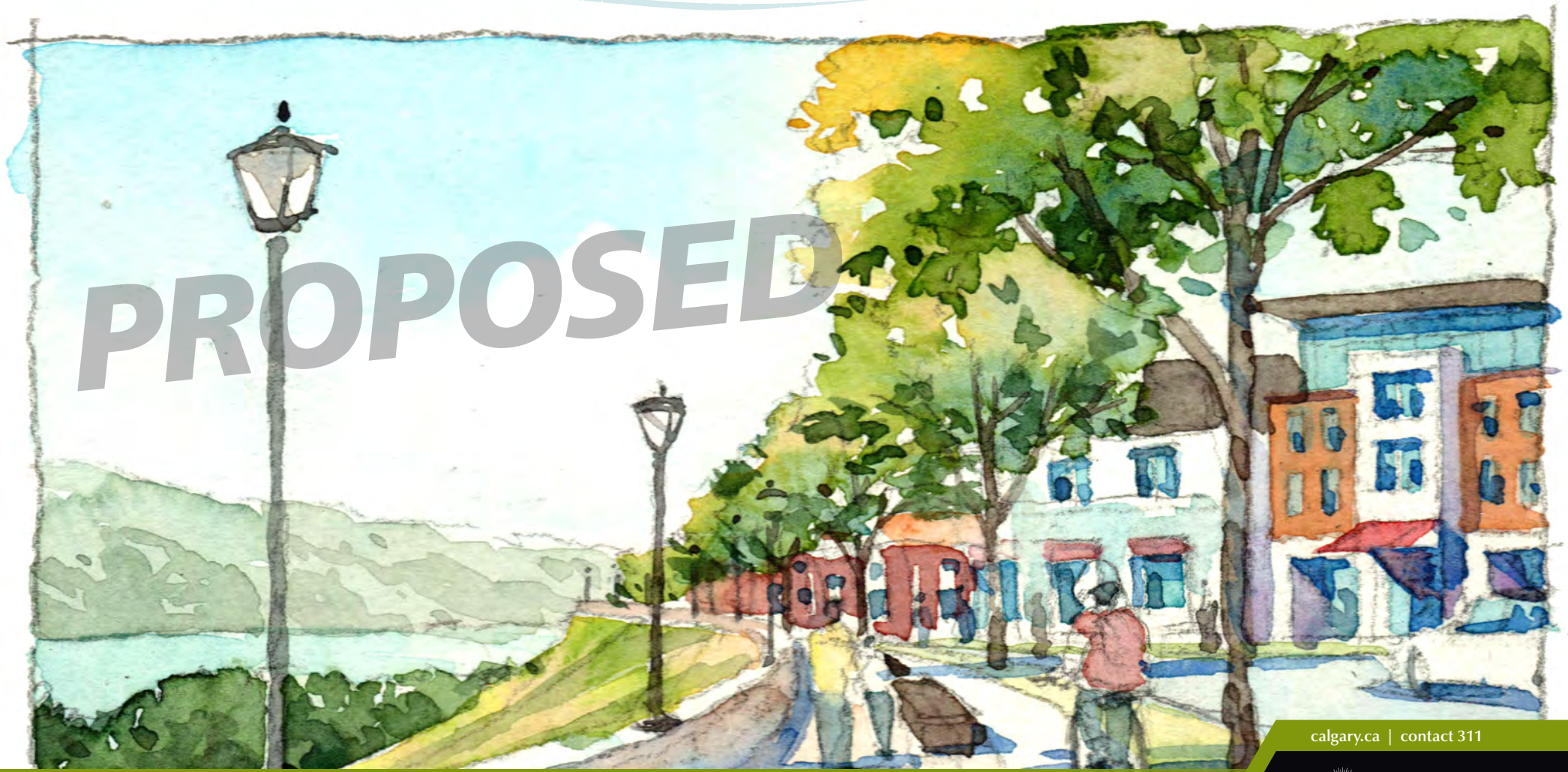
CPC2015-126
ATTACHMENT 2

Haskayne area structure plan



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THE CITY OF CALGARY

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CORE IDEAS OF THE HASKAYNE ASP

THIS IS A PLAN TO GUIDE DEVELOPMENT TO CREATE A NEW COMMUNITY IN NORTHWEST CALGARY THAT WILL:

- Complement Haskayne Legacy Park and Glenbow Ranch Provincial Park
- Preserve key natural features and vistas through a system of ecological networks
- Have distinct, attractive Neighbourhoods that allow residents to access services and amenities locally
- Have an interconnected, efficient and adaptive grid street network

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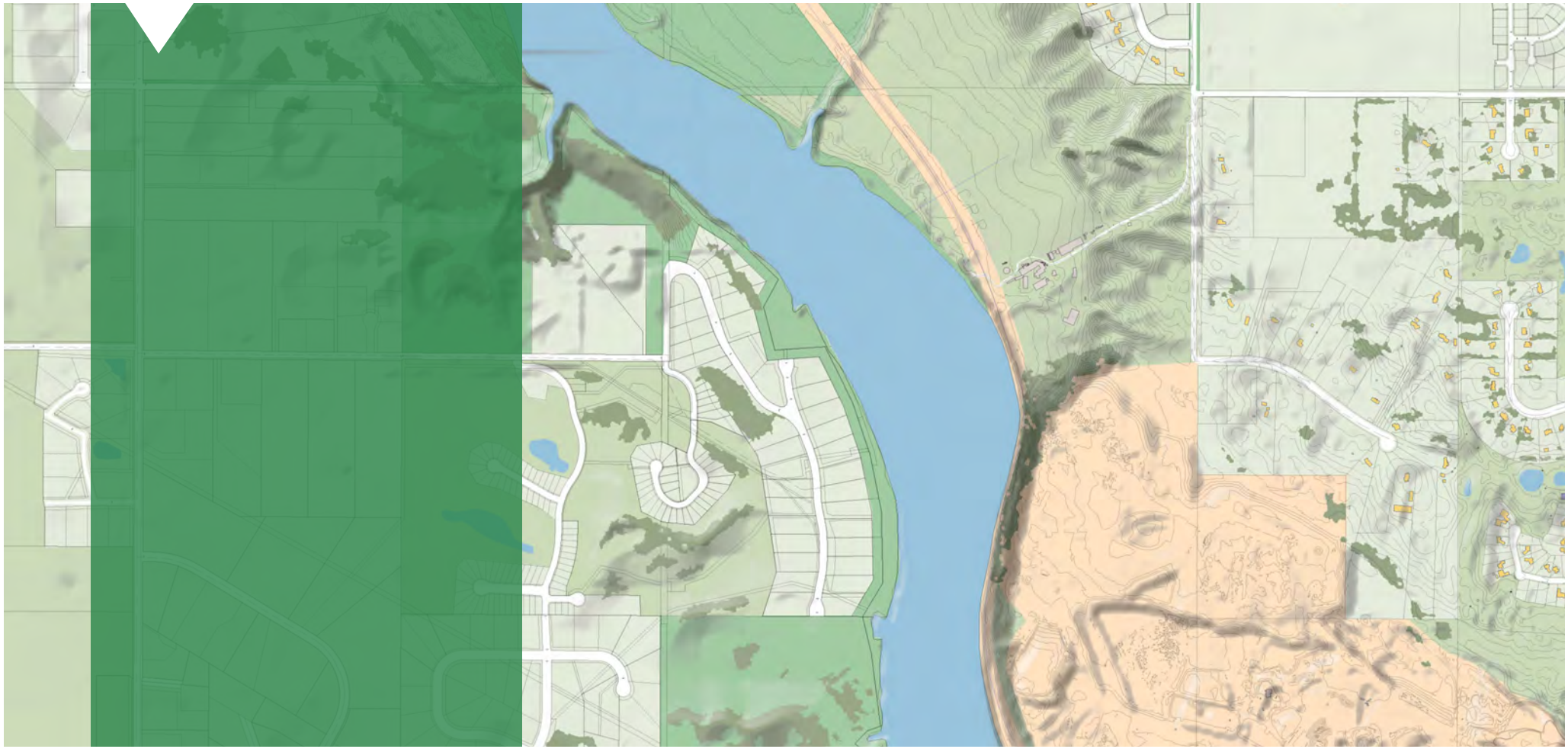
1 INTRODUCTION



1.1 VISION AND PRINCIPLES

VISION

The Plan Area will consist of one Community that will compliment Haskayne Legacy Park and Glenbow Ranch Provincial Park. Neighbourhood character will build on the unique natural features of the escarpment top and river valley and centre around a walkable local Activity Centre. The existing natural features will form the backbone of a green infrastructure network providing character and amenity value.

Efficient, direct and vibrant street connections will lead people travelling by all modes to and from the Community and out to the rest of the city. A Community Retail Centre will be centrally located and function as an integrated shopping, working and living environment for local residents and adjacent communities.

PRINCIPLES

1. Create multi-modal connections to and through the Haskayne Plan Area to link trail networks, or pedestrian or cycling pathways, transit circulation and vehicular movement.

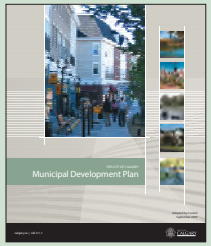
2. Build on an emerging regional open space network that takes advantage of the existing landscape while restoring, enhancing and protecting the ecology and hydrology of the land and river.

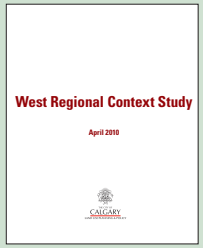
3. Build walkable Neighbourhoods that are diverse and cohesive, to attract a broad spectrum of lifestyles, ages and income levels.

4. Use topography, bluffs and coulees to highlight key viewsheds of the mountains, the river valley and downtown Calgary.

1.2 POLICY FRAMEWORK

This ASP is to be read in conjunction with:





Municipal Development Plan (2009)

The *Municipal Development Plan* (MDP), which contains city-wide objectives and specific direction for the land use typologies and should be consulted for general direction.

New Community Planning Guidebook (2013)

The *New Community Planning Guidebook*, which contains basic policy for all new communities and should be consulted for specific direction.

West Regional Context Study (2010)

The West Regional Context Study, which provides high-level guidance for the Plan Area.

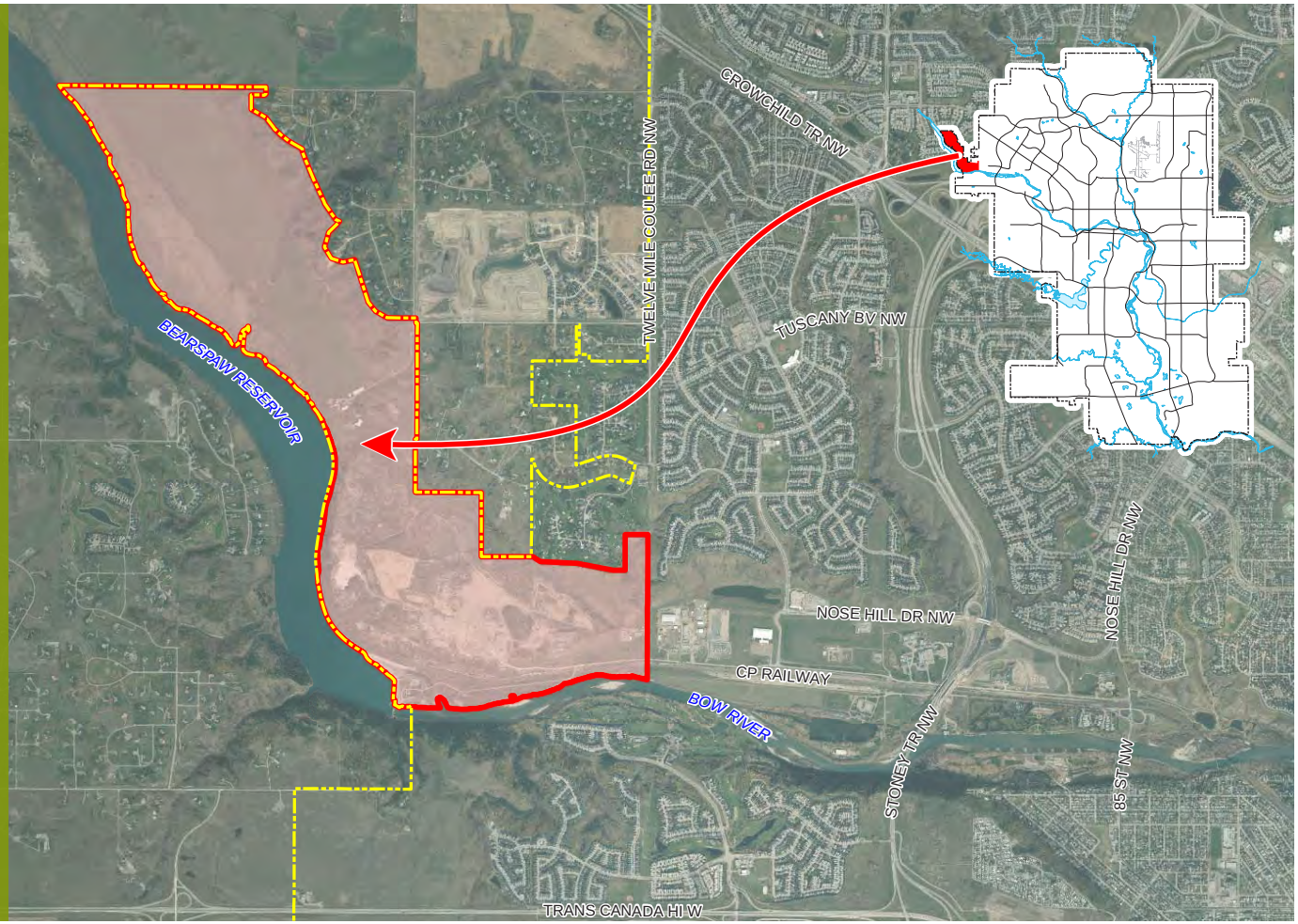
Other City policies on specific topics

In some cases, there may be no additional policy in this ASP for a particular item. In such cases, only the New Community Planning Guidebook, the MDP or other City policies apply. However, this ASP takes precedence in the event of any conflict where the ASP has a finer level of detail and refines what is in the *New Community Planning Guidebook*, the MDP, or other City policy documents.

2 PLAN AREA ATTRIBUTES

MAP 1: LOCATION AND REGIONAL CONTEXT

The Plan Area is located in the city's northwest and is bound to the north and west by Rocky View County. To the west, on the north bank of the Bow River is a portion of the eastern extremity of the Glenbow Ranch Provincial Park. Along the south boundary is the Bearspaw Reservoir, one of two sources of drinking water for Calgary. To the east are existing and future water treatment facilities and The City's Operations Workplace Centre, while to the northeast is the community of Tuscany. There are prominent escarpments located along the north and southeast boundaries of the Plan Area. The site itself is comprised of a decomissioned gravel pit, cultivated agricultural and native pasture lands, Haskayne Legacy Park, and part of Glenbow Ranch Provincial Park. The Plan Area contains approximately 561 hectares (1,386 acres) of land.



2.1 NATURAL ENVIRONMENT

The Plan Area is situated within a corridor of natural features and vistas. From both the top and bottom of the escarpment, there are views across the Bow River and up its valley to the mountains. As the gateway to a regional system of parks that includes Haskayne Legacy Park and the Glenbow Ranch Provincial Park, this Plan Area will offer all Calgarians a significant amenity. These two large parks are adjacent to each other at the northwest end of the Plan Area. **Section 4: Open Space Network** contains further information on how development will interface with parks and open spaces.

2.2 GRAVEL PIT RECLAMATION

The Plan Area contains a former gravel extraction facility in the southeast portion of the Plan Area. It has ceased operations and is no longer active.

2.3 BOW RIVER (BEARSPAW RESERVOIR & DAM)

One of two sources of drinking water for Calgarians, the reservoir provides a dramatic backdrop to the Plan Area. However, the sensitivity of the reservoir to pollutants will require a detailed review to address the impacts of urban development in relation to water quality. **Section 6.6: Stormwater Management** contains further information on how development will protect one of Calgary's water sources.

