this site. It has been cultivated and supported in the past by the Copithorne family. A significant First Nations historical site, existing tree stands and higher order wetlands in the Plan Area will be protected throughout the development process and incorporated into the final neighbourhood design. The Plan Area once supported the Windy Ridge Equestrian Centre but this site no longer operates and is the location of the proposed commercial hub.

The land uses adjacent to the Conceptual Scheme boundary range from country residential to agricultural uses. These will be responded to via appropriate transitions and sensitive agricultural buffering and design.

3.1 Description of Current Land Use Districts within the Study Area

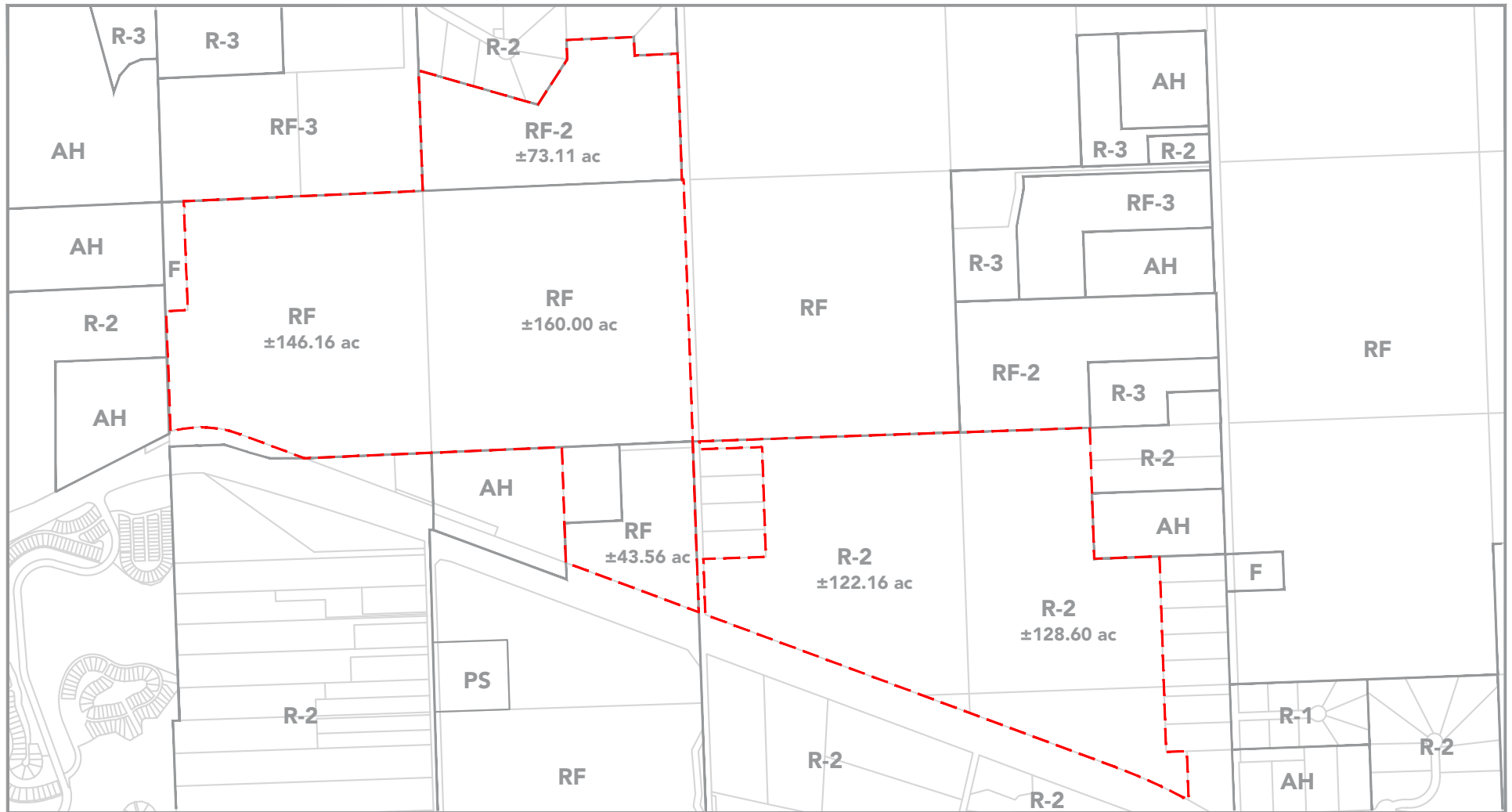
There are a number of different Land Use Districts assigned within the Plan Area, as seen in **Figure 2: Glendale Mountain View Plan Area** and **Table 1: Glendale Mountain View Landowner and Plan Area Acreage**. The westerly portion is designated either Ranch and Farm (RF) or Ranch and Farm 2 (RF-2) reflecting the historic use of the site as part of a farming operation. The easterly portion is designated Residential 2 (R-2), meant for small, primarily residential acreages. The balance of the lands are a mixture of Ranch and Farm and Agricultural Holdings land (AH).

TABLE 1: Glendale Mountain View Landowner and Plan Area Acreage

OWNER	LEGAL DESCRIPTION	HECTARES	ACRES
UrbanStar Mountain View Estates Ltd.	SW 7-26-3-W5M	+/- 59.15	+/- 146.16
UrbanStar Windy Ridge Phase 1 Inc.	SE 7-26-3-W5M	+/- 64.70	+/- 160.00
UrbanStar Windy Ridge Estates Ltd.	NE 7-26-3-W5M	+/- 29.59	+/- 73.11
UrbanStar Windy Ridge Commercial Inc.	Plan 9912147, Block 1, Lot 3, NE 6-26-3-W5M	+/- 17.62	+/- 43.56
UrbanStar Glendale Manor Inc.	NW, SW 5-26-3-W5M	+/- 49.43	+/- 122.16
UrbanStar Glendale Manor Inc.	NE, SE 5-26-3-W5M	+/- 52.04	+/- 128.60

3.2 Description of Adjacent Land Uses and Development Proposals

The Plan Area is adjacent to thirty seven (37) rural neighbouring parcels of varying size and use. To the south, the land primarily abuts Highway 1A and the Glenbow Ranch ASP. To the north is a mixture of RF, RF-2, RF-3, R-2, and R-3 uses in a mixture similar to what exists within the Conceptual Scheme boundary. To the east are a number of differing residential parcels and one Agricultural Holding. To the west, the Conceptual Scheme boundary is contiguous to the Town of Cochrane's urban boundary and the community of GlenEagles. Please see **Appendix A: Adjacent Landowner Acreages** for a detailed list of all neighbouring parcels.



GLENDALE MOUNTAIN VIEW
 LAND USE BOUNDARIES

SECTION 5, 6, 7, TOWNSHIP 26, RANGE 3, WEST OF THE 5TH MERIDIAN



4.0 PHYSICAL SITE FEATURES

4.1 Topography

In 2013, Maidment Land Surveys Ltd. was retained to create a topographical survey of the Plan Area. Evidenced by **Figure 3: Site Topography and Air Photograph**, site topography can be described as gently rolling, with elevations ranging from 1,305 to 1,335 metres, spanning a total of 30 metres (98.4 feet). The lands generally slope downwards from south to north from the highway. The majority of the site possesses grades that are below 5%, however, some isolated areas present grades of up to 27%.

4.2 Hydrogeological and Geotechnical Considerations

In December 2015, ParklandGEO prepared a geotechnical investigation into the Plan Area. Twenty-one (21) boreholes were drilled into the site to depths ranging 6.1 to 9.1 metres below grade, as depicted in **Appendix B: Borehole Locations Map**.

The study found that subsurface conditions in the Plan Area are suitable for phased development of the planned residential and commercial development. There were a number of geotechnical recommendations made regarding the site, the first of which was to prime for development via site grading and fills, levelling the site. Piles were recommended for heavy buildings, especially those located on fills, thereby preventing settlement issues. Furthermore, a note was made on trenching, primarily that it may be difficult in areas where bedrock is shallow and to be wary of this during construction.

A slope stability assessment was also undertaken by ParklandGEO on locations in the Plan Area that exceeded the unrestricted development grade of 15% listed by Rocky View County. These slopes were determined to be mature and stable from an aerial view, with no evidence of distress or landslide activity. They noted that the worst case scenario in the Plan Area would be saturation and minor surficial slumping on these high grade sites. Their recommendations were to

vegetate these slopes as soon as possible during the construction process, to avoid excessive watering, and to have drainage moving away from dwellings upon buildout.

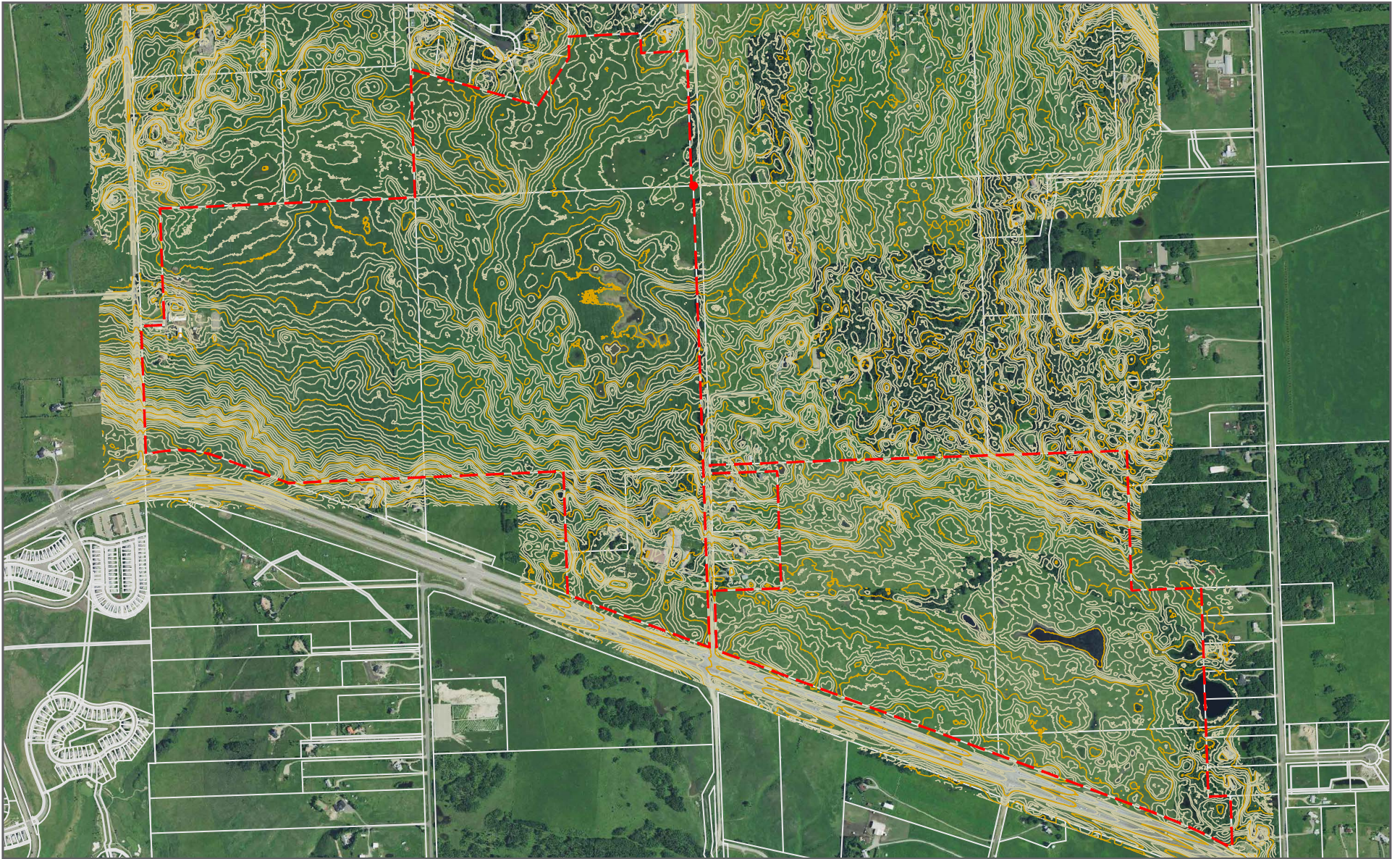
4.3 Soil Profile and Groundwater Levels

The general profile of soil encountered at the twenty one (21) boreholes in descending order was topsoil, followed by silty clay, clay till, and bedrock. Topsoil averaged a thickness of 150 to 610mm and was present at every borehole. It could be characterized as organic, black, and moist. The silty clay was only found in the four westernmost boreholes of the Plan Area, where it extended below the topsoil to a range of 1.8 to 2.4m below grade. It possessed a stiffer consistency than the topsoil and had lower than average moisture content. Clay till was the next soil layer encountered, and like topsoil was present in every borehole. In half of the boreholes, the clay till extended to a depth of between 1.5 to 6.0m, while it extended below the depth drilled in the remainder. Bedrock was found beneath the clay till that did not extend past 6.0m, and was hit at depths varying between 3.2 and 7.1m below grade. This rock was sedimentary in nature, being primarily composed of sandstone and siltstone.

Groundwater levels were measured two weeks after drilling and was only found in one of the boreholes. This measurement was taken in late September and the report states that the groundwater level may be higher and existent seasonally with snowmelt.

4.4 Vegetation

In June 2013, HAB-TECH Environmental Ltd. (now Ecotone Environmental Ltd.) finished conducting a terrestrial and wetland based biophysical impact assessment for the Plan Area. Their work consisted of background research and multiple site visits to classify and map habitats and wetlands present.



 GLENDALE MOUNTAIN VIEW



4.0 PHYSICAL SITE FEATURES

The research completed by HAB-TECH placed the Plan Area within the Foothills Parkland Subregion of the Parkland Natural Region, characterized by the presence of both aspen forest and native grasslands dominated by rough fescue. The Plan Area also falls into the Black Diamond Upland Ecodistrict, composed of approximately 80% grassland vegetation and 20% open canopied shrub on gently undulating morainal plain.

Site visits provided more specific information regarding vegetation. 3.6% of the site was human inhabited, made up of farming buildings, related infrastructure, and a gravel access road. 87% of the Plan Area could be characterized as disturbed grassland and cultivated fields, predominantly composed of non-native species. 4.8% of the Plan Area was covered by Aspen Forest. Balsam poplar and white spruce were also present in these forest tracts. Shrubs here were mostly native, while non-native species from the cultivated fields populated the forest floor. The remainder of the Plan Area was composed of small numbers of less common forest and wetlands.

Their overall findings were that the majority of the Plan Area had low ecological diversity and regional economic significance due to their anthropogenic nature and the level to which the lands and those adjacent to them were used for agricultural and ranching purposes. The relatively abundant supply (92.2%) of lands with low ecological significance dampens the likelihood of additional incremental development contributing significantly to regional habitat fragmentation. The property is not considered to be a potential wildlife corridor/route since local and sub-regional fragmentation of corridor areas has already taken place significantly due to agricultural development.

4.5 Wetlands

There were fifty three (53) wetlands of various size and significance identified, mapped, and classified utilizing the Stewart and Kantrud wetland classification system. These wetlands are mapped in **Appendix C: Existing Wetlands in the Plan Area**. They compose 2.5% of the total Plan Area. There were fifteen (15) class one (1) ephemeral wetlands

present, all of which were heavily disturbed by animal grazing and land cultivation, leaving them severely compromised. Native vegetation was absent from these class one (1) wetlands. Nineteen (19) class two (2) temporal wetlands were also found. Like their ephemeral counterparts, they are typified by heavy disturbance from animal grazing and land cultivation. However, due to their larger scale, many had some native wetland species present, including fowl bluegrass, narrow reed grass, wire rush, Sartwell's sedge, and woolly sedge. Eighteen (18) class three (3) seasonal wetlands were located in the Plan Area. Their deepest portions present as shallow marsh, with various marsh grasses and sedges. In shallow zones, native species found in temporal wetlands were found, while peripheral areas had the same non-native vegetation found in ephemeral wetlands. One class five (5) permanent wetland is partially located in the Plan Area. In addition to possessing the same vegetation and attributes as the class three (3) wetlands, its deepest portion is dominated by open water.

A total of 22.0 hectares of Plan Area will be devoted to Environmental Reserve (ER). These areas were carefully chosen based on the quality of the habitats and the interspersions among them. In the eastern portion of the property, the Permanent Wetland (W5), rated as having high ecological significance, is part of an ER area along with a mosaic of seasonal wetlands and patches of aspen and balsam poplar forest. In the northeast corner of the Plan Area, a matrix of aspen and poplar forest will also be retained. This area is part of a larger forest patch that extends north and east of the property. It is recommended that areas inside the ERs that are covered by non-native vegetation will be naturalized as much as possible by planting of native low/tall shrub and tree species.

A total of forty eight wetlands will be totally or partially lost during development for a total of 4.64 hectares. Impacts on wetlands in the Plan Area from development will require minimization and/or compensation under the Alberta Wetland Policy (2013). Approval for the development of wetlands should be done through Alberta Environment. A Wetland Impact Assessment (WIA) following the 2015 guidelines will be required.

4.6 Wildlife

HAB-TECH found that due to its highly cultivated landscape, little wildlife lived in the Plan Area. They noted thirty six (36) at risk bird, two mammal, three amphibian, and three reptile species that could potentially live on the site. No rare plant or rare plant communities were observed during field surveys and four vertebrate species at risk (Great Blue Heron, Least Flycatcher, Sora and Western Wood-Pewee) with a provincial designation of sensitive were recorded. To avoid disturbance, vegetation clearing and grading/contouring will occur outside of the nesting/fledgling timing window (approximately April 1 to August 20). If land clearing must be completed inside of this time frame, then a nest search should be conducted prior to clearing. If an active nest(s) is found, it cannot be disturbed based on the MBCA regulations.

4.7 Environmental Considerations

Three separate Phase I Environmental Site Assessments (ESA) were completed for different parts of the site as the Landowner/Developer chronologically purchased these lands. The three ESAs cover the majority of the Plan Area.

The first ESA was completed by Base Property Consultants Ltd. on April 22, 2010 for portions of 05-26-3-W5M, the eastern half of the Plan Area. Historically, land use here has been split between agricultural and country residential. There is one water well on the property, likely used by a nearby acreage. Scrap metal surrounds it which will need to be recycled when the site is developed. No record of environmental violation or impairment to the subject site exists, with adjacent properties being maintained reasonably according to site observations. Based on historical review, a site visit, and other available information, Base Property Consultants Ltd. recommended that no further environmental investigation was required on site.

The second ESA was completed by Amec Earth & Environmental in July 2011 for Plan 9912146, Block 1, Lot 3, composing the small piece of land adjacent to Highway 1A which connects the eastern

and western portions of the site. There were a number of items of interest found on the site and recommendations were provided. The first regarded three groundwater wells and six hydrants found on the site. Any of these not intended for future use were recommended for reclamation in accordance with Alberta Regulation 205/98, which outlines requirements for disinfecting and sealing wells. There were also two above ground storage tanks found on site. Amec Earth & Environmental Ltd. provided two recommendations here: that they be equipped with adequate spill and leak containment and that any soils impacted by fuel leaks be removed and disposed of at an appropriate landfill. Furthermore, the septic tanks on site not intended for future use were recommended for decommission and removal by a qualified professional. The improvements located on site also had a number of items to be addressed. Non-hazardous waste was found in and around two storage sheds towards the northern boundary of the site. These materials were recommended for disposal at an appropriate landfill, after which the ground should be assessed further. The farm itself had mold found in its drywall, and was constructed with harmful materials on site, including mercury in thermometers and potential asbestos and lead containing materials. When the site is developed, it will have to be safely remediated.

