Office Consolidation
2025 June

Belvedere Area Structure Plan

Note: This office consolidation includes the following amending Bylaws:

Amendment	Bylaw	Date	Description
1	54P2018	2018 July 30	(a) Delete and replace Map 4
2	70P2018	2018 September 11	(a) Delete and replace Map 4
3	84P2018	2018 December 10	(a) Rename Appendix F in TOC (b) Delete and replace Map 3 (c) Delete and replace Map 5 (d) Section 4.2.8 – delete and replace text (e) Section 6.4.1.5 – delete (f) Section 10.10.2 – delete and replace (g) Section 10.10.3 – delete
4	LOC2016-0189	2018 December 10	(a) Appendix F – delete and replace
5	60P2019	2019 July 29	(a) Delete and replace Map 4
6	16P2020	2020 April 6	(a) Delete and replace Map 5 (b) Delete and replace Map 6
7	54P2021	2021 September 14	(a) Delete and replace Map 4
8	51P2022	2022 September 13	(a) Delete and replace Map 4
9	46P2023	2023 July 25	(a) Section 2.1 – delete and replace graphic (b) Delete and replace Map 5 (c) Delete and replace Table 3 (d) Delete and replace Map 6
10	48P2023	2023 July 25	(a) Section 5.1 – delete (b) Delete Map 4 (c) Section 11.2.1 Policy 3.a – delete (d) Section 5.1 – remove reference from TOC (e) Map 4 – remove reference from TOC
11	47P2025	2025 June 10	(a) Delete and replace Map 5

Persons making use of this consolidation are reminded that it has no legislative sanction, and that amendments have been embodied for ease of reference only. The official Bylaw and amendments thereto are available from the City Clerk and should be consulted when interpreting and applying this Bylaw.

PUBLISHING INFORMATION

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PART 1 - THE PLAN

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1. EXECUTIVE SUMMARY

The Belvedere Plan Area will one day be a thriving part of Calgary's east side. As a result of its unique geography and access to major transportation systems, it is poised to become a flagship Mixed Use location serving local and regional needs. Belvedere comprises 14 Neighbourhoods encapsulated by four Communities. Located some 10 kilometres from the heart of Centre City, future development in Belvedere is well positioned for downtown commuters as well providing local employment opportunities to live, work and play within the Plan Area itself. Belvedere is located on the east side of the Transportation Utility Corridor (Stoney Trail) and bound to the east by 116 Street SE, the north by 8 Avenue NE and south by 26 Avenue SE. See Map 1: Plan Location and Map 2: Plan Area (aerial photograph).

The Land Use Concept for the Plan Area will ultimately realize a predominantly residential community with a series of commercial/retail Activity Centres serving the local needs of residents and bringing people to the area for regional shopping interests. Approximately 61,000 people will call Belvedere home at full build-out while offering employment opportunity for nearly 14,000. This will be a part of Calgary where daily needs can be met within comfortable walking distance for most residents and where access to wider employment, retail, leisure and cultural destinations is provided by excellent pedestrian, transit, cycling and road connections. Communities in the Plan Area will be designed to respect unique natural features and to protect existing ecosystem function and wildlife habitat and to enable residents, workers and visitors to enjoy their natural surroundings.

The Area Structure Plan (ASP) refines and implements the strategic objectives and policies identified within the Municipal Development Plan, The Calgary Transportation Plan and the East Regional Context Study and is influenced by The City of Calgary's broader planning and Sustainability objectives. It is informed by specific engineering, transportation and land use studies, and transportation and servicing constraints in the area. The ASP has evolved through a consultation process involving landowners, the general public, City Administration, school boards and other key stakeholders.

Through this process, detailed policies and guidelines have been developed. These will be used to direct land use, subdivision and development permit applications that will collectively shape the future development of the Plan Area to achieve the ASP vision.

2. INTRODUCTION

2.1 Vision and Objectives

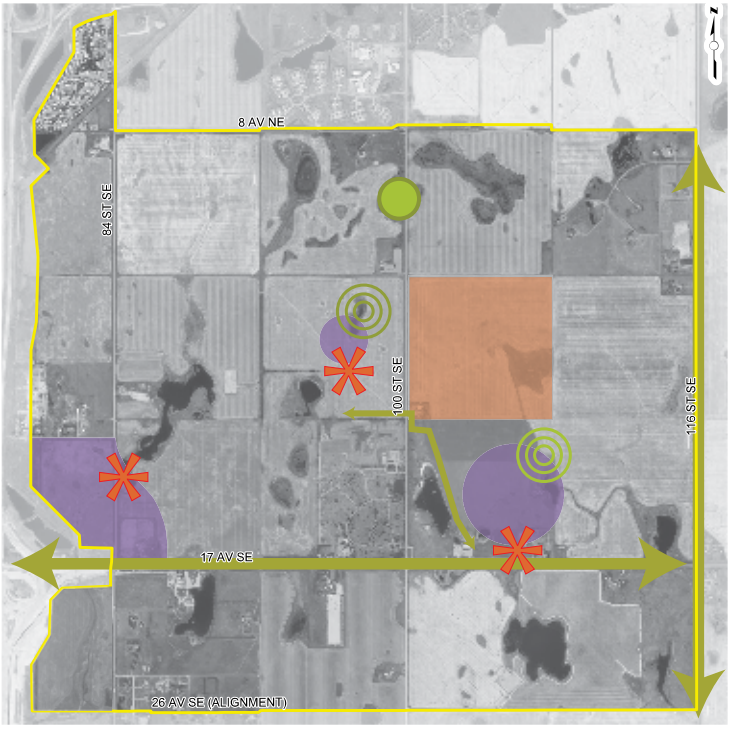
The vision and objectives for the Plan outline the aspirations of The City, its residents, partners and stakeholders. They have been developed through public and stakeholder engagement, review of relevant City policies and analysis of the Plan Area. The policies contained within this ASP aim to guide development to achieve the objectives and realize the Plan vision.

Neighbourhood Areas

- Quality, Attractive and Compact Form
  - o compact, mixed use, high quality urban design
  - o proximity to transit stations and stops
- Complete Communities with a Strong Sense of Place:
  - o integrated, well connected, compact and vibrant
  - o retail, employment, education, green space, public spaces and recreation facilities
  - o access to schools, retail and services
- At least one Neighbourhood Activity Centre per Neighbourhood:
  - o high-intensity nodes
  - o focal points of Neighbourhoods
  - o hubs of employment, services, and higher density housing
  - o employment and education centres built using design guidelines and sustainability techniques
  - o access to wider employment, retail, leisure and cultural destinations
  - o neighbourhood scale amenities and a mix of land uses

Mixed Uses

- mix of land uses focused around transit, with the broadest range around Activity Centres
- variety of housing choices and amenities, meeting needs and interests for people of varying ages, budgets and lifestyles



Prosperous Economy

- Urban Corridor and Community Activity Centre
- Retail Centres (Super Regional and Community scales): shopping convenience and options for consumers
- mix of employment opportunities including home based businesses, Local Commercial Uses, and Live-Work Units around Activity Centres
- competitive, diverse and adaptable local economy, attracting both new people and businesses

Open Space, Agricultural Land, Natural Beauty, Critical Environmental Areas Preservation and Green Infrastructure and Buildings

- conserve and enhance existing wetlands, habitats and topography
- visually appealing and biologically diverse environment, where the built form is designed to respect natural functions
- sustainable design solutions
- energy and resource use minimized
- building designs incorporate green building methods and alternative energy solutions

Range of Housing Opportunities and Choices

- Community diversity and sustainability by providing access to a range of housing opportunities in different built forms and different levels of affordability

Mobility: Connective Transportation System

- integrated grid street pattern with high quality urban design Pedestrian-Oriented developments with safe public realm
- multiple commuting options
- strategically placed pathway system, connects destination points within Neighbourhoods, adjacent Communities, downtown and beyond.
- comfortable walking distance to public amenities
- transit and cycling facilities

2.1.1 Vision: Integrated New Communities

The Plan Area will be a desirable area to live, learn, work and recreate. It will comprise four Communities and a diverse Neighbourhood fabric, each successfully meeting the social, economic and environmental needs of its residents and visitors. Each Community will be unique and complement uses and amenities. The objectives speak to the essence of the ***Municipal Development Plan (MDP).*** The policies within this Plan aim to achieve these objectives.

2.2 Strategic Policies

The vision and policies of this ASP are influenced by a wide range of existing plans, policies and guidelines. Please see ***Appendix I*** for a list of referenced plans and policies. The ASP should not be considered a stand-alone document and the policies and guidance of other Council approved policies and guidelines should also be considered as applicable.

2.3 Growth Rationale

The timing for the preparation of an Area Structure Plan is determined by Council in accordance with criteria outlined in the ***MDP*** and the ***East Regional Context Study***. The following information on the listed criteria is provided for the Plan Area.

1. **Advancing the objectives of the MDP, the Calgary Transportation Plan (CTP), and other initiatives**

   The ASP policies are in alignment with the *MDP* and ***CTP*** goals and objectives. The extent to which the development of the Plan Area advances the objectives of the ***MDP*** and ***CTP*** is contingent on achieving mixed use Activity Centres, corridors and transit supportive land use. Therefore the extent to which the objectives are achieved depends on the timing of development and the timeframe of build out of all components of the Community.

   The City's ***MDP*** and ***CTP*** set the vision for a long-term sustainable pattern of growth and development, and the transportation networks over the next 60 years. These plans also put into place a policy framework that will shape the city over the next 30 years. The ***MDP*** outlines seven strategic goals:

   - Build a globally competitive city that supports a vibrant, diverse and adaptable local economy, maintains a sustainable municipal financial system and does not compromise the quality of life for current and future Calgarians.
   - Direct future growth of the city in a way that fosters a more compact efficient use of land, creates Complete Communities, allows for greater mobility choices and enhances vitality and character in local Neighbourhoods.
   - Create great Communities by maintaining quality living and working environments, improving housing diversity and choice, enhancing community character and distinctiveness and providing vibrant public places.
   - Make Calgary a livable, attractive, memorable and functional city by recognizing its unique setting and dynamic urban character and creating a legacy of quality public and private developments for future generations.
   - Develop an integrated, multi-modal transportation system that supports land use, provides increased mobility choices for citizens, promotes vibrant, connected communities, protects the natural environment and supports a prosperous and competitive economy.
   - Conserve, protect and restore the natural environment.
   - As stewards of the land within its jurisdiction, The City will provide leadership on growth and change within a strategic framework that achieves the best possible social, environmental and economic outcomes while operating within The City's financial capacity. The City will work with key stakeholders to achieve this goal.