2.4 HISTORICAL RESOURCES

The Plan Area likely contains historic resources which are regulated by the provincial government.

2.5 OIL AND GAS INFRASTRUCTURE

There is a high pressure sweet natural gas pipeline running through the Plan Area. The defined setback is the established right-of-way. As the line runs through Haskayne Legacy Park, setbacks from this line will be maintained.

2.6 HEAVY RAIL LINE

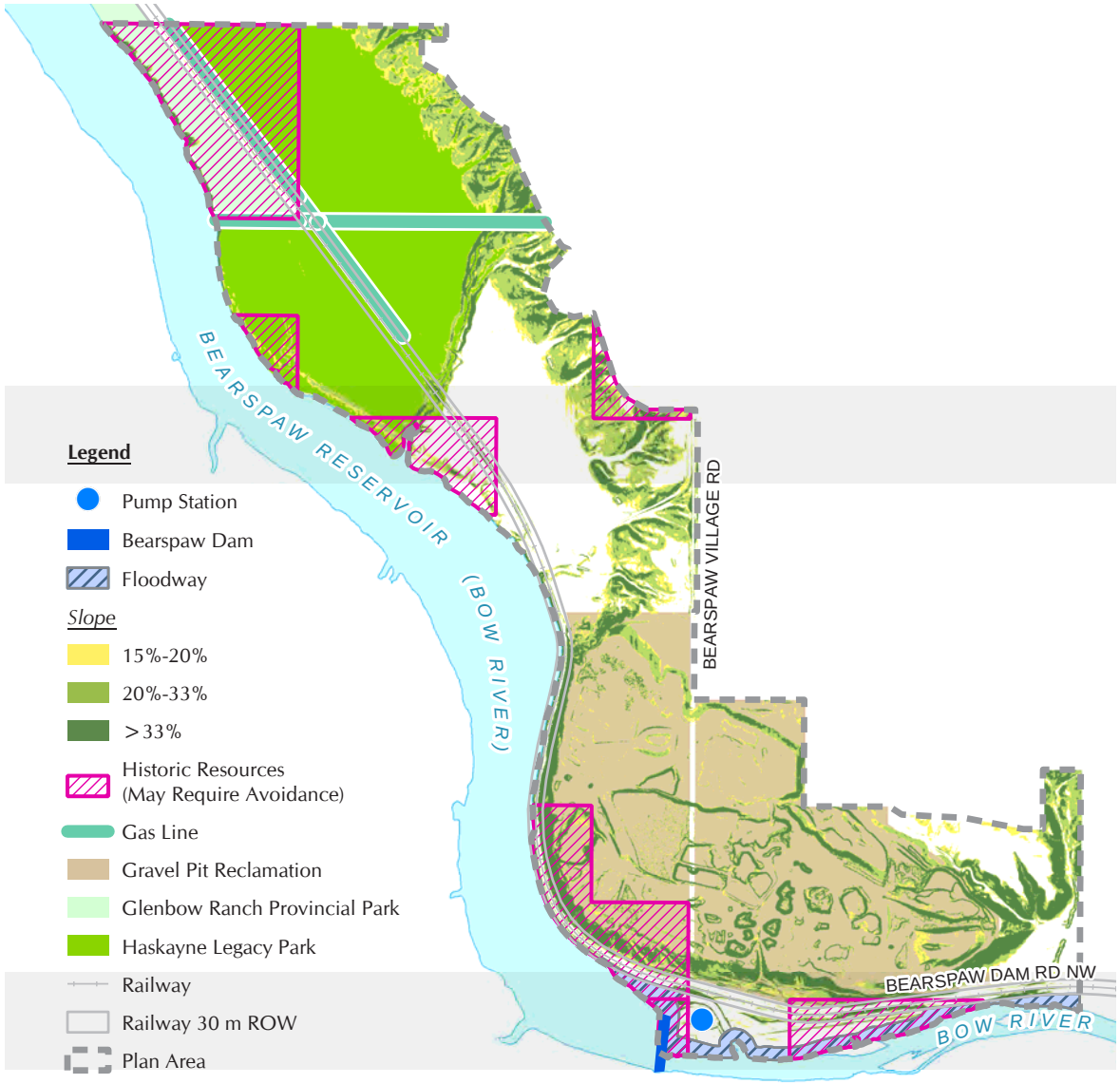
The Haskayne Plan Area includes a heavy rail line that parallels the Bow River to the west and south. **Section 5.4: Heavy Rail** contains further information on how development will interface with the rail line.

FIGURE 1 *View of the reservoir from the east edge of the plan area*

FIGURE 2 *The former onsite gravel pit will be become a new residential neighbourhood*

FIGURE 3 *The Bow river, CPR Main line, and Bearspaw Dam Road will run parallel into the site's east edge*

MAP 2: PLAN AREA ATTRIBUTES

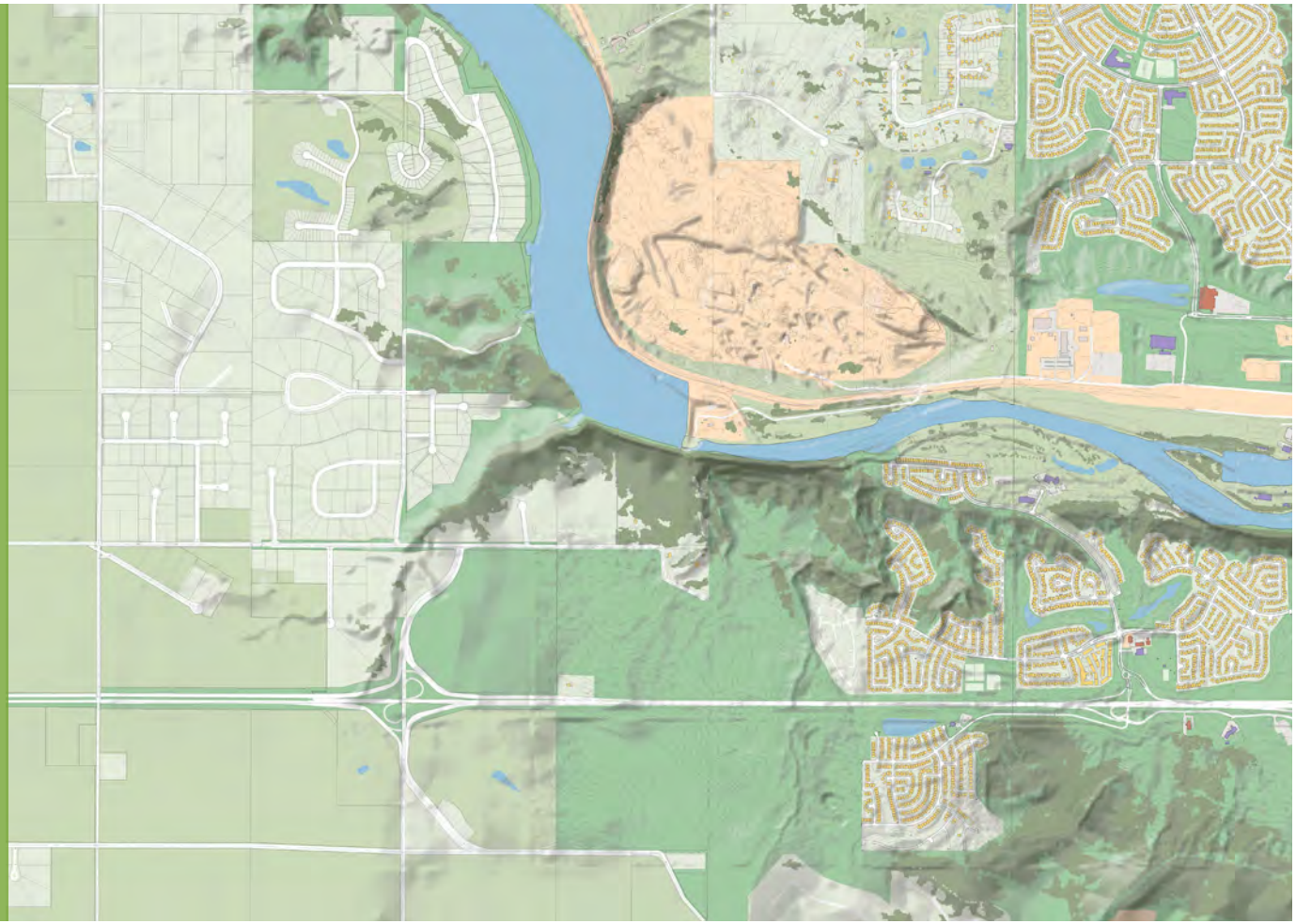


3 COMMUNITY FRAMEWORK

A complete community is "a community that is fully developed and meets the needs of local residents through an entire lifetime. Complete communities include a full range of housing, commercial, recreational, institutional and public spaces. A complete community provides a physical and social environment where residents and visitors can live, learn, work and play." — MDP

"Neighbourhoods are the basic building blocks of a city. The term 'Neighbourhood' is used to describe a distinct part of a large community, containing up to 5,000 people. A Neighbourhood is typically considered an area within walking distance of a local commercial area, school, park, transit station, etc." — MDP

This section provides direction for establishing Community and Neighbourhood identity, as shown on **Map 3: Community Structure**, and for determining Land Use Areas and items identified on **Map 4: Land Use Concept.**



3.1 COMMUNITY STRUCTURE

INTENT

Promote a compact, walkable and complete Community by organizing the Plan Area into distinct Neighbourhoods. Each Neighbourhood should convey a sense of belonging or connection to the overall Community and be organized around a focal point within walking distance for most residents. These focal points should contain a central amenity space, a transit stop, higher density residential development and non-residential opportunities.

POLICIES

1. The Haskayne Community and the Neighbourhoods within are shown on **Map 3: Community Structure.**
2. Neighbourhood 4 should have a minimum intensity of 60 and a maximum intensity of 120 people and jobs per gross developable hectare.

MAP 3: COMMUNITY STRUCTURE

Note: *Some areas are not included in the Community boundary because they will remain as open space.*

3.2 LAND USE CONCEPT

The Haskayne Community is comprised of the river valley lands in the northwest and the lands above the escarpment in the southeast. These two parts of the Plan Area are divided by the escarpment but will be connected by an extension of Nose Hill Drive NW and the pathway system.

- The river valley lands will have two Neighbourhood Activity Centres on either end of a corridor that will connect the main entrance of Haskayne Legacy Park to the Bow River escarpment and lands above it.
- The upper lands will be oriented around a street that starts in the northeast passing a school, a Community Retail Centre and Neighbourhood Activity Centre before terminating at the top of the escarpment in the southwest. These focal points of the Community will be surrounded by predominantly residential Neighbourhood Areas. The eastern entrance to the Community will be a Gateway Area that provides a transition from adjacent land uses to the land uses within the Plan Area.
- Environmental Open Space (EOS) Study Areas, mostly escarpment lands and coulees, exist throughout the Plan Area. Areas within the EOS Study Area that are preserved will provide a passive amenity for local residents and habitat for wildlife. Local parks will provide recreation opportunities for local residents.
- Haskayne Legacy Park and Glenbow Ranch Provincial Park are amenities for the Calgary region and form an open space connection between Calgary and Cochrane.

The concept for the Plan Area is shown on **Map 4: Land Use Concept.** This map consists of a series of areas and symbols that define the anticipated land use pattern for the Community. Policies for those areas and symbols are contained in subsequent sections as well as in the *New Community Planning Guidebook.* Both documents apply concurrently, but where there is a discrepancy the policy of this ASP prevails.

FIGURE 4 *Local parks and Joint Use Sites provide recreation and education opportunities*

FIGURE 5

TOTAL PLAN AREA =
561 hectares (1,386 acres)

"The term Community is typically used to describe a geographic area of between 5,000 and 20,000 residents that was planned comprehensively and developed over a period of time." — MDP

COMMUNITY SIZE =
350 HECTARES (860 ACRES)

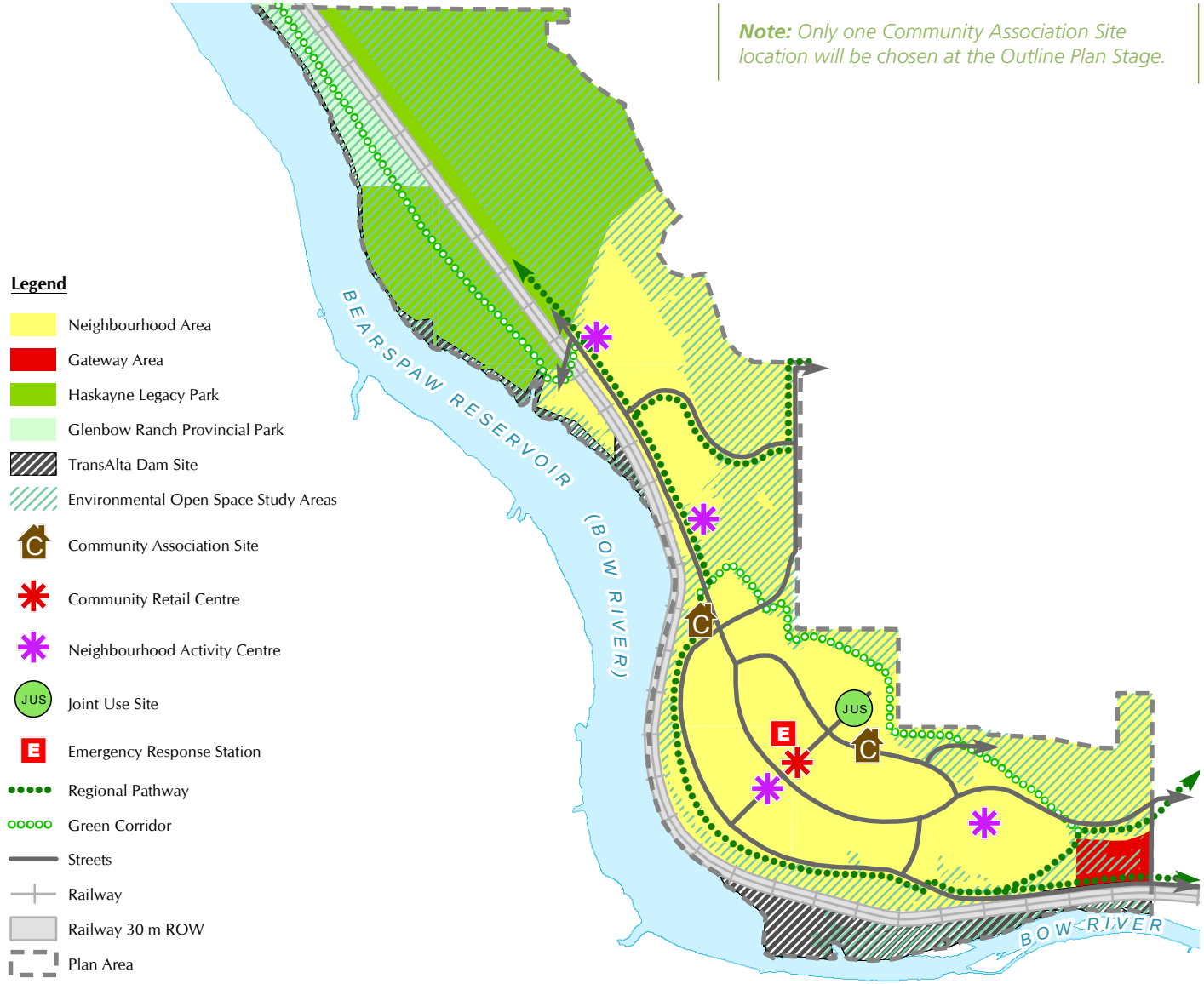
ANTICIPATED **13,000** PEOPLE

1,400 **JOBS**

MAP 4: LAND USE CONCEPT

CORE IDEAS

- Compliment Haskayne Legacy Park and Glenbow Ranch Provincial Park
- Preserve key natural features and vistas through a system of ecological networks
- Have distinct, attractive Neighbourhoods that allow residents to access services and amenities locally
- Have an interconnected, efficient and adaptive grid street network



Note: *Only one Community Association Site location will be chosen at the Outline Plan Stage.*

TABLE 1: LAND USE CONCEPT ELEMENTS

Neighbourhood Activity Centres

Neighbourhood Activity Centres (NACs) are located in each Neighbourhood. They are the focal points of Neighbourhoods and will feature higher density multi-residential housing, a central amenity area, a transit stop and non- residential use(s).