The third ESA was completed concurrently with the second by the same consultant, and was for a portion of S1/2 07-026-03-W5M, which is the remainder of the Plan Area, with the exception of its most northern portion. This site of approximately 300 acres is composed entirely of farmland and also possessed a number of items of environmental concern. Amec Earth & Environmental Ltd. noted the presence of waste materials including wood, fence wire, scrap metal, a refrigerator, tree branches, boulders and rocks from fields, an empty septic tank, propane bottles, an empty metal aboveground storage tank, and a hot water heater. All items found were located at a single dump site along the east central boundary of the northwestern field. The recommendation was for the waste materials to be removed and disposed of properly, after which another site assessment can be completed if there are any suspected impacts from the dumping. Based on the current review, there is no need for a Phase II ESA on this site.

4.8 Historical Resources Impact Assessment

Lifeways of Canada Limited completed a Historic Resources Impact Assessment (HRIA) on the Plan Area in May 2014. The majority of the land in the Plan Area is currently cultivated or has been previously farmed, so deep testing was undertaken for the presence of cultural artifacts. Uncultivated areas had shallow tests performed. The result of this work is the documentation of two new archaeological sites within the Plan Area: EhPo-127 and EhPo-129 and one outside of the Plan Area EhPo-128. The location of the sites are mapped in **Appendix D: HRIA Areas**.

EhPo-129 is a minor archaeological scatter located in the middle of a cultivated field, which the experts determined required no protection as it retained limited scientific and interpretive value.

The Windy Ridge Bison Kill (EhPo-127) was discovered at the northeastern margin of the Plan Area, where fields meet a wooded area. This site houses an extensive scatter of bone and fire-broken rock over 16.8 acres, materials associated historically with the killing, butchering, and processing of bison. The shallow depth at which these artifacts were found suggest this site was utilized relatively recently, and the report author recommends carbon dating and further work on the site to more thoroughly assess what is there. The Windy Ridge Bison Kill site was measured to be of regional significance and will be retained in this Conceptual Scheme as a cultural amenity.

Alberta Culture granted Historical Clearance on the site (OPaC:006139525) December 19, 2014 with the requirement that EhPo-127 and EhPo-128 be avoided and the resources remain in situ if possible. No further requirements were noted for EhPo-129.

4.9 Existing Structures

The majority of the site is comprised of cultivated agricultural fields or ranch and farm lands. There is only one dwelling on the site, a farmstead, located at Plan 9912146, Block 1, Lot 3. It consists of a house, a number of outbuildings, and a gravel access road which once

formed part of the Windy Ridge Equestrian Centre.

5.0 COMMUNITY DESIGN STRATEGIES, LAND USE POLICIES AND GUIDELINES

Land use and design decisions were made in accordance with the Vision and Principles of the Glendale Mountain View Conceptual Scheme outlined at the inception of the project. A number of additional considerations were derived from the public consultation process and review of the County Plan. The development concept has been significantly influenced by the relationship to existing area landowners and the need to incorporate appropriate transitions with existing Country Residential and Agricultural parcels, as seen in **Figure 4: Community Land Use Concept**. Within the site, a mix of housing types and styles were included to diversify the built form and provide options for residents to age in place to a certain extent, as people modify or downsize but wish to remain in the community. The development also actively calms vehicle traffic along Range Road 35 (Glenbow Road) and includes a traffic circle at a point that provides safe vehicle movements to Glendale Mountain View but does not permit the free-flow of traffic past residents living along Range Road 35 (Glenbow Road).

Glendale Mountain View includes a clustering of parcels to maximize open space provision. Conservation by design techniques were utilized in the site design to not impede on significant environmental and cultural features inclusive of the historical site, tree stands, overland drainages, and existing wetlands.

5.1 Community Design Strategies

Community land use design strategies are to be employed across Glendale Mountain View Conceptual Scheme Plan Area to ensure the continued aesthetically pleasing feel of the community and to ensure maintenance of common spaces continues after build out. A Homeowner's Association (HOA) shall be incepted at every new phase of development and will be responsible for enforcing adherence to landscape controls, architectural controls, and neighbourhood bylaws regarding Dark Skies, noise, and unsightly property.

5.1.1 Homeowner's Associations (HOA)

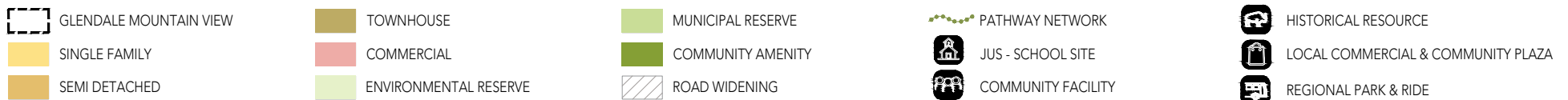
A Homeowner's Association (HOA) is a group created by the developer of a community. Its continued existence is ensured through the registration on title of every property in the neighbourhood. The HOA shall be responsible for maintenance of common spaces, monitoring of architectural and landscape maintenance controls, Dark Skies compliance, and the enforcement of the Noise Control and Unsightly Premises Bylaws. It will also be responsible for ensuring a high aesthetic appeal in the community via the performance of maintenance services on community amenities, solid waste management and recycling. Homeowners living in the neighbourhood are required to pay the HOA an annual membership fee.

The HOA will be incepted at every new phase of construction at the expense of the developer in accordance with the Society's Act of Alberta. When Glendale Mountain View is developed to an agreed upon level, the financial responsibility of the maintenance and continued running of the HOA will shift from the developer to community residents.

Policy 5.1.1.1 *There shall be Homeowner's Associations established by the developer at every stage in the build out process. These HOAs shall be incepted at the subdivision stage of development for each Phase. The existence of the HOA will be registered on the titles of every property in the Plan Area and will be funded annually via the payment of a compulsory fee by all homeowners.*

Policy 5.1.1.2 *The HOA shall be responsible for maintenance of common property, the collection of community waste, organics, and recycling, the continued enforcement of architectural controls, community pathway and landscape care, Dark Skies and nuisance enforcement within the Plan Area.*

FIGURE 4
COMMUNITY LAND USE CONCEPT



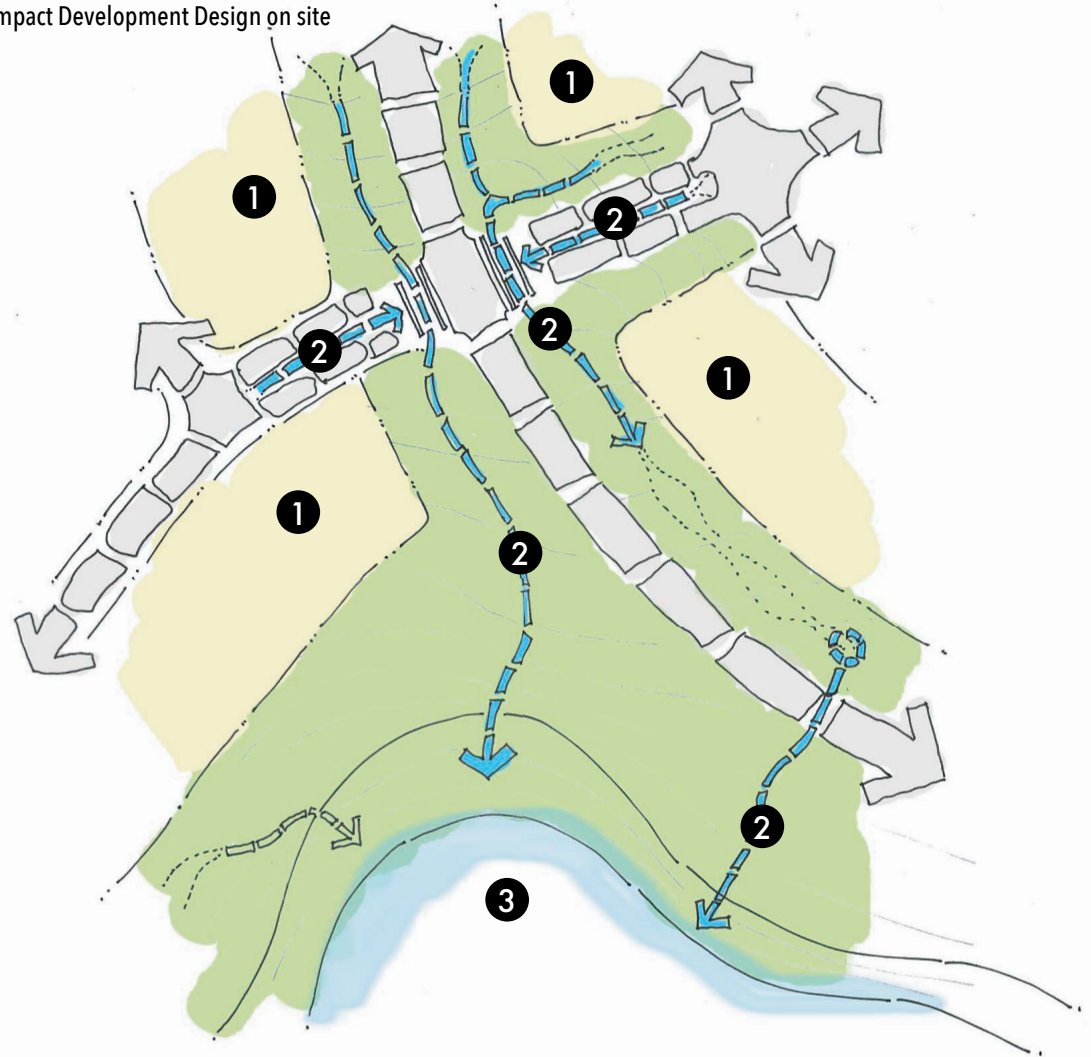
5.1.2 Proposed Landscaping Guidelines

Glendale Mountain View Conceptual Scheme includes landscaping guidelines that emphasize low impact development (LID) design at its core (to be expanded upon in **Section 8.3.1**). The organization and location of LID features plays a principal role in conservation focused design, meaning sustainable landscapes will be located throughout the open space network in green corridors, interior meadows and perimeter parks. In open spaces and on residential parcels, an emphasis shall be placed on the planting and replication of hardy native vegetation species that are drought tolerant and require low maintenance. Plants should be grouped based on watering needs, such as the concentration of absorbent plants in bioswales. Bioswales should be utilized in concert with permeable surfaces to absorb stormwater and channel it towards landscapes that require and desire irrigation. Finally, community trails should be composed of gravel or mowed grass to minimize environmental impact. The ultimate goal of the landscaping guidelines is to establish a community that is both naturally beautiful and resilient from a stormwater conveyance perspective.

Policy 5.1.2.1 Landscaping guidelines shall be prepared by the Landowner/Developer at the time of subdivision. The guidelines shall include LID strategies required on residential parcels, the species of plants appropriate for planting, and guidance on the grouping of these plants based on watering needs and how they complement each other.

Policy 5.1.2.2 The HOA shall be responsible for the continued enforcement of landscaping guidelines.

Low Impact Development Design on site



- | | | |
|--|--|--|
| <p>1 Capture rainwater on site</p> <ul style="list-style-type: none"> • rain barrels • permeable sidewalk and driveway • absorbent native vegetation | <p>2 Direct stormwater drainage</p> <ul style="list-style-type: none"> • bio-swales, turf swales • flood irrigation • permeable driving surfaces | <p>3 Discharge Control</p> <ul style="list-style-type: none"> • stormwater retention ponds |
|--|--|--|

5.1.3 Architectural Controls

The various housing forms in Glendale Mountain View should possess their own individual character and contribute to the overall community feel reflected in this Conceptual Scheme. This shall be achieved via the provision of architectural controls that allow a variety of housing types, rendered thematically similar through application of predetermined forms and colours. The HOA will be tasked with the continued enforcement of architectural controls in Glendale Mountain View.

The architectural controls will be influenced by the surrounding local vernacular and be derived from historical styles such as Craftsman (Arts & Crafts), Prairie, National and Shingle. These styles will be thoughtfully applied to the three residential housing types described in **Section 5.2**. Topography in the Plan Area will further influence locations and orientations of buildings with respect to views, privacy and park access. Architectural features shall include balance and articulation in facades and avoid complicated roof lines, excessive materials and extensive protrusions. Fenestration is to be arranged in simple fashion, providing easily accessible doorways and appropriate sunlight through windows. Acknowledging the use of locally produced materials, the proposed architectural styles will employ wood cladding and trim, asphalt roof shingles and concrete foundations. Further details and suggested features for the proposed architectural styles can be found in the accompanying image.

Architectural controls shall not extend solely to residential land uses but also to Neighbourhood Commercial sites and other land uses (such as interpretation and community areas) to maintain quality rural character throughout Glendale Mountain View. Specific residential design standards will be proposed via the architectural and landscape design guidelines registered on each lot at the time of subdivision.





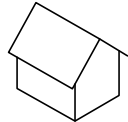
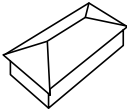
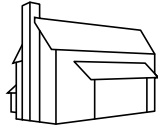
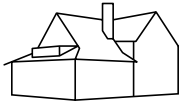
Policy 5.1.3.1 *Architectural controls shall be prepared by the Landowner/Developer at the time of subdivision which address exterior design and appearance including the balancing of forms, colours and themes across all land uses in the community and result in the creation of unique and beautiful homes.*

- a. *Homes shall be constructed in local vernacular styles that include Craftsman, Prairie, National, and Shingle styles.*
- b. *Architectural features shall include balance and articulation in facades and avoid complicated roof lines, excessive materials, and extensive protrusions.*
- c. *Fenestration shall be organized simply to provide for easily accessible doorways and appropriate sunlight through windows.*
- d. *Local materials, including but not limited to wood cladding and trim, asphalt roof shingles, and concrete foundations shall be used as construction materials.*

Policy 5.1.3.2 *Other land uses in the Plan Area including commercial and institutional shall be subject to architectural controls to ensure continuity in community feel.*

Policy 5.1.3.3 *The HOA shall be responsible for the continued enforcement of architectural controls.*

Allowable Housing Types and their design details in Glendale Mountain View, as outlined in detailed Architectural Controls

Craftsman	Prairie	National	Shingle
			
			
<ul style="list-style-type: none"> • GABLED ROOF DESIGN • OVERHANGINGS & FRONT PORCH • LAYERED MILL WORK • DORMERS ARE FREQUENT • ONE AND A HALF STORY • HIGHLY DETAILED ROOF LINES • EXPOSED RAFTER TAILS • COLUMN BASES REACH TO GROUND • SHALLOWER PITCHED ROOF • HAND CRAFTED MATERIALS • UNIQUE MUNTIN PATTERNS • PORCHES AS LIVING SPACE • EXTERIOR GARDENS CONNECT TO STRUCTURE 	<ul style="list-style-type: none"> • ELONGATED ROOF LINES • HIGHLY DETAILED FENESTRATION • DETAILS EMPHASIZE HORIZONTAL LINES • HIPPED ROOF DESIGN • LOW PITCHED ROOFS • WIDE OVERHANGING EAVES • TWO STORY MAIN VOLUMES BUTRESSED WITH ONE STORY WINGS • MAIN BUILDING VOLUME IS SYMMETRICAL • OVERSIZED COLUMNS • INDIGENOUS NORTH AMERICAN STYLE • HEAVY FOUNDATIONS, LIGHTER SECOND STORIES 	<ul style="list-style-type: none"> • PREDOMINANT FRONT GABLED • SIDE GABLED FEATURES FRONT DORMERS • LIGHT FRAMING IN PARTICULAR TO EAVES AND TRIM • MULTIPLE ROOF PITCHES • PORCHES AS FUNDAMENTAL DESIGN ELEMENTS • OBVIOUS FIRE PLACES AND CHIMNEYS • FORM EXHIBITS EXPANSION OVER TIME • VARIED MATERIALS - WOOD CLADDING PREDOMINANT • ALWAYS ELEVATED (3-5 STEPS ABOVE GRADE) 	<ul style="list-style-type: none"> • IRREGULAR OR STEEPLY PITCHED ROOF LINE • WALL AND ROOF CLADDING OFTEN MATCH • MULTI-LEVEL EAVES • DEVOID OF CORNER TRIM • EXTENSIVE PORCHES • GAMBREL ROOFS ARE COMMON (SECOND FLOOR BUILT INTO ROOF LINE) • OFTEN ASYMMETRICAL • COLLIDING FORMS • CIRCULAR ELEMENTS INCORPORATED INTO ANGULAR FORMS • ORNATE WINDOW TRIM • DORMERS ARE COMMON • MAY INCLUDE MASONRY FOUNDATIONS, SIGNATURE GESTURES AND PORCH SUPPORTS

5.1.4 Dark Skies Community

As a best practice for minimizing factors that impact astronomical observation, plant and animal cycles, in addition to the health and safety of those living in the community, the Glendale Mountain View Plan Area shall be compliant with Dark Skies initiatives. These initiatives regulate the type of light source and fixture that can be installed by any person or entity in the community, therefore preventing future light pollution and mitigating that which already exists. **Appendix E: Dark Skies Compliant Fixtures** details the type of lights are allowed and which are not as per the bylaw. The initiative also aims to lessen and ultimately prevent three types of light pollution: glare, up-lighting, and light trespass. The HOA will be charged with ensuring homeowner compliance with the Dark Skies initiative.

There are three general requirements set out by the Glendale Mountain View Conceptual Scheme that the Dark Skies initiative shall adhere to upon buildout. They are:

- **Shielding:** Full cut-off fixtures (those that do not allow any light dispersion above the horizontal plane and whose bulb is recessed within the fixture) shall be installed for all exterior lighting and all fixtures shall be oriented as to direct all lighting below the horizon.
- **Lamp Types:** Only efficient bulbs listed by the Dark Skies initiative shall be allowed for installation in the neighbourhood. In order to maintain the rural feel existing in many Bears paw communities, Glendale Mountain View shall also have no street lights except where reasonably practical for public safety.
- **Voluntary Light Curfew:** All owners of property in the Plan Area, whether it be residential, commercial, or institutional will be encouraged to extinguish artificial light at night when it is not required by use of timers and motion activation.

Policy 5.1.4.1 *Glendale Mountain View Conceptual Scheme shall be subject to a Dark Skies initiative as outlined in the Architectural Controls, to be enforced by the Landowner/Developer, home builder and HOA.*

Policy 5.1.4.2 *Lights on private dwellings shall possess both full cut-off fixtures and efficient bulbs and homeowners should extinguish artificial light at night when not required.*

5.1.5 Noise Control and Unsightly Premises Bylaws Compliance

Glendale Mountain View shall be subject to the rules and regulations of both the Noise Control Bylaw and Unsightly Premises Bylaw of Rocky View County. The purpose of these bylaws are to protect the health, safety, and welfare of the people and property of the Municipality. Noise control violations are defined as volume based activities carried out by an individual that prevents others from enjoying their neighbourhood, most often outside of allocated daytime hours (6:59am to 10:01pm on weekdays, 8:59am to 10:01pm on weekends). Unsightly property infractions are assigned to premises not maintained to standard, most often linked to the accumulation of garbage and refuse.

The HOA will be charged with determining whether a property has made a noise control or unsightly property violation and with contacting homeowners to rectify the situation. Should the HOA warnings not be fixed in an appropriate timeframe, bylaw officers from Rocky View County may become involved as necessary to enforce an infraction.

Policy 5.1.5.1 *The Glendale Mountain View Conceptual Scheme Plan Area is subject to the rules and regulations established in the Rocky View County Noise Control Bylaw and the Unsightly Premises Bylaw. The HOA shall be responsible for ensuring compliance with said bylaws throughout the entire Plan Area in regards to any issues arising from noise control or unsightly premises.*

Policy 5.1.5.2 *If a Noise Control or Unsightly Premises Bylaw violation escalates, the HOA may involve a bylaw officer from Rocky View County who may at their discretion issue a ticket to the offending premises.*

5.1.6 Transitioning and Edge Treatments

Transitioning a landscape interface plays a vital role in the protection of privacy of residents both within and adjacent to proposed developments. Bordering Glendale Mountain View are a range of land uses. To establish a best practice for providing transitions between the Plan Area and these lands, Rocky View County's Agricultural Boundary Design Guidelines were utilized. The guidelines endeavour to minimize land use conflicts that can occur between agricultural and non-agricultural uses through provision of a set of rules that thoughtfully approach these interfaces.