2. **Assessment of The City's financial capacity**

   A portion of the costs for leading infrastructure are noted in the respective departments' 10-year Capital Plans. Costs associated with Transit are not currently in the 10-year Capital Plan. Funds for the required infrastructure for the Plan Area are not allocated in the 3-year Capital Budget as of 2012. Departmental capital budgets will need to align to support public investment needed to service the Plan Area, following Council's approval of the ASP. The estimated capital and operating costs for the core infrastructure components of the Plan Area is provided in ***Appendix B: Area Structure Plan Preliminary Cost and Revenue Estimation***.

3. **Planned land supply**

   The City of Calgary has a practice of maintaining up to a 15 year planned land supply. There is currently a 9 to 11 year planned year supply including the approval of the Belvedere ASP, based upon current forecasted projections for growth. With the additional approval of the South Shepard and West View Area Structure Plans and the West MacLeod amendment, that will increase to an estimated 13 to 17 year planned land supply. The planned land supply is based upon the preliminary Suburban Residential Growth 2013-2017 report.

4. **Consideration of the operating and lifecycle costs to The City in supplying and maintaining infrastructure**

   Development of the Plan Area will require new infrastructure that will incur operating and lifecycle costs; however, an efficient land use pattern highlighted by a system of Activity Centres and an Urban Corridor and a multi-modal transportation system may reduce this cost burden by minimizing expensive capital infrastructure costs and long term operation and maintenance costs. The projected annual operating costs for infrastructure required for the Plan Area total $42.1M (see ***Appendix B***).

5. **The City's ability to provide efficient and cost-effective utility servicing**

   Water and sanitary services may be available from the south but with limited capacity. A limited number of developments on the west side of the Plan Area can be initially serviced.

   Water and sanitary servicing for most of the Plan Area is severely limited by funding shortfalls and trunk and water main capacity. The current estimated infrastructure cost required for the development of the Plan Area (2012 dollars) is $228.8M. This includes Belvedere's portion ($28.2M) of an Operations Workplace Centre (OWC) to be constructed near full build out of the Plan Area. This OWC will serve Belvedere as well as surrounding development cells who will also contribute to the total cost of the OWC (see ***East Regional Context Study***).

   An overview of the projected infrastructure costs for the Belvedere Plan Area is outlined in ***Appendix B*** of this ASP. No major infrastructure investments required for development to occur in the Plan Area are in The City's 3-year Capital Budget or 10-year Capital Plan with the exception of the Emergency Response Station and the OWC.

6. **Opportunities for land use that supports the Primary Transit Network and multi-modal connections**

   A Bus Rapid Transit (BRT) route along 17th Avenue SE with four stops identified to service the Plan Area. These stops will be located near transit supportive land uses such as the Super Regional Retail Centre, Urban Corridor, Community Activity Centre and High School as identified on ***Map 5: Land Use Concept Map***.

7. **Landowner Interest**

   The majority of landowners within the Plan Area have expressed a desire to proceed with this ASP.

8. **Community Interest**

   A portion of the Plan Area currently contains acreage development, businesses, institutions and a mobile home park. Through public engagement, current landowners have expressed an interest in developing their lands.

3. REGULATORY PROCESS

3.1 Purpose of an Area Structure Plan

Land use planning is the process of shaping the physical environment to achieve an orderly, sustainable and compatible pattern of growth, and protection sensitive ecological functions with the goal of enhancing the quality of life of the Community's residents.

The purpose of an Area Structure Plan is twofold. Firstly, it refines and implements The City's broad planning objectives and policies of the ***MDP***, ***CTP*** and other policies by promoting logical, compatible and sustainable Community development. Secondly, an Area Structure Plan guides and directs the specific land use, subdivision and development decisions that collectively determine the form that an area will take.

3.2 Authority of the Plan

Area Structure Plans are adopted by bylaw passed by Council in accordance with the *Municipal Government Act, R.S.A. 2000, c.M-26 (MGA)*. Section 633 of the *MGA* states:

> *633 (1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may, by bylaw, adopt an area structure plan.*
>
> *(2) An area structure plan*
>
> *a. must describe*
>
> *i. the sequence of development proposed for the area,*
>
> *ii. the land uses proposed for the area, either generally or with respect to specific parts of the area,*
>
> *iii. the density of population proposed for the area either generally or with respect to specific parts of the area, and*
>
> *iv. the general location of major transportation routes and public utilities, and*
>
> *b. may contain any other matters the council considers necessary.*

3.2.1 Authority Policies

1. An Area Structure Plan shall conform to the ***MGA***, the ***MDP*** and all statutory plans as amended or replaced.
2. Subdivision approvals should only be made where they comply with an Area Structure Plan.
3. Direct Control Districts shall comply with Area Structure Plans.

3.3 ASP Timeframe

This 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. No specific timeframe is applied to the ASP. The timeframe of this ASP shall be determined by the principles of the ***Corporate Framework for Growth and Change*** or other Council approved policies. City wide growth management will determine how and when certain infrastructure improvements are made. This can affect the timeline of the ASP.

3.4 Interpretation of the Plan

3.4.1 Map Interpretation Policies

Unless otherwise specified within the 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. Precise location of these boundaries and symbols, for the purpose of evaluating development proposals, will be determined by City Administration at the time of Outline Plan / Land Use Amendment future applications.

For greater clarity, all Land Use Areas, including those identified as Environmental Open Space Study Area are not field verified and may not reflect actual site conditions. As such, these areas shall be subject to further study and will be delineated at the Outline Plan / Land Use Amendment application stage. Where adjustments are made as a result of delineation, the policies of the adjacent Land Use Area shall apply without requiring an amendment to maps within this ASP, including but

not limited to ***Map 5: Land Use Concept*** and ***Map 11: Environmental Open Space Study Area***.

3.4.2 Policy Interpretation

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

Most policies are written in the active tense, as deliberate statements or plans indicative of the direction that The City is proposing for future development or desired outcomes. In some of these policies, 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 be to the satisfaction of The City with regards to design and performance standards.

In some cases, policies are written to apply to all situations, without exception, usually in relation to a statement of action, legislative direction or situations where a desired result is required. The word "shall" is used in these cases and it also means "require", "must", "will".

3.4.3 Guideline Interpretation

Guidelines provide design details to aid in complying with ASP policies. There is recognition that other design solutions may exist and therefore the guidelines are not applied in a mandatory manner. Where the guidelines identify information or analysis to be submitted as part of an Outline Plan / Land Use Amendment application, such requirements are not to be applied in a mandatory manner and may be varied or expanded upon as determined appropriate given the specific circumstances that exist.

Where the guidelines identify standards to be addressed within an Outline Plan / Land Use Amendment application, the guidelines may be varied without an amendment to the ASP.

Where the policies of this ASP refer to compliance with the guidelines it is understood that the guidelines are provided for direction only.

3.5 Monitoring and Review

The policies within the ASP will be monitored over time in relation to the ***MDP*** 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.

To ensure the ASP serves as 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 initially adopted until such time as the Approving Authority considers the Plan Area fully built-out.

Presently, the City is undertaking research related to employment forecasting for the entire city and given employment is an integral part of this Plan, there are specific requirements that provides updates for this issue in the Implementation section.

3.6 Application-Based Plan Amendments

Subject to section 3.4.1, any change to the text or maps within the ASP may require an amendment to the ASP, in accordance with the ***MGA***. Where an amendment to the ASP is requested, the Applicant will submit the supporting information necessary, to evaluate and justify the potential amendment and ensure its consistency with the ***MDP*** and other relevant policy documents.

3.7 Plan Limitations

Area Structure Plans are long-term planning documents promoting a vision for a Community and putting in place policies and guidelines that work towards achieving that vision. Area Structure Plans may be amended from time to time either in relation to a City initiative or an Outline Plan / Land Use Amendment application.

Policies and guidelines in an Area Structure Plan 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, will be assessed on a case by case basis as part of an application for Land Use, Subdivision or Development Permit approval.

4. PLAN AREA

4.1 The Plan Area

The Plan Area is located in the east quadrant of Calgary and consists of approximately 1,204 ha (2,973 ac). This area was annexed from Rocky View County in 2007 and is bound by 8 Avenue NE (Rocky View County border) to the north, 116 Street (Town of Chestermere border) to the east, 26 Avenue SE to the south and the Transportation / Utility Corridor to the west.