Gateway Area

The Gateway Area creates a sense of arrival using design elements such as unique entrance signage and landscaping to establish a distinct character for the Haskayne Community.

Regional Pathway

The Regional Pathway system provides cycling and walking connections within the Plan Area and to surrounding Communities.

Neighbourhood Area

Surrounding the NACs, Neighbourhood Areas allow for an appropriate mix of residential and non-residential uses.

Environmental Open Space Study Area

Environmental Open Space (EOS) Study Areas identify lands that are environmentally significant. Where lands do not qualify as Environmental Reserve, development may occur.

Joint Use Site

Joint Use Sites (JUS) provide locations for elementary and junior high schools as well as public recreation and community uses.

Community Retail Centre

The Community Retail Centre provides local goods and services to serve the Community and provide an area for future intensification.

Green Corridor

Green Corridors connect EOS Study Area through natural or constructed ecological corridors and also provide places for people to walk and cycle in a natural environment.

Community Association Site

A Community Association Site provides a location for community association uses.

3.3 GATEWAY AREA

INTENT

The Gateway Area, at the eastern entrance to the Community, will provide a transition from the adjacent municipal public works yard to the east and the future neighbourhoods to the west. This transition will provide a welcoming sense of arrival for the community by creating distinguished entries into the community from Nose Hill Drive NW and Bearspaw Dam Road NW that are defined by buildings of architectural interest, entry features, open spaces, streetscapes, and/or safe pedestrian, cycling, and vehicular movement.

POLICIES

1. Composition

a. The Gateway Area should include one or more of the following uses: residential, commercial (office, retail), light industrial, or utility infrastructure (e.g., stormwater management pond).

b. Residential development should incorporate design solutions to mitigate noise, vibration and visual impact from the Operations Workplace Centre to the east.

c. Commercial (Retail) Development should accommodate small to medium-sized retail uses and shall not be large-format retail.

d. Commercial (Office) Development should provide entrances that are distinct, visible from the street and emphasize a pedestrian scale.

e. Light Industrial Development:

i. should be enclosed with no outdoor storage; and

ii. shall not have an adverse impact on residential development by way of noise, dust, odours, outdoor lighting or other emissions.

f. Utility infrastructure (e.g., Stormwater Management Pond) should be configured and landscaped to enhance the natural open space system.

2. Gateway Features

Gateway features should include the combination of:

a. street oriented and well-articulated architectural design and built form;

b. a stormwater management pond with potential to incorporate public art; or

c. high quality landscape design along the roadway entrance or green space.

3. Streets

a. Nose Hill Drive NW is the main route into Haskayne. This street leading into the Plan Area should provide a sense of arrival through landscape or hardscaping treatments and incorporate the image and style of the Community.

b. A street should connect Nose Hill Drive NW to Bearspaw Dam Road NW at the eastern edge of the Gateway Area.

4. Design

a. To provide a sense of identity and arrival, gateway features such as entrance signage, an architecturally distinct building, amenity space and/or signature feature are encouraged at the origin of the Gateway Area along Nose Hill Drive NW.

b. Buildings located at the intersection of two streets should address both streets with architectural or massing elements, including entrances, windows and other façade features.

c. Residential development should incorporate design solutions to mitigate noise, vibration and visual impact from the Operations Workplace Centre to the east.

FIGURE 5

3.4 NEIGHBOURHOOD ACTIVITY CENTRES

INTENT

Differentiate the identity and characteristics of Neighbourhood Activity Centres (NACs) based on local features. NACs are the focal points of Neighbourhoods. Proposed NACs have been identified on **Map 4: Land Use Concept.** Each Neighbourhood within the Plan Area will have a minimum of one NAC, with the exception of Neighbhourhood 2 and 3, which will contain a combine NAC, CRC, EMS and Community Centre.

POLICIES

1. The 700 m walking distance may be exceeded in cases where the Neighbourhood is larger or of an elongated shape due to natural features.
2. NACs located next to a Community Retail Centre should be integrated with the Community Retail Centre and have a distinct character as a pedestrian-focused area. The multi-residential component of the NAC may be located in the Community Retail Centre.
3. The NAC shown in Neighbourhood 4 may extend to both sides of the railway right-of-way.

FIGURE 7

NEIGHBOURHOOD FOCAL POINT

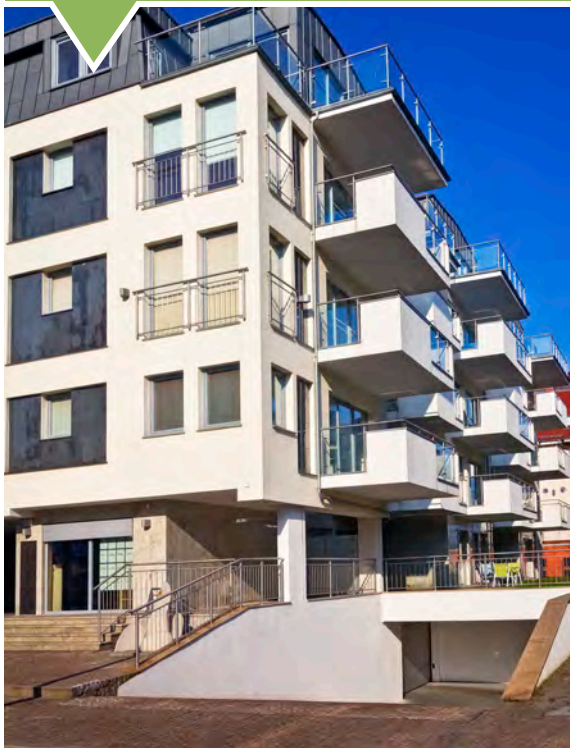
central amenity space + multi-residential + non-residential use + transit stop

local **goods** and **services**

700 m walking distance from all areas of the neighbourhood

NACs contain an amenity space, higher density housing and non-residential use.

FIGURE 8 *Neighbhourhood Areas are specific policy areas of the Plan*



3.5 NEIGHBOURHOOD AREAS

This section applies to the areas on **Map 4: Land Use Concept** shown as Neighbourhood Areas - these are specific policy areas of the Plan. References to Neighbourhoods in **Section 3.1: Community Structure** above, describe areas within the Haskayne Community comprised of a number of typologies (the policy areas shown on **Map 4**). See **Map 3: Community Structure** for the defined Neighbourhood boundaries within the Community. *The New Community Planning Guidebook* contains policies pertaining to Neighbourhood Areas.

3.6 COMMUNITY RETAIL CENTRE

INTENT

Provide local goods and services to one or more Communities and an area for future intensification.

POLICIES

1. Composition

a. A Community Retail Centre should be comprehensively planned to integrate:

i. small and medium-format retail uses, office uses;

ii. a transit stop; and

iii. an amenity space.

b. Community Retail Centres may contain:

i. multi-residential developments;

ii. cultural, recreational and institutional uses; and

iii. other compatible uses.

2. Intensity

a. A Community Retail Centre should contain between 1,900 m^2 and 9,300 m^2 (20,450 ft^2 and 100,100 ft^2) of retail uses.

b. The floor area ratio for Community Retail Centre sites should be a minimum of 0.3.

c. Increased intensity in the Community Retail Centres should be in the form of mixed uses that maintain the community-oriented character of the retail component and can integrate within the size and character of the site.

3. Site Design

A Community Retail Centre shall be designed to evolve with increased intensity in the future through use of:

a. A fine grain block structure on public and private streets to allow for future intensification.

b. Site design that allows for infilling and structured parking.

FIGURE 9

LOCAL GOODS AND SERVICES

1,900 m^2 – 9,300 m^2 of **retail uses**

intensification

Orient the retail uses to face the street, with the street fronting facade occupied by smaller units.

Surface parking lots should incorporate safe, convenient sidewalk connections for pedestrians to move through them. Additional landscaping makes for a more pleasant streetscape.

4. Building Design

a. Retail buildings should be designed to provide visual interest and pedestrian scale architecture.

b. Retail buildings should:

i. be oriented to the public street and have pedestrian connections from the public sidewalk to building entrances, where there is on-street parking immediately fronting the building. Where there is no on-street parking immediately fronting the building, development may be oriented to an internal private street (preferred) or parking area at the rear or side and should provide convenient pedestrian access from the public sidewalk to the non-residential unit entrances;

ii. have the majority of the length of their street-facing façade occupied by smaller separate retail units; and

iii. have an articulated street-facing façade.

5. Amenity Spaces

a. A Community Retail Centre shall provide an amenity space.

b. Amenity spaces should be prominently located and connected by the pedestrian and cycle network throughout the site and into adjacent residential areas.

c. The amenity space should be adjacent to retail frontages or other uses that activate the space.

d. Amenity spaces may include hardscaped plazas, landscaped green areas and widened walkway areas that can accommodate outdoor spaces for retail and café uses.

6. Mobility

a. Streets within Community Retail Centres should allow for pedestrian-oriented, vibrant commercial activity.

b. A Community Retail Centre should be supported by local transit service.

c. Clearly defined pedestrian sidewalks and pathways should be integrated throughout the commercial site to provide safe and convenient access to and between store entrances and to the public sidewalk, amenity spaces, transit stops and adjacent sites.

d. A pedestrian connection should be provided from the main store building entrance to the public sidewalk.

e. If required, pedestrian walkways connecting street-oriented entries with rear parking areas should be provided.

f. Drive-thru businesses and service stations shall minimize disruption to the pedestrian-oriented street environment and internal pedestrian movement through appropriate design solutions (landscaping, berming, raised pedestrian walkways, etc).

3.7 DAM SITE

INTENT

Ensure the ongoing, safe and efficient operation of the dam while encouraging future initiatives to establish public access to the Bow River upstream and downstream of the dam. The Dam Site includes the river, dam, reservoir and all the land that TransAlta owns upstream and downstream of the dam.

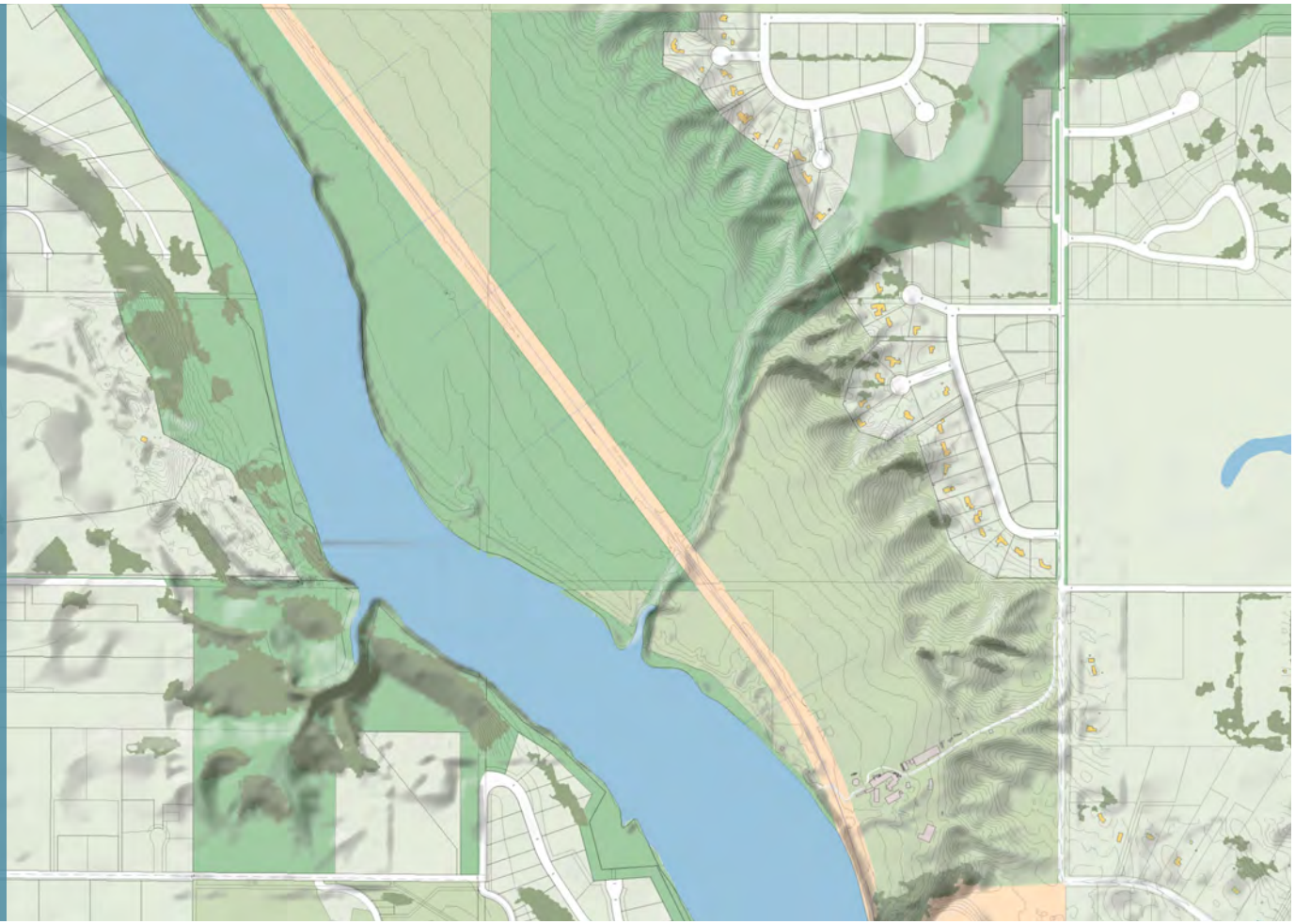
POLICIES

1. Structures and improvements related to the operation of the dam are permitted on the Dam Site.
2. Provision of access for the public to the Bow River is encouraged. The City acknowledges that to achieve access to the Bow River for the public, safety, ownership and maintenance issues must be resolved.

FIGURE 10 *The Trans Alta Dam and Bearspaw Reservoir, a significant source of Calgary's potable water*

4 OPEN SPACE NETWORK

"The open space network is an interconnected system that provides social, biophysical and aesthetic benefits to the community. It is comprised of parcels and corridors which can be either developed or naturally occurring and can support active and passive activities. Parcels generally consist of developed parks, joint use sites and protected natural areas. Corridors consist of pathway routes, linear natural features and green corridors that connect and support the parcel areas." — *New Community Planning Guidebook*, 3.4.1



4.1 HASKAYNE LEGACY PARK

Haskayne Legacy Park is a 160 hectare (390 acre approximately) park that will be a regional destination with spectacular mountain and prairie views. The park will provide recreational access to the Bow River Valley and interpretation relating to Calgary's natural and cultural history. As Haskayne Legacy Park is directly adjacent to the Glenbow Ranch Provincial Park, a significant portion of the Bow River Valley will remain intact for future generations to appreciate and enjoy.

4.2 GLENBOW RANCH PROVINCIAL PARK

Glenbow Ranch Provincial Park consists of over 1,300 hectares (3,200 acres) of foothills parkland, a small portion of which (17 hectares; 42 acres) falls within the Plan Area, adjacent to Haskayne Legacy Park. The park is intended to preserve and protect significant natural features, including endangered ecosystems and rare species, and to provide a unique opportunity to showcase the rich history of ranching and the historic Glenbow townsite.

FIGURE 11 *Overlooking Haskayne Park*

FIGURE 12 *Overlooking Glenbow Ranch Provincial Park*
CREDIT: BEN CLARKE

4.3 REGIONAL PATHWAY AND GREEN CORRIDORS

INTENT

Pedestrian and bicycle connectivity will be established between the Plan Area and facilities to the west and east, city park spaces and the provincial park space beyond.