The County guidelines recommend that a buffer of at least fifteen (15) metres between incompatible uses be established. For this Conceptual Scheme, all transitions will therefore measure at least fifteen (15) metres. Efforts towards sympathetic interfaces along neighbourhood edges will provide screened views across the landscape. This will be achieved through replicating surrounding features such as rolling hills and densely planted tree stands of both coniferous and deciduous species. The layout of rolling hills, meandering trails and forested stands will be designed to maximize views to the Rockies and minimize views to adjacent residential properties. Public utility lots will be sited along the boundaries of the Plan Area to further buffer existing land uses from new residences. Portions of the development bordering Highway 1A will feature tall berms and coniferous tree stands, filtering the constant sound and sight of high volume traffic.

The planned outcome of the buffering strategy in Glendale Mountain View is to provide existing landowners with sensitive transitions from their lands to new development. These buffers will overlap with the open space plan and incorporate low impact development design. **Figure 5: Agricultural Buffering and Transitional Lotting** illustrates key interfaces between the proposed development and adjacent lands; schematically depicting transitional landscape and edge treatments.

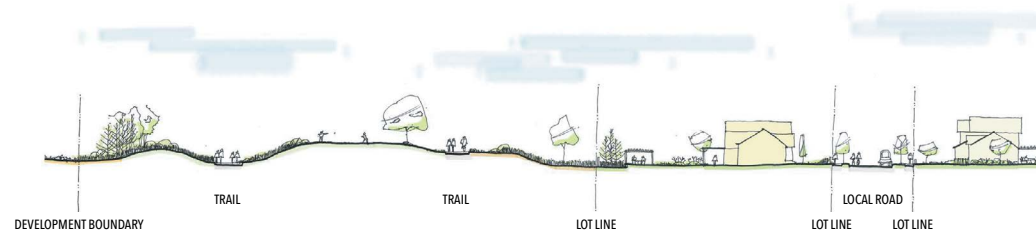
Policy 5.1.6.1 *Transitional buffer areas shall be incorporated in the Glendale Mountain View Plan Area. They shall be detailed in plan at subdivision stage and measure a minimum of fifteen (15) metres.*

Buffers should result in sensitive transition utilizing vegetation, topography, low impact development strategies and pathways where required. They should also maximize mountain and vegetative views while minimizing views to adjacent properties.

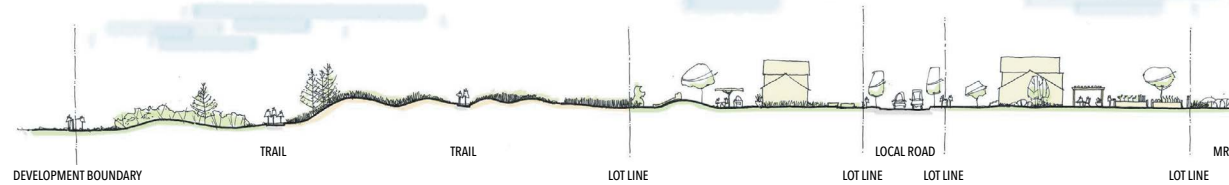
Policy 5.1.6.2 *The transitional buffer areas shall be designed by a Landscape Architect at the expense of the Landowner/Developer and submitted for review and approval by the County.*

FIGURE 5
AGRICULTURAL BUFFERING AND TRANSITIONAL LOTTING

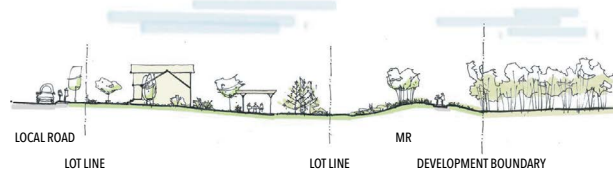




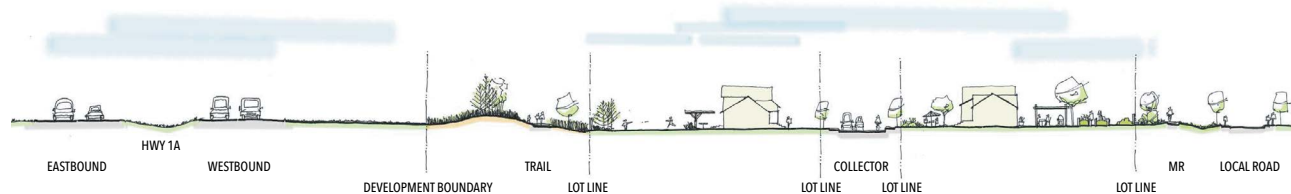
1 Large vegetated buffer



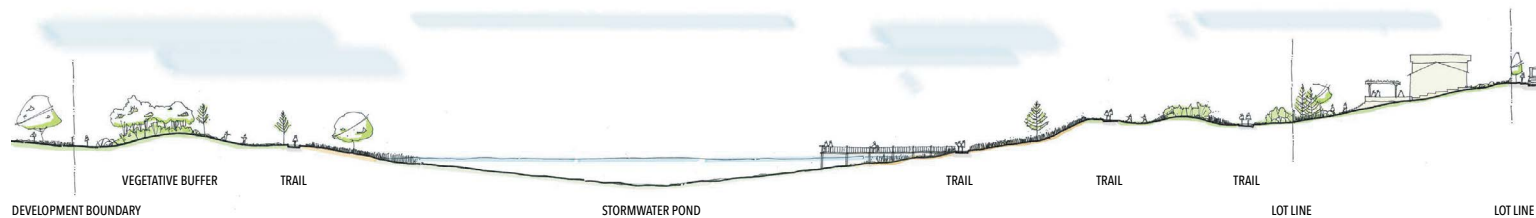
2 Adjacent existing rural residential



3 Narrow vegetated buffer



4 Highway frontage



5 Perimeter park and stormwater pond

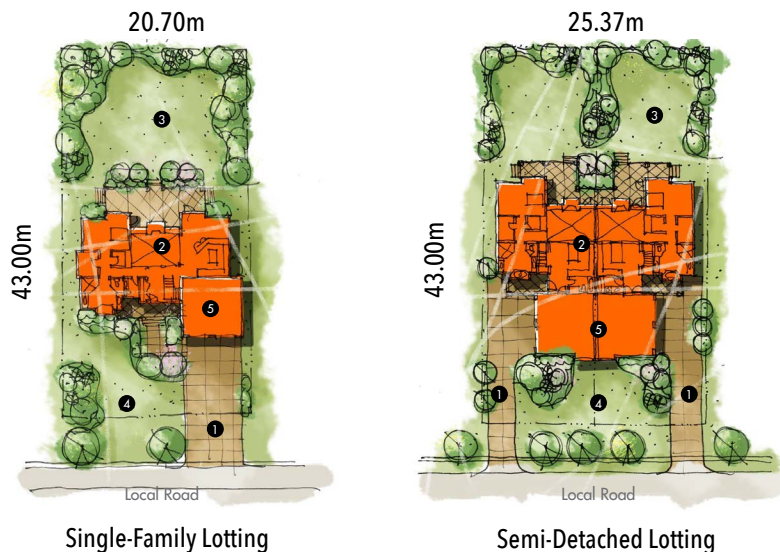
5.2 Residential Land Uses

Glendale Mountain View contains three distinct housing types, the general dimensions of which are outlined on the images below. A specific Direct Control Land Use Designation accompanies the site to outline all required setbacks, minimums/maximums, and building heights as required. The mix and allocation of housing types can be found on **Figure 4: Land Use Concept**. The villa and townhouse typologies are being introduced to assist in attaining a 2.0 unit per acre (upa) gross density which also allows for the retention of 47.42% greenspace within the community.

Three housing types are included, as follows:

- 360 Single Family units.
- 612 Semi Detached (villa) units.
- 392 Townhouse units (in clusters of no greater than 4 to 6 attached units).

Site Lotting diagrams for proposed housing typologies reflective of minimum parcel sizes and lot dimensions



Map Key

- 1 Driveway
- 2 Residence
- 3 Backyard
- 4 Frontyard
- 5 Garage

The minimum parcel size shall be:

SINGLE FAMILY	SEMI-DETACHED	TOWNHOUSE
0.088 hectares (0.219 acres) or 890m ²	0.108 hectares (0.269 acres) or 1091m ²	0.32 hectares (0.80 acres) or 3268m ²

Minimum lot dimensions for standard lots (metres/feet) are:

SINGLE FAMILY	SEMI-DETACHED	TOWNHOUSE
20.70m x 43.00m	25.37m x 43.00m	43.00m x 76.11m
67'9" x 141'	83'2" x 141'	141' x 250'

Policy 5.2.1 The Subdivision Approving Authority may grant a variance to each site's minimum dimension for standard lots by a maximum of 5%.

Policy 5.2.2 The Subdivision Approving Authority may grant a variance to each site's minimum parcel size by a maximum of 5%.

Policy 5.2.3 The Subdivision Approving Authority may grant a variance to each housing typology maximum number of dwelling units by +/- 2 dwelling units. The maximum number of dwelling units shall not exceed 1364 units.

5.3 Neighbourhood Commercial Node

As illustrated in **Figure 6: Neighbourhood Commercial Node** and its corresponding conceptual plan view on this page, the Glendale Mountain View Conceptual Scheme includes a +/- 26.32 acre (10.65 ha) Neighbourhood Commercial component. This area provides for community supportive mixed use environments, which are required for a complete and balanced community. These uses will create greater community vitality within predominately residential areas. The Glendale Mountain View Neighbourhood Commercial area is intended to be pedestrian oriented and possess a flexible core that allows for hosting of local Farmers Markets, special seasonal markets or neighbourhood events.

Neighbourhood Commercial areas establish uses that provide local residents access to daily goods and services. These areas should exhibit high-quality architecture and urban design, provide unique opportunities for retailers to distinguish themselves and offer a sense of destination for local residents. When consulting with existing area residents, it was important that the Neighbourhood Commercial area be designed with a high aesthetic, comply with Dark Skies policy, have street lights only where practical, have no high mast pylon signage, and only operate within a range of acceptable hours.

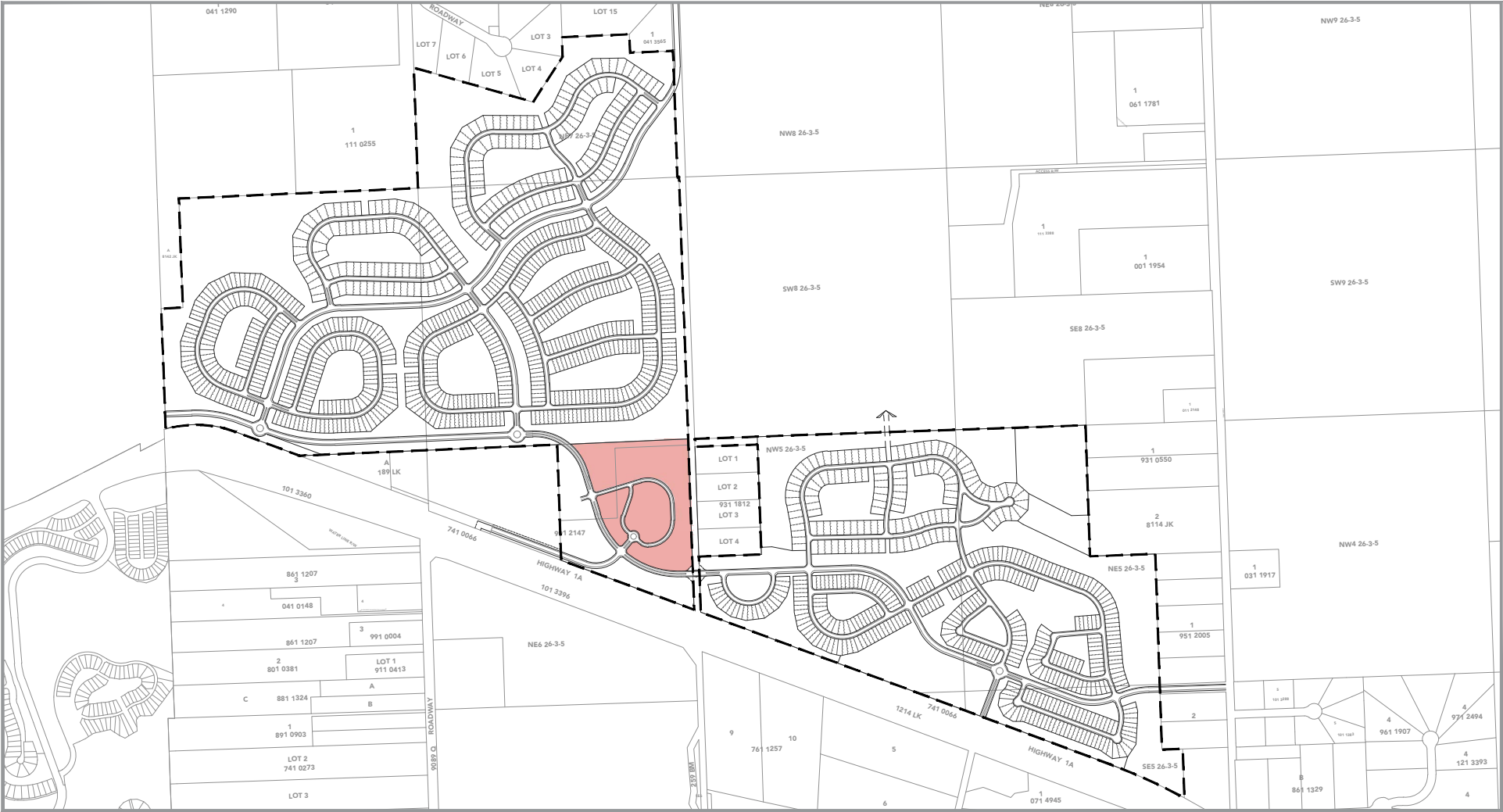
Neighbourhood Commercial Node, Conceptual Plan View

Map Key

- 1 Primary Collector Road
- 2 Local Road
- 3 Community Trail
- 4 Plaza Space
- 5 Existing Vegetation
- 6 Commercial Buildings
- 7 Parking Lots
- 8 Market Promenade



FIGURE 6
NEIGHBOURHOOD COMMERCIAL NODE



GLLENDALE MOUNTAIN VIEW
NEIGHBOURHOOD COMMERCIAL NODE & COMMUNITY PLAZA



The range of allowable uses in this area are to be contained within small commercial retail units (CRUs) totaling 150,000 square feet collectively as they develop over time. They should support local convenience and personal service uses such as hair salons, post offices, dentist offices, veterinarians, small restaurants, small grocery stores, medical offices, dance studios, coffee shops, or fitness facilities. Uses should not serve the travelling public. Therefore, automotive, fast food, convenience or gas station uses are precluded in the Neighbourhood Commercial node as they entice the travelling public.

It is also important to area residents that the Landowner/Developer ensure the Neighbourhood Commercial node has safe access and does not result in poor turning movements.

The Neighbourhood Commercial node shall comply with the architectural controls, which may include provisions related to the following:

- Retail uses that fit a pedestrian scale;
- High aesthetic design using natural materials, natural colours, and fully integrated and unified signage;
- Horizontal and/or vertical integration within individual buildings;
- A public amenity space (or spaces);
- Small or medium sized retail units composing the CRUs;
- Dark Skies Bylaw and Community Standards Bylaw compliance;
- Signage lit from flush mounted soffit lighting in the roof overhang;
- No high mast pylon signage, no light canopies, and no back light signage;
- The use of composite signage that will typically have the look of a carved wood sign;
- Landscape design that reflects naturally clustered plant communities typically found in the area that shall buffer and soften parking areas and enhance pedestrian pathways;
- Loading and garbage functions designed to be on the rear side of buildings with appropriate visual screening and finish materials complimentary to the principal building materials;
- Provision of streetscape furnishings such as bollard style bike racks, benches, garbage bins, etc where required;

- The barring of any storage uses either indoor or outdoor.

Policy 5.3.1 *The design of the Neighbourhood Commercial node should provide for a compatible interface with adjacent development and natural features; orient buildings towards the street; present an attractive building, fencing, berming and landscaping treatment along public roads and reserve land, and where visible from residential areas and transportation corridors; and be comprehensively designed at the subdivision stage.*

Policy 5.3.2 *The transportation network in the Neighbourhood Commercial node shall be designed to provide connectivity for pedestrians and cyclists, and safe conditions for drivers from the local area. This will be achieved by:*

- a. *ensuring dedicated turning lanes and siting areas for safe vehicle movements in and out of the Neighbourhood Commercial node;*
- b. *providing safe and convenient walkway and pathway access from other areas of the Community; and*
- c. *ensuring that convenient potential future regional transit access and facilities are provided if regional transit should be embraced at future time.*

5.4 Population and Density Projections

The maximum density for the entire Glendale Mountain View Conceptual Scheme Plan Area has been assumed to be 2.0 units per gross acre (5.0 units per ha) over the total land area of +/- 673.73 acres (+/- 272.64 ha) for a total of 1364 residential units. The 2011 Federal Census indicated an average person per household value in Rocky View County of 3.0 persons per private household. The population projection for the Glendale Mountain View community would therefore be 4,092 persons based on a total of 1364 residential units.

6.0 OPEN SPACE









The open space system, mapped in **Figure 7: Parks and Open Space Plan** (and further detailed in **Figure 8: Internal Trail Network Plan and Cross Sections**), consists of lands that may be identified as Municipal Reserve (MR), Environmental Reserve (ER), Public Utility District, and/or School/Joint Use District. Together, these green spaces total 47.42% of the Plan Area.

The Glendale Mountain View community supports one (1) School/Joint Use Site and outlines a linear parkway open space system primarily along the perimeter and interior of the Plan Area. The design of this system is deliberate, intended to provide for internal circulation within neighbourhoods and to connect neighbourhoods to one another. It is a system of active and passive open space, with active programming in all neighbourhoods to be detailed at the subdivision stage with input from the Municipality. The open space system will promote, conserve and enhance an interconnected ecological and recreation network. It provides a buffer in the form of a green amenity interface with existing Country Residential and Agricultural lands.

The design of park spaces and pedestrian pathways are geared to users of all abilities and interests, making the leading of a healthy and active lifestyle simple. Green spaces and meandering pathways will gently converge with urban elements such as plazas and courtyards, retail shops and neighbourhood commercial spaces. The organic open space design extends to the residential realm, surrounding clustered homes with varying landscapes and a network of active and passive pathways.

LAND USE	ACRES	HECTARES
PUL	20.41	8.26
Environmental Reserve	53.68	21.72
Municipal Reserve	240.80	97.45
JUS- School Site	15.33	6.20



- | | | |
|---|--|---|
|  GLENDALE MOUNTAIN VIEW |  MUNICIPAL RESERVE (MR) |  COMMUNITY AMENITY |
|  HISTORICAL RESOURCE SITE |  ENVIRONMENTAL RESERVE (ER) |  PATHWAY NETWORK |
|  STORMWATER PONDS (PUL) |  JOINT USE SITE / SCHOOL | |



6.1 Municipal Reserves

Accessible parks are a significant component of Glendale Mountain View. Municipal Reserves (MR) are linked around the community by trails, pathways and sidewalks. The varying topography, vegetation patterns, and size of MR sets a framework for distinguishing the three types of parks that will exist.