4.2 Attributes and Constraints of the Plan Area

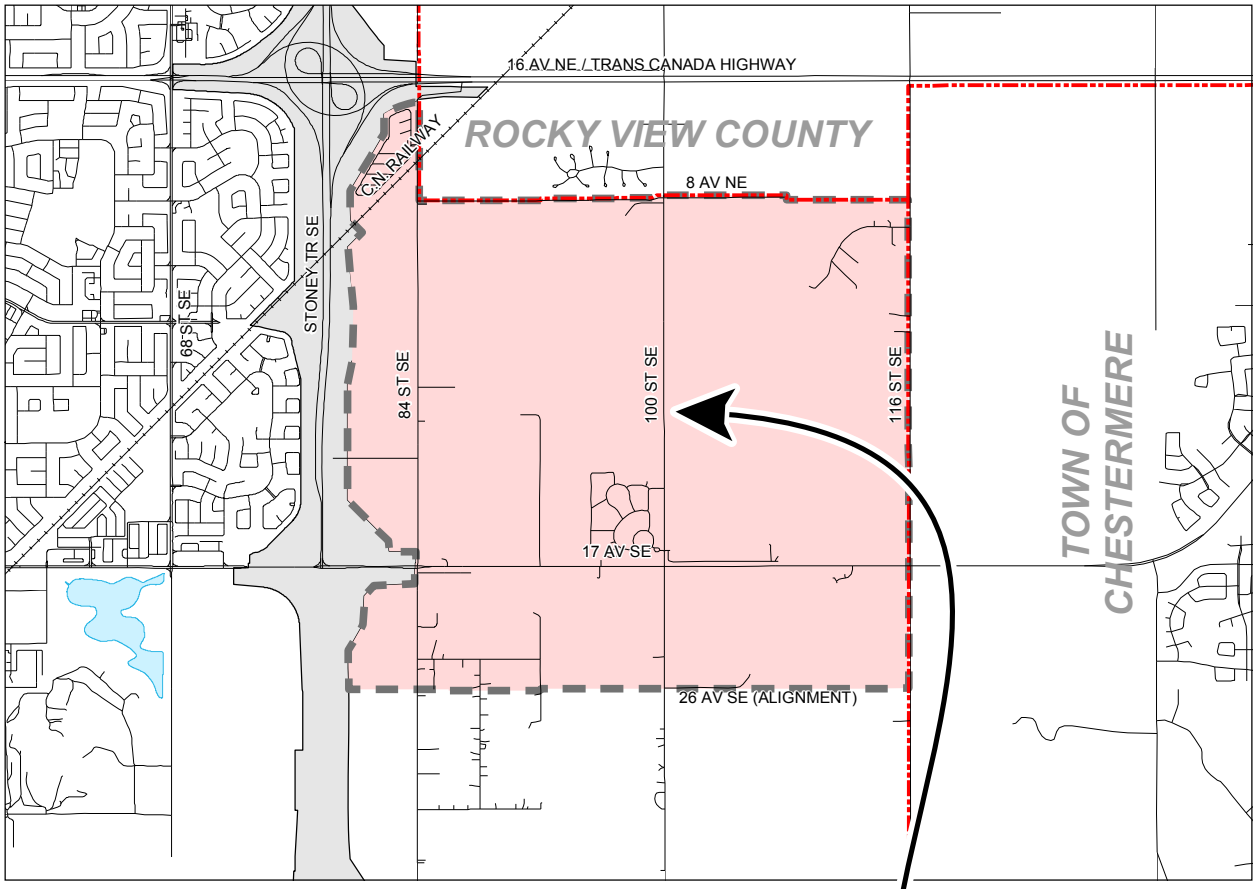
This section provides a summary of the main physical features that will provide opportunities to create Community identity and those which pose constraints and may need special consideration when planning for development. This is not meant to be an exhaustive list of opportunities and constraints. Those developing in the area will practice due diligence in the development process.

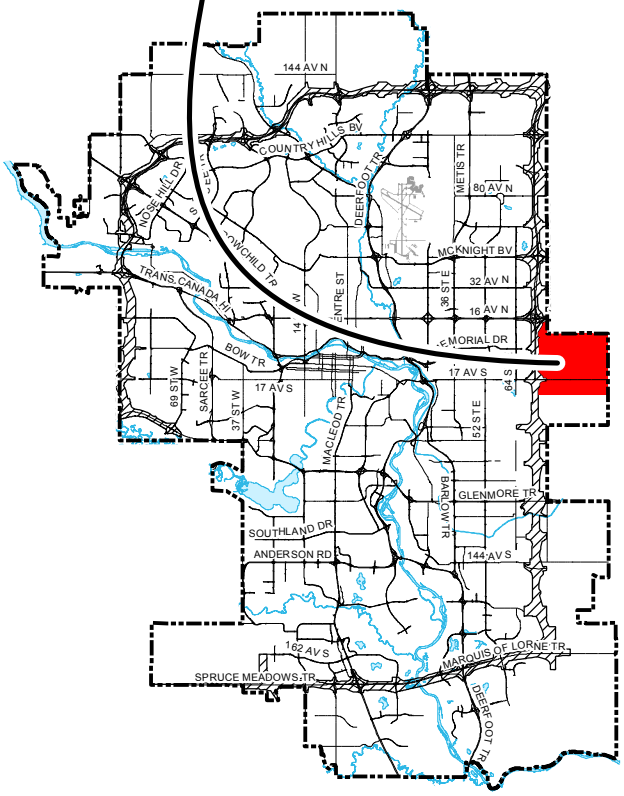
4.2.1 Existing Land Uses and Development (2013)

The Plan Area is currently primarily large residential acreages. There are also a number of businesses and services, including:

- Cobblestone Garden Centre
- Mountain View Cemetery
- Canadian Reformed Church of Calgary (school)
- Garden Road Seventh Day Adventist Church
- Chateau Estates Mobile Home Park
- East Hills Shopping Centre (development application being reviewed at the time of this Plan)

There are two abandoned wells in the Plan Area, a fuel pipeline and a series of abandoned sour gas pipelines. Alberta Environment and Sustainable Resource Development has classified one site in the area as a non-operating landfill. Two parcels of land abutting Stoney Trail and 17 Avenue SE have land use for a super regional retail centre.





Map 1

Plan Area Location

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

4.2.2 Natural Environment Features

The Plan Area is located within the Foothills Fescue Subregion of the Grassland Natural Region *(Calgary Annexation Territory Open Space Study – Phase 2 (North): Trans-Canada Highway to Janet, May 2010)*.

Vegetation communities are dominated by rough fescue, although most of the area is cultivated.

Areas of significant natural features include a number of wetland complexes, watercourses, Water Bodies, several distinct glacial till ridge landforms, which provide potential opportunities for ridgetop trail systems and elevated viewpoints of large wetlands and wetland complexes, and the Rocky Mountains and city viewscapes to the west. Several patches of native prairie, trees, and small wetlands act as habitat stepping stones. The diversity of ecological communities in the Plan Area provides a range of habitats for a variety of species, including provincially and federally listed species. The drainage corridors provide for wildlife movement and connectivity of the wetlands.

These natural features are opportunities to enhance the Communities of the Plan Area in terms of identity, attractiveness, and ecological function.

4.2.3 Topography and Drainage

Surficial deposits are dominated by glacial till, which form an undulating landscape and several topographically closed drainage basins and wetland complexes.

There are two primary drainage corridors, one running north to south on the far west portion of the Plan Area that connects to Forest Lawn Creek, and one running northwest to southeast and eventually draining to the Shepard Slough Complex. There are several ephemeral draws.

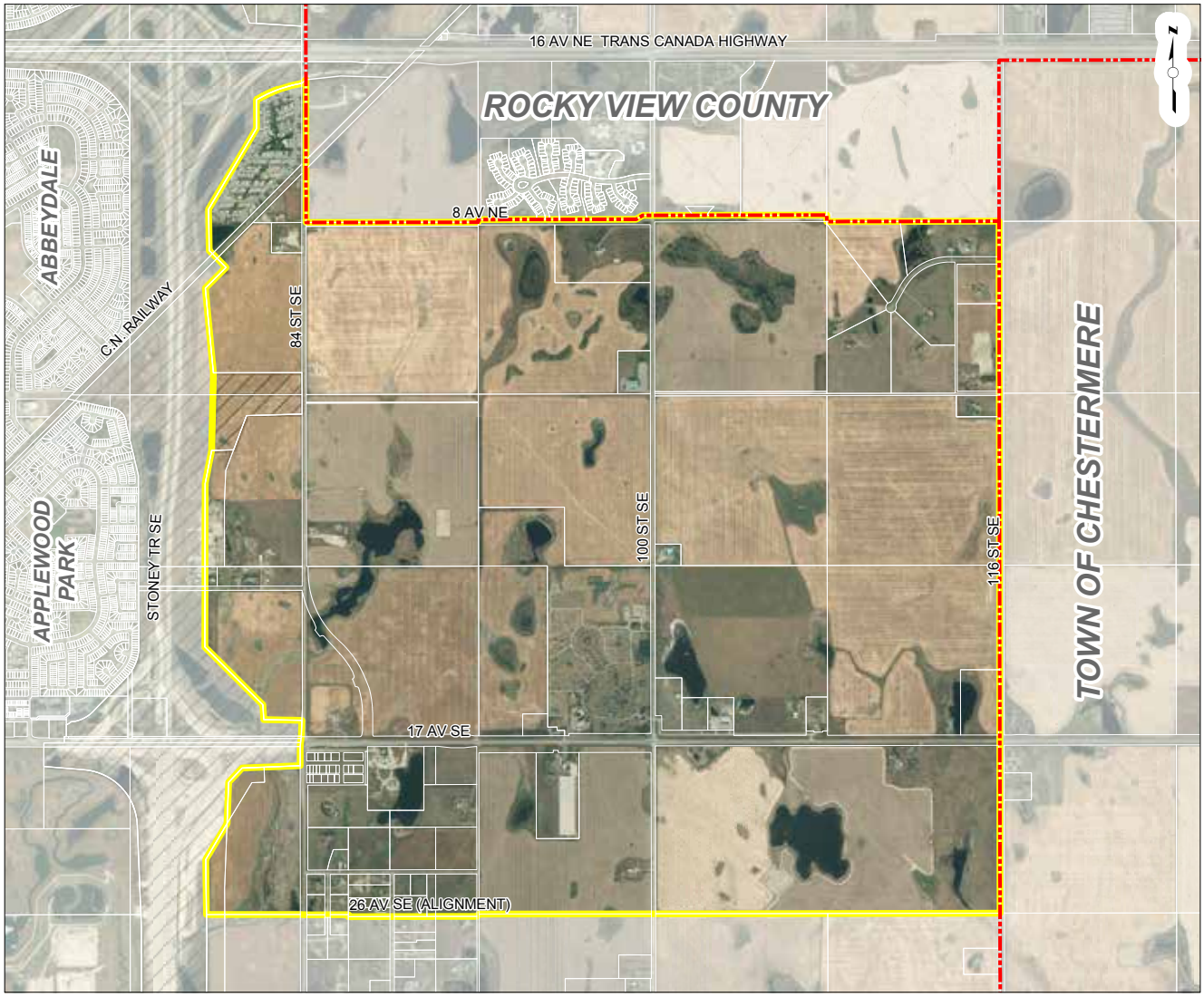
Rolling till ridges are oriented along a north-south axis. The largest ridge features are located in the northwest and central portion of the Plan Area. The Plan Area's terrain defines topographic divides that can be subdivided into four catchment basins.

4.2.4 Historical Resources

A detailed review of the Plan Area was not conducted. Further investigation shall be required by Alberta Culture and Community Spirit at the time of Outline Plan / Land Use Amendment application.