1. The Regional Pathway will comprise a key local segment of the Trans Canada Trail, connecting Cochrane to the west, via Haskayne Legacy Park and the Glenbow Ranch Provincial Park, with the rest of Calgary to the east.
2. The Green Corridor connects the EOS Study Area through natural or constructed ecological corridors and also provides places for people to walk and cycle. This connects with the city-wide Regional Pathway and bikeway network and the proposed Calgary Perimeter Greenway.

POLICIES

1. **Regional Pathways**
   a. The Regional Pathway network should be located as shown on **Map 5: Parks and Trails.**
   b. Regional Pathway alignment may be refined but not removed at the Outline Plan/Land Use Amendment stage.
   c. The Regional Pathway network must connect to the Bow River regional pathway to the west and east.
2. **Green Corridor**
   a. The Green Corridor network should be located as shown on **Map 5: Parks and Trails.**
   b. The Green Corridor should:
      i. provide natural connections within and between natural areas; and
      ii. be characterized by native plantings and natural landscaping.

4.4 ENVIRONMENTAL DESIGN CONSIDERATIONS

Haskayne's natural environment, scenic context and unique topographic form represent the Community's most distinct assets. Achieving a balance of development that nestles into the natural setting, matches the terrain and adapts to the EOS Study Area is essential to creating a parkland feel in the Community. Applicants are encouraged to minimize land disturbances, preserve sensitive environmental areas, minimize visual impacts and incorporate existing topographical features into the design.

INTENT

Provide opportunity to apply an environmentally sensitive design approach, where appropriate, to public infrastructure standards and site planning within Haskayne. This approach will facilitate the unique character and identity of the Community while being sensitive to its natural areas.

POLICIES

1. Consideration should be given to a customized approach to infrastructure design for parks, the circulation system, utility alignments and other infrastructure within the Plan Area where existing public infrastructure design standards are unable to effectively adapt to topography or conserve natural areas. Preserving the natural areas.
2. City staff will coordinate between departments to review and consider environment design considerations.
3. Where land within the EOS Study Area does not qualify as Environmental Reserve (ER), **Appendix C: Development Guidelines** should be considered.

4.5 ENVIRONMENTAL OPEN SPACE STUDY AREA

The EOS Study Area identifies lands that may qualify as ER or Environmentally Significant Areas. Lands within the EOS Study Area have the potential to be incorporated into an urban context to provide for amenity value and ecological services.

The EOS Study Area policies incorporate provincial direction for the Key Wildlife and Biodiversity Zone within the Plan Area **(see Appendix A: Biophysical Background Information).**

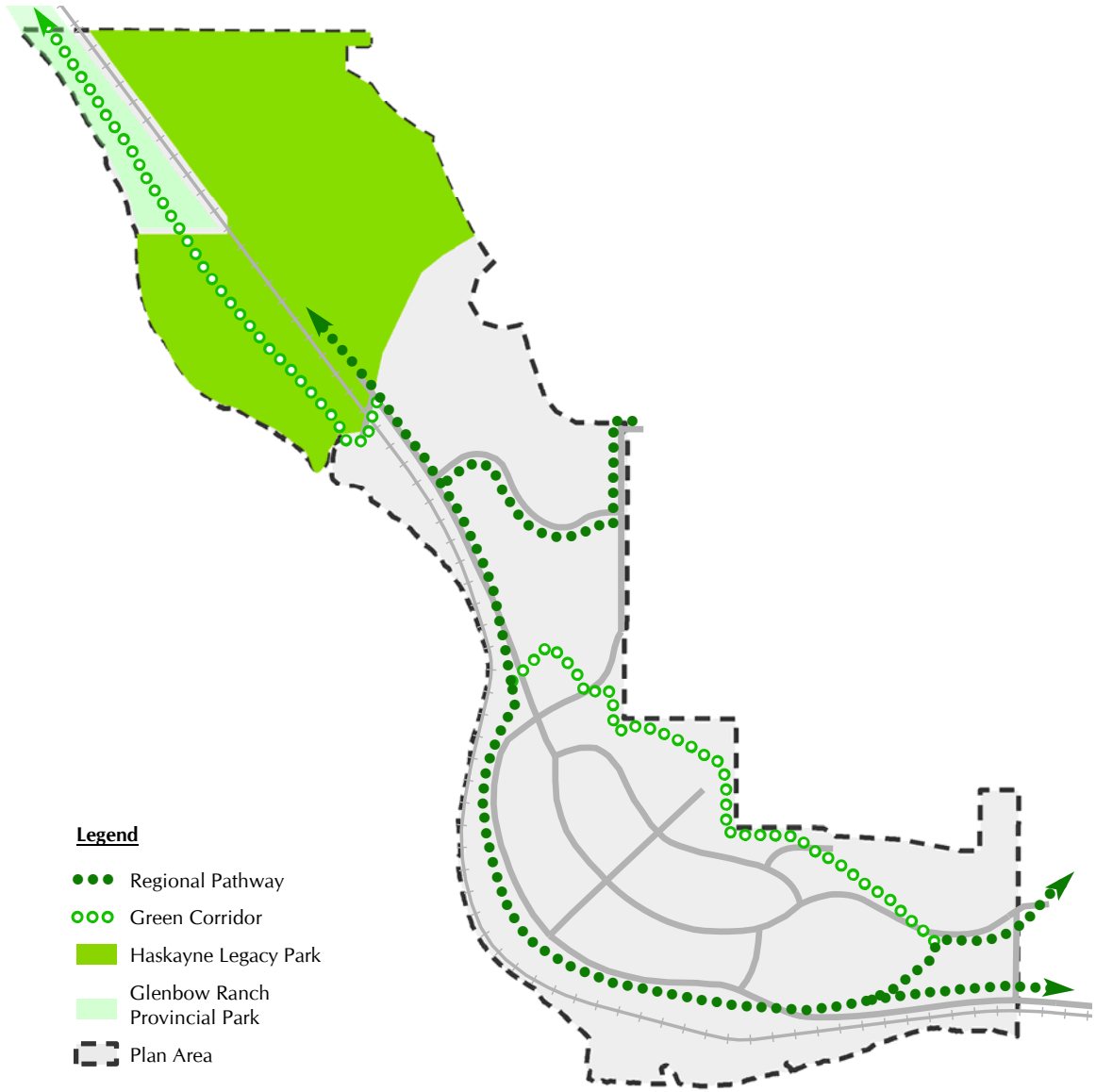
INTENT

Provide for natural amenities and ecological services within the Plan Area by retaining viable natural features and undevelopable land in a connected ecological network.

POLICIES

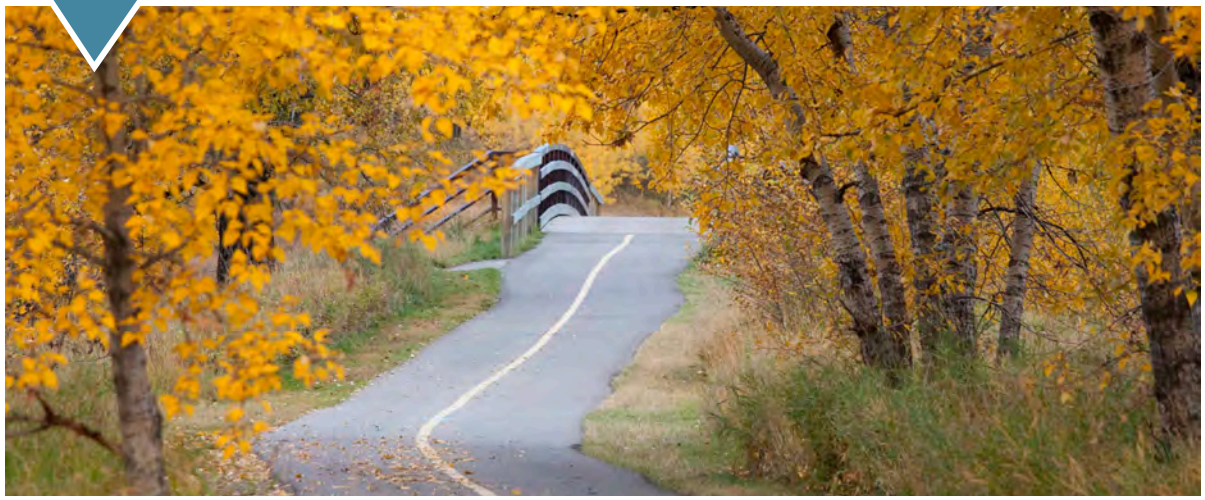
1. Upland sites within the EOS Study Area (i.e., native grassland; native shrubland; and deciduous, coniferous and mixed wood forest) shall be protected as ER where they qualify as such. Where they do not qualify as ER, other means of protection are encouraged. Where sites are not dedicated, acquired or otherwise protected, mitigation measures may be considered at the Outline Plan/Land Use Amendment stage.
2. Escarpment disturbances should be minimized. Existing access routes should be used to minimize disturbance.
3. A single-loaded road will be evaluated at the top of the escarpment in Neighbourhoods 3 and 4. "Single-loaded roads and/or pedestrian connections should be located adjacent to retained EOS, along some stretches, to enable public views." — **New Community Planning Guidebook, Section 3.4.2, 5.c.**

MAP 5: PARKS AND TRAILS



4. Changes to existing natural drainage courses should be minimized.
5. The Plan Area is anticipated to have higher wildlife conflict potential because of its location within the Bow River valley and provincial Key Wildlife and Biodiversity Zone. Strategies to avoid wildlife conflicts (e.g., vehicle collisions, human–wildlife encounters) shall be developed at the Outline Plan/Land Use Amendment stage. Strategies should address:
    a. Appropriate buffers between high wildlife use areas (e.g., escarpments, ravines) and developed areas (e.g., lots, roads).
    b. Collision mitigation planning for roads within the Plan Area, focussing on roads crossing the escarpment.
    c. Living-with-wildlife education for residents throughout all stages of development (e.g., educational pamphlets for new residents).
6. Development shall be designed to allow wildlife movement through and around the overall Community, such that wildlife is attracted to areas designed to allow safe movement (e.g., green corridors) and detracted from residences and roads to reduce interactions with people and vehicles.
7. The applicant shall demonstrate the connectivity and function of all retained natural features.
8. Medium to high-density residential development adjacent to ER should:
    a. Ensure a pedestrian pathway between the private property and natural areas.
    b. Avoid solid or high fencing.
    c. Interconnect local pathways with the Green Corridor or Regional Pathway.
9. Commercial uses backing on ER lands should:
    a. Allow for public gathering space to be integrated with natural areas.
    b. Allow direct pedestrian connection from the commercial uses to the pedestrian pathways within the natural area.
    c. Coordinate landscape components, where appropriate, with the overall character of the Neighbourhood.

FIGURE 13 *When finished the Haskayne Area will connect the Trans Canada Trail into Calgary's west side*



MAP 6: ENVIRONMENTAL OPEN SPACE STUDY AREA

5 MOBILITY

The mobility system envisioned for the Plan Area will encourage sustainable modes of transportation and provide a highly connected network of paths, streets and transit routes.

5.1 PEDESTRIAN AND CYCLIST CIRCULATION

Pedestrian and bicycle circulation is a priority in the Plan Area. Site designs and amenities that attract walking, cycling and other active travel for commuting or recreation are encouraged.

5.2 TRANSIT SERVICE

The Plan Area allows for transit service to connect with the adjacent communities of Tuscany and Scenic Acres, as well as the rest of Calgary. The mix of residential, retail and commercial uses in the Plan Area will promote transit use.

INTENT

Provide direct, convenient and efficient transit service both within the Plan Area and to the rest of Calgary, to support public transit as the preferred mobility choice for more residents.

POLICIES

1. Transit routes are shown on **Map 7: Transportation Network.** Routes are conceptual and may be refined or changed at the Outline Plan/Land Use Amendment stage without requiring amendment to this ASP provided they meet the transit network intent.
2. The Community should be designed to provide direct and convenient transit route connections within the Plan Area, to Tuscany or Scenic Acres to the east, and to the Primary Transit Network (LRT) on Crowchild Trail NW.

FIGURE 14 *There is a tradeoff between a linear transit route and capturing population / area within a 400 m radius of Transit. The preference is for a linear route*

5.3 STREET NETWORK

The Plan Area is at the northwest limit of Calgary, with newly planned areas in Rocky View County to the north and east and in the city to the east. The Plan Area is within 3 km of the provincial highway network. There is a connection to Crowchild Trail (Highway 1A) via 12 Mile Coulee Road NW just northeast of the Plan Area and 80 Avenue NW which is under Rocky View County's jurisdiction; a direct connection to Stoney Trail NW (Highway 201) via Nose Hill Drive NW east of the Plan Area. The transportation network for the Plan Area builds on these connections and balances the needs of pedestrians, cyclists, transit and automobiles, using street cross-sections compliant with *Complete Streets Policy and Guidelines.*

INTENT

To create a network that is sensitive to the topography of the area, minimizes environmental impacts on the coulee system, accommodates all modes of transportation and optimizes safety for all users.

POLICIES

1. Regional Transportation Network Integration

Crowchild Trail (Highway 1A) and Stoney Trail (Highway 201) are under the jurisdiction of Alberta Transportation. Arterial Streets link these highways to the Plan Area. The need for the following offsite improvements should be reviewed at the Outline Plan/Land Use Amendment stage:

a. Extension of Nose Hill Drive NW to the Plan boundary.

b. Signals at Tuscany Hill NW and Nose Hill Drive NW.

c. Improvements to 80 Avenue NW.

d. Improvements to 80 Avenue / 12 Mile Coulee Road NW intersection.

e. Interchange at Crowchild Trail and 12 Mile Coulee Road NW.

f. Bearspaw Dam Road NW including intersection improvements to 87 Street NW.

2. Alignment and Classification

a. The street network should be located as shown on **Map 7: Transportation Network.**

b. Where a Local Connection is shown, there should be a street between the two points on the street network, but the alignment does not need to be as shown on **Map 7: Transportation Network.**

c. At the Outline Plan/Land Use Amendment stage, a Transportation Impact Analysis (based on target or actual intensities/densities for all Neighbourhoods within the Plan Area) will be required that confirms the street classifications are adequate. If the street classifications are inadequate, higher or lower classifications may be approved without requiring an amendment to this ASP.

3. Arterial Streets

Arterial Streets provide thoroughfares and connections to the highway network.

4. Parkway (Liveable Street)

The Parkway serving the east part of the Plan Area provides a suitable high volume connection between the Arterial Street connection to the provincial highway network and the Plan Area, with sensitivity to the area topography and coulee. The cross-section features narrower lanes for vehicles, buffered cycling lanes, boulevard and median trees and the option for sidewalks or multi-use pathways.

5. Activity Centre Street

The Activity Centre Street will support all modes of travel to and from the higher density mixed-use development in the Plan Area. On-street cycling lanes, on-street parking and sidewalks are included in the cross-sections. There is no median island and a relatively narrow right of way. Intersections can be as closely spaced as 60 m.