Neighbourhood parks, known as **Interior Meadows**, will merge residents' backyards with the broader open space network and provide direct access to development features. The interior meadows will average five (5) acres in size, providing space for elements including trails, forest stands, gardens and park amenity structures. These passive green spaces will complement the larger open space design by providing connectivity throughout the development with a restorative approach to landscape implementation.



Map Key

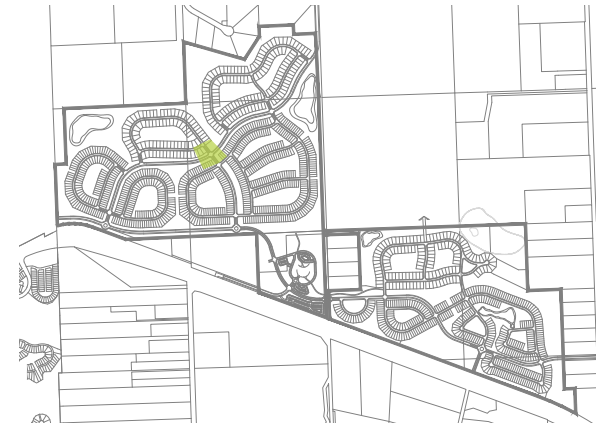
- 1 Local Road
- 2 Paved Trail through Meadow
- 3 Landforms
- 4 Built Shelter
- 5 Active/Passive Lawn
- 6 Semi Detached Residential Lots

Interior Meadow, Conceptual Plan View



Linear parks along roadways, known as **Green Corridors**, will connect people via pedestrian pathways and activity nodes such as playgrounds, sports fields and community plazas for gatherings. The mix of multi-use paved pathways and granular trails will merge at key intersections, guiding residents to the different park types. The landscape design will consist of native plant species, drainage swales, berming and a balance of unmaintained and manicured green spaces.

Green Corridor, Conceptual Plan View



Map Key

- 1 Collector Road
- 2 Local Entrance Road
- 3 Paved Trail in Green Corridor
- 4 Granular Trail to Perimeter Parks
- 5 Active Sports Areas
- 6 Landforms
- 7 Single Family Residential Lots
- 8 Semi Detached Residential Lots



6.0 OPEN SPACE

Natural areas along the outer edge of the community, known as **Perimeter Parks**, will neighbour existing country residential and agricultural lands. Averaging 20 acres in size, these large parks feature sweeping hills and meandering trails. Trees and shrubs will provide a contextually appropriate interface to the surrounding land. Perimeter parks will also offer a variety of informal trails that connect to backyards (where desired), streets and existing pedestrian routes. Minimal signage and landmarks will guide people through these green spaces.

Perimeter Park, Conceptual Plan View



Map Key

- 1 Local Roads
- 2 Boardwalk
- 3 Paved Trail access to Perimeter Park
- 4 Granular Trail in Perimeter Parks
- 5 Stormwater Pond
- 6 Landforms
- 7 Semi Detached Residential Lots
- 8 Single Family Residential Lots



Adequate land should be provided through Municipal Reserve and Environmental Reserve dedication to meet the open space needs of area residents and the public. Development of parks serving the passive recreational needs of residents with pathways, sitting areas, grassy knolls, landscaped edges, and children's play areas should be communally created by the Landowner/Developer and maintained through an HOA created by the Landowner/Developer at the time of subdivision.

Policy 6.1.1 Reserve shall be dedicated through the subdivision process in the full amount owing as outlined on **Figure 4: Community Land Use Concept** in accordance with the requirements of the Approving Authority, pursuant to the County Plan and MGA.

Policy 6.1.2 The allocation of reserve shall be determined at the time of subdivision at the discretion of the County. The County and the Landowner/Developer shall ensure the required amount of reserve is dedicated throughout the course of the development over time.

Policy 6.1.3 As outlined in **Section 5.1.1**, an HOA will be formed by the Landowner/Developer and they shall be responsible for maintenance of community open spaces and MR areas as agreed to with the County.

Policy 6.1.4 A transfer of creditable reserve between neighbourhood areas where land is owned by the same landowner may be permitted, if agreed to by the Landowner/Developer, in accordance with the MGA and subject to approval by the County to achieve:

- a. optimal distribution/location of school sites within communities;
- b. optimal distribution/location of open spaces; and
- c. flexibility to utilize MR for integration of open space that otherwise does not qualify as ER.

6.2 School/Joint Use and Community Facility Sites

The Glendale Mountain View Conceptual Scheme identifies a +/- 15.33 acre (6.20 ha) School/Joint Use Site to be utilized for individual Catholic and/or public schools if possible, in combination with other community recreational uses such as a shared gym or library. The type, grade level and size of student population the schools can accommodate should be reviewed at the applicable subdivision stage in conjunction with the applicable school board.

The Landowner/Developer has set aside a parcel of land west of the Neighbourhood Community node that is designed to accommodate a future Community Facility. The Landowner/Developer will provide the land and make a voluntary contribution to the Bears paw Glendale Recreation District to accommodate a future community facility. The concept described in the plan includes a suggested open air theatre or performance stage for outdoor events and cultural gatherings as the Bears paw area is well served by indoor community facilities.

Map Key

- ① Primary Collector Road
- ② Collector Road
- ③ Community Facility
- ④ Sunken Lawn
- ⑤ Parking Lots
- ⑥ School
- ⑦ Active Sports Fields
- ⑧ Paved Trails
- ⑨ Commercial Hub
- ⑩ Townhouse Residential Lots
- ⑪ Semi Detached Residential Lots

School Site and Community Facility,
Conceptual Plan Views



Policy 6.2.1 *The School/Joint Use Site identified in the Conceptual Scheme is provided as Municipal Reserve dedication and shall be designated as a Public Service District in accordance with the County's Land Use Bylaw at the discretion of the County.*

Policy 6.2.2 *The Landowner/Developer may work with the applicable school board to provide an estimated school service population and grade level at the subdivision stage to the satisfaction of the County.*

Policy 6.2.3 *The Landowner/Developer has provided specific lands for the future development of a community facility and may make a voluntary contribution to the Rocky View Recreation Board for Bears paw Glendale as seed capital for a future venue at this site.*

6.3 Recreation

Glendale Mountain View is committed to allocating 47.42% of the Plan Area to open space. This system of parks shall be minimally programmed and very well connected by an extensive trail network, providing community members the opportunity to circulate the neighbourhood to reach natural, programmed, and commercial amenities.

6.3.1 Trails

Featuring over 15 kilometres of trails and loops in the Plan Area, the comprehensive multi-modal pathway network in Glendale Mountain View provides accessible recreational opportunities to users of all abilities. Pathways shall be constructed to accommodate pedestrians and cyclists while respecting the natural landscape through use of varied surface materials that place low impact on the land. There shall be four types of pathways in the Plan Area, as outlined in **Figure 8: Internal Trail Network Plan and Cross Sections**. They are as follows:

- **Paved Primary Trails:** These will be constructed of asphalt at a width of 2.0-3.0 metres to accommodate a variety of activities including cycling and roller skating. Paved pathways will act as the backbone of the trail network, moving users from residential

clusters along green corridors towards activity nodes and perimeter trails.

- **Granular Perimeter Trails:** These will be constructed of compacted aggregate and will meander through perimeter parks and interior meadows. Granular trails will be designed at varying widths of 1.5-2.0 metres to encourage active and passive use and to distinguish connection points to paved pathways and key intersections.
- **Informal Trails:** Mowed grass trails provide for a lesser impact on the environment than granular trails. These pathways will be interspersed within perimeter parks and interior meadows and will connect to granular trails, providing more pathway options.
- **Granular & Wood Community Trails:** A wood bordered granular trail will serve as a primary connection between the north and south residential parcels. Flowing through the commercial and retail hub, this unique trail is wide at 4.0 metres and will feature low level lighting and seating along the way.

Policy 6.3.1.1 *An extensive trail network shall be constructed in Glendale Mountain View to connect residences to the open space system and neighbourhood amenities, following the typologies assigned in **Figure 8: Internal Trail Network Plan and Cross Sections** to the satisfaction of the County.*

Policy 6.3.1.2 *The Plan Area shall be well connected by both the road and multi-modal pathway networks. These networks shall safely and quickly connect residents to homes, open space, and community amenities. They shall be designed with wayfinding signage and vegetative landmarks to strengthen community identity and connectivity.*

6.3.2 Amenities

A variety of low maintenance amenities will be featured in each of the three park types throughout Glendale Mountain View that encourage social interaction and community focused living. The interior meadows will include shade shelters and garden plots built with locally referenced materials. These spaces are envisioned for small gatherings

FIGURE 8
INTERNAL TRAIL NETWORK PLAN AND CROSS SECTIONS



- GLENDALE MOUNTAIN VIEW
- COMMUNITY INTERSECTIONS
- PAVED PRIMARY TRAIL (2.0m - 3.0m)
- GRANULAR PERIMETER TRAIL (1.5m - 2.0m)
- GRANULAR AND WOOD COMMUNITY TRAIL (4.0m)
- INFORMAL TRAIL THROUGH ER
- MIXED INTERIOR MEADOW TRAIL



Trail Typology Cross Sections



Paved Primary Trail (2.0 - 3.0m)



Granular Perimeter Trail (1.5 - 2.0m)



Granular and Wood Community Trail (4.0m)



Informal Trail

6.0 OPEN SPACE

in natural garden settings. Active park amenities such as sports fields, playgrounds and sheltered common areas will be found along green corridors (see images of facilities). Perimeter parks will feature wooden boardwalks along stormwater ponds, providing users with educational opportunities through interpretive signage.

Within the Glendale Mountain View community also exists a regionally significant archaeological site. Once used as a resting place for hunted bison, this culturally sensitive and historic site shall be integrated into the landscape design. Understanding the history of the Glendale Mountain View lands through the introduction of a programmed natural interpretive site will provide residents with a sense of place for their community. The interpretive centre has been located on MR lands and does not disturb the historic artifacts located within the identified area on ER lands.

Policy 6.3.2.1 Park amenities in the Plan Area shall be left as natural as possible and minimally programmed through the use of natural materials such as wood to construct boardwalks, benches, and shelters to the satisfaction of the County.

Policy 6.3.2.2 The regionally significant archaeological site in the Plan Area shall be supported by an interpretive centre and incorporated into the landscape design of Glendale Mountain View. It shall provide an educational opportunity for community members who want to learn how the Plan Area lands were used historically.

Policy 6.3.2.3 The interpretive centre and programmed areas shall be developed at the cost of the Landowner/Developer and maintained by the HOA to the satisfaction of the County.



Map Key

- | | |
|------------------------------------|-----------------------|
| 1 Local Road | 5 Seating Node |
| 2 Granular Trail in Perimeter Park | 6 Landforms |
| 3 Single Family Residential Lots | 7 Existing Vegetation |
| 4 Historical Resource Site | |

Historical Resource Site, Conceptual Plan View



7.0 TRANSPORTATION

The ultimate regional transportation system has been developed based on improvements identified as necessary to support the Glenbow Ranch ASP. Additional network improvements required to accommodate the Glendale Mountain View development in addition to internal roadway classifications which were identified in the Transportation Impact Assessment (TIA) completed by Bunt & Associates Engineering Ltd. in January 2017.

7.1 Regional Road Network

The regional road network refers to the higher order roads in the municipality that provide access to the Plan Area and also the provincially operated roads adjacent to the site.

7.1.1 Existing Network

There are a number of roads that run adjacent to or enter the Plan Area. They are:

- **Highway 1A:** A four lane divided road whose speed limit adjacent to the majority of the site is 100 km/h.
- **Gleneagles Drive (Range Road 40):** A paved two lane Rocky View County road that runs north-south from Highway 1A along the western boundary of the Plan Area and will connect into the Glendale Mountain View road network.
- **Mountain Ridge Place:** An unpaved gravel Rocky View County road that primarily provides access south of the site, but also accesses two acreages in the south of the Plan Area.
- **Glenbow Road (Range Road 35):** An unpaved gravel Rocky View County roadway that runs north-south from the Plan Area, across Highway 1A and into Glenbow Ranch Provincial Park.
- **Glenview Road:** An unpaved gravel Rocky View County road that provides access to acreages south of the site. When Glendale Mountain View is built out, it will have a link which provides access to the Plan Area.

- **Glendale Road (Range Road 34):** A chip sealed Rocky View County roadway located east of the Plan Area that the road network will link into as a point of egress.

Upon completion, Glendale Mountain View will be serviced by four separate access points. Access to the Plan Area will be primarily from Highway 1A via a new north leg at Glenview Road, an extension of Mountain Ridge Place, Glenbow Road (Range Road 35), and a connection to the existing signalized intersection at Range Road 40. Emergency only access will be provided to Glendale Road. Current access at Glenbow Road may be closed as part of the development at the discretion of Alberta Transportation.

7.1.2 Future Network

Future network improvements must first take into consideration the projected increases in volume and road capacity from buildout of the Glenbow Ranch ASP Lands. Network analysis on the Glenbow Ranch Plan Area completed by Watt Consulting Group in July 2016 recommended that Highway 1A be upgraded to a six (6) lane cross section east of Glendale Road, and further widened to eight (8) lanes near the City of Calgary. Watt also recommended that signalization of Highway 1A intersections at Glendale Road and Glenview Road occur as required while development proceeds. Following this analysis by Watt, Bunt & Associates completed their own analysis and determined that additional steps need to be taken to support the densities proposed on the Glenbow Ranch ASP lands. Bunt recommends that the western limit of the Highway 1A six (6) lane cross section not be Glendale Road, but extended further to the boundary of Cochrane. Furthermore, Bunt recommends that signalization at Mountain Ridge Place will need to be considered at full buildout of the Glenbow Ranch Plan Area.

Bunt then completed its analysis on the Glendale Mountain View Plan Area. It was determined that there will be three event horizons in relation to the project. The two major horizons are opening day in

2020, when Highway 1A access to the site will be restricted to Glenview Road. At the long term horizon when buildout is complete, Highway 1A access to site will include Glenview Road, Mountain Ridge Place, and Gleneagles Drive.

Taking these event horizons and access locations into consideration, the TIA lists a number of additional network improvements necessary to support the Glendale Mountain View Conceptual Scheme. The first is a new north leg of Glenview Road in the southeast of the Plan Area, required to provide access to the development on opening day. Glenview Road will be the only access to Glendale Mountain View at this event horizon and will therefore be constructed as a 4 lane collector to accommodate daily traffic. The second improvement may be the closure of Glenbow Road (Range Road 35) at Highway 1A prior to the construction of an internal roadway connection west of Glenbow Road. This closure is at the discretion of Alberta Transportation. The third network improvement will be the paving of Mountain Ridge Place north of Highway 1A, which will provide access to the commercial centre and residences on the west side of the Plan Area in time for the 10 year interim event horizon. Finally, as development occurs within the subject lands, signalization of Highway 1A intersections of Glenview Road shall be required on opening day and at Mountain Ridge Place at the interim event horizon.

The TIA also identified ultimate network improvements to support the Glendale Mountain View development. Updates to the TIA may be required as part of the subdivision application for each phase if deemed necessary. Collaboration with Alberta Transportation regarding access to Highway 1A shall occur at each phase of the subdivision. **Figure 9: Regional Transportation Network Upgrades** summarizes the improvements recommended in the TIA.

Policy 7.1.2.1 *Transportation network improvements for the Glendale Mountain View Conceptual Scheme shall take into consideration the improvements required for the Glenbow Ranch ASP lands. The improvements on these lands may impact subsequent network changes for the Glendale Mountain View lands.*

Policy 7.1.2.2 *Any costs associated with transportation improvements identified within the TIA shall be the responsibility of the Landowner/Developer.*

Policy 7.1.2.3 *The Landowner/Developer shall be required to pay the County Transportation Off-Site Levy.*

Policy 7.1.2.4 *The County should examine the cost and benefits of a wildlife corridor underpass through Highway 1A, including possible funding mechanisms prior to subdivision of the applicable phase of development.*

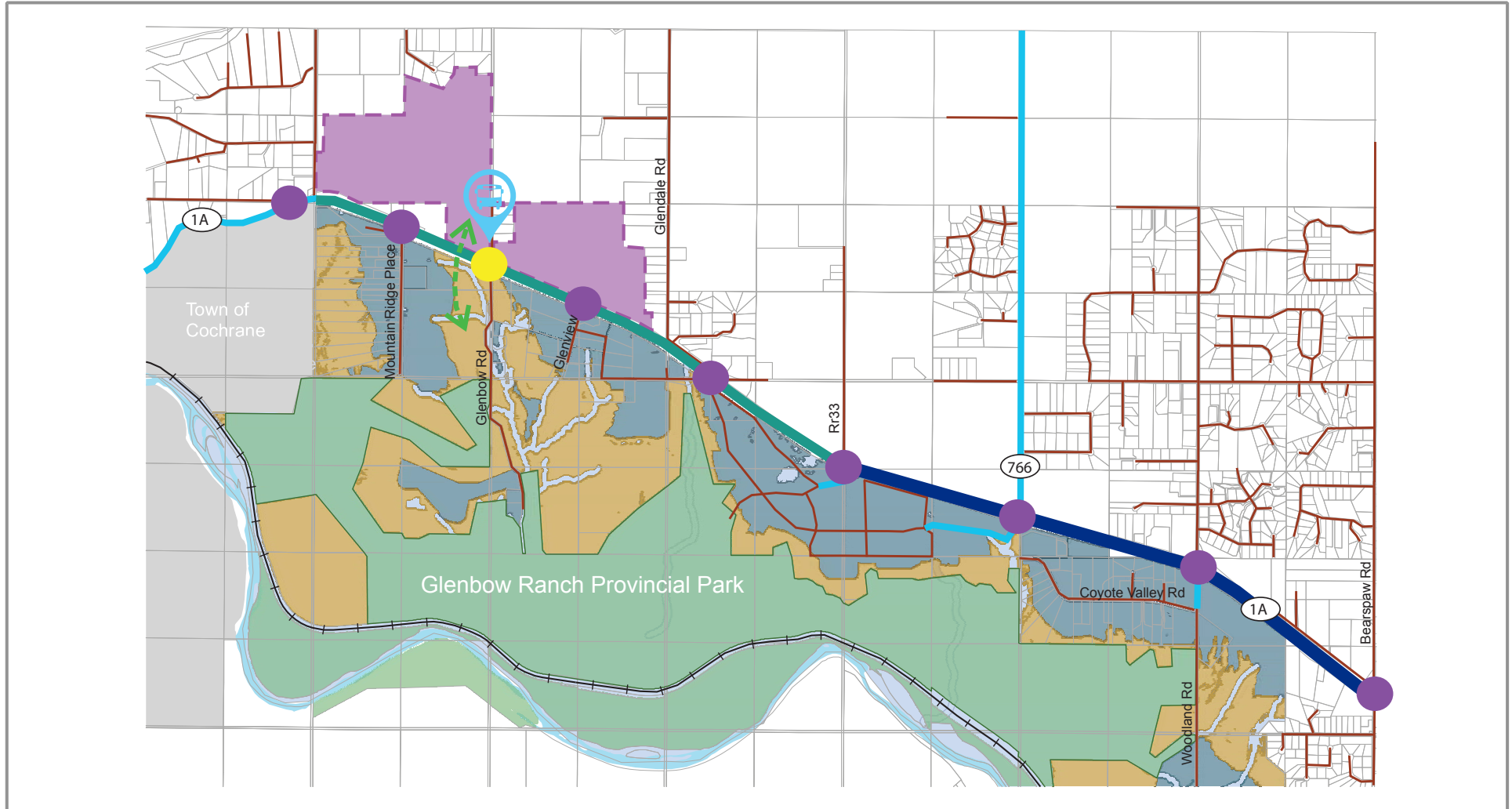
Policy 7.1.2.5 *As development proceeds to the Land Use and Neighbourhood Plan stages, the TIA shall be reviewed in case updates are required to support specific phases of development. Collaboration with Alberta Transportation shall be required when improvements are regarding access to Highway 1A.*

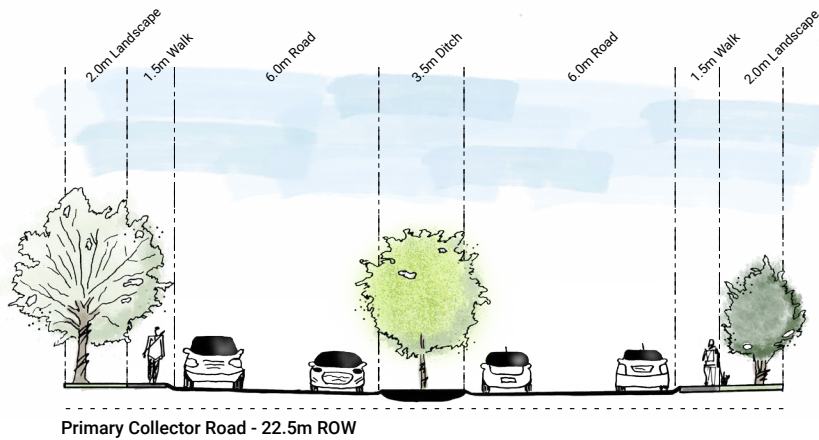
7.2 Internal Network and Road Standards

The internal road network for Glendale Mountain View possesses an east-west divided collector road that will act as the backbone of the development. There will be two direct internal connections to Highway 1A located at Glenview Road and Mountain Ridge Place. For internal traffic flow purposes, roundabouts will be incorporated at larger internal intersections.