4.2.5 Oil and Gas Infrastructure

1. **Oil and gas infrastructure exist throughout the Plan Area and must be considered during development processes.**
    a. The status of all oil and gas infrastructure shall be determined at the Outline Plan and Land Use Amendment stage.
    b. Prior to any development in the Plan Area, appropriate assessment and risk evaluation of these facilities shall be required.
    c. A detailed evaluation of the potential nuisance issues around the facilities shall also be required to evaluate and identify the need for mitigation strategies.
    d. Phasing of development shall need to be considered around setback areas. Additional consultation may also be required as part of any proposed development near oil and gas facilities with the operators, The City and the Energy Resources Conservation Board (ERCB).



Map 2

Plan Area

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area

0 200 400 600 800 1,000

Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

Table 1: Well Data*

Well Name	Unique Well Identifier (UW)	Company (Operator)	Status
Wascana Crossfield	11-18-24-28	Nexen	D13 (Abandoned)
Wascana, et al. Crossfield	11-08-24-28	Nexen	D13 (Abandoned)

**As of January 2013.*

1. Gas Infrastructure

Wells

There are two wells associated with oil and gas activity within the Plan Area as shown on ***Map 3: Attributes and Constraints***. ***Table 1: Well Data*** provides well information current as of January 2013.

a. Abandoned Wells

ERCB records indicate that there are two abandoned sour gas wells within the Plan Area, as shown on ***Map 3: Attributes and Constraints***. Setback areas and access as mandated by the ERCB shall be required around abandoned wells at the time of development.

2. Gas Pipelines

There are several abandoned pipelines associated with oil and gas activity within the Plan Area. The ERCB determines the minimum setback for all sour gas facilities. Additional setbacks may be applied by The City. ***Table 2: Pipeline Data*** provides pipeline data current as of November 2012. All infrastructure is currently owned by Nexen Inc.

Table 2: Pipeline Data*

Line / License Number	Level
6581 (Section 1)	Abandoned (formerly Level 2)
5474 (Section 2)	Abandoned (formerly Level 1)
5474 (Section 3)	Abandoned (formerly Level 2)
3117 (Section 4)	Abandoned (formerly Level 1)
48495 (Section 5)	Abandoned (formerly Level 1)
48495 (Section 6)	Abandoned (formerly Level 2)

**As of November 2012, no product flowing through pipeline.*

3. Low Vapour Pressure Line

A low vapour pressure pipeline carrying fuel products, runs north-south through the Plan Area at approximately 92 Street SE. The product is not sour, does not have a significant development setback (i.e., 15m) nor does it have an EPZ. The owner is Alberta Products Pipeline (based in Calgary, AB).

4.2.6 Transportation / Utility Corridor

The Transportation Utility Corridor (TUC) was originally planned by the Province of Alberta and The City in the late 1970s and is commonly referred to as the Ring Road. During the 1980s and 1990s the Province of Alberta, which is responsible for the development of the Ring Road, purchased most of the lands required for this TUC.

Stoney Trail, which forms the northeast link of the Ring Road, extends east from Deerfoot Trail (Highway 2) to the eastern city limits, then south to 17 Avenue SE (Highway 1A).

The Southeast Stoney Trail involves the construction of the largest single highway project in Alberta's history. The Southeast Stoney Trail will extend from the south side of the current Stoney Trail / 17 Avenue SE intersection south along the east perimeter of Calgary to Highway 22X, then west to the east side of the Highway 22X / MacLeod Trail interchange.

Major linear utilities, such as high voltage transmission lines and pipelines may be built within the TUC. Non-linear utilities such as natural gas gate stations, power substations or telecommunications towers might also be approved in the area. The Pipeline and Powerline Components of the TUC lie on east side of the corridor adjacent to the Plan Area.

4.2.7 Cemetery

The Mountain View Cemetery is located at the northwest corner of the intersection of 17 Avenue SE and 100 Street SE. There are plans to expand onto the northwest portion of the parcel owned by the Cemetery.

4.2.8 Non-Operating Landfill Site

Bylaw 84P2018

The Plan Area contains a non-operating landfill site located at 8775 17 AV SE. This landfill was not an approved facility and there are limited details in regards to its operation. Alberta Environment & Parks' (AEP) records indicate that the facility operated from 1974-2005 and accepted commercial and residential inert demolition waste materials.

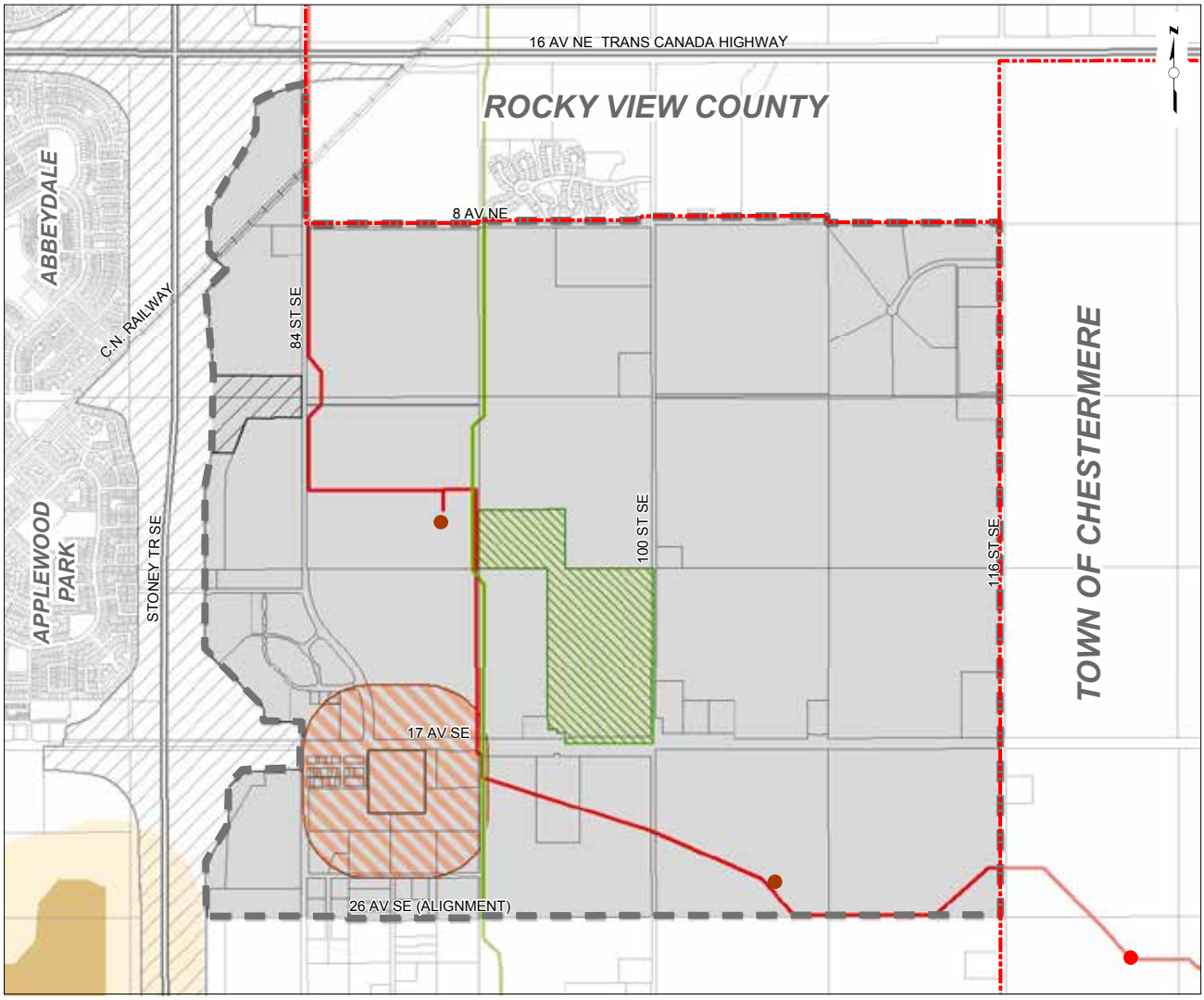
Setbacks from the non-operating landfill for restricted uses are established by the Subdivision and Development Regulation, Alberta Regulation 43/2002 (SDR) under the Municipal Government Act (MGA). Development of schools, hospitals, food establishments or residential uses on lands within in the 300 metres SDR setback should not be approved unless a consent to vary the setback distance from the landfill is provided by AEP. The setback is conceptually illustrated on ***Map 3: Attributes and Constraints*** and on ***Map 5: Land Use Concept.*** Refer to section ***10.10.2 Special Study Area***, and ***Appendix F: Background Information for the Non-Operating Landfill***.

4.2.9 Canadian National (CN) Rail

CN Rail operates main lines through Calgary and a small portion runs through the Plan Area. The line runs in part, from the Calgary Intermodal Terminal near Barlow Trail and 54 Avenue SE, northeast through the edge of the Chateau Estates Mobile Home Park (see ***Map 3: Attributes and Constraints***) and continues to the CN Calgary Logistics Park in Conrich.

4.2.10 Intermunicipal Interface

The Plan Area abuts the Rocky View County boundary to the north along 8 Avenue NE, as well as the Town of Chestermere boundary to the east along 116 Street SE. Because of this interface, intermunicipal planning is required (see ***section 12.5 Intermunicipal Coordination***).



Map 3

Attributes and Constraints

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area
- Cemetery
- Sour Gas Well Suspended*
- Abandoned Well
- Abandoned Pipeline
- Low Vapor Pressure Pipeline
- Low Vapor Pressure Pipeline 15m Setback
- East Calgary Landfill
- East Calgary Landfill 450m Working Area Setback
- Landfill Property Boundary
- 300m Permanent Setback

0 200 400 600 800 1,000

Metres

Approved: 2P2013
Amended: 84P2018

This map is conceptual only. No measurements of distances or areas should be taken from this map.

*At the time of original ASP adoption. Status subject to change. Contact operator for current status.

5. A PROSPEROUS ECONOMY

Municipal Development Plan Goal: Build a globally competitive city that supports a vibrant, diverse and adaptable local economy, maintains a sustainable municipal financial system and does not compromise the quality of life for current and future Calgarians.

deleted **Bylaw 48P2023**

Map 4 deleted **Bylaw 48P2023**

6. SHAPING A MORE COMPACT URBAN FORM

Municipal Development Plan Goal: to direct future growth of the city in a way that fosters a more compact, efficient use of land, creates Complete Communities, allows for greater mobility choices and enhances vitality and character of local Neighbourhoods.