6. Liveable Streets and Pathways

a. Where a Regional Pathway is shown on **Map 4: Land Use Concept** adjacent to a liveable street:

i. the Regional Pathway function may be accommodated in the standard street cross-section;

ii. the accommodation within the street cross-section must be as a separated pedestrian and bicycle way of a width appropriate for the mode accommodated; otherwise, the Regional Pathway must be provided separately; and

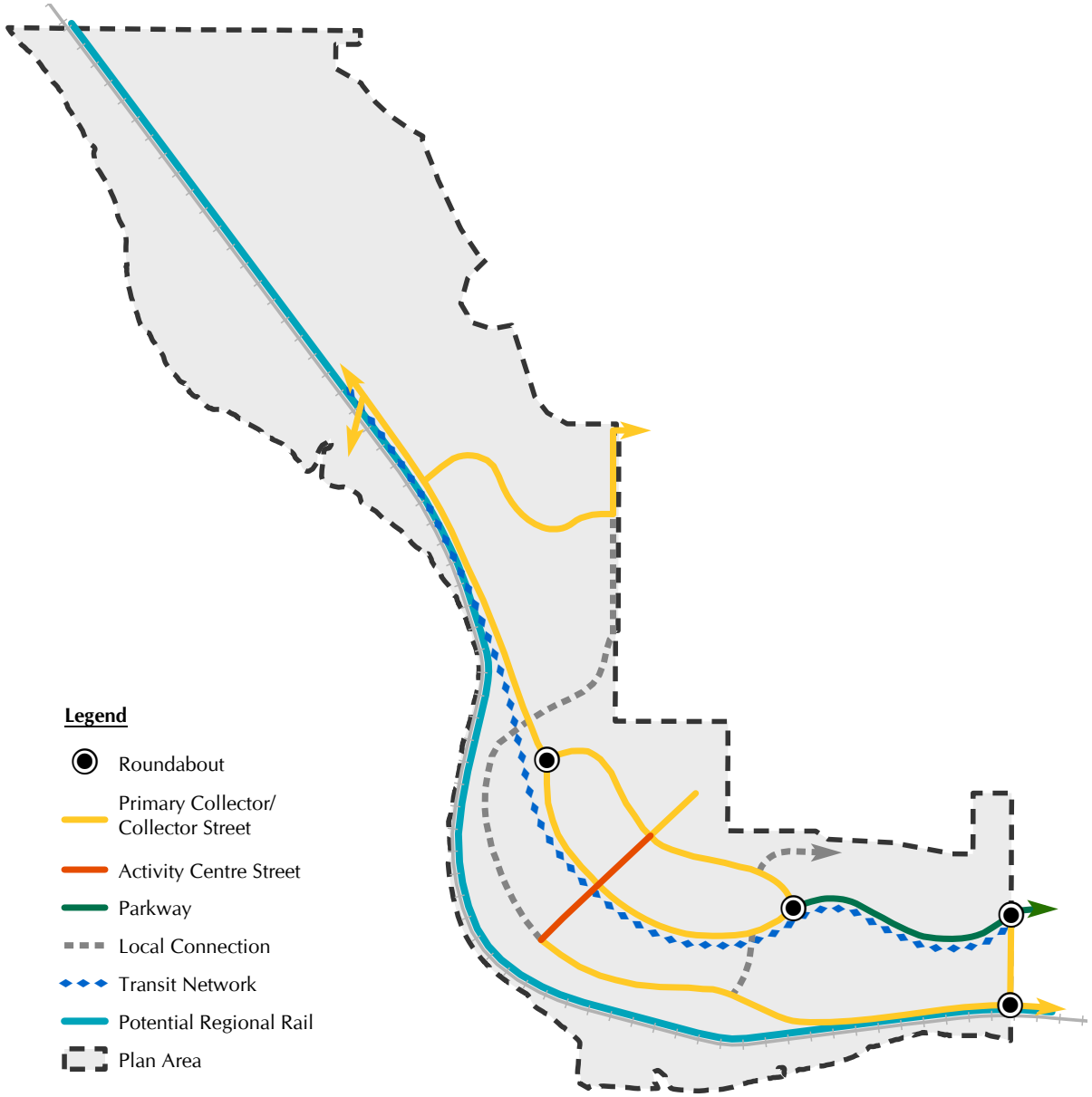
iii. enhanced modal separation for cycling infrastructure should be provided where high motor vehicle volumes and/or modal conflicts are anticipated. Modal separation may be provided through an off-street pathway or on-street cycle track.

b. Where the Regional Pathway cannot be located within or integrated with a park or natural feature, or within a utility right-of-way, it may be located within a road right-of-way in the form of a pathway constructed in place of a sidewalk.

7. Residential Street Network

a. Residential Street Network classifications shall comply with the *Residential Streets Design Policy.*

MAP 7: TRANSPORTATION NETWORK



5.4 HEAVY RAIL

INTENT

Mitigate various safety, noise and vibration impacts associated with development in proximity to railway operations and minimize the conflict between rail and adjacent land uses. Rail traffic, including transport of dangerous goods, is projected to increase over time. Rail activities pose risks to the safety, as well as physical and mental comfort, of individuals living and working nearby.

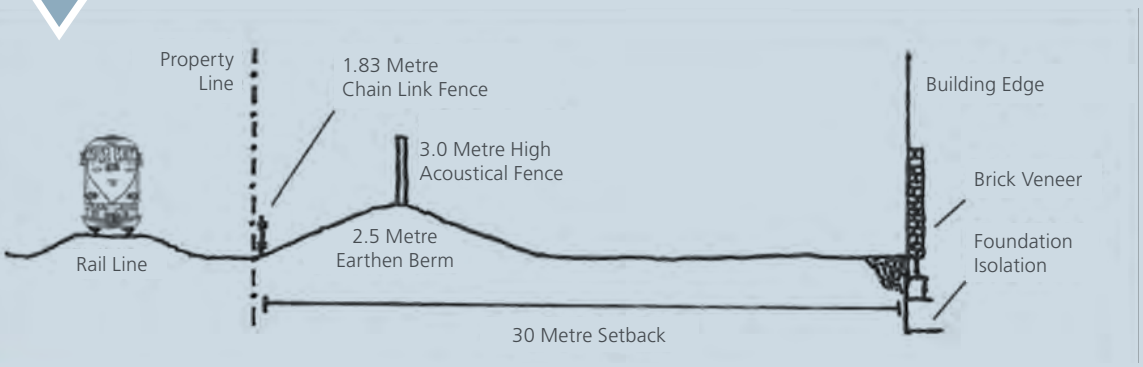
POLICIES

1. Where there is a conflict between these heavy rail policies and citywide policies on rail, the citywide policies prevail.
2. **Circulation**

   No new at-grade public rail crossings for vehicles are permitted. All new public street crossings shall be grade separated.

FIGURE 15

FIGURE 16 *Standard mitigation for new residential development in proximity to a main line railway*



Development adjacent to rail lines and yards should provide measures to reduce noise and vibration impacts, prevent trespassing and provide protection from derailment or release of dangerous goods, such as: a 2.5 m earthen berm; a 1.8 m chain link fence; and, an acoustical fence.

3. Location and Features

a. All Outline Plan/Land Use Amendment and Development Permit applications that are adjacent to a rail right-of-way or rail yard shall be circulated to the rail operator for review.

b. All developments should adhere to the minimum offset distances indicated in **Figure 14** unless a Development Viability Assessment, Site Specific Risk Assessment, Noise Study and/or Vibration Study determine that alternate noise and safety mitigation strategies are suitable.

c. All applications within 95 m of a rail right-of-way or within 300 m of a rail yard shall be required provide either a Development Viability Assessment or a Site Specific Risk Assessment, to identify risks and the mitigation required to address them **(see Figure 15).**

d. A Noise Study shall be required for all developments within 300 m of the property line of a main line railway or within 1,000 m of the property line of a rail yard.

e. A Vibration Study shall be required for all developments within 75 m of the property line of a main line railway or rail yard.

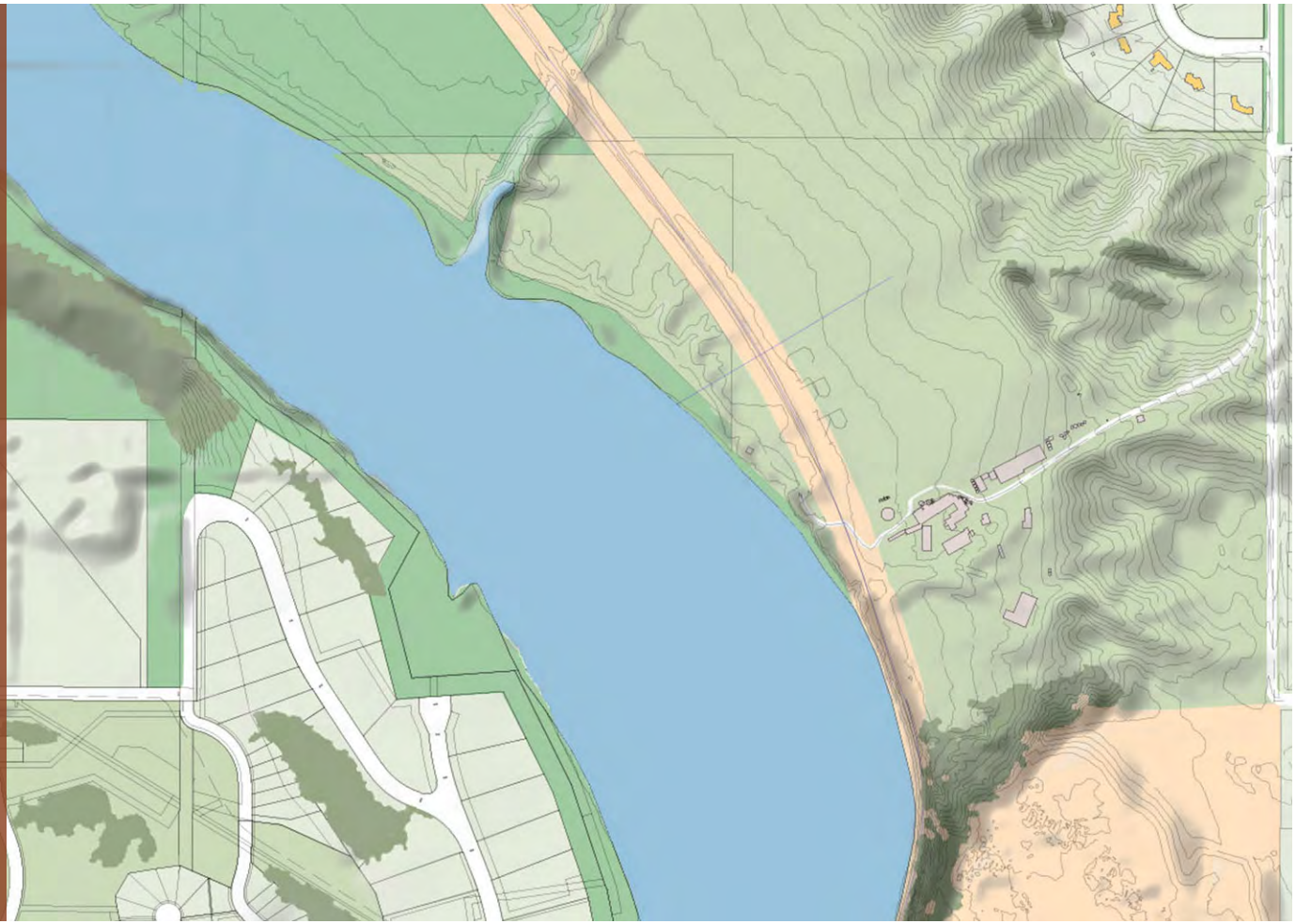
f. Long range City transportation plans have an inspirational goal of connecting Calgary to Cochrane via regional rail (generally along the CPR alignment).

g. Acknowledging the aspiration to protect and/or allow for a regional rail access to the lower Haskayne lands.

FIGURE 17 *Minimum Offset Distance from Centre Line of Closest Mainline Track*

6 FACILITIES AND UTILITIES

This section contains policies to guide the development of the facilities and utilities necessary to service the Plan Area. The facilities described below provide spaces for community interaction, education and emergency services. Utilities distribute essential services to homes and businesses. These include water, electricity and natural gas provision, wastewater removal, stormwater management, and ecological services delivery.



6.1 JOINT USE SITE

INTENT

A Joint Use Site (JUS) provides for the development of public and separate schools together with sports fields and recreational areas on sites dedicated as reserve land. Please see **Appendix B: Joint Use Site Requirements** for JUS size and requirements.

POLICIES

1. JUS should be located as shown on **Map 4: Land Use Concept.**
2. The school building envelope within a JUS should be located along a street abutting the site. Buildings should be oriented to offer direct pedestrian access to the primary building entrance from the sidewalk.
3. The location of a JUS may change to the opposite side of a local street within the same Neighbourhood at the Outline Plan/Land Use Amendment stage without requiring an amendment to the ASP.

FIGURE 18 *School sites provide the neighbourhood with a playground and multi-purpose sports fields*

6.2 COMMUNITY ASSOCIATION SITE

Community Association Sites provide for future community association uses, which may include a community association building, community gardens, ice rinks and/or other recreation facilities. The Community Association Site could be located as shown on Map 4: Land Use Concept or may be integrated with the Emergency Response Station near the Community Retail Centre without amendment to this ASP.

6.3 EMERGENCY RESPONSE STATION

1. The Emergency Response Station should be located as shown on **Map 4: Land Use Concept.** The station may be integrated with the Community Retail Centre.
2. Consideration should be given to co-locate the Emergency Response Station on sites or in buildings shared with other users (public or private).

6.4 WATER SERVICING

INTENT

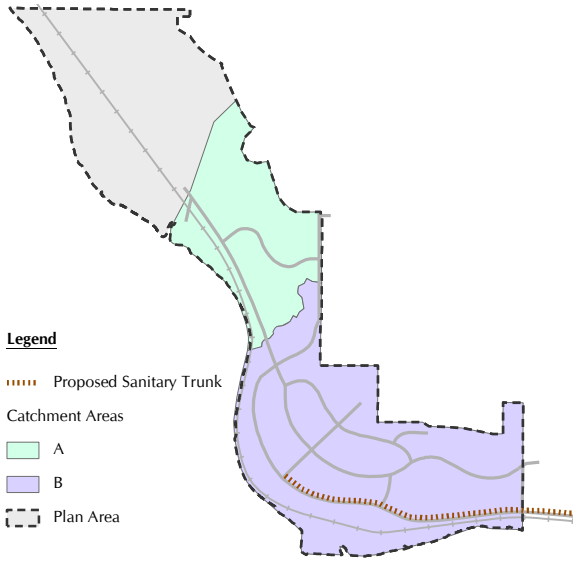
Ensure that a suitable and efficient water system is provided to serve the full build-out of the Plan Area.

POLICIES

1. The majority of the Plan Area is located within the Spy Hill West Pressure Zone. Servicing of the lands within the Spy Hill West Pressure Zone will be achieved through a feedermain loop, pressure reduced from the adjacent Big Hill West Pressure Zone. The conceptual feedermain alignment is shown on **Map 8: Water Servicing.**
2. The required feedermain loop for the lands within the Spy Hill West Pressure Zone may be altered at the time of Outline Plan/Land Use Amendment without requiring an amendment to the ASP upon a comprehensive review that verifies all lands within the Plan Area (the review must consider the target density and intensity of parcels in all Neighbourhoods) can be serviced by this altered system.
3. Due to significant elevation changes, water servicing within the Plan Area shall meet these criteria:
    a. Lands located above 1,148 m are not serviceable by the Spy Hill West Pressure Zone;
    b. Lands located below 1,090 m require fill to bring the elevation up to or above 1,090 m to be serviced; alternatively,
    c. Lands located below 1,090 m may be serviced without the addition of fill through the installation and use of pipe with high pressure ratings, to be evaluated at the time of the Outline Plan/Land Use Amendment application.
4. If requested, alternative servicing options for lands above 1,148 m in elevation shall be explored and evaluated through consultation with Water Resources.
5. Any proposed land use or transportation network significant changes to the approved ASP may require re-evaluation of water infrastructure.
6. Any proposed distribution systems for an Outline Plan/Land Use Amendment area shall be reviewed and, if required, modelled by Water Resources as part of an Outline Plan/ Land Use Amendment application.

MAP 8: WATER SERVICING

MAP 9: SANITARY SERVICING



6.5 SANITARY SERVICING

INTENT

Ensure that a suitable and efficient sanitary sewer system is provided to serve the full build-out of the Plan Area.