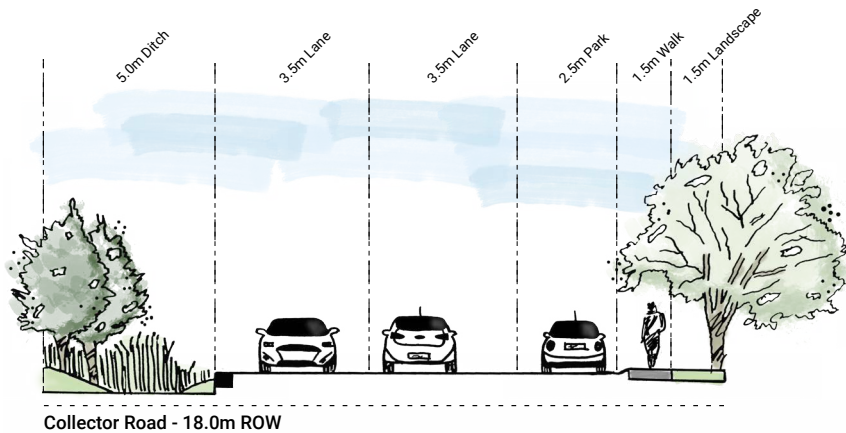
There are five types of internal roads being proposed, mapped in **Figure 10: Internal Transportation Plan**. Their standards are organized as follows:

- **Primary Collector:** This divided collector shall have a right-of-way (ROW) measuring 22.5 metres and be located at the east and west access/egress points into Glendale Mountain View and in the centre near the commercial site. It will possess landscaping and a sidewalk on either side of the ROW, each measuring 3.5 metres. The divider will be a 3.5 metre vegetated ditch, straddled on either side by a 6.0 metre two lane roadway for a total of four lanes.



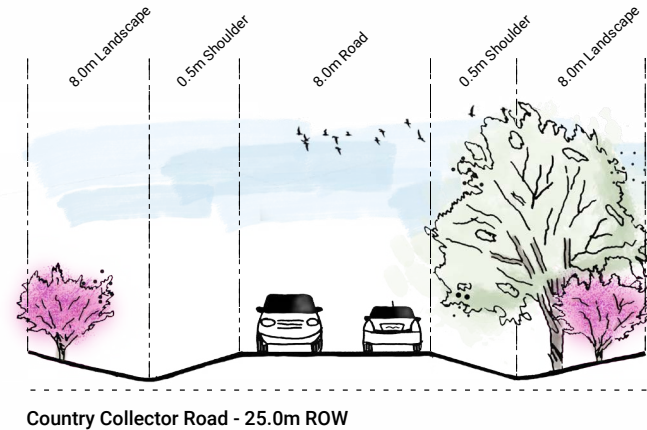


- Collector:** These 18.0 metre ROWs form the east-west backbone of the community road network. Their purpose is to connect local residential roads with primary collectors to move vehicles into and out of the neighbourhood. Generally, the road itself is a two lane cross section totaling 7.0 metres with one parking lane (nearest the residential) measuring 2.5 metres. Beside the parking lane is a 1.5 metre walk and a 1.5 metre landscaped boulevard. On the other side of the road is often open space. A 5.0 metre ditch/vegetated swale composes the remainder of the ROW.

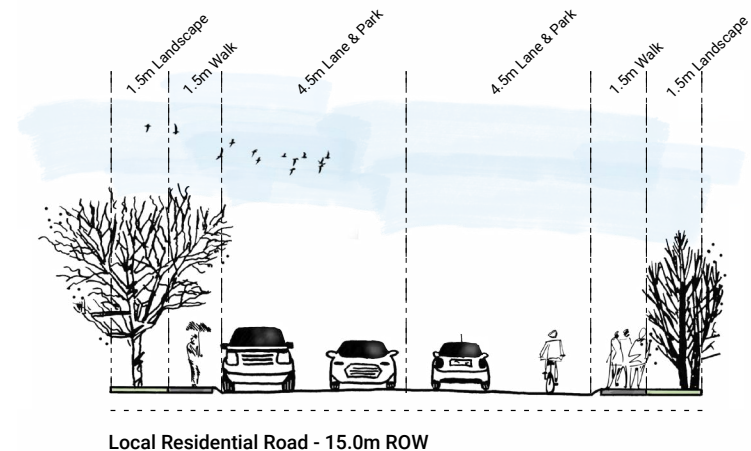


- Country Collector:** These roads are more rural in nature. The roadway cross section is two lanes measuring 8.0 metres. On

either side of the street is a 0.5 metre gravel shoulder, followed by 8.0 metres of landscaping which buffers the ROW from any other use. Country collector roads will be located along Glenbow Road and will be primarily used by owners of existing acreages on the site boundary.

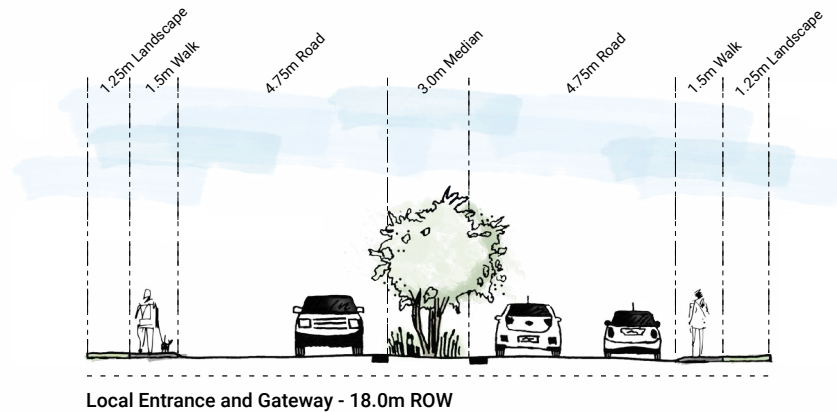


- Local Residential:** These roads will have the smallest ROW at 15.0 metres and compose the roadways adjacent to residences. They are composed of one driving and one parking lane on each side of the road measuring 4.5 metres, combined for a total of 9.0 metres. Beside the parking lanes are a 1.5 metre sidewalk followed by a 1.5 metre vegetated boulevard.





- Local Entrance:** Local entrances connect local residential roads with all types of collectors and can be found throughout the Plan Area at a width of 18.0 metres. A 3.0 metre vegetated median forms its centre, straddled on either side by a two lane, 4.75 metre wide roadway for a total of four lanes. On either side of the road is a 1.5 metre sidewalk, followed by a 1.25 metre landscaped boulevard.



Policy 7.2.1 The internal road network shall be constructed in alignment with the Glendale Mountain View Conceptual Scheme. The design and construction of roadways within the local transportation network, and between the local network and the provincial and regional transportation networks, shall use sound access management principles. Should there be any changes required to the network, they shall be determined at the subdivision stage.

Policy 7.2.2 The designation and design of local roads within the transportation network, including classification, street sizing, and intersection access spacing, shall be determined at the time of subdivision and be consistent with the Glendale Mountain View Conceptual Scheme to the satisfaction of the County.

Policy 7.2.3 The identified emergency access location shall be provided to the satisfaction of the County.

7.3 Regional Transit Service

An area has been provided within the Conceptual Scheme Boundary in support of future regional (i.e. "On-It" or similar) transit service between Cochrane and Calgary, providing Rocky View and regional residents with a multi-modal transit option while reducing traffic demand on Highway 1A. Land has been set aside directly south of the neighbourhood commercial site for a Park & Ride lot (reflected in **Figure 10**). The addition of a stop within the Plan Area will require regional discussions between the Town of Cochrane, Rocky View County, and the City of Calgary.

Policy 7.3.1 There should be a Park & Ride facility constructed within the Plan Area, supportive of a future regional transit stop. At the subdivision stage, the regional growth management board in conjunction with the Town of Cochrane, Rocky View County, and the City of Calgary shall determine the feasibility of this Park & Ride facility.

8.0 SERVICING STRATEGY

The Glendale Mountain View Conceptual Scheme will utilize a regional piped servicing strategy for water and wastewater. Development within Glendale Mountain View should be supported by an efficient, economic and environmentally sustainable municipal utility system. To justify the cost and to adequately support this level of servicing to the community and beyond, the clustered residential densities reflected in the Community Land Use Concept were selected. From a stormwater perspective, Glendale Mountain View will be a self-contained community with an emphasis on low impact design and zero discharge strategies.

Policy 8.0.1 *Servicing requirements, staging, and cost contributions for regional infrastructure shall be identified at the subdivision stage.*

Policy 8.0.2 *Landowners/Developers relying on regional piped utility services shall be required to front-end the costs of utility service upgrades or pay the proportionate allocated cost to connect to regional infrastructure provided by others.*

Policy 8.0.3 *Landowners/Developers relying on proposed regional piped water and wastewater utility services shall be required to pay the Rocky View County Water and Wastewater Off-site Levy.*

8.1 Water Supply

Glendale Mountain View Plan Area will receive water via a regional piped strategy. This strategy is informed by the Glenbow Ranch Area Structure Plan, which has proposed a water treatment plant directly south of the Plan Area, south of Highway 1A and east of Glenbow Road. This location was selected due to its advantageous elevation above the majority of the Glenbow Ranch Area Structure Plan Area. This location and plant elevation is optimal to provide water service to the Glendale Mountain View Plan Area as well, allowing it to be serviced on one pressure zone. The plant will be supplied by raw water from a point of diversion along the Bow River, approximately

3.5 kilometres due south of the Windy Ridge commercial centre. The raw water will be pumped uphill to the proposed plant. Once there, it will be treated to Alberta Environment and Canadian Drinking Water Quality standards. The water treatment plant shall be owned and operated by Rocky View County. This regional servicing strategy is reflected in **Figure 11: Regional Water Connection**.

The Plan Area will receive treated water via two main connections to the proposed Glenbow Ranch 400mm water main, with one connection northwest of the proposed treatment plant at Glenbow Road and the second at Glenview Road. During detailed design, required oversize of this line to service the Plan Area will be examined.

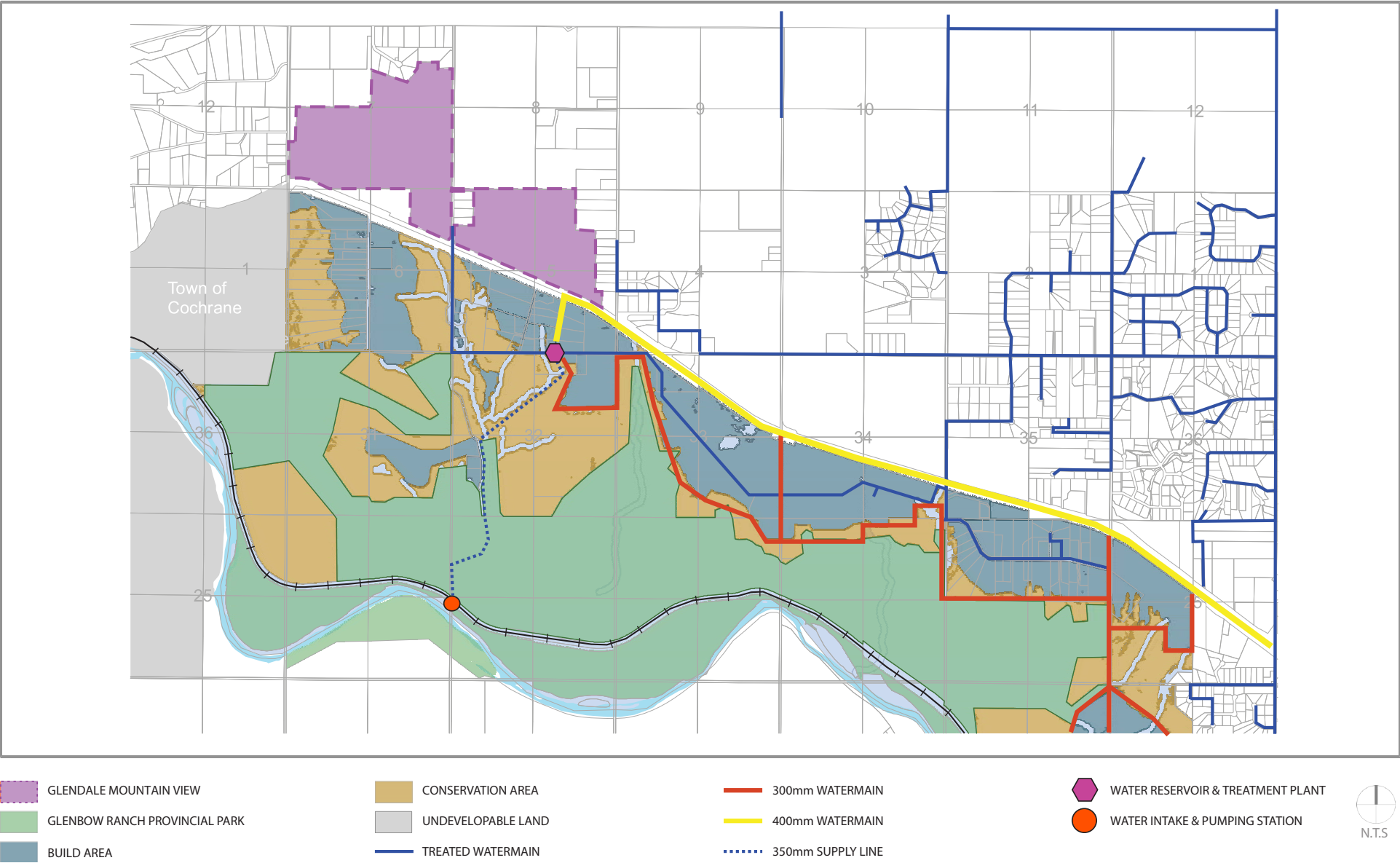
The Plan Area will use the water distribution concept proposed by the Glenbow Ranch ASP to provide full municipal water service. Residential lots will be connected via individual services to 200mm water mains in the streets, which will in turn connect to a distribution loop in each of the two main sections of residential development (east and west) fed by the water treatment plant. Similarly, Windy Ridge commercial centre will be served by a local water main loop.

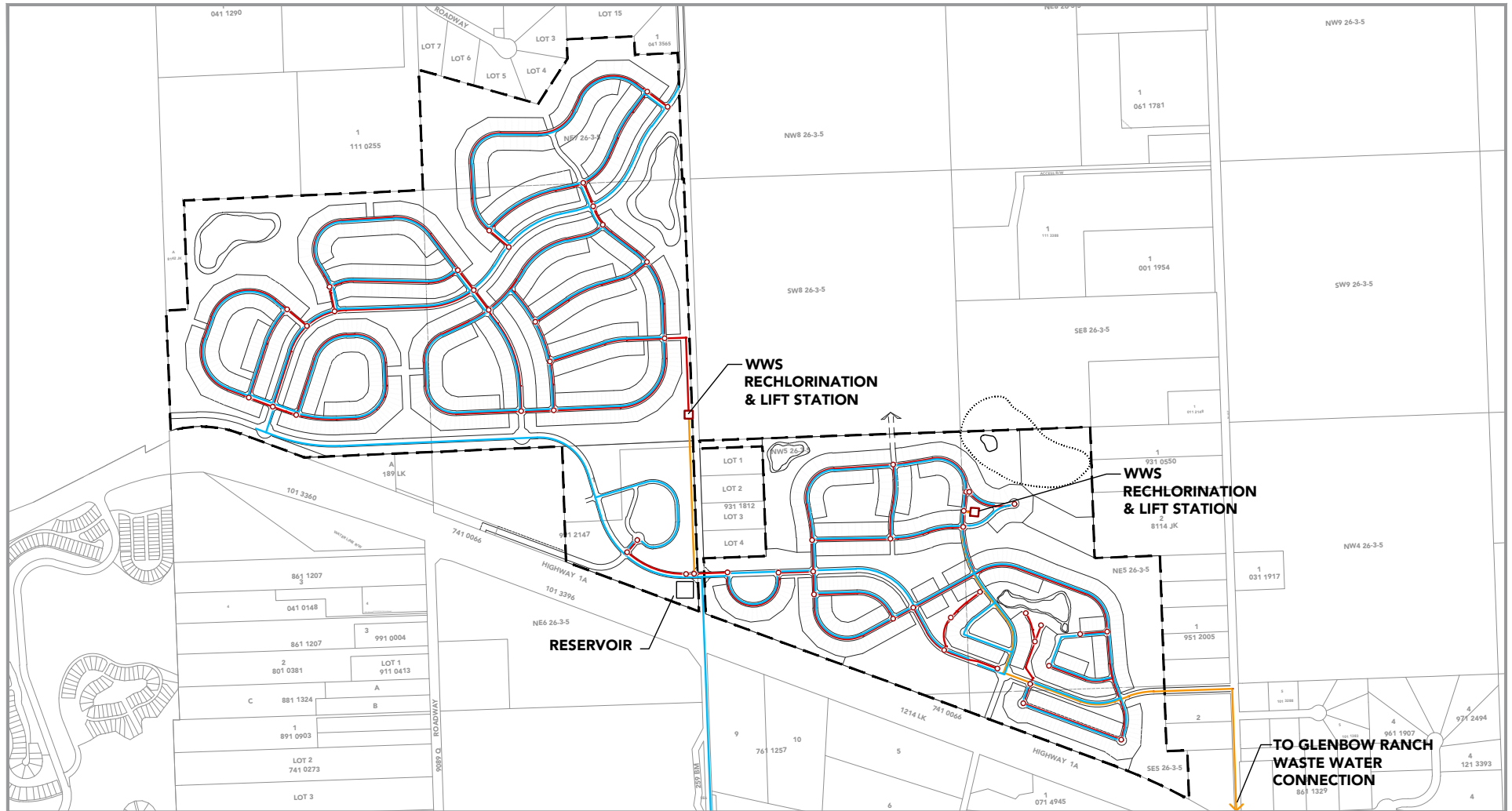
Fire protection will be provided by hydrants along the roadways at typical urban spacing. A water reservoir shall be incorporated into the design and phasing of the proposed water treatment plant for peak demand and fire protection. In order to service Glendale Mountain View, the water reservoir capacity will need to be expanded, most likely in phases, to meet the added requirement placed on it by the included development. For a full map of the on-site water and wastewater system, please see **Figure 12: Water and Wastewater Servicing**.