Purpose

The purpose of this section is to provide a future land use framework to develop compact, walkable and vibrant Communities, strategically direct growth, promote walking, cycling and transit, and provide opportunities for the intensification and redevelopment of the existing country residential areas. Intensity targets for people and jobs are provided to achieve an efficient land use pattern that supports transit and local services.

Land Use Concept

6.1 General Policies for all Land Use Areas

These policies shall apply to all of the Land Use Areas.

6.1.1 Mobility

1. Mobility Policies

a. Connectivity and mobility throughout each Land Use Area will be facilitated by a block-based road network comprised in part of walkable streets fronted by Street-Oriented design. This will allow for short and direct pedestrian connections with multiple routing options to the various destinations within the Plan Area.

b. Transit bus stops design should accommodate efficient transit access, comfortable passenger waiting areas, bicycle parking, and safe, direct and unobstructed routes for pedestrians and cyclists connected to the pedestrian network of a site.

6.1.2 Design

1. Design Policies

a. Design within all Land Use Areas should conform to the policies in ***section 8: Urban Design, section 9: Connecting Communities*** as well as the ***Neighbourhood Design Guidelines in Appendix D***.

b. Design of all Land Use Areas should minimize disturbance and maximize connectivity of Environmental Open Space, as well as provide sightlines and/or public access. Where the Environmental Open Space is not protected through Environmental Reserve dedication or other means, it may be considered developable, subject to ***section 3.7 Plan Limitations*** and the policies of the adjacent Land Use Area.

c. The use of Form-Based Controls emphasizing the importance of the public realm is recommended to meet the design policies for the Transit Station Planning Area, Community Activity Centre, Retail Centres and the Urban Corridor (see ***section 12.3 Form-Based Control Opportunities***).

6.1.3 Environmental Sustainability

1. Environmental Sustainability Policies

a. Design of all Land Use Areas should conform to the policies in ***section 10: Greening Communities***, and to the ***Appendix E: Environmental Design Guidelines***.

b. Development of district energy and innovative green building technology are promoted in accordance with the guidelines in ***Appendix E: Environmental Design Guidelines***.

c. A District Energy Assessment may be required at the Outline Plan / Land Use Amendment stage for applications within the Urban Corridor, retail centres, the Community Activity Centre, (see ***Map 5: Land Use Concept***) and any other area deemed appropriate by the Approving Authority.

6.1.4 Intermunicipal Interface

1. Intermunicipal Interface Policies

a. Intermunicipal land use interface shall be discussed at the Outline Plan / Land Use Amendment process through circulation of applications, to ensure appropriate buffering is provided.

6.1.5 Evaluation

1. Evaluation Policies

a. The detailed uses and size of each Land Use Area shall be determined at the time of Outline Plan / Land Use Amendment application.

b. A Concept Plan may be required at the Outline Plan/Land Use Amendment stage for lands containing a NAC, CAC or Urban Corridor, that demonstrates how the Land Use Area functions comprehensively, and integrates with and connects to the surrounding uses.

A list of required studies for the evaluation of Outline Plan / Land Use Amendment application is contained in ***Appendix A: Required Studies, Analysis & Concept Plans***.

c. Applications using Form-Based Controls may have alternate requirements, at the discretion of the Approving Authority (see ***section 12.3 Form-Based Control Opportunities***).

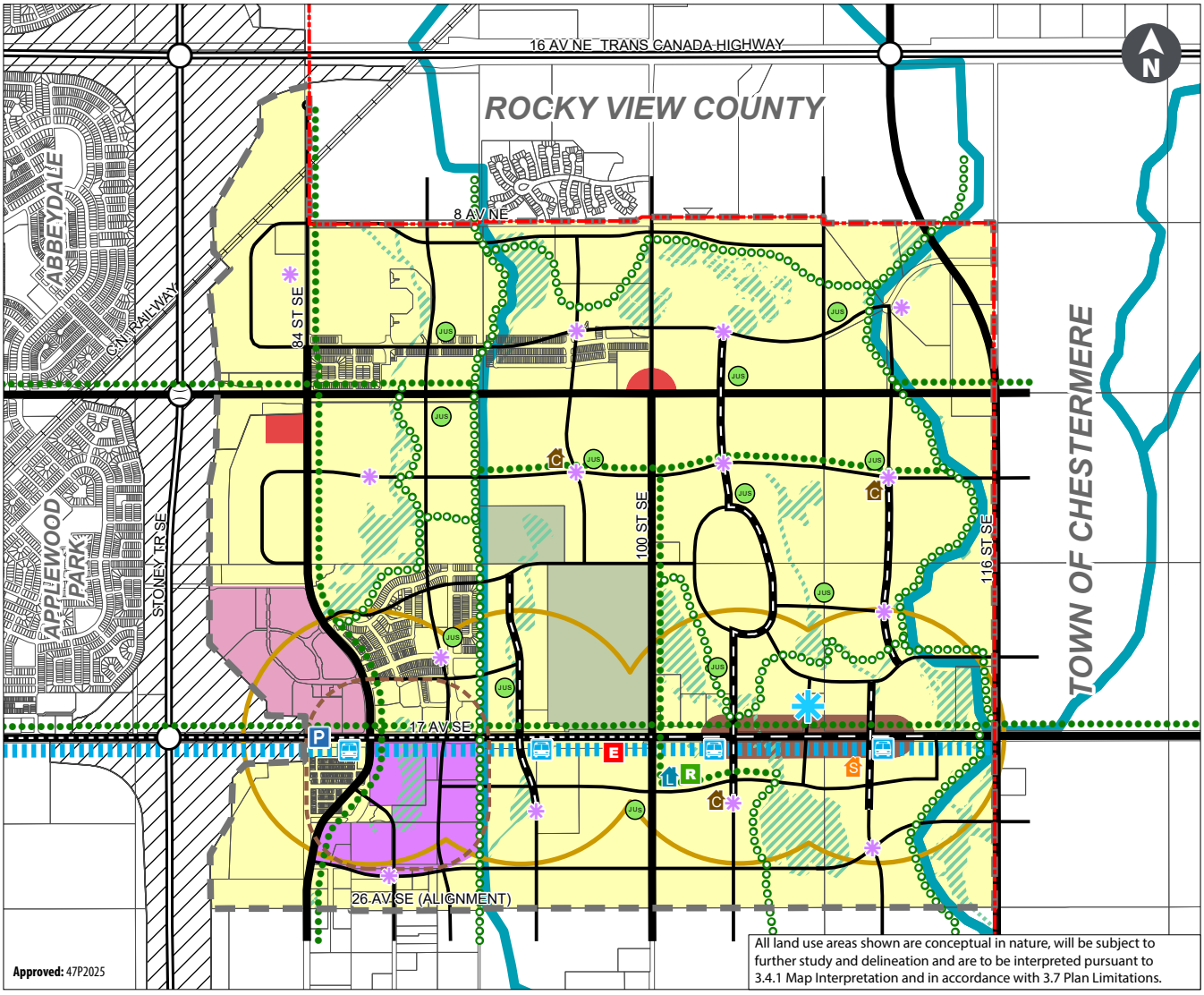
6.2 Complete Communities

Purpose

The Plan Area includes four Communities and multiple employment areas as shown on *Map 5: Land Use Concept* and *Map 6: Community and Neighbourhood Concept*. The approximate size of each Community is shown in *Table 3*. In the MDP, "Community" is typically used to describe a geographic area of between 5,000 and 20,000 residents that is planned comprehensively and developed over a period of time. The boundaries of a Community are usually used to delineate community associations and statistical data collection boundaries.

In this ASP, the Plan Area shall have four Communities, each Community containing three to four Neighbourhoods. Neighbourhood is defined in the MDP as a distinct part of a larger Community, containing up to 5,000 people. A Neighbourhood is typically considered as a primarily residential area within walking distance of a local commercial area, school, park, transit station, etc. There are approximately 14 Neighbourhoods within the Plan Area.

A Complete Community is defined as being 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.



Map 5

Land Use Concept

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area Boundary
- Neighbourhood Area
- Neighbourhood Area (Restricted)
- Community Retail 2 Centre
- Special Study Area
- Urban Corridor
- Super Regional Retail Centre
- Cemetery
- Environmental Open Space Study Area
- Transit Station Planning Area
- 300m Permanent Setback
- Community Centre
- Emergency Response Station
- Library
- Recreation Facility
- Community Activity Centre
- Neighbourhood Activity Centre
- Joint Use Site
- High School
- Shepard Regional Drainage System (per 2011 AECOM Report)
- Skeletal Road
- Arterial Street
- Urban Boulevard
- Neighbourhood Boulevard
- Parkway
- Collector Road
- Full Interchange
- Overpass
- Regional Pathway
- Green Corridor
- BRT Route
- BRT Stop
- Park and Ride

0 200 400 600 800 1,000
Metres

This map is conceptual only. No measurements of distances or areas should be taken from this map.

Table 3: Belvedere ASP Community Size, Number of Neighbourhoods, Anticipated Population and Jobs

Community Neighbourhood	Area (ha / ac)	Anticipated Number of Neighbourhoods	Anticipated Population	Anticipated Jobs
A	359 ha (886 ac)	4	19,600	2,200
B	279 ha (691 ac)	4	16,750	1,700
C	317 ha (785 ac)	3	16,150	2,200
D	*266 ha (657 ac)*	3	*11,765*	*3,724*
Total	***1,221 ha (3,019 ac)***	**14**	***64,265***	***9,824***

BYLAW 46P2023

6.2.1 General Complete Community Policies

1. Size and Intensity of Complete Community Policies

a. Each Community shall achieve a minimum Intensity of 60 people and jobs per Gross Developable Hectare; and

b. Communities shall achieve a target Intensity of 70 people and jobs per Gross Developable Hectare at full build-out.

c. Minimum density requirements are to reflect the policies and knowledge at the time of each land use/outline plan application. The minimums identified in this ASP may not be appropriate at that time and should be adjusted as required as long as they can be serviced by the approved infrastructure.