POLICIES

1. Servicing of the Plan Area will be achieved through a sanitary sewer trunk, tied into the existing 900 mm gravity trunk along Bearspaw Dam Road NW. The conceptual alignment of the sanitary sewer trunk extension is shown on **Map 9: Sanitary Servicing.**
2. The required sanitary sewer trunk for the Plan Area may be altered at the time of Outline Plan/Land Use Amendment without requiring an amendment to the ASP upon a comprehensive review that verifies all lands within the Plan Area (the review must consider the target density and intensity of parcels in all Neighbourhoods) can be serviced by this altered system.
3. There are two sanitary catchments within the Plan Area, shown on **Map 9: Sanitary Servicing.** To service all developable lands, including lower elevation lands within the western portion of the Plan Area (catchment B), a developer-funded lift station(s) may be required, designed to City standards.
4. In conjunction with an Outline Plan/Land Use Amendment application, a sanitary servicing study will be required that addresses both the pumped and gravity-fed sanitary sewer systems. Comprehensive Outline Plan/Land Use Amendment plans that show details for the entire Plan Area are required to complete this evaluation. In the absence of these details, Water Resources will default to the densities identified within this ASP to complete this evaluation.
5. Any proposed land use or transportation network significant changes to the approved ASP by may require re-evaluation of sanitary infrastructure.
6. Required downstream upgrades to the West Memorial Sanitary Trunk must be in place prior to release of building permits within the Plan Area.

6.6 STORMWATER MANAGEMENT

The Plan Area is located in the Bow River watershed basin, adjacent to the Bearspaw Reservoir, which is one of Calgary's two drinking water supply sources. Stormwater servicing and site drainage associated with land development must be undertaken carefully, as development and associated stormwater impacts pose a level of risk to the quality, safety and cost of Calgary's public drinking water system.

INTENT

Guide the design and development of a suitable and efficient stormwater management system, while preserving, to the greatest extent possible, important watershed features, including steep slopes, floodplains and riparian areas, groundwater, and areas with close subsurface connections to the Bearspaw Reservoir.

POLICIES

1. The Master Drainage Plan for the Plan Area must be approved prior to Outline Plan/Land Use Amendment approval.
2. Recommendations for stormwater outfall discharge locations, maximum allowable release rates, runoff volume control targets, water body setbacks (reservoir, river, and stream) and stormwater treatment as established in the approved Master Drainage Plan must be adhered to throughout the Plan Area.
3. Proposed land uses with potential for source water contamination shall not be permitted in any areas with a surface or subsurface connection to The City's raw water supplies on the Bearspaw Reservoir and the Bow River, as identified in the Master Drainage Plan unless satisfactory mitigation measures can be developed.
4. Based on the outputs of the Master Drainage Plan and hydrogeology study, impervious cover requirements may be defined for single family, multi-family, commercial, or multi-use development applications.
5. The stormwater management system shall be designed to:
    a. Include Low Impact Development (LID) solutions in accordance with The City of Calgary's LID manual and the approved Master Drainage Plan.
    b. Introduce mitigation measures to address impacts on water quality for the Bearspaw Reservoir, Bow River and any other bodies of water.
6. The use of reserve lands for dry ponds may be supported, provided that their location, size and recreation, education or conservation functions are not compromised.
7. Outputs of the approved Master Drainage Plan significant enough to alter land use may require amendments to the ASP.

7 IMPLEMENTATION

This section contains policy necessary for plan implementation such as interpretation, growth management, application requirements and intermunicipal coordination.

7.1 INTERPRETATION

INTENT

Clarify the interpretation of this ASP. Accurate interpretation is paramount to achieving the goals of this ASP.

POLICIES

1. Map Interpretation

a. Unless otherwise specified in this ASP, the boundaries or locations of any symbols or areas shown on a map are approximate only, not absolute, and will be interpreted as such. They are not intended to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries such as property lines or road or utility rights-of-way. The precise location of these boundaries, for the purpose of evaluating development proposals, will be determined by the Approving Authority at the time of application.

b. No measurements of distances or areas should be taken from the maps in this ASP.

c. All proposed Land Use Areas, Neighbourhood boundaries, road/utility alignments and classifications may be subject to further study and may be further delineated at the Outline Plan/Land Use Amendment stage in alignment with applicable policies. Any major refinements may require an amendment to this ASP.

d. In the case of the EOS Study Area, where adjustments to the extent of EOS are made, the policies of the adjacent Land Use Area apply without requiring an amendment to maps within this ASP, including but not limited to **Map 4: Land Use Concept.**

2. Policy Interpretation

a. Where an intent statement accompanies a policy, it is provided as information only to illustrate the intent and enhance the understanding of the subsequent policies. If an inconsistency arises between the intent statement and a policy, the policy will take precedence.

b. The word "should" is explicitly used to further clarify the directional nature of the statement. Policies that use active tense or "should" are to be applied in all situations, unless it can be clearly demonstrated to the satisfaction of The City that the policy is not reasonable, practical or feasible in a given situation. Proposed alternatives will comply with the MDP and Calgary Transportation Plan policies and guidelines to the satisfaction of The City with regard to design and performance standards.

c. Policies that use the words "shall," "will," "must," or "require" apply to all situations, without exception, usually in relation to a statement of action, legislative direction or situations where a desired result is required.

3. Appendix Interpretation

The appendices do not form part of the statutory portion of the ASP. The intent of the appendices is to provide information and guidelines to support the policies of the ASP.

4. Illustrations and Photo Interpretation

All illustrations and photos are intended to illustrate concepts included in the ASP and are not an exact representation of an actual intended development. They are included solely as examples of what might occur after implementation of the ASP's policies and guidelines.

5. Monitoring, Review and Amendments

a. The ASP is future oriented and depicts how the Plan Area is to be developed over an extended time period through a series of public and private sector initiatives. The time frame of this ASP will be determined by the criteria for prioritizing and sequencing growth areas as part of the Corporate Framework for Growth and Change.

b. The policies within the ASP will be monitored over time in relation to development, the MDP and the *New Community Planning Guidebook* to ensure they remain current and relevant. Where determined necessary, these policies will be updated through the plan amendment process either generally or in response to a specific issue.

c. To ensure the ASP is a living document that reflects new policies adopted by Council over time, it should be reviewed and updated every 10 years from the time it is adopted until such time as the Approving Authority determines the Plan Area is fully built out.

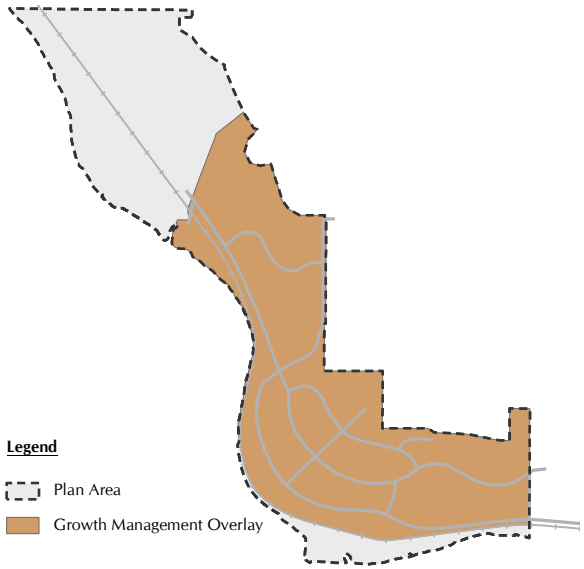
6. Plan Limitations

Policies and guidelines in this ASP are not to be interpreted as an approval for a use on a specific site. No representation is made herein that any particular site is suitable for a particular purpose as detailed site conditions or constraints, including environmental constraints, must be assessed on a case-by-case basis as part of an application for Outline Plan, Land Use Amendment, Subdivision or Development Permit.

7.2 GROWTH MANAGEMENT

The purpose of this section is to ensure that development within the Plan Area is aligned to the growth management process. This process involves the application of a Growth Management Overlay to the Plan Area as shown on **Map 10: Growth Management Overlay.** The Overlay strategically directs development in the Plan Area to lands where growth management issues have been resolved. The *New Community Planning Guidebook* contains the policy pertaining to the Growth Management Overlay. Development staging will generally progress from the eastern boundary of the Plan Area, where infrastructure is already located, to the west and northwest, where new infrastructure will be required.

MAP 10: GROWTH MANAGEMENT OVERLAY



7.3 APPLICATION REQUIREMENTS

INTENT

Applicants must meet a number of requirements when submitting a development application for the Plan Area.

POLICIES

1. The density of specific developments can vary, but Outline Plan/Land Use Amendment applications shall be monitored to ensure that each Neighbourhood Area meets the overall minimum required density of 20 units per gross developable residential hectare (8 units per gross developable residential acre) as per the *New Community Planning Guidebook.*
2. Historical Resources Act clearance is granted for the Plan Area. However, subject to Section 31 of the Act, "a person who discovers an historic resource in the course of making an excavation for a purpose other than for the purpose of seeking historic resources shall forthwith notify the minister of the discovery." The discovery of historical resources is to be reported in accordance with the Act.
3. Unless otherwise indicated any changes to the text or maps within the ASP will require an amendment in accordance with the Municipal Government Act. Where an amendment to the ASP is requested, the applicant shall submit the supporting information necessary to evaluate and justify the potential amendment and ensure its consistency with the MDP and other relevant policy documents.

7.4 INTERMUNICIPAL COORDINATION

INTENT

The Plan Area is bordered by Rocky View County (RVC) to the north and northeast. Historically, the lands in the Plan Area were part of RVC. Annexation of RVC lands by The City of Calgary in 2007 resulted in the present municipal boundaries. The 2006 annexation agreement between RVC and The City led to the identification of planning principles which were refined in the 2011 Rocky View/Calgary Intermunicipal Development Plan (IDP). The Haskayne ASP falls entirely within the IDP Policy Area as shown on **Map 11: City–County Interface Areas.** The intent of these policies is to ensure that The City of Calgary and RVC work collaboratively to coordinate planning for areas of mutual interest.

POLICIES

1. **Intermunicipal Communication and Cooperation**
   a. The City will consult with RVC on intermunicipal planning, transportation and servicing matters that may arise within the IDP Policy Area of the Plan Area to achieve cooperative and coordinated outcomes.
   b. The City will circulate all development and planning proposals within the IDP Policy Area in accordance with current IDP policies.
2. **Pathway Connections**

   Regional Pathway connections to Glenbow Ranch Provincial Park and RVC from the Haskayne Plan Area are encouraged where appropriate.

3. Interface Planning

Interface principles and transition tools outlined in section 6.0 of the IDP will be applied between proposed urban development and existing country residential development to achieve appropriate transitions across the municipal boundary. The Haskayne Plan Area has four interface areas with RVC (see **Map 11: City–County Interface Areas**). As subsequent outline plans are prepared, interface areas should incorporate the following transition elements:

a. Interface Area 1

Haskayne Legacy Park escarpment (City) is near to acreage housing (RVC). Naturalized park space will buffer acreages from the active/programmed park spaces of Haskayne Legacy Park anticipated to the south.

b. Interface Area 2

Escarpment slopes (City) are near to acreage housing (RVC). The natural open space separating City and County residential areas will be protected and maintained as a natural corridor.

c. Interface Area 3

Escarpment slopes and pockets of developable land above (City) are near to acreage housing (RVC). The secondary access point to the Plan Area is also within this interface area. As such,

i. a detailed design concept for the new intersection will provide an aesthetically pleasing transition between RVC and City jurisdictions;

ii. residential development should provide a compatible interface to the existing acreage development; and

iii. a local pathway or boulevard-separated sidewalk will be provided along the City–County boundary to buffer developable land from the natural areas and provide additional connections to the Plan Area.

d. Interface Area 4

A JUS (school) and a Green Corridor (City) will be near to acreage housing (RVC):

i. the Green Corridor should delineate a buffer of passive open space and active open space related to the JUS;

ii. where feasible and appropriate, additional pedestrian connections should be provided along the Plan Area boundary to increase pedestrian/cyclist access.

MAP 11: CITY–COUNTY INTERFACE AREAS

8 GLOSSARY

This section clarifies the meaning of terms used in the document.

ABBREVIATIONS

ASP	Area Structure Plan
CPR	Canadian Pacific Railway
CTP	Calgary Transportation Plan
EOS	Environmental Open Space
ER	Environmental Reserve
JUS	Joint Use Site
LRT	Light Rapid Transit
MDP	Municipal Development Plan

DEFINITIONS

The following definitions shall apply. Where a term is defined in the Glossary of the MDP or CTP, that definition applies in the interpretation of this ASP. The street classifications mentioned in this ASP refer to the street classifications of the Design Guidelines for Subdivision Servicing. Where a definition differs from The City of Calgary Land Use Bylaw (1P2007), the Land Use Bylaw definition shall prevail. Intent

A

Adaptive Grid: A street grid network that responds to natural topography and features; is adaptable in orientation and block pattern; supports a diversity of land uses, housing types and neighbourhood character; and provides high connectivity and legibility for all modes of transportation.

B

Biophysical Impact Assessment (BIA): A commonly required report used to define the environmental impact of a project on the biological features of a Community. In preparing a BIA, baseline data are usually collected on soil, vegetation, wetlands, wildlife and hydrology.

C

The City: The Corporation of The City of Calgary.

Compact Urban Form: A land use pattern that encourages efficient use of land, walkable Neighbourhoods and mixed land uses (residential, retail, workplace and institutional) all within one Neighbourhood, with proximity to transit and reduced need for infrastructure.

Council: The elected Council of The City of Calgary.

E

Environmental Reserve: As described in the *Municipal Government Act.*

I

Institutional Use: Use of land, buildings or structures for the purpose of religious, charitable, educational, health, welfare or correctional activities. Institutional uses may include, but are not limited to, Places of Worship, public or private schools, post-secondary institutions, hospitals, medical clinics and daycare centres.

L

Land Use Area: Refers to one of the categories of land uses delineated on the Land Use Concept and described in one of the policy sections of the ASP/Guidebook.

Large-Format Retail: Retail units of over 6,000 m^2 (64,580 ft^2) in floor area.

M

Medium-Format Retail: Retail units ranging from 1,200 m^2 to 6,000 m^2 (12,900 ft^2 to 64,580 ft^2) in floor area.

Multi-Residential Development: A residential development of one or more buildings, each containing a minimum of three units in total.

Municipal Development Plan (MDP): Bylaw 24P2009 of The City of Calgary, as amended or succeeded.

R

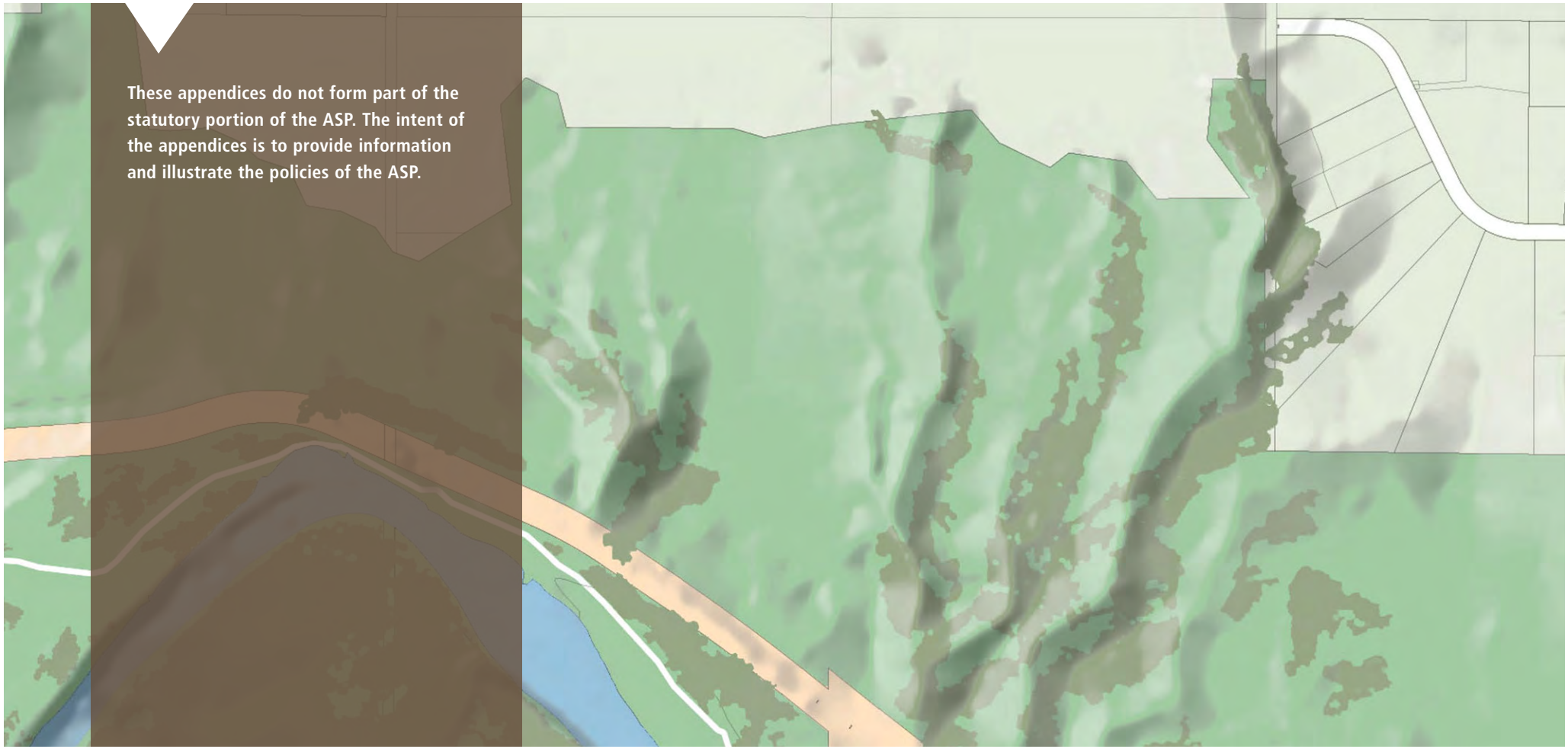
Risk Assessment: The process of identifying and documenting risks to human health or the environment, to allow further evaluation and appropriate responses. Risk Assessments should include potential risks, their likelihood, their consequences and proposed mitigation measures.