Policy 8.1.1 *Land Use applications relying on piped utility servicing shall not be supported until the County has confirmed servicing capacity and raw water licensing either exists, or will be provided.*

Policy 8.1.2 *The Plan Area shall receive water via a regional piped strategy, supplied raw from the Bow River and treated at a plant,*

FIGURE 11
REGIONAL WATER CONNECTION





- GL GLENDALE MOUNTAIN VIEW
- GRAVITY SEWER
- POTABLE WATER
- L LIFT STATION
- WASTE WATER FORCEMAIN TO GLENBOW RANCH WASTE WATER CONNECTION
- R RESERVOIR



owned and operated by Rocky View County.

Policy 8.1.3 A Water Use Assessment shall be required with subdivision applications to determine water demand and infrastructure required to meet that demand.

Policy 8.1.4 All residential lots in the Plan Area shall be connected via individual service to 200mm water mains in the streets which will connect to a distribution loop fed by the treatment plant.

Policy 8.1.5 A water reservoir with added capacity sufficient to service the Glendale Mountain View Conceptual Scheme shall be for peak demand and fire protective service to the satisfaction of the County.

8.2 Sanitary Sewer

Glendale Mountain View Conceptual Scheme requires full municipal wastewater service to each home and commercial space, with wastewater collected via individual services connecting to 200mm gravity sewers in the roadways. Wastewater flows will be lifted where necessary to overcome elevation, ultimately being directed south under Hwy 1A to the future wastewater treatment plant envisioned by the Glenbow Ranch ASP, as reflected in **Figure 13: Regional Wastewater Connection**. The future wastewater treatment plant will be upstream of the existing Watermark at Bearspaw wastewater treatment plant, and will share the use of its outfall line to the Bow River.

As the land slopes gently downwards from south to north and from west to east, two lift station locations have been identified to service the community. One lift station serves the western area of the development and will be located near Range Road 35, north of the future commercial area. The second lift station will be located in the northeast portion of the east side of the Plan Area and will direct all flows from the community via forcemain. From here, it will tie into the wastewater servicing concept proposed by the Glenbow Ranch ASP. Please see **Figure 12** for on-site wastewater servicing and lift station locations.

Given the Glenbow Ranch wastewater network as proposed, the

logical point for the forcemain to cross Hwy 1A is at Glendale Road. The Glendale Mountain View development will calculate the additional capacity required downstream of the tie-in to ensure the Glenbow Ranch sewers are sized appropriately to service both developments.

Policy 8.2.1 A Wastewater Servicing Study shall be required with subdivision applications to determine the wastewater demand and the infrastructure required to meet that demand.

Policy 8.2.2 Sump pumps and stormwater drainage systems shall not be connected to the wastewater system.

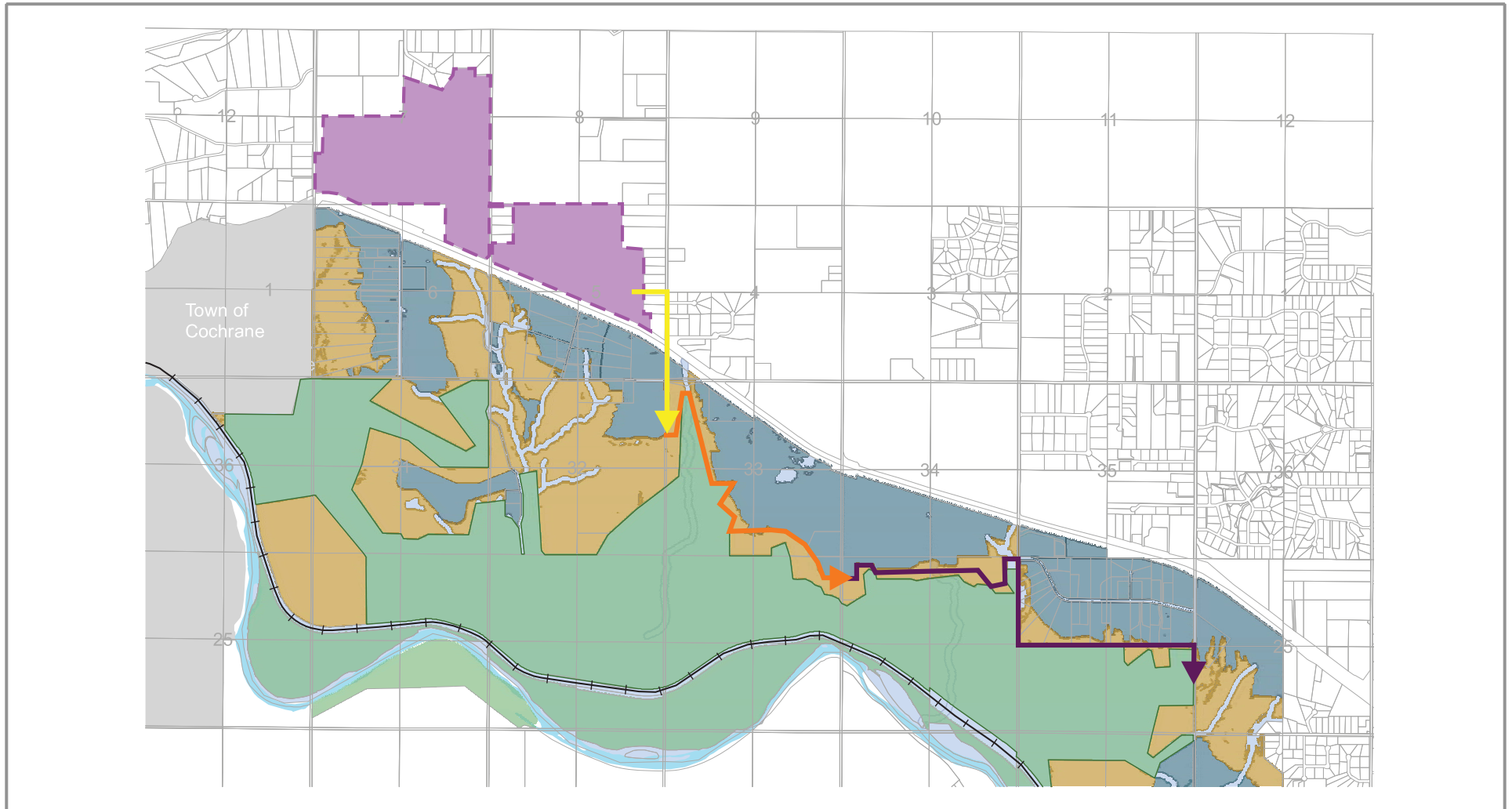
Policy 8.2.3 Wastewater and effluent generated by the Plan Area shall be conveyed across the site and through a forcemain underneath Highway 1A where it shall link into the wastewater system and eventual treatment plant in the Glenbow Ranch ASP Plan Area.

Policy 8.2.4 The Developer shall at their cost augment the wastewater piping when it is constructed in the Glenbow Ranch Plan Area to accommodate the increase in volume originating from Glendale Mountain View.

8.3 Stormwater Management

Glendale Mountain View lies within three watersheds inclusive of Big Hill Creek, Nose Creek, and the Bow River. Previous watershed management plans have identified the Plan Area as being largely self-contained. No discharges were identified to Nose Creek or Big Hill Creek, and only approximately fifteen (15) percent of the site currently drains to the Bow River via existing natural channels. The stormwater servicing for Glendale Mountain View has therefore been designed as self-contained and producing zero discharge.

Stormwater in Glendale Mountain View will collect in roadway catch basins which convey stormwater into storm sewers in the street. Storm sewers will carry stormwater to one of four separate storm ponds within the community. The storm ponds and Municipal Reserve areas are designed to be low impact developments with rainwater re-use in



- | | | | | | |
|--|-------------------------------|--|-----------------------|--|-------------|
| | GLENDAL MOUNTAIN VIEW | | CONSERVATION AREA | | 300mm SEWER |
| | GLENBOW RANCH PROVINCIAL PARK | | UNDEVELOPABLE LAND | | 600mm SEWER |
| | BUILD AREA | | WASTE WATER FORCEMAIN | | |



mind. Each of the four storm ponds is connected to a designated area of Municipal Reserve that will be irrigated throughout the year using stormwater collected during rainfall.

The stormwater pond sizes and irrigation areas have been balanced using fifty-four (54) years of rainfall data such that all runoff generated is stored in the storm ponds until it can be used to irrigate the park areas, achieving zero discharge. Some additional pond storage above and beyond the design capacity has been provided as a factor of safety. A Preliminary Stormwater Management Plan has been prepared by LGN Consulting Engineering Ltd. (LGN) which describes and supports the stormwater management pond locations and principles prescribed in this Conceptual Scheme.

Some additional low impact development measures have also been recommended in the report to achieve zero discharge: 300mm of top soil will be placed in all landscaped areas and runoff from the roofs of all buildings will be directed to landscaped areas. The stormwater strategy is graphically depicted in **Figure 14: Stormwater Re-use**.

Policy 8.3.1 *A finalized Stormwater Master Drainage Plan prepared on the scale of the Plan Area is required at the subdivision stage for the initial development stage and it shall conform to the Preliminary Stormwater Management Plan. Any subsequent development within the designated Neighbourhood Area shall conform to the Stormwater Master Drainage Plan and be completed in accordance with guidelines established by Alberta Environment and to the satisfaction of the County.*

Policy 8.3.2 *The development of the management of the stormwater shall focus on achieving a system of natural drainage that enhances the community landscape, reduces peak discharges, and improves water quality.*

8.3.1 Low Impact Development

Low Impact Development (LID) techniques inform the overall stormwater conveyance strategy for Glendale Mountain View. These techniques will work alongside natural processes and systems to create a healthy landscape. Their organization and location is a principal element of the open space plan. The goal is to incorporate best management practices that reduce impervious surfaces, clean or filter runoff and allow for reuse of stormwater for non-potable purposes.

LID design can be achieved through replicating surrounding natural landscapes. The introduction of hardy, drought resistant native vegetation in open space and residential landscaping will allow for increased ecological integrity and a natural system that can effectively convey stormwater. Another element of LID design is achieving minimal built impact in natural areas. For this reason, trails on reserve lands will be constructed using permeable materials to control runoff rates and volumes.

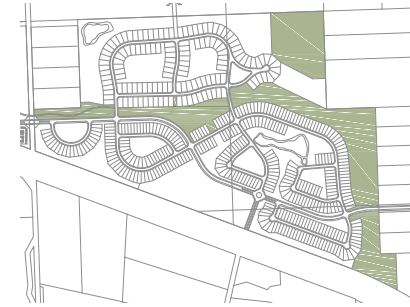
This technique extends to the built environment, where LID design will be achieved by capturing rainwater through the use of permeable hardscape, the provision of absorbent native vegetation across all land uses, and by encouraging residential rain barrels and collection systems for residences and businesses. Stormwater shall be channeled and absorbed along bioswales located in road ditches and low lying areas to open spaces. Here, the water can flow into stormwater retention ponds or be further channeled to flood irrigation fields, where it can be absorbed by more native vegetation. These runoff strategies should be incorporated into the landscaping guidelines at the time of subdivision.

Policy 8.3.1.1 *Low Impact Development strategies shall be applied across all land uses in Glendale Mountain View as part of an integrated stormwater management plan. This shall be achieved by replicating natural landscapes through the introduction of absorbent native plants, introducing permeable pathways and permeable hardscape where appropriate across all land uses, encouraging the use of residential rain barrel collection systems, and introducing a well-connected series*



of bioswales that direct stormwater to retention ponds.

Policy 8.3.1.2 Low Impact Development strategies shall be incorporated in the final Stormwater Master Drainage Plan for each development phase at the time of subdivision to the satisfaction of the County.



LID Strategies for Stormwater on-site, specifically for the area highlighted on the key map

Replication of Surrounding Landscapes



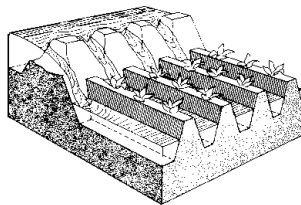
Within the development's proposed green spaces, restoration of native plant species plays a vital role in LID design. Re-introducing hardy plants will ensure healthy growing conditions with minimal watering needs through the aid of re-established drainage corridors. By replicating the surrounding landscapes, animal habitat restoration will also ensure a thriving ecological environment.

Image Key

1. Bio-swale through Perimeter Park
2. Hardy, flowering grasses in Green Corridors
3. Stormwater Retention Pond
4. Bio-swale planting in roundabout
5. Permeable Grass Trail through ER
6. Flood Irrigation



Flood Irrigation Design



Historically used as a strategy for irrigating agricultural fields, flood irrigation provides the opportunity for introducing low impact watering in residential developments. The design goal of flood irrigation is to manage stormwater runoff and volumes, through the use of swales and drainage channels to irrigate the community park spaces (MR).



Minimizing Runoff

Capture Rainwater on Site

- residential rain barrels and collecting systems
- permeable sidewalk and driveway
- absorbent native vegetation

Direct Stormwater Drainage

- bio-swale and turf drainage channels
- flood irrigation design

Discharge Control

- stormwater retention ponds



Rainwater Tank by Luis Prado from the Noun Project
Creek by Don Tolson from the Noun Project
Bioswale by Carlos Diaz from the Noun Project

8.3.2 Low Flow Fixtures and Non-Potable Irrigation

Low flow fixtures shall be installed across all land uses in Glendale Mountain View. These fixtures function at the same level as their traditional counterparts while using a fraction of the water, resulting in a major reduction in dependency on the servicing network. The incorporation of low flow shower heads, high efficiency toilets and high efficiency washers will result in a reduction of millions of litres in water use annually and lower the cost of water bills for those living in the community.

Non-potable irrigation is related to LID design and focuses on retaining stormwater to irrigate open spaces in the Plan Area. The most effective way of achieving non-potable irrigation for residences and businesses is through thoughtful planting of native vegetation and the installation of rain barrel collection systems to water lawns and vegetation during dry periods. From an open space perspective, non-potable irrigation can be achieved through thoughtful stormwater design and its channeling through bioswales to stormwater ponds and low lying flood fields.

Policy 8.3.2.1 *Low flow fixtures shall be installed in residences and commercial buildings in accordance with the Architectural Controls.*

Policy 8.3.2.2 *The open space design shall incorporate non-potable irrigation strategies via the thoughtful inclusion of bioswales and stormwater ponds.*

8.4 Solid Waste Management

Solid waste management will fall under the purview of the HOA. It will be their responsibility to contract a solid waste disposal company. Additionally, the HOA will be responsible for a recycling and organics program.

Policy 8.4.1 *A waste management strategy, inclusive of solid waste removal and waste diversion of recycling and organic materials shall be submitted by the Landowner/Developer upon subdivision. The waste management strategy shall align with the County's Solid Waste Master*

Plan.

Policy 8.4.2 *The HOA shall be responsible for the continued running of these programs once the Landowner/Developer has incepted the HOA and put the waste management strategy in place.*

Policy 8.4.3 *Commercial business owners shall be responsible for providing their own solid waste services.*

8.5 Emergency Services

The County requires that proposals for redesignation, subdivision, and/or development include appropriate levels of emergency servicing and access for police, fire, and ambulance services. The Plan Area will be policed by the RCMP. County Fire fighting service will be provided by Bearspaw Fire Station 103 (Highway 1A and Lochend Road). For medical emergencies and ambulance, 911 service shall be extended to the Plan Area.

Policy 8.5.1 *In association with County Fire Services, the RCMP, and other emergency service providers, emergency services shall be provided to meet current and future needs, based on population growth and demographic change within the Conceptual Scheme area.*

Policy 8.5.2 *Police service to the Plan Area shall be provided by the Royal Canadian Mounted Police Cochrane Detachment as per the Provincial Police Services Agreement, until such time as another policing solution is required or sought out.*

Policy 8.5.3 *New subdivisions shall meet the criteria for on-site firefighting measures as determined by the County.*

Policy 8.5.4 *The Plan Area shall be serviced by 911 emergency service, with an emergency locator system established for each individual property.*

Policy 8.5.5 *Applications for redesignation, subdivision, or development shall provide proper emergency vehicle access in*

accordance with County policy.

8.6 Shallow Utilities

Shallow utilities to be installed in Glendale Mountain View include electricity, natural gas, cable, high speed internet and telephone. These services will be installed along road rights-of-way during the development process and will be in conjunction with deeper utility servicing such as water and sanitary.

Policy 8.6.1 *Development in the Plan Area will be serviced by shallow utilities (i.e. electricity, gas, cable, high speed internet and telephone) at cost of the Landowner/Developer.*

Policy 8.6.2 *The location of all shallow utilities and the provision of rights-of-way and easements and related line assignments should be addressed to the mutual satisfaction of the County, the Landowner/Developer and the utility companies.*

Policy 8.6.3 *The provision of shallow utilities in application for redesignation, subdivision, and/or development shall be at the sole expense of the Landowner/Developer to the extent required in the Standard Development Agreement.*

Policy 8.6.4 *Utility rights-of-way and easements shall be provided to accommodate County utilities at the discretion of the County and shallow utilities as determined necessary by utility providers.*

Policy 8.6.5 *Utility rights-of-way and easements, public utility lots and road rights-of-way may be required as determined necessary to facilitate orderly and sequential development.*

Policy 8.6.6 *A Landowner/Developer may be required to provide, or enter into an agreement to provide when required, the utility rights-of-way or easements necessary to accommodate the extension of County utilities through or adjacent to a site in order to allow for the servicing of a site.*

9.0 PLAN REVIEW, IMPLEMENTATION, AND AMENDMENT

9.1 Subdivision Phasing Strategy

Glendale Mountain View is a large residential development covering +/- 673.73 acres, which requires extensive municipal upgrades including roads, drainage, treated piped water supply and regional wastewater connections. There is a logical sequence to phasing that addresses all of these needs in a manner that minimizes existing ground disturbance and allows input costs to be applied to the development as incrementally as possible. The phasing presented in **Figure 15: Plan Area Phasing Strategy** is based on assumptions regarding regional, off-site and on-site servicing improvements. More than one phase may proceed at the same time and the order and size of phases may change without amendment to this plan.

Policy 9.1.1 Overall density of residential development within the Conceptual Scheme shall not exceed 2.0 units per gross acre.

Policy 9.1.2 Specific lot sizes and lot dimensions will be based on the details provided at the subdivision stage and be consistent with the Direct Control District established for the Conceptual Scheme Plan Area.

Policy 9.1.3 Details regarding internal road systems, specific lot sizes and distribution of lots shall be finalized at the subdivision stage.

Policy 9.1.4 To accommodate market conditions, the order of actual development may vary from the proposed phasing plan without requiring an amendment to the Conceptual Scheme.

9.2 Subdivision Naming

Glendale Mountain View is the current name of the Conceptual Scheme Plan Area, while Windy Ridge has been selected as the current name of the neighbourhood commercial site. These titles have been chosen for their affinity with the Plan Area and surrounding region. However, as the

development proceeds to Outline Plan and implementation phases, other names considered evocative of the history and environmental significance of the region may be selected for these sites. Once names of the Plan Area and its commercial site have been solidified, neighbourhood and street naming shall proceed in theme with these titles, continuing to reflect the local context.

Policy 9.2.1 Prior to the approval of the subdivision and land use for the first phase of development, an overall project name shall be confirmed.

Policy 9.2.2 Neighbourhood names shall be determined at the subdivision stage. Internal road names shall be selected in line with the neighbourhood theme, all of which will be approved by the County.

9.3 Plan Amendment

The Glendale Mountain View Conceptual Scheme falls within a hierarchy of applicable plans. The County Plan and the Bearspaw ASP are the guiding documents for all development within the County. The Land Use Bylaw (LUB) establishes the land use rules and regulations. The Conceptual Scheme presents a greater level of planning detail within the specific Plan Area and is required to be consistent with both the County Plan, the ASP and LUB. Development in the Plan Area should be acceptable to the community and be consistent with policy contained within this document. The Glendale Mountain View Conceptual Scheme does not supercede, repeal, replace or otherwise diminish any other statutory plan in effect in the Plan Area.