2. Each Complete Community should provide the following

a. a broad range of housing choices covering a mix of built forms at Densities that support transit viability, and support changing demographics within the Community;

b. a range of Local Commercial Uses that both provide employment and allow residents to meet most of their basic shopping needs without leaving the Community;

c. schools, Places of Worship, culture and leisure spaces, Child Care Facilities, Care Facilities, and community services;

d. spaces for community gardens and local food production;

e. transit stops within a 400m walking distance for residents throughout the Community;

f. a connected pathway, bikeway, sidewalk and roadway network allowing convenient pedestrian and vehicle access to focal points within the Community such as schools and facilities, Activity Centres and Urban Corridors;

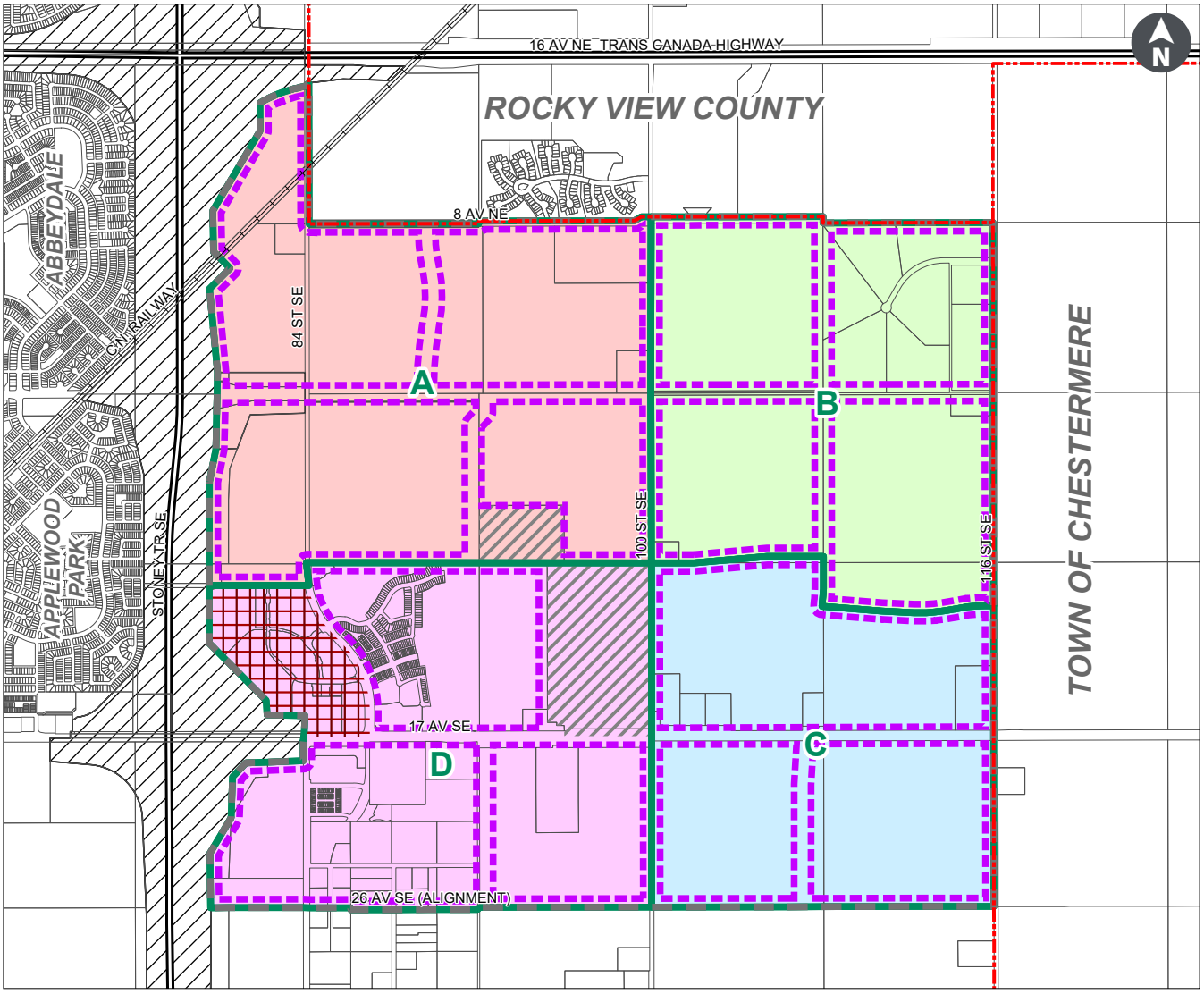
g. Green Infrastructure and energy efficient design and site planning;

h. public spaces, parks and recreation facilities;

i. distinctive, attractive Neighbourhoods designed with natural elements that contribute to local identity and provide a sense of place;

j. permeability of streets to allow all modes of travel to easily move between Communities; and,

k. retention of sensitive environmental areas.



Map 6

Community and Neighbourhood Concept

Legend
- City / Town / County Limits
- Transportation/ Utility Corridor
- Plan Area Boundary
- Community Boundary
- Neighbourhoods
- Cemetery
- Super Regional Retail Centre

0 200 400 600 800 1,000
Metres

Approved: 2P2013
Amended: 16P2020, 46P2023

This map is conceptual only. No measurements of distances or areas should be taken from this map.

3. Community Identity

Community identity should be enhanced through the provision of

a. street names and identification signage that reflect the Plan Area's historical context and/or natural features;

b. a high quality of architecture and urban design to create attractive streetscapes convenient for all modes of travel, particularly in Activity Centres;

c. preservation and integration of unique natural features;

d. branding of significant local parks;

e. landmark buildings or structures;

f. public art to be integrated with public places; and

g. identification of historical resources, and development of interpretive features about such sites.

6.3 Neighbourhoods

Purpose

The Communities within the Plan Area will contain a series of Neighbourhoods as demonstrated conceptually on *Map 6: Community and Neighbourhood Concept*. The boundaries of Neighbourhoods may be refined at the time of Outline Plan / Land Use Amendment without amending this ASP. Each Neighbourhood will promote the MDP goals of walkability, accessibility and a sense of place. Neighbourhoods typically consist of a Neighbourhood Area (as defined in *section 6.4*) and an Activity Centre or corridor forming a cohesive and functional arrangement of parks, transit stops and a mix of uses. The following sections provide policy guidance for the planning and design of Neighbourhoods.

6.3.1 General Neighbourhood Policies

1. Size and Density of Neighbourhoods

a. All lands within Communities A, B, C and D will be identified as part of a Neighbourhood, with the exception of Environmental Open Space that forms the boundary of one or more Neighbourhoods, the cemetery and the Super Regional Retail Centre.

b. There should be a minimum of 14 Neighbourhoods in the Plan Area as shown in ***Table 3.*** The number of Neighbourhoods and Neighbourhood boundaries may vary provided the Neighbourhood design is in accordance with the policies in this section.

2. Composition of Neighbourhoods

a. To provide residents with a walkable, Street-Oriented environment, a Neighbourhood

i. shall be composed of a Neighbourhood Area that is designed around an Activity Centre, Corridor or Retail Centre; and

ii. should range between 40 and 75 hectares (100 to 185 acres) (including the Neighbourhood Area and the Activity Centre, Urban Corridor or Retail Centre) unless otherwise indicated on ***Map 6: Community and Neighbourhood Concept***.

b. Multi-Residential developments should not be used as a buffer between road alignments (e.g., Transportation Utility Corridor or Arterial Streets) and other types of development.

3. **Design of Neighbourhoods**

   a. A Neighbourhood should provide a distinct identity for its residents, created through the use of natural features including sightlines and access to Environmental Open Space, public parks, gathering places, streetscape design, distinctive buildings, landmarks and public art.

   b. The design of Neighbourhoods, including Activity Centres and Urban Corridors, should conform to the policies in ***Section 8: Urban Design*** and ***Section 9: Connecting Communities. Appendix D: Neighbourhood Design*** provides a set of examples and illustrations that demonstrate ways the policies might be achieved.

6.4 Neighbourhood Areas

Purpose

Neighbourhood Areas consist primarily, though not exclusively, of residential uses. More specifically, it is the residential component of a Neighbourhood and excludes Activity Centres, Urban Corridors and Environmental Open Space. A well designed Neighbourhood Area provides a range of housing choices that meets the needs of Calgary's diverse population, as well as convenient access to amenities such as parks, community gardens, schools, recreation facilities and the Activity Centre or Urban Corridor via a transportation network that balances the needs of pedestrians, cyclists and drivers.

6.4.1 Neighbourhood Area Policies

1. **Size and Density of the Neighbourhood Area**

   a. To ensure the ASP meets the Density requirements of the MDP, a minimum residential Density of 20 units per gross developable residential hectare (GDRHa) (8 units per gross developable residential acre) (GDRac) is required in the Neighbourhood Area within each Neighbourhood.

   b. 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 minimum required Density.

2. **Composition of Neighbourhood Areas**

   a. Neighbourhood Areas shall provide a variety of housing forms and affordability levels in accordance with the policies in ***section 7.1 Housing Diversity***.

   b. Neighbourhood Areas should include opportunities for residential-based commercial uses such as Live-Work Units and Home-Based Businesses and Child Care Facilities.

   c. Neighbourhood Areas should provide opportunities for a variety of compatible uses, if such development does not compromise the viability of similar development in Neighbourhood Activity Centres. Uses include but are not limited to the following:

      i. Civic Uses including Cultural, Recreational, and Institutional uses;

      ii. Child Care Facilities and Care Facilities in accordance with policies in ***section 7.2 Community Services and Facilities***;

      iii. Neighbourhood retail centres in accordance with the policies in ***section 6.9 Retail Centres***; and

      iv. other compatible uses as deemed appropriate by the Approving Authority.

   d. If present in Neighbourhood Areas, uses listed in subsection (c) above should be well connected to pedestrian routes, located near transit stops or adjacent to an Activity Centre, wherever practical.

   e. Multi-Residential Developments should be located in the Neighbourhood Area only if such development does not compromise the viability of similar development in the Activity Centre, Urban Corridor or Retail Centre, to the satisfaction of the Approving Authority.

   f. When Multi-Residential Development is deemed appropriate in the Neighbourhood Area, it should be located

i. in close proximity to transit stops;

ii. adjacent to natural features, open space, or other amenities; and

iii. on sites integrated with other types of housing, preferably conforming to the block pattern.

3. Mobility in Neighbourhood Areas

a. To provide residents with a Street-Oriented environment, the transportation network in Neighbourhood Areas

i. shall be designed with a block-based pattern; and

ii. should provide multiple routing options for residents to access the Activity Centre or Urban Corridor safely and conveniently using walkways, pathways and / or streets.

b. P-loops, culs-de-sac and other single-access street patterns should be avoided wherever practical. In cases where this is deemed impractical by the Approving Authority, safe and attractive pedestrian and bicycle connections shall be provided to link streets.