S

Small-Format Retail: Retail units of less than 1,200 m^2 (12,900 ft^2) in floor area.

9 APPENDICES

These appendices do not form part of the statutory portion of the ASP. The intent of the appendices is to provide information and illustrate the policies of the ASP.



APPENDIX A:

BIOPHYSICAL BACKGROUND INFORMATION

The following important biophysical resources have been identified in the Plan Area by Stantec Consulting Ltd. (2015):

- Bow River valley, including escarpments and terraces
- Drainages (episodic, ephemeral, intermittent and permanent)
- Wetlands (one Class III, located within existing gravel pit disturbance)
- Native grassland primarily associated with escarpments, terraces, and lands between the CP Rail line and the Bow River
- Native shrubland primarily associated with escarpments, coulees, ravines and drainages
- Native forest patches, including deciduous, mixedwood and coniferous stands, primarily associated with escarpments
- Provincially-listed rare ecological community: little bluestem – sand grass
- Provincially-listed rare plants: Parry's sedge, umbellate sedge, little bluestem, prairie wedge grass, green-cushioned weissia moss, bare-bottomed sunburst lichen
- Wildlife species of management concern: pied-billed griebe, Swainson's hawk, osprey, bald eagle, American kestrel, bank swallow.

The Plan Area is located in a provincial Key Wildlife and Biodiversity Zone (AESRD 2010):

The Key Wildlife and Biodiversity Wildlife Zones are considered to be a combination of key winter ungulate habitat and higher habitat potential for biodiversity. In some areas this zone consists of important riparian vegetation complexes that are important for biodiversity, while in other areas it indicates important winter ranges for ungulates.

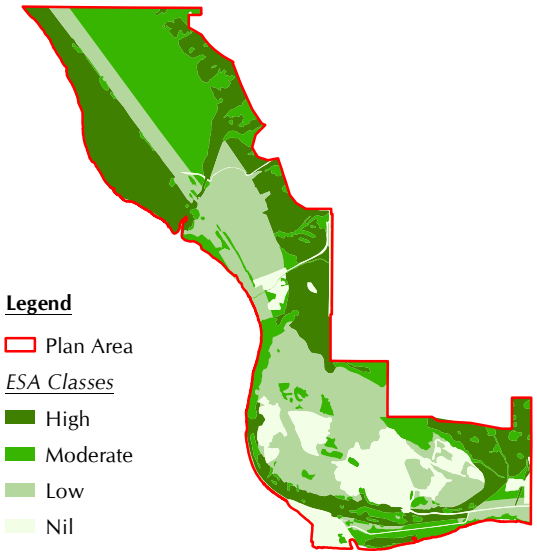
Typically Key Wildlife and Biodiversity Zones occur along major river valleys. These landforms contain the topographic variation and site productivity conditions that provide increased levels of biodiversity and good winter browse conditions in proximity to forest and topographic cover. Additionally, south-facing valley slopes have relatively lower snow accumulations and warmer resting sites for ungulate species. The valley landform itself provides protection from high wind chills.

Key Wildlife and Biodiversity Zones play a disproportionately large role in the landscape given their localized size and distribution, in maintaining the overall productivity of regional ungulate populations and source of biodiversity. These zones ensure that a significant proportion of the breeding population survives to the next year.

The environmental significance of each biophysical feature in the Plan Area has been ranked as Nil, Low, Moderate or High (Stantec 2015).

The Environmental Open Space Study Area incorporates the important biophysical resources in the Plan Area, as summarized in **Table 2.**

HASKAYNE ASP: ENVIORNMENTALLY SIGNIFICANT AREAS



References:

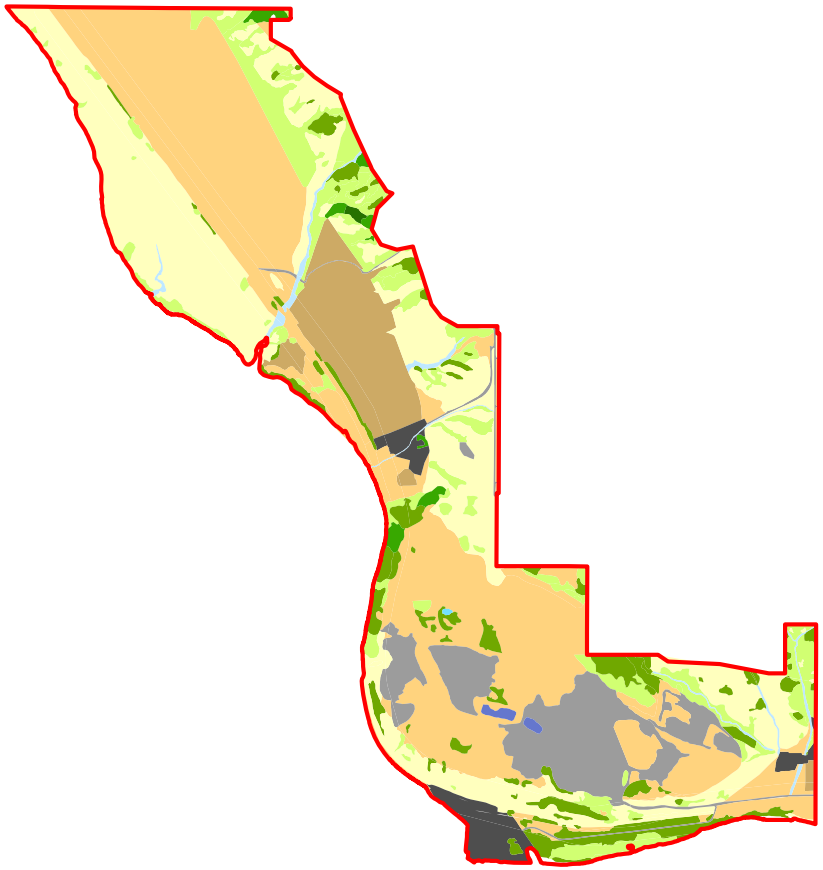
Alberta Environment and Sustainable Resource Development (AESRD). 2010. Recommended Land Use Guidelines: Key Wildlife and Biodiversity Zones. Available online: http://esrd.alberta.ca/fish-wildlife/wildlife-land-use-guidelines/documents/WildlifeLandUse-KeyWildlifeBiodiversityZones-Dec03-2010.pdf

Stantec Consulting Ltd. 2015 (final report submitted April 22, 2015 preparation). Haskayne Area Structure Plan: Biophysical Inventory. Prepared for City of Calgary. Calgary, AB.

TABLE 2

Feature	Cover Type	EOS Study Area	Rationale	Exclusions
Environmentally Significant Areas (High)	Any cover type containing rare plants / rare plant communities / wildlife species of conservation concern	Yes	*Municipal Development Plan* (p. 2-47) • Give the highest priority to the protection of environmentally-significant areas in the allocation of land use. • Protect biodiversity within river valleys, ravines, coulees and wetlands. • Protect unique environmental features such as... rivers and escarpments. **Note:** Escarpment landform overlaps with High and Moderate ESAs. • 50 m Environmental Reserve setback from Bow River.	Excludes High and Moderate ESA within CP Rail lands or surrounded by existing gravel pit. Excludes the existing dam site.
	Native Grassland	Yes		
	Native Shrubland (surrounded by native grassland or forest)	Yes		
	Drainages or seeps (intermittent or permanent)	Yes		
Environmentally Significant Areas (High)	Forest (deciduous, mixedwood or coniferous)	Yes		
	Wetland (Class III)	Yes		
	Drainages (episodic or ephemeral)	Yes		
	Native Shrubland (surrounded by cropland or modified grassland)	Yes		
	Modified Grassland (patches providing moderate to high wildlife forage, nesting or security cover)	Yes		
Escarpment	All vegetated cover types on escarpment	Yes		
Bow River corridor	All vegetated cover types within 50 m of the Bow River.	Yes		
Environmentally Significant Areas (Low)	Modified Grassland	No	These areas do not meet criteria for inclusion within the EOS Study Area.	--
	Cultivated	No		
Environmentally Significant Areas (Low)	Cleared, Residential	No		
	Cultivated	No		

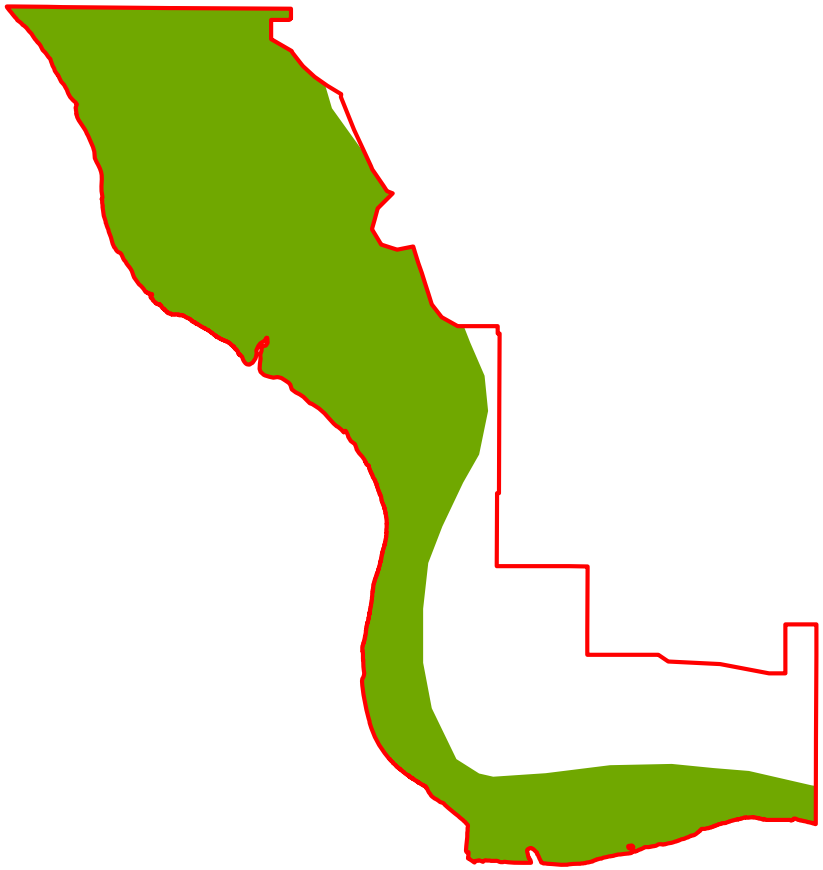
HASKAYNE ASP: BIOPHYSICAL FEATURES



Legend

- Plan Area
- *Biophysical Features*
- Native Grassland
- Modified Grassland
- Native Shrubland
- Deciduous Forest
- Mixedwood Forest
- Coniferous Forest
- Wetland
- Drainage
- Cultivated
- Cleared
- Residential/Commercial
- Reservoir

HASKAYNE ASP: KEY WILDLIFE & BIODIVERSITY ZONE



Legend

- Plan Area
- Key Wildlife Biodiversity Zone

APPENDIX B:

JOINT USE SITE REQUIREMENTS

The purpose of the Joint Use Site (JUS) requirements is to address the school jurisdiction and the type and size of the JUS. Only one JUS is required for the Plan Area and is shown on **Map 4: Land Use Concept.** It will be a CBE K–9, requiring 12 acres. This information is provided for reference purposes; the exact type of school, school board jurisdiction and size of the JUS will be determined at the Outline Plan/Land Use Amendment stage by the Joint Use Coordinating Committee (JUCC).

APPENDIX C:

DEVELOPMENT GUIDELINES

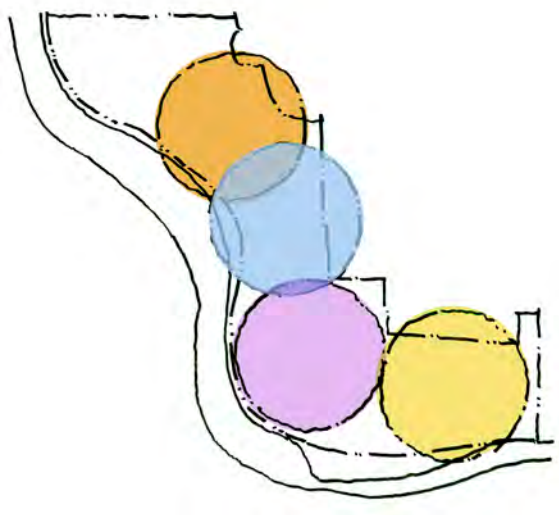
GOAL / OBJECTIVES:

- Environmental Protection
- To retain and protect natural areas where practicable.
- To ensure development is sensitive to the existing topography and vegetation while allowing for development opportunities consistent with The City's broader strategic plans.

Haskayne's natural environment and dramatic topographic form characterizes the community's most distinct assets. The importance of achieving a balance of development that fits into the natural setting is closely tied to the success and viability of the community. The careful crafting of settlement patterns and associated infrastructure within Haskayne presents a unique opportunity to create a community that is in harmony with the landscape. Preserving these natural features enhances wildlife habitat, offers opportunities for storm water management and adds variety and distinctiveness to development. Rather than forcing a "by the number" design onto a parcel of the land, applicants are encouraged to minimize land disturbance, preserve sensitive environmental areas, minimize visual impacts and incorporate existing topographical features into the site design.

The design concept for Haskayne is characterized by five key factors:

1. Creation of Diverse Neighbourhoods
2. Link to Regional Open Space System
3. Conserved and Enhanced Natural System
4. Secure Key Viewsheds
5. Inter-Connected and Multi Modal



WALKABLE NEIGHBOURHOODS
Develop a pattern of walkable neighbourhoods with links to community amenities and natural open space.