Policy 9.3.1 The policies contained within this Conceptual Scheme shall be reviewed and implemented by the County at their discretion.

Policy 9.3.2 As the Conceptual Scheme is adopted by bylaw of the County, a formal process as outlined in the Municipal Government Act is required to amend the Plan.

FIGURE 15
PLAN AREA PHASING STRATEGY



10.0 COMMUNITY ENGAGEMENT

An extensive public engagement strategy was undertaken to aid in the iterative development of the Glendale Mountain View Conceptual Scheme. Its goal was to communicate in a transparent, inclusive, responsive and timely manner with public and stakeholder groups. In so doing, the team would raise awareness of the plan, encourage participation and feedback regarding its contents, and ultimately gain support for the resulting plan. The project team provided an array of feedback mechanisms that allowed both event attendees and those who could not attend the opportunity to share their thoughts and concerns on the Conceptual Scheme.

The strategies employed by the project team during the engagement timeline were as follows:

- **Working Group Meetings:** Landowners and sub-consultants met with the planning team on a regular basis to make decisions regarding the development of the land use plan and how it would respond to feedback received at engagement events.
- **Community Member Meetings:** At Open House events, the project team connected with adjacent Landowners and built relationships. Community representatives were identified for clusters of neighbouring parcels to act as information intermediaries between the project team and their neighbours. The goal here was to keep open communication channels with neighbours and have conversations over their concerns with the land use plan. These discussions focused mainly on how the Plan Area would sensitively interface with their lands through the application of agricultural buffers and transitional lotting between residential, commercial, and agricultural lands.
- **Open House #1:** The first Open House followed a “Meet and Greet” format and was held between 6pm and 9pm on Thursday, September 22, 2016 at the Rock Pointe Church in Bearspaw. 80 people attended the event. Information regarding the Plan Area was presented to the attendees in a general manner geared to eliciting a wide range of feedback, explained at the beginning of the event in a short presentation by planning team lead

Kristi Beunder. Questions were taken from the floor. The team managed to receive some strong feedback from community members regarding concerns over the proposed signalization along the highway, water and wastewater servicing, and wildlife connectivity. **Appendix F: Community Engagement** graphically displays the most common feedback, both positive and negative, received by the planning team at both Open House events.

- **Open House #2:** The second Open House was held between 5pm and 7pm on Tuesday, November 22, 2016 in the same location as the first. It followed a more traditional Open House format, which residents commented left them with a better understanding of the proposed Land Use Concept in the Plan Area. The 38 attendees were able to engage with project team members and provide feedback on comprehensive plan boards, listen to a presentation given by the planning team lead, and ask specific questions on the presentation following its conclusion. There were still concerns regarding wildlife movements across the lands, but presenting more thorough servicing and transportation strategies gave responses to many of the questions at the previous event.
- **Website, Advertising and Communications:** Several communications platforms were employed to cast a wide net for Open House event attendance and to give those unable to attend an opportunity to provide feedback. Advertisements were placed in the Rocky View Weekly ahead of any Open House event to invite community members to attend. Mailers were also sent out before each Open House to anyone living within the boundary of the Bearspaw ASP. A website was also set up and shared with the public to keep them informed of how the plan was progressing, future engagement dates, and posting of prior Open House boards for convenient browsing. There were feedback forms on this website for those who were unable to attend the events and wanted to provide the project team their thoughts. Furthermore, a dedicated phone line was established to respond to anyone who preferred to call and have a conversation about the Conceptual Scheme.

5.0 COMMUNITY DESIGN STRATEGIES, LAND USE POLICIES AND GUIDELINES

Policy 5.1.1.1 There shall be Homeowner's Associations established by the developer at every stage in the build out process. These HOAs shall be incepted at the subdivision stage of development for each Phase. The existence of the HOA will be registered on the titles of every property in the Plan Area and will be funded annually via the payment of a compulsory fee by all homeowners.

Policy 5.1.1.2 The HOA shall be responsible for maintenance of common property, the collection of community waste, organics, and recycling, the continued enforcement of architectural controls, community pathway and landscape care, Dark Skies and nuisance enforcement within the Plan Area.

Policy 5.1.2.1 Landscaping guidelines shall be prepared by the Landowner/Developer at the time of subdivision. The guidelines shall include LID strategies required on residential parcels, the species of plants appropriate for planting, and guidance on the grouping of these plants based on watering needs and how they complement each other.

Policy 5.1.2.2 The HOA shall be responsible for the continued enforcement of landscaping guidelines.

Policy 5.1.3.1 Architectural controls shall be prepared by the Landowner/Developer at the time of subdivision which address exterior design and appearance including the balancing of forms, colours and themes across all land uses in the community and result in the creation of unique and beautiful homes.

- a. Homes shall be constructed in local vernacular styles that include Craftsman, Prairie, National, and Shingle styles.
- b. Architectural features shall include balance and articulation in facades and avoid complicated roof lines, excessive materials, and extensive protrusions.

- c. Fenestration shall be organized simply to provide for easily accessible doorways and appropriate sunlight through windows.

- d. Local materials, including but not limited to wood cladding and trim, asphalt roof shingles, and concrete foundations shall be used as construction materials.

Policy 5.1.3.2 Other land uses in the Plan Area including commercial and institutional shall be subject to architectural controls to ensure continuity in community feel.

Policy 5.1.3.3 The HOA shall be responsible for the continued enforcement of architectural controls.

Policy 5.1.4.1 Glendale Mountain View Conceptual Scheme shall be subject to a Dark Skies initiative as outlined in the Architectural Controls, to be enforced by the Developer, home builder and HOA.

Policy 5.1.4.2 Lights on private dwellings shall possess both full cut-off fixtures and efficient bulbs and homeowners should extinguish artificial light at night when not required.

Policy 5.1.5.1 The Glendale Mountain View Conceptual Scheme Plan Area is subject to the rules and regulations established in the Rocky View County Noise Control Bylaw and the Unsightly Premises Bylaw. The HOA shall be responsible for ensuring compliance with said bylaws throughout the entire Plan Area in regards to any issues arising from noise control or unsightly premises.

Policy 5.1.5.2 If a Noise Control or Unsightly Premises Bylaw violation escalates, the HOA may involve a bylaw officer from Rocky View County who may at their discretion issue a ticket to the offending premises.

Policy 5.1.6.1 Transitional buffer areas shall be incorporated in the Glendale Mountain View Plan Area. They shall be detailed in plan at subdivision stage and measure a minimum of fifteen (15) metres. Buffers should result in sensitive transition utilizing vegetation,

topography, low impact development strategies and pathways where required. They should also maximize mountain and vegetative views while minimizing views to adjacent properties.

Policy 5.1.6.2 The transitional buffer areas shall be designed by a Landscape Architect at the expense of the Landowner/Developer and submitted for review and approval by the County.

Policy 5.2.1 The Subdivision Approving Authority may grant a variance to each site's minimum dimension for standard lots by a maximum of 5%.

Policy 5.2.2 The Subdivision Approving Authority may grant a variance to each site's minimum parcel size by a maximum of 5%.

Policy 5.2.3 The Subdivision Approving Authority may grant a variance to each housing typology maximum number of dwelling units by +/- 2 dwelling units. The maximum number of dwelling units shall not exceed 1364 units.

Policy 5.3.1 The design of the Neighbourhood Commercial node should provide for a compatible interface with adjacent development and natural features; orient buildings towards the street; present an attractive building, fencing, berming and landscaping treatment along public roads and reserve land, and where visible from residential areas and transportation corridors; and be comprehensively designed at the subdivision stage.

Policy 5.3.2 The transportation network in the Neighbourhood Commercial node shall be designed to provide connectivity for pedestrians and cyclists, and safe conditions for drivers from the local area. This will be achieved by:

- a. ensuring dedicated turning lanes and siting areas for safe vehicle movements in and out of the Neighbourhood Commercial node;
- b. providing safe and convenient walkway and pathway access from other areas of the Community; and

- c. ensuring that convenient potential future regional transit access and facilities are provided if regional transit should be embraced at future time.

6.0 OPEN SPACE

Policy 6.1.1 Reserve shall be dedicated through the subdivision process in the full amount owing as outlined on **Figure 4: Community Land Use Concept** in accordance with the requirements of the Approving Authority, pursuant to the County Plan and MGA.

Policy 6.1.2 The allocation of reserve shall be determined at the time of subdivision at the discretion of the County. The County and the Landowner/Developer shall ensure the required amount of reserve is dedicated throughout the course of the development over time.

Policy 6.1.3 As outlined in **Section 5.1.1**, an HOA will be formed by the Landowner/Developer and they shall be responsible for maintenance of community open spaces and MR areas as agreed to with the County.

Policy 6.1.4 A transfer of creditable reserve between neighbourhood areas where land is owned by the same landowner may be permitted, if agreed to by the Landowner/Developer, in accordance with the MGA and subject to approval by the County to achieve:

- a. optimal distribution/location of school sites within communities;
- b. optimal distribution/location of open spaces; and
- c. flexibility to utilize MR for integration of open space that otherwise does not qualify as ER.

Policy 6.2.1 The School/Joint Use Site identified in the Conceptual Scheme is provided as Municipal Reserve dedication and shall be designated as a Public Service District in accordance with the County's Land Use Bylaw at the discretion of the County.

Policy 6.2.2 The Landowner/Developer may work with the applicable school board to provide an estimated school service population and grade level at the subdivision stage to the satisfaction of the County.

Policy 6.2.3 The Landowner/Developer has provided specific lands for the future development of a community facility and may make a voluntary contribution to the Rocky View Recreation Board for Bearspaw Glendale as seed capital for a future venue at this site.

Policy 6.3.1.1 An extensive trail network shall be constructed in Glendale Mountain View to connect residences to the open space system and neighbourhood amenities, following the typologies assigned in **Figure 8: Internal Trail Network Plan and Cross Sections** to the satisfaction of the County.

Policy 6.3.1.2 The Plan Area shall be well connected by both the road and multi-modal pathway networks. These networks shall safely and quickly connect residents to homes, open space, and community amenities. They shall be designed with wayfinding signage and vegetative landmarks to strengthen community identity and connectivity.

Policy 6.3.2.1 Park amenities in the Plan Area shall be left as natural as possible and minimally programmed through the use of natural materials such as wood to construct boardwalks, benches, and shelters to the satisfaction of the County.

Policy 6.3.2.2 The regionally significant archaeological site in the Plan Area shall be supported by an interpretive centre and incorporated into the landscape design of Glendale Mountain View. It shall provide an educational opportunity for community members who want to learn how the Plan Area lands were used historically.

Policy 6.3.2.3 The interpretive centre and programmed areas shall be developed at the cost of the developer and maintained by the HOA to the satisfaction of the County.

7.0 TRANSPORTATION

Policy 7.1.2.1 Transportation network improvements for the Glendale Mountain View Conceptual Scheme shall take into consideration the improvements required for the Glenbow Ranch ASP lands. The improvements on these lands may impact subsequent network changes for the Glendale Mountain View lands.

Policy 7.1.2.2 Any costs associated with transportation improvements identified within the TIA shall be the responsibility of the Landowner/Developer.

Policy 7.1.2.3 The Landowner/Developer shall be required to pay the County a Transportation Off-Site Levy.

Policy 7.1.2.4 The County should examine the cost and benefits of a wildlife corridor underpass through Highway 1A, including possible funding mechanisms prior to subdivision of the applicable phase of development.

Policy 7.1.2.5 As development proceeds to the Land Use and Neighbourhood Plan stages, the TIA shall be reviewed in case updates are required to support specific phases of development. Collaboration with Alberta Transportation shall be required when improvements are regarding access to Highway 1A.

Policy 7.2.1 The internal road network shall be constructed in alignment with the Glendale Mountain View Conceptual Scheme. The design and construction of roadways within the local transportation network, and between the local network and the provincial and regional transportation networks, shall use sound access management principles. Should there be any changes required to the network, they shall be determined at the subdivision stage.

Policy 7.2.2 The designation and design of local roads within the transportation network, including classification, street sizing, and intersection access spacing, shall be determined at the time of subdivision and be consistent with the Glendale Mountain View Conceptual Scheme to the satisfaction of the County.

Policy 7.2.3 The identified emergency access location shall be provided to the satisfaction of the County.

Policy 7.3.1 There should be a Park & Ride facility constructed within the Plan Area, supportive of a future regional transit stop. At the subdivision stage, the regional growth management board in conjunction with the Town of Cochrane, Rocky View County, and the City of Calgary shall determine the feasibility of this Park & Ride facility.

8.0 SERVICING STRATEGY

Policy 8.0.1 Servicing requirements, staging, and cost contributions for regional infrastructure shall be identified at the subdivision stage.

Policy 8.0.2 Landowners/Developers relying on regional piped utility services shall be required to front-end the costs of utility service upgrades or pay the proportionate allocated cost to connect to regional infrastructure provided by others.

Policy 8.0.3 Landowners/Developers relying on proposed regional piped water and wastewater utility services shall be required to pay the Rocky View County Water and Wastewater Off-site Levy.

Policy 8.1.1 Land Use applications relying on piped utility servicing shall not be supported until the County has confirmed servicing capacity and raw water licensing either exists, or will be provided.

Policy 8.1.2 The Plan Area shall receive water via a regional piped strategy, supplied raw from the Bow River and treated at a plant, owned and operated by Rocky View County.

Policy 8.1.3 A Water Use Assessment shall be required with subdivision applications to determine water demand and infrastructure required to meet that demand.

Policy 8.1.4 All residential lots in the Plan Area shall be connected via individual service to 200mm water mains in the streets which will

connect to a distribution loop fed by the treatment plant.

Policy 8.1.5 A water reservoir with added capacity sufficient to service the Glendale Mountain View Conceptual Scheme shall be for peak demand and fire protective service to the satisfaction of the County.

Policy 8.2.1 A Wastewater Servicing Study shall be required with subdivision applications to determine the wastewater demand and the infrastructure required to meet that demand.

Policy 8.2.2 Sump pumps and stormwater drainage systems shall not be connected to the wastewater system.

Policy 8.2.3 Wastewater and effluent generated by the Plan Area shall be conveyed across the site and through a forcemain underneath Highway 1A where it shall link into the wastewater system and eventual treatment plant in the Glenbow Ranch ASP Plan Area.

Policy 8.2.4 The Developer shall at their cost augment the wastewater piping when it is constructed in the Glenbow Ranch Plan Area to accommodate the increase in volume originating from Glendale Mountain View.

Policy 8.3.1 A finalized Stormwater Master Drainage Plan prepared on the scale of the Plan Area is required at the subdivision stage for the initial development stage and it shall conform to the Preliminary Stormwater Management Plan. Any subsequent development within the designated Neighbourhood Area shall conform to the Stormwater Master Drainage Plan and be completed in accordance with guidelines established by Alberta Environment and to the satisfaction of the County.

Policy 8.3.2 The development of the management of the stormwater shall focus on achieving a system of natural drainage that enhances the community landscape, reduces peak discharges, and improves water quality.

Policy 8.3.1.1 Low Impact Development strategies shall be applied

across all land uses in Glendale Mountain View as part of an integrated stormwater management plan. This shall be achieved by replicating natural landscapes through the introduction of absorbent native plants, introducing permeable pathways and permeable hardscape where appropriate across all land uses, encouraging the use of residential rain barrel collection systems, and introducing a well-connected series of bioswales that direct stormwater to retention ponds.

Policy 8.3.1.2 Low Impact Development strategies shall be incorporated in the final Stormwater Master Drainage Plan for each development phase at the time of subdivision to the satisfaction of the County.

Policy 8.3.2.1 Low flow fixtures shall be installed in residences and commercial buildings in accordance with the Architectural Controls.

Policy 8.3.2.2 The open space design shall incorporate non-potable irrigation strategies via the thoughtful inclusion of bioswales and stormwater ponds.

Policy 8.4.1 A waste management strategy, inclusive of solid waste removal and waste diversion of recycling and organic materials shall be submitted by the Landowner/Developer upon subdivision. The waste management strategy shall align with the County's Solid Waste Master Plan.

Policy 8.4.2 The HOA shall be responsible for the continued running of these programs once the Landowner/Developer has incepted the HOA and put the waste management strategy in place.

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Policy 8.5.1 In association with County Fire Services, the RCMP, and other emergency service providers, emergency services shall be provided to meet current and future needs, based on population growth and demographic change within the Conceptual Scheme area.

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Policy 8.5.3 New subdivisions shall meet the criteria for on-site firefighting measures as determined by the County.

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Policy 8.6.4 Utility rights-of-way and easements shall be provided to accommodate County utilities at the discretion of the County and shallow utilities as determined necessary by utility providers.

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Policy 9.3.1 The policies contained within this Conceptual Scheme shall be reviewed and implemented by the County at their discretion.

Policy 9.3.2 As the Conceptual Scheme is adopted by bylaw of the County, a formal process as outlined in the Municipal Government Act is required to amend the Plan.