4. Neighbourhood Area (Restricted)

A parcel of land located at the intersection of Stoney Trail and Memorial Drive SE (alignment) at the time of approval of this ASP, is owned by the Province of Alberta (***Map 5: Land Use Concept)***. These are lands included in the Transportation and Utility Corridor and subject to the Calgary Restricted Development Area Regulations (AR 212/76). This regulation states, at s. 5(2)(k)

(2) No person, shall without the written consent of the Minister, continue, commence or recommence any operation or activity that causes, or will likely cause any surface disturbance of land in the Area or to construct or erect any buildings on any land in the Area, and without limiting the generality of the foregoing, no person shall, without the consent of the Minister, continue, commence or recommence any operation or activity that is of the kind falling within the following descriptions...

(k) the preparation of land to be used for the purpose of residential, commercial or industrial sites or for recreational development

a. The Neighbourhood Area (Restricted) lands noted above shall not be used for residential purposes without written consent from Minister of Infrastructure;

b. Notwithstanding ***policy 4(a) above***, should the Province of Alberta remove the aforementioned lands from the Restricted Development Area Regulations, an Order in Council shall be required to change the boundary of the TUC and remove the Restricted Development Area notification from affected titles. Lands would then revert to Neighbourhood Area and not require an amendment to the ASP.

deleted **Bylaw 84P2018**

6.5 Neighbourhood Activity Centres (NAC)

Purpose

NACs provide Neighbourhoods with focal points that contain a mix of transit supportive residential and non-residential uses. Connected to their surrounding Neighbourhood Areas by a network of converging streets, walkways and pathways, they are designed to provide a positive pedestrian environment and establish activity in the public realm.

6.5.1 Neighbourhood Activity Centre Policies

1. Location of NAC

a. NAC should be located

i. central to the surrounding Neighbourhood Area in order that all Neighbourhood residents live within a 700m network walking distance via the transportation network;

ii. along the Collector streets to allow access for transit services; and

iii. in the conceptual location as shown on ***Map 5: Land Use Concept***, may be refined at the Outline Plan / Land Use Amendment stage without an amendment to the ASP.

2. Size and Intensity of NAC

a. Each NAC

i. shall comprise of a mix of land uses that reach a minimum Intensity of 100 people and jobs per Gross Developable Hectare.

ii. should comprise an area of approximately 2 to 4 hectares (5 to 10 acres).

3. Composition of NAC

a. Each NAC should be a comprehensively planned, Mixed-Use area consisting of a central amenity space, Medium-Density Multi-Residential Development, and a non-residential use.

b. Residential uses in the NAC

i. shall accommodate a range of Medium-Density Multi-Residential Development (such as ground-oriented Multi-Residential Developments, and low to medium profile Multi-Residential Development) in accordance with the policies in ***Section 7.1 Housing Diversity Policies***;

ii. should be developed on multiple sites less than one hectare (2.5 acres); and

iii. should include opportunities for residential-based commercial uses such as Live-Work Units and Home-Based Businesses including Child Care Facilities.

c. At least 300m^2 (3,230ft^2) of building use area shall be provided in the NAC to provide for non-residential uses such as Local Commercial, Civic (Cultural, Recreational, Institutional), and / or Employment Uses in a Mixed-Use or stand-alone format.

d. Non-residential development in the NAC

i. shall be oriented to the street and have direct pedestrian connections from the public sidewalk to building entrances;

ii. should be small in scale, consistent with nearby residential areas;

iii. should have limited use sizes;

iv. should provide for only limited vehicular uses; and

v. should include other compatible uses as deemed appropriate by the Approving Authority.

e. The central amenity space in a NAC

i. shall be designed as a multi-functional space, such as a plaza or park;

ii. shall comprise a land area of 0.2 to one hectare (0.5 to 2.5 acres);

iii. should be bound by streets and/or active building facades;

iv. should be located on a prominent site; and

v. should be located in close proximity to one or more transit stops.

f. To create an appropriate level of activity and sense of spatial enclosure, no more than 25% of dwelling units adjacent to the central amenity space should be provided in the form of single detached houses.

4. Mobility in NACs

a. To provide a high degree of connectivity for pedestrians, cyclists and drivers the design of the transportation network in and around the NAC

i. shall be composed of a block-based network of interconnected streets, walkways and pathways;

ii. should provide a quality streetscape (e.g., laned-product, etc.)

iii. should provide safe and convenient walkway and pathway access; and

iv. should restrict culs-de-sac, p-loops and other single-access street patterns.

b. Transit facilities should be a well-integrated focal point of the NAC.

5. Modification of NAC Composition

a. In the situation where a Neighbourhood contains a Community Activity Centre (CAC) or Urban Corridor the following changes can be made to the composition and design of the NAC

i. The Medium-Density Multi-Residential Development and the non-residential components required in the NAC can instead be located in the CAC, Urban Corridor; and

ii. The transportation network in the Neighbourhood Area should provide a high degree of connectivity to the CAC or Urban Corridor.

b. The NAC should always provide a central amenity space for residents even in the case where the Neighbourhood contains a Community Activity Centre or Urban Corridor.

c. For a NAC to be subject to ***section (5) a. i.***, an Outline Plan / Land Use Amendment application shall demonstrate that the appropriate land uses necessary to constitute a Community Activity Centre or Urban Corridor are located elsewhere in the Neighbourhood, to the satisfaction of the Approving Authority.

6. Applications Containing a NAC

a. An application for Outline Plan and / or Land Use Amendment which contains a NAC should include all lands contained within the NAC. Alternately a detailed Concept Plan shall be submitted for all lands within the NAC, following a process of consultation with adjacent landowners.

b. All landowners deemed by the Approving Authority to be located within the NAC should reach agreement on the overall Concept Plan prior to approval of the first Outline Plan / Land Use Amendment application within the NAC.

7. Evaluation of Development within the NAC

a. Development applications for areas adjacent to the NAC shall establish a development pattern that ensures the proper functioning of the NAC as a highly-connected transit-oriented area.

6.6 Community Activity Centre (CAC)

Purpose

The purpose of the Community Activity Centre is to provide a comprehensively planned, Mixed-Use area serving the needs of one or more Communities. It should consist of a mix of commercial uses, ground-oriented and Medium to High-Density Multi-Residential Development, as well as Recreational, Institutional, and Cultural Uses. It should provide a balance of mobility for pedestrians, cyclists, transit vehicles and automobile drivers through thoughtful design and placement of buildings, streets and infrastructure. The land use Intensity of the CAC should promote a vibrant street environment that can be supported by the Primary Transit Network, allowing residents and employees safe and convenient mobility options.

6.6.1 Community Activity Centre Policies

1. Location of CAC

a. The CAC should be located

i. along or in proximity to the Primary Transit Network; and

ii. in the conceptual location as shown on ***Map 5: Land Use Concept***, may be refined at the Outline Plan / Land Use Amendment stage without an amendment to the ASP.

2. Size and Intensity of CAC

a. The use Intensity of a CAC shall achieve 150 people and jobs per Gross Developable Hectare upon full build out.

b. The CAC should be a minimum of 4 hectares (10 acres).

c. No more than 70% of the land use Intensity in a CAC should be achieved with any one general land use type (e.g., residential, employment, retail, institutional, etc.) to ensure an appropriate mix of uses.

3. Composition of the CAC

a. To create a cohesive urban environment, the CAC shall include an integrated mix of residential and commercial uses along with an appropriate amount of amenity space.

b. Commercial development in the CAC

i. should consist of Small and Medium Format Retail Uses totalling between 2,800m^2 (30,139 ft^2)and 19,000m^2 (±5%) (204,514 ft^2);

ii. shall be integrated vertically and/or horizontally with other uses; and

iii. should include a site for a Community-scale food store.

c. Residential development in the CAC

i. shall accommodate a broad range of ground-oriented and Medium to High-Density Multi-Residential Development;

ii. shall be integrated vertically with other uses;

iii. should comprise no less than 30% of the land use Intensity of the CAC; and

iv. should be distributed throughout the CAC on multiple small and medium sites, less than 2 hectares.

d. Amenity space(s) in the CAC

i. shall be designed to accommodate active and passive recreation;

ii. shall comprise no less than 5% of the total land area of the CAC; and

iii. should include a Transit Plaza central to the CAC.

e. Other uses are also promoted in the CAC and may include the following

i. Cultural, Recreational, and Institutional Uses;

ii. Child Care Facilities and Care Facilities in accordance with policies in ***section 7.2 Community Services and Facilities***; and other compatible uses as deemed appropriate by the Approving Authority.

f. Employment Uses within the CAC should achieve a minimum Floor Area Ratio (FAR) of 0.5.

g. Retail uses within the CAC should achieve a minimum FAR of 0.3.

h. Notwithstanding the conditions of ***section 6.6.1 Section 3(b) (i)*** Small and Medium format Retail uses may exced 19,000m^2 (±5%) (204,514 ft^2) if the following planning and design conditions are met to the satisfaction of the Approving Authority.

   i. If it can demonstrate at the outline plan stage that the scale and intensity of the Community Activity Center integrates appropriately with the scale and intensity of the adjacent uses.

   ii. Employment development demonstrates significant contribution to the Plan Area as a catalyst for future residential and economic development.

   iii. All employment uses shall consider the interface with adjacent development to ensure appropriate integration and transitions are provided. This includes uses within the Plan Area adjacent to other municipalities.

   iv. That a Transportation Impact Assessment can demonstrate that the transportation infrastructure has the capacity to support the increased intensity of use.

4. Mobility within the CAC

a. To provide a high degree of connectivity for pedestrians, cyclists and drivers the design of the transportation network in and around the CAC

   i. shall be composed of a block-based network of interconnected streets, walkways and pathways;

   ii. should provide safe and convenient walkway and pathway access between different uses and sites throughout the CAC;

   iii. should limit surface parking; however when necessary, convenient pedestrian pathways connecting uses should be provided through the surface parking; and

   iv. should restrict culs-de-sac, p-loops and other single-access street patterns from the network in and around the CAC.

b. The CAC should be served by the Primary Transit Network, with a stop located at the Transit Plaza, allowing transfers to and from feeder lines. Transit facilities should be a focal point of the CAC.

c. Where a CAC spans one or more Arterial streets, the Arterial street(s), including the roadway and roadside, shall be designed to accommodate the safe and convenient movement of pedestrians and cyclists.