Residential development designed to front onto a public street

Bike and hiking trails from the river's edge into neighbourhoods

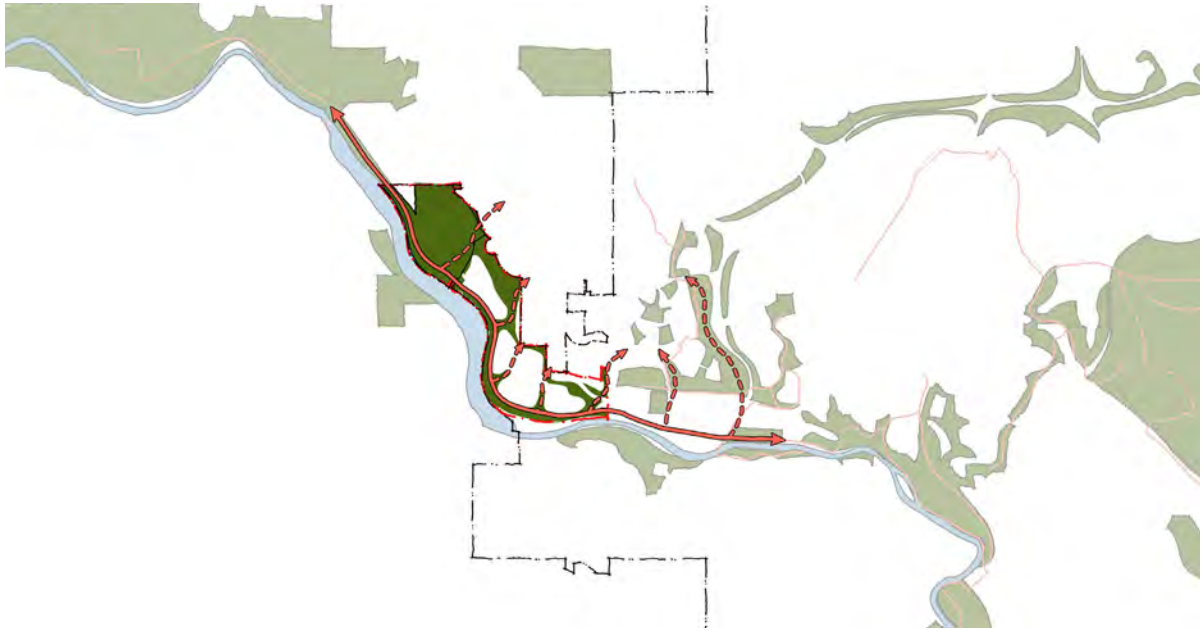
Mix of housing types fronting a green court

CREATE DIVERSE NEIGHBOURHOODS

The overall land use concept anticipates a series of neighbourhoods providing a variety of housing forms and types, amenities and services. Each neighbourhood will include the integration of trails, open spaces, natural corridors, and community facilities accessible to residents and users through both pedestrian/ bike networks and transit/vehicular networks. Neighbourhoods will also include a range of housing types such as single family, semi-detached, townhomes/villas, small and medium sized multi-family apartment style buildings, and where appropriate, mixed use buildings. Schools and other civic uses as well as neighbourhood commercial uses are key components in the creation of complete communities.

Smaller parks and amenity areas will become focal points and landmarks for the community while community and neighbourhood activity centres will be designed as destinations or nodes linking neighbourhoods to one another.

Opportunities for active adult and senior housing options are given specific attention in all neighbourhoods. The creation of walkable urban neighbourhoods, with local services, community assets, and proximity to outdoor recreation, contributes to the attractiveness of this area to the aging population. This community desires the integration, rather than segregation, of senior housing opportunities within a diverse population setting.



WALKABLE NEIGHBOURHOODS
Develop a pattern of walkable neighbourhoods with links to community amenities and natural open space.

Diversity in:

- Amenities and Services
- Trails, Open Space, Natural Corridors, and Community Facilities
- Pedestrian, Bicycle, Transit, and Vehicular Networks
- Housing including: Single Detached, Semi-Detached, Townhouses/ Villas, Apartment Buildings, and Mixed-use Buildings
- Schools, Civic Uses, and Commercial uses
- Integrated Senior/Adult Living Facilities

Residential units facing a green mews

Opportunities to create recreational activity centres along the river.

LINK TO REGIONAL OPEN SPACE SYSTEM

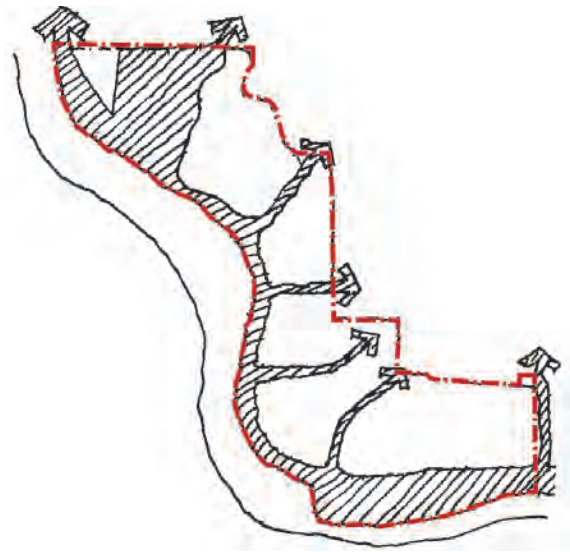
The sites within the Plan Area offer a remarkable opportunity to link Calgary to the emerging regional greenway and parks system. These neighbourhoods should be designed so that pedestrians and cyclists have a robust network of trails and routes that connect them to Haskayne Legacy Park, The Glenbow Ranch Provincial Park and the regional Trans-Canada Trail.

GUIDELINES

1. Parks should become the link between the natural environment and the neighbourhoods providing transitional landscapes, view shed enhancements and points of access.
2. To support an integrated public open space system within the new community the design should consider:
   - (a) offering a diversity of conditions along the escarpment where the community connects with the natural areas;
   - (b) creating an appropriate edge along the open space system that recognizes the significance of the natural amenity;
   - (c) designing the open space system so that it is supportive, safe, accessible, active, and enriched with a unifying identity with meaningful places; and
   - (d) featuring the natural and cultural heritage aspect of the open space system so that all can understand and appreciate the area's unique relationship to the Bow River.

Key Points:

- Robust trail network that connects pedestrians and cyclists to Haskayne Legacy Park, Glenbow Ranch Provincial Park, and the regional Trans-Canada Trail
- Focus residential development around open spaces, including community parks, the escarpment and the Bow River/Reservoir, wherever possible.



RIVER
Develop links to the river through trail networks and community access nodes.

CONSERVE AND ENHANCE NATURAL SYSTEMS

Former quarry operations and the active rail line have historically limited access to the river within the ASP for surrounding communities. Additionally, plant and wildlife habitat areas have been impacted by agricultural use, power generation, reservoir development, and quarry operations.

New neighbourhoods within the Plan Area should be designed to create sustainable settlement patterns that contribute to the conservation and enhancement of natural systems. The unique setting for an urban community creates opportunities to integrate naturalized open space lands with active and passive parks, stormwater management areas, and open spaces within the community. Achieving an inter-connected open space system that is both functional and healthy is a primary organizing framework for neighbourhoods within the Plan Area.

Key Points:

- Integrate the naturalized open space with active and passive parks
- Integrate Stormwater Management into parks system
- Primary organizing framework for neighbourhoods is an inter-connected open space system.

GUIDELINES

1. Minimize impacts on natural areas through sensitive development.

2. Augment natural areas with improved habitat features and integrate into the subdivision layout, where appropriate.

3. Conserve or replant native and adapted species.

4. Consider non-palatable native and adapted species to reduce attractants to wildlife.

5. Manage disruption and fragmentation of natural habitats by

(a) incorporating ecological features such as natural vegetation, topography, and water bodies into the design at the Outline Plan/ Land Use Amendment and Development Permit stages;

(b) utilizing environmentally-friendly landscaping where practical; and

(c) preventing the spread of invasive, alien species in environmentally sensitive areas.

6. Integrate vegetation, trees, and permeable surfaces where practical and possible, in order to minimize the negative effects of large expanses of paved surfaces.

7. Notwithstanding the 20% or greater slope applicability, The applicant is encouraged to reference **The City of Calgary Slope Adaptive Development Policy and Guidelines and Conservation Planning and Design Guidelines** to achieve development, which retains significant natural features where safe and practical.

8. Utilize low impact development stormwater management technologies, where practical, that aim to emulate pre-development hydrology including:

(a) bioswales and grassed swales;

(b) rain gardens and infiltration trenches;

(c) green roofs;

(d) pervious pavement; and

(e) the re-use of stored stormwater for irrigation from stormwater ponds.

9. Terrain adaptive techniques for sloped lands may be considered, including:

(a) one-way streets,

(b) very low design speeds,

(c) narrow local roads with parking pull-outs,

(d) steeper pathways,

(e) sloping boulevards with fewer sidewalks, and

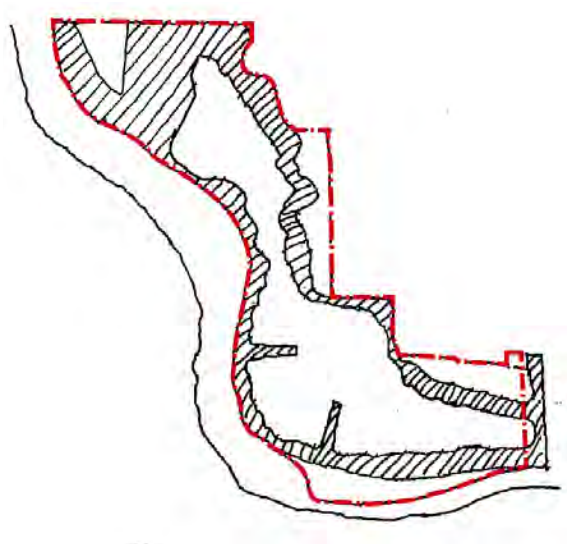
(f) low-impact development drainage.

10. Architectural guidelines for each neighbourhood may be established and enforced by the developer. The guidelines should consider:

(a) supporting terrain adaptive architecture and infrastructure for sloping sites with emphasis on minimizing impacts of development on sensitive terrain;

(b) using landscape techniques and plant materials that are complementary to and supportive of the natural setting; and

(c) establishing complementary colour and material palettes for building materials that reinforce the visual setting within the Bow River valley.



OPEN SPACE NETWORK
Restore, enhance and protect the ecology of place

View of the northern reaches of the valley floor

View of the reservoir along escarpment areas

Eastern approach from Bearspaw Dam Road

A

View looking northwest across the Damkar Farm

B

View looking northwest from the escarpment along the reservoir

C

KEY VIEWSHEDS
Use topography, bluffs, and coulees to secure key viewsheds of the mountains, the river valley and Downtown Calgary.

Distant view looking southwest

D

View looking southwest towards the Damkar Farm

E

SECURE KEY VIEWSHEDS WITHIN THE PLAN AREA

The topography of the Plan Area lands offers an array of viewsheds to the mountains, river valley, and Downtown Calgary. The design of neighbourhoods and infrastructure within the area should establish common viewsheds within each area that secures both the visual connectivity and physical connectivity within a shared public realm. A key component of the overall concept is that the public road system is sensitive to both the topography and the coulee system of the area.

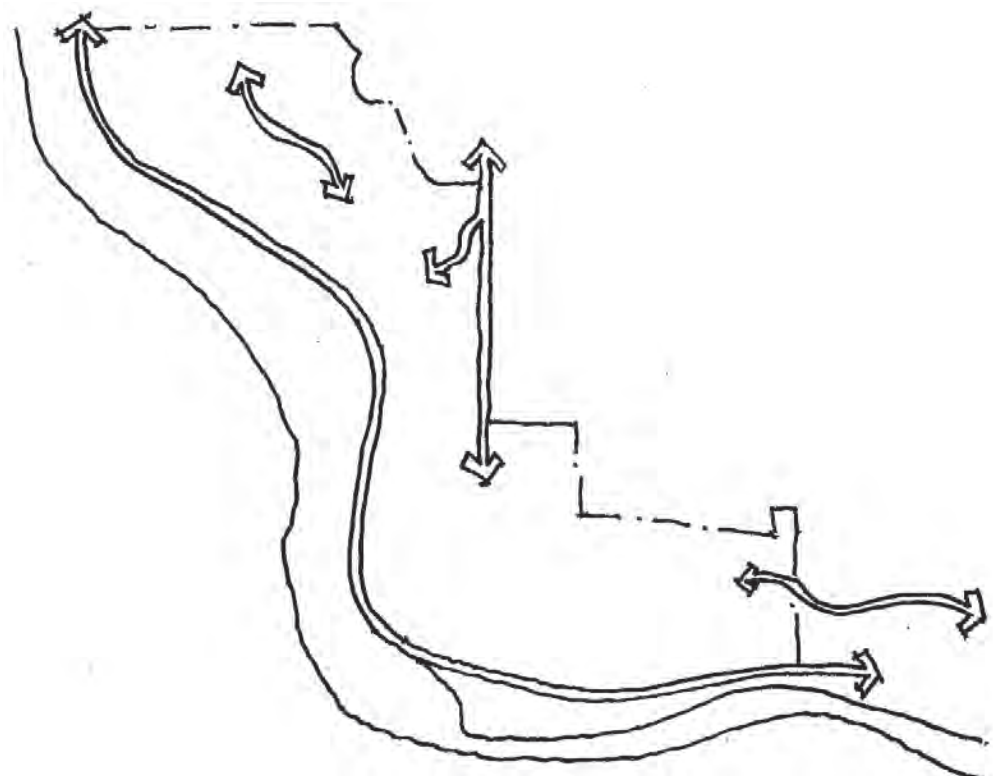
Sensitive slope development that has a visual impact on the landscape is a key component of establishing a harmonious pattern of settlement areas within the Plan Area.

GUIDELINES

1. Maintain vistas from streets at higher elevations through the orientation of block patterns and the integration of public space by providing public access points to create a shared public realm.
2. Preservation of the Bow River view corridor that respects private property and provides safe and dedicated public access for visitors and surrounding neighbourhoods is encouraged.
3. If a direct connection is not possible, develop roadways and pathways that terminate onto adjacent open space and/ or agricultural land to create attractive, natural view corridors.
4. Sculpt the built form to fit within the context and minimize impacts on viewshed areas.

Key Points:

- Views toward the mountains, the river valley, Downtown
- Maintain viewsheds for the public realm, wherever possible
- Minimize the physical and visual impacts to the natural areas and viewsheds.

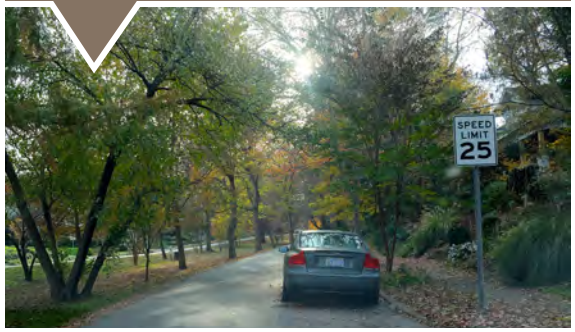


CONNECTIONS
Create multi-modal connections to and through Haskayne to link trail networks, vehicular movements, and transit circulation.

Eastern approach from Bearspaw Dam Road

Balance vehicular traffic with bicycle and pedestrian traffic through traffic calming techniques

Park street within a neighbourhood setting



Dedicated multi-use pathway separate from vehicular carriageways.

Local community street with in-lane bike accommodation

INTER-CONNECTED AND MULTI-MODAL

A key design principle of the Plan Area is to provide future residents with a sense of place that prioritizes connectivity and local access within the community and surrounding neighbourhoods and services with appropriately scaled infrastructure. The proximity to regional parks and pathways/trails calls for sensitive treatment of streets and transit routes so that vehicular traffic and infrastructure design is complementary to pedestrian and bicycling networks within the neighbourhoods.

Neighbourhood Activity Centres will become key multi-modal hubs for local services and amenities. Neighbourhoods should employ a framework of complementary and supportive standards including traffic calming and topographically responsive street design that further enhance the unique setting, landscape character and pedestrian orientation for neighbourhoods.

GUIDELINES

1. Roadway alignments that minimize the impacts on the slopes, ravines and other natural features as well as environmentally significant areas are encouraged.
2. Modified road designs that protect significant natural environments and topographic forms may be considered where appropriate.
3. Where a road is being proposed through a coulee or natural area, detailed designs should demonstrate how the disturbance to the coulee or natural area is minimized.
4. Where appropriate, infiltration swales may be considered in the design of the road system.

Key Points:

- Prioritize local connectivity/access over infrastructure to surrounding neighbourhoods and services
- Balance vehicular traffic with bicycle and pedestrian traffic through traffic calming techniques and topographically responsive street design
- Neighbourhood Activity Centres will act as multi-modal hubs for local services and amenities