APPENDIX A: ADJACENT LANDOWNER ACREAGES

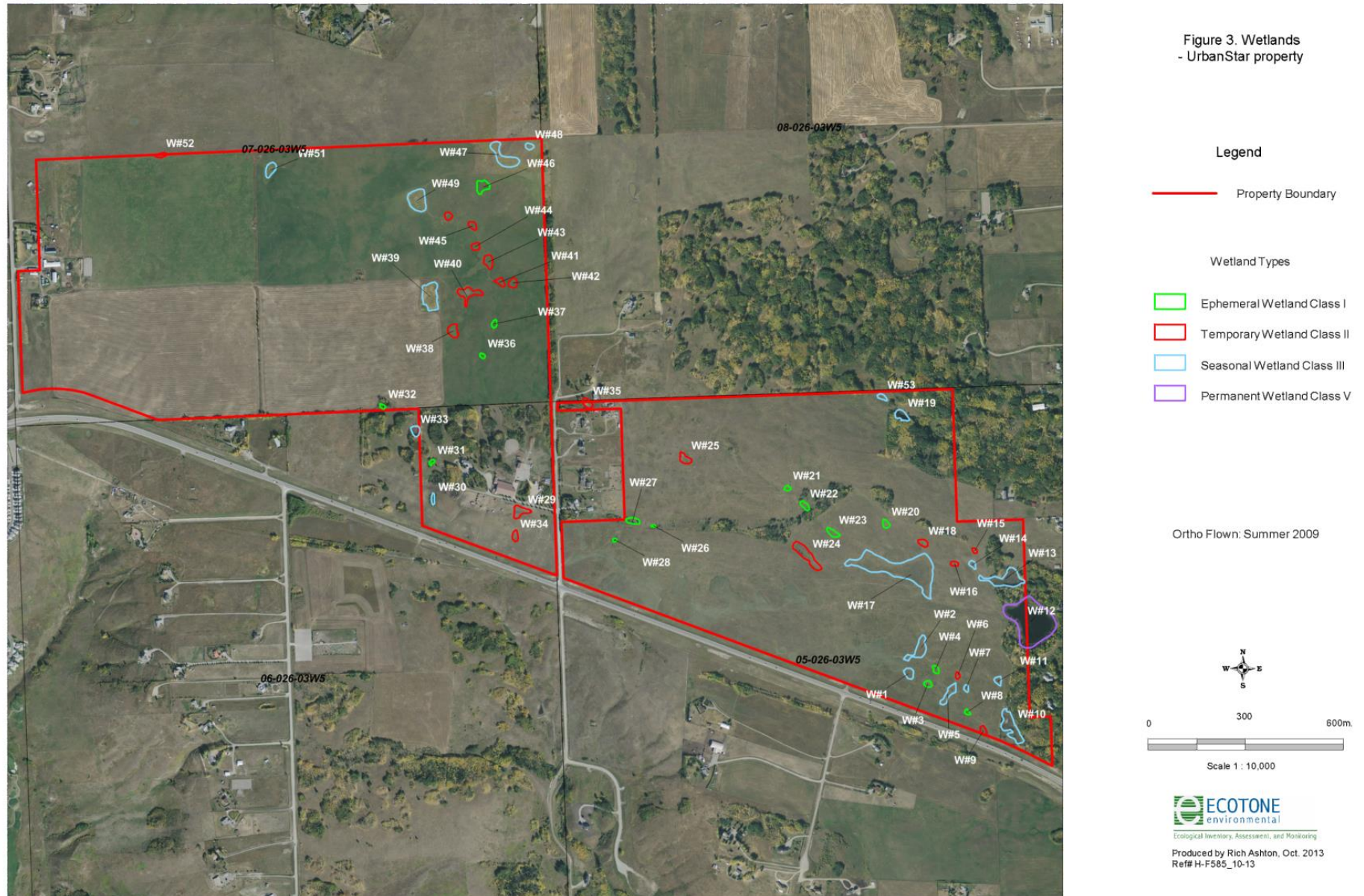
OWNER	LEGAL DESCRIPTION	HECTARES	ACRES
Telus Communications Inc.	Plan 835JK;OT, SE 12-26-4-W5M	0.45	1.11
Telus Communications Inc.	Plan 8310302;RW;26, NE 1-26-4-W5M, SE 12-26-4-W5M	3.39	8.37
Steven C. Schock & Audrey M. Schock	Plan 9512822, Block 3, Lot 5, SE 12-26-4-W5M	1.82	4.50
Gregory Francis Marasco & Gloria Jean Marasco	Plan 9512833, Block 3, Lot 4, SE 12-26-4-W5M	1.46	3.61
The Canada Trust Company	Plan 9510961, Block 2, Lot 6, SE 12-26-4-W5M	2.22	5.50
The Canada Trust Company	Plan 9510961, Block 2, Lot 5, SE 12-26-4-W5M	2.22	5.50
Lloyd C. Copithorne	Plan 8412JK, Block A, SW 7-26-3-W5M	0.17	0.40
Walter Wearmouth & Kathryn Wearmouth	Plan 1110255, Block 1, Lot 3, NW 7-26-3-W5M	16.20	40.03
Walter Wearmouth & Kathryn Wearmouth	Plan 1110255, Blck 1, Lot 4, NW 7-26-3-W5M	15.61	38.57
Gary Brooks & Leanne Binetruy	Plan 7911220, Lot 7, NE 7-26-3-W5M	1.62	4.01
David John Werrett & Sharon Pearl Werrett	Plan 7911220, Lot 6, NE 7-26-3-W5M	1.63	4.03
Diane Marie Ogston Kilbourn	Plan 7911220, Lot 5, NE 7-26-3-W5M	1.63	4.03
Joanne Schachtel	Plan 7911220, Lot 4, NE 7-26-3-W5M	1.63	4.03
Elizabeth Mazurik	Plan 7911220, Lot 3, NE 7-26-3-W5M	1.72	4.24
Richard Peter Kuzek	Plan 8610664, Lot 15, NE 7-26-3-W5M	4.06	10.03

OWNER	LEGAL DESCRIPTION	HECTARES	ACRES
Patricia H. Hagerman	Plan 0413565, Block 1, Lot 16, NE 7-26-3-W5M	1.63	4.03
M. Gordon Bryan	NW 8-26-3-W5M	64.70	160.00
Manfred Schickedanz & Robin Schickedanz	SW 8-26-3-W5M	64.70	160.00
Trimor Equity Corporation	SE 8-26-3-W5M	24.36	60.30
James David Lewis & Cristy Suzanne Lewis	SE 8-26-3-W5M	6.47	16.00
Leslie A. Zaharichuk & Adelia F. Zaharichuk	Plan 9310550, Block 1, Lot 1, NE 5-26-3-W5M	4.05	10.01
Joshua Goertzen & Holly Goertzen	Plan 9310550, Block 1, Lot 2, NE 5-26-3-W5M	4.05	10.01
Pia Foss	Plan 8114JK, Block 2, NE 5-26-3-W5M	8.09	19.99
Susan Kempin & Eric Kempin	Plan 9512005, Block 1, Lot 1, NE 5-26-3-W5M	1.62	4.00
Laurence Allan Ottmann & Marion Jean Ottmann	Plan 9512005, Block 1, Lot 2, NE 5-26-3-W5M	1.62	4.00
Ashley Charles Raabis & Leanne Erin Pidsadowski	Plan 9512005, Block 1, Lot 3, NE 5-26-3-W5M	1.62	4.00
Christelle Louw & Andries Louw	Plan 9512005, Block 1, Lot 4, NE 5-26-3-W5M	1.62	4.00
Peter Reah Tharby & Marilyn Tharby	Plan 9512005, Block 1, Lot 5, NE 5-26-3-W5M	1.62	4.00
David Levicek & Monika Levickova	Plan 9512005, Block 2, Lot 1, SE 5-26-3-W5M	1.73	4.27
David Elm & Sherrill Elm	Plan 9512005, Block 2, Lot 2, SE 5-26-3-W5M	1.73	4.27

OWNER	LEGAL DESCRIPTION	HECTARES	ACRES
William Palmen & Yolanda Palmen	Plan 4594JK, SE 5-26-3-W5M	2.97	7.34
Ghost Lake Manor Corp.	Plan 9912147, Block 1, Lot 2, NE 6-26-3-W5M	0.609	1.50
Patricia Boswell & Claude Cote	Plan 189LK, Portion of Block A, NW 6-26-3-W5M	1.60	3.97
Michael E. Heier	Plan 189LK, Portion of Block A, NW 6-26-3-W5M	1.60	3.97
Darcy Davis & Marcie Davis	Plan 9311812, Lot 1, NW 5-26-3-W5M	1.619	4.00
Guy Leslie Dechamps & Tracy Margaret Dechamps	Plan 9311812, Lot 2, NW 5-26-3-W5M	1.619	4.00
Trevor Dillabough & Jodi Dillabough	Plan 9311812, Lot 3, NW 5-26-3-W5M	1.619	4.00
Brandon Clague	Plan 9311812, Lot 4, NW 5-26-3-W5M	1.619	4.00

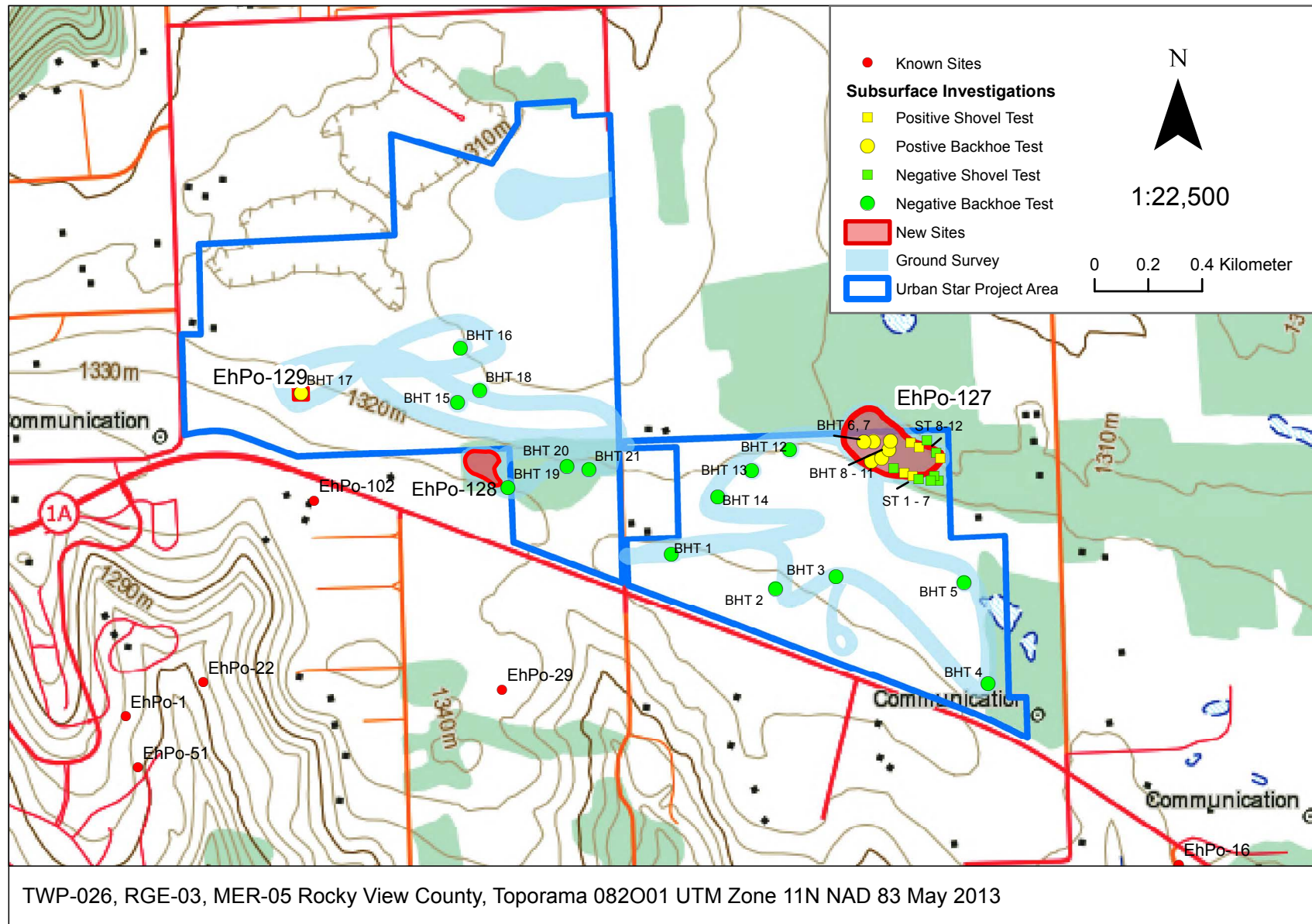


APPENDIX C: EXISTING WETLANDS IN THE PLAN AREA



APPENDIX D: HRIA AREAS

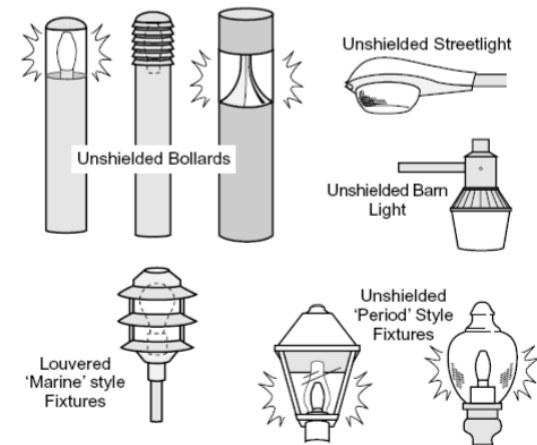
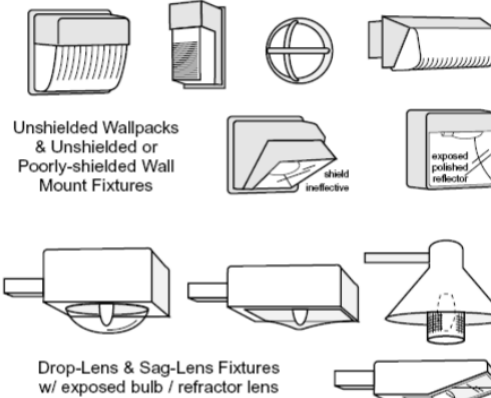
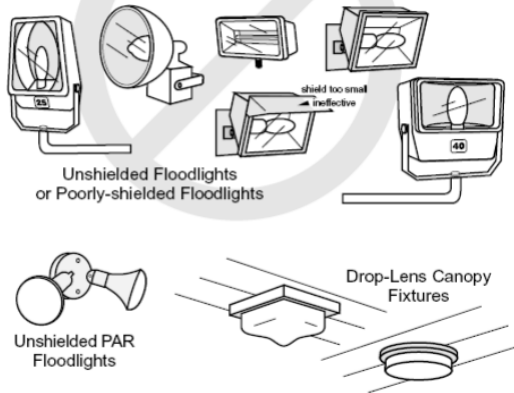
Figure 2. Urbanstar Project Area Showing Location of Sites Found and Backhoe Tests Completed



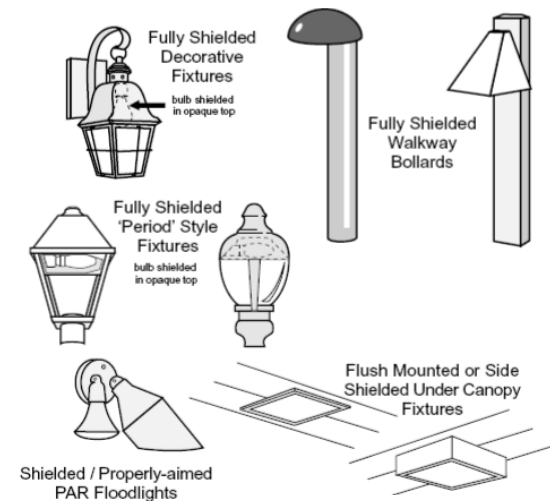
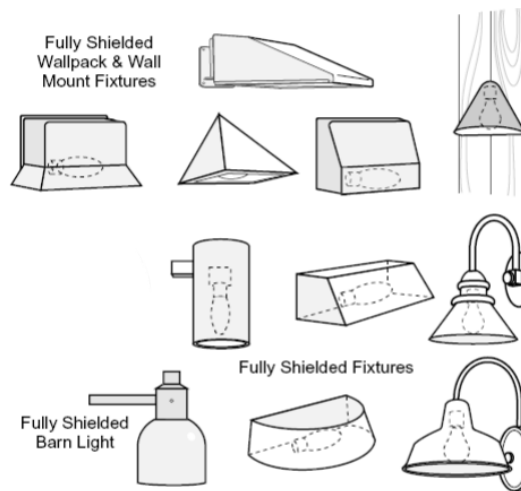
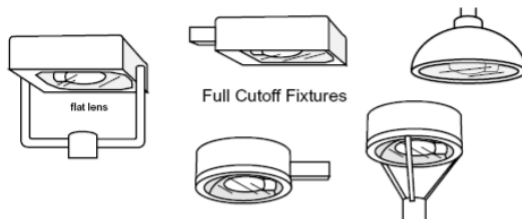
APPENDIX E: DARK SKIES COMPLIANT FIXTURES

Unacceptable / Discouraged

Fixtures that produce glare and light trespass

**Acceptable**

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



APPENDIX F: COMMUNITY ENGAGEMENT



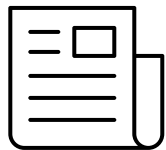
Open Houses

- 1 2016.09.22, 6-9pm
80 Attendees
7 Feedback Forms
- 2 2016.11.22, 5-7pm
38 Attendees
5 Feedback Forms



Individual Landowner Meetings

2 meetings with community landowners



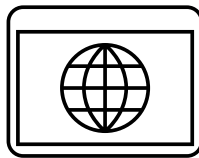
Newspaper Notices

Newspaper ads in the Rocky View Weekly
2 weeks prior to all Open Houses



Mailers

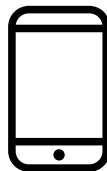
Mailers set on Canada post map
Sent to all Landowners in Bearspaw ASP Boundary
Personal invites sent to Councillors



Project Website

www.usglendalemountainview.com

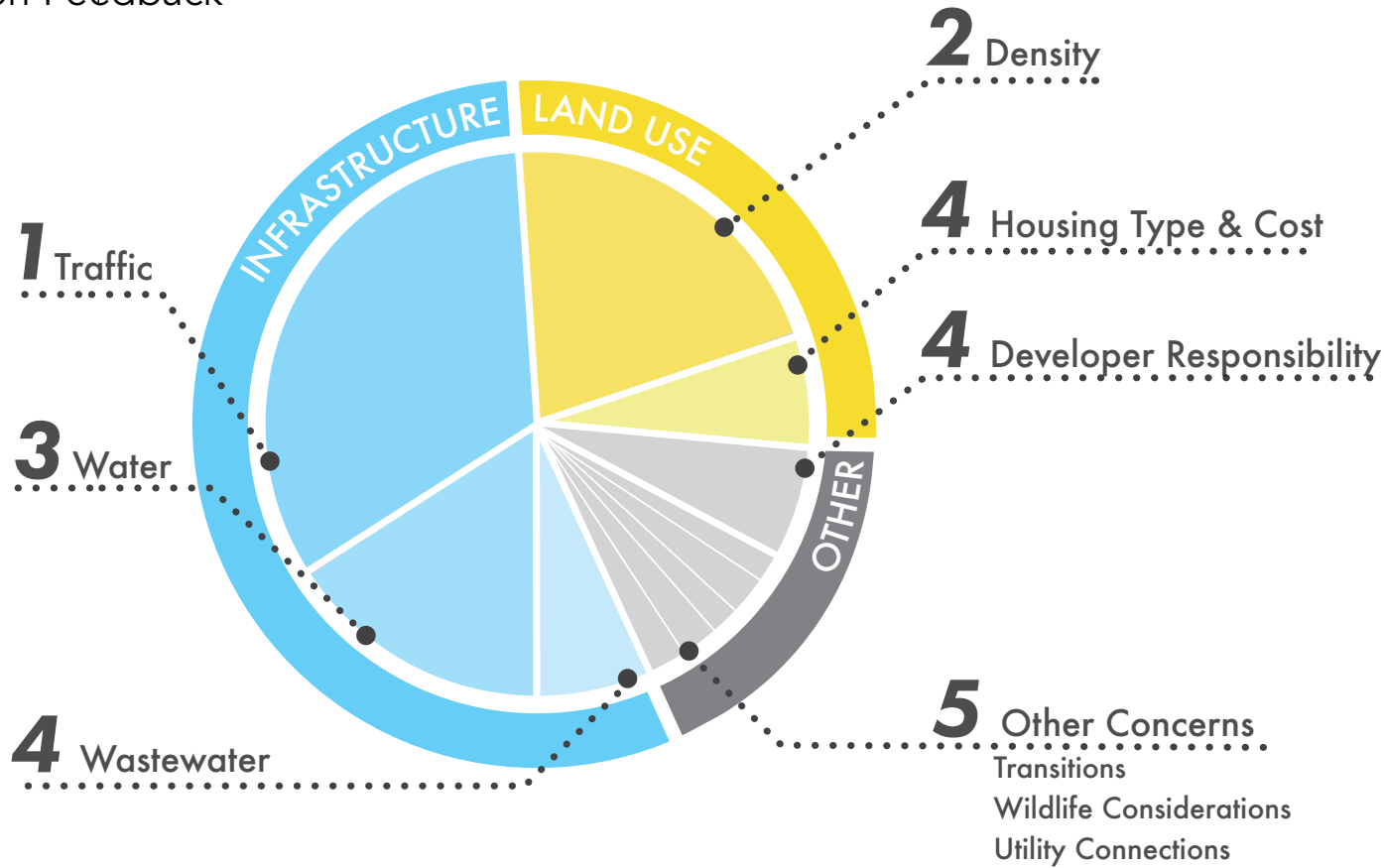
- 1,550 Total visits
- 1,063 Audience size
- 1 Response form submitted
- Advertising for both open houses



Dedicated Phone

587.747.0317

Common Feedback



PRIMARY HOPES

- 1** Traffic is well integrated and all concerns are recognized
- 2** Density is appropriate
- 3** Developer sees project through and construction is not ongoing

PRIMARY CONCERNS

- 1** Water
- 2** Increased traffic and signalization on Highway 1A
- 3** High Density