5. Applications Containing a CAC

a. An application for Outline Plan and / or Land Use Amendment which contains a CAC should include all lands contained within the CAC.

b. Where an application for the entire CAC is not able to be provided, a detailed Concept Plan shall be submitted for all lands within the CAC.

6. Evaluation of Development within the CAC

a. Development applications for areas adjacent to the CAC shall establish a development pattern that ensures the proper functioning of the CAC as a highly-connected transit-oriented area.

6.7 Urban Corridor

Purpose

The ASP identifies an Urban Corridor extending along 17 Avenue SE from approximately 103 Street SE to 113 Street SE. The Urban Corridor will provide a variety of housing and commercial opportunities.

Development within the Urban Corridor will comprise High-Density Residential, Employment and Local Commercial Uses. Development in the Urban Corridor shall create a strong pedestrian environment by providing a variety of transit-supportive uses and active street frontages along 17 Avenue SE.

The Plan Area will also provide an anchor component to the 17 Avenue SE revitalization area east of the TUC bringing a complement of commercial uses to the overall 17 Avenue SE transportation corridor.

6.7.1 Urban Corridor Policies

1. Location of the Urban Corridor

The Urban Corridor is shown conceptually on ***Map 5: Land Use Concept*** on both sides of 17 Avenue SE.

2. Size and Intensity of the Urban Corridor

a. The Urban Corridor should be a minimum of one block wide on both sides of 17 Avenue SE.

b. The Urban Corridor shall be comprised of residential, commercial, and other uses that achieve a minimum Intensity of 200 jobs and people per Gross Developable Hectare upon full build-out.

3. Composition of the Urban Corridor

The Urban Corridor shall contain a range of commercial and residential uses in a mix of housing types to accommodate a diverse population. The Urban Corridor is to be Street-Oriented, with a well designed public realm and buildings oriented towards, and with primary entrances on, 17 Avenue SE.

a. To create a vibrant pedestrian environment that supports transit services the Urban Corridor shall include a cohesive mix of residential and commercial uses and an appropriate amount of amenity space.

b. Commercial development in the Urban Corridor shall

   i. accommodate retail uses that fit a pedestrian scale;

   ii. be integrated vertically with other uses; and

   iii. accommodate Employment Uses.

c. Residential development in the Urban Corridor

   i. shall provide a broad range of Medium and High-Density Multi-Residential Development;

   ii. shall be integrated vertically with other uses; and

   iii. should comprise no less than 30% of the land use Intensity of the Urban Corridor.

d. The multi-functional amenity space(s) in the Urban Corridor should

   i. be provided to create points of interest along the Urban Corridor and / or enhance the design of prominent intersections; and

   ii. include a Transit Plaza in a prominent location along the Urban Corridor.

e. Other uses are also promoted in the Urban Corridor and can include the following

   i. Cultural, Recreational, and Institutional Uses;

   ii. Child Care Facilities and Care Facilities in accordance with policies in ***section 7.2 Community Services and Facilities***; and

   iii. other compatible uses as deemed appropriate by the Approving Authority.

f. Employment Uses within the Urban Corridor should achieve a minimum FAR of 0.5.

g. Retail uses within the Urban Corridor should achieve a minimum FAR of 0.3.

4. Mobility within the Urban Corridor

a. The Urban Corridor should be served by the Primary Transit Network with feeder bus routes linking to the surrounding Neighbourhoods Areas.

b. The primary street type as defined in The City's ***Interim Complete Street Guide*** along the Urban Corridor shall be an Urban Boulevard, which prioritizes the movement of pedestrians, cyclists and transit vehicles above private automobiles.

c. Streets parallel to 17 Avenue SE should be designed to provide alternate route options for east-west traffic.

5. Applications Containing an Urban Corridor

a. An application for Outline Plan / Land Use Amendment which contains an Urban Corridor should include all lands contained within the Urban Corridor.

b. A detailed Concept Plan shall be submitted for all lands within the Urban Corridor.

6. Evaluation of Development within the Urban Corridor

a. Development applications for areas adjacent to the Urban Corridor shall establish a pattern of development that ensures the proper functioning of the Urban Corridor as a highly-connected transit-oriented area.

6.8 Transit Station Planning Area

Purpose

The Transit Station Planning Area includes land within 600m of any Bus Rapid Transit (BRT) station. The intent of designating a Transit Station Planning Area is to focus the composition and design of the land use, transportation network and streetscape within the 600m zone in a way that both supports transit use and takes fullest advantage of the significant investment that primary transit service represents. The Transit Station Planning Area will act as an overlay for another planning typology such as an Activity Centre or Urban Corridor.

6.8.1 Transit Station Area Policies

1. General Transit Station Planning Area Policies

a. Development in the Transit Station Planning Area shall provide a transition of land use Intensities with the highest in proximity to the transit station and lowest further from the station.

b. Streets, walkways and pathways shall converge on the transit station providing pedestrians and cyclists with safe, direct and convenient access from all parts of the Transit Station Planning Area.

c. Within the designated CAC or Urban Corridor, plans shall comply with applicable policies found in ***sections 6.6 Community Activity Centre*** and ***6.7 Urban Corridor.***

d. Portions of the Transit Station Planning Area that are outside the CAC and Urban Corridor shall comply with the policies of ***section 6.4 Neighbourhood Areas.***

e. Development within the Transit Station Planning Area should be in accordance with The City of Calgary's ***Transit Oriented Development Policy Guidelines***.

2. Composition and Design Policies

a. Within a designated activity centre or Urban Corridor, concept plans should comply with applicable policies found in ***sections 6.6 Community Activity Centre*** and ***6.7 Urban Corridor.***

b. Development within the Transit Station Planning Area should be in accordance with The City's ***Transit Oriented Development Policy Guidelines***.

c. The use of culs-de-sac, p-loops and similar single-access street patterns should be avoided within the Transit Station Planning Area to support pedestrian orientation and multi-modal connectivity (exceptions to this such as access ways to utilities and other public service facilities should be considered).

6.9 Retail Centres

Purpose

Retail Centres, as defined in the MDP section 4.1 Retail, vary in scale from Neighbourhood Retail Centres to Regional Retail Centres. Community Retail and Super Regional Retail are shown generally on Map 5: Land Use Concept. Retail Centres should exhibit high quality design provide an attractive environment for retailers and residents based on the scale of the centre. They are distinct from the CAC, typically supported by local transit service. Regardless of scale, these areas should be designed in such a way that they may transition into Activity Centres in the future. The development of Retail Centres should not compromise the viability of development of the Urban Corridor or CAC.

6.9.1 Retail Centre Policies

1. Location of Retail Centres

a. The Community Retail 2 Centres should be located in the conceptual area as shown on ***Map 5: Land Use Concept*** along Arterial and / or Collector street(s).

b. The Super Regional Retail Centre is located in the southwest corner of the Plan Area as shown on ***Map 5: Land Use Concept*** along 17 Avenue SE and abutting Stoney Trail.

2. Size and Intensity of Retail Centres

a. Per the MDP, each Community Retail 2 Centre contains between 1,900m^2 and 9,300m^2 (20,000 ft^2 -100,104 ft^2) of Retail;

b. The Super Regional Retail Centre should consist of more than 93,000m^2 (1,001,043 ft^2) of Retail.

c. Increased intensity in the Community Retail 2 Centres may be allowed if it can be demonstrated that innovative solutions fostering mixed uses that maintain the Community oriented character of the retail component, and can integrate appropriately within the size and character of the site.

3. Composition of Retail Centres

a. Retail Centres shall include significant area of publicly accessible (but privately held and maintained) space available for a variety of uses and located to be activated by adjoining retail frontages and appropriate uses. These areas are not necessarily green space and may include hardscaped plazas, landscaped green areas, underutilized and defined parking areas and widened sidewalk areas that allow for outdoor retail and cafe functions. These spaces shall be prominently located and connected to one another by the network of pedestrian and cycle routes throughout the sites, and connected to adjacent residential communities. On larger sites at least one of these sites should be large enough for assembly use by neighbourhood groups.

b. The Super Regional Retail Centre should be comprehensively planned to integrate retail, Employment, and other uses.

c. The Super Regional Retail Centre can include the following

i. Small, Medium, and Large Format Retail Uses and other similar uses;

ii. employment uses;

iii. cultural, Recreational and Institutional Uses; and

iv. other compatible uses as deemed appropriate by the Approving Authority.

d. Community Retail 2 Centres should include a site for a Community-scale food store, and can also include the following

i. Small and Medium Format Retail Uses and other similar uses;

ii. employment Uses;

iii. cultural, Recreational, and Institutional Uses; and

iv. other compatible uses as deemed appropriate by the Approving Authority.

4. Street Orientation

a. The front facade of Large-Format Retail buildings, when located within a site and facing a Primary Retail Street should be oriented to face the street and shall locate front doors to be visible and enable a safe pedestrian connection through the parking lot between the street and the front doors. Large Format Retail building facades facing Primary Retail Streets should have the majority of the length of their street facing facade occupied by smaller independent retail units with entries facing the street or have an articulated facade to provide an appropriate pedestrian scale and interest for the site context of the building.

b. Small and Medium Format Retail shall be primarily located and oriented toward the streets within Retail sites, creating a walkable street-oriented shopping environment. Primary Retail Unit entries will face public or private streets; additional entries facing rear parking areas may be provided if required; clearly located, landscaped pedestrian walkways connecting street-oriented entries with rear parking areas are recommended at reasonable intervals along street lengths. A high degree of unobstructed glazing with complete transparency will be required to contribute to the visual interest of exterior facades.

5. Approval of Retail Centres

a. The Community Retail 2 Centre and Super Regional Retail Centre should be distinct in character from the Community Activity Centre and Urban Corridor.

b. Prior to approval of an Outline Plan / Land Use Amendment application for a Retail Centre, a Retail Market Analysis shall be required to demonstrate that the development will not compromise the viability of development in the Community Activity Centre and Urban Corridor (See ***Appendix A: Required Studies Analysis, and Concept Plans*** for more details on the required Retail Market Analysis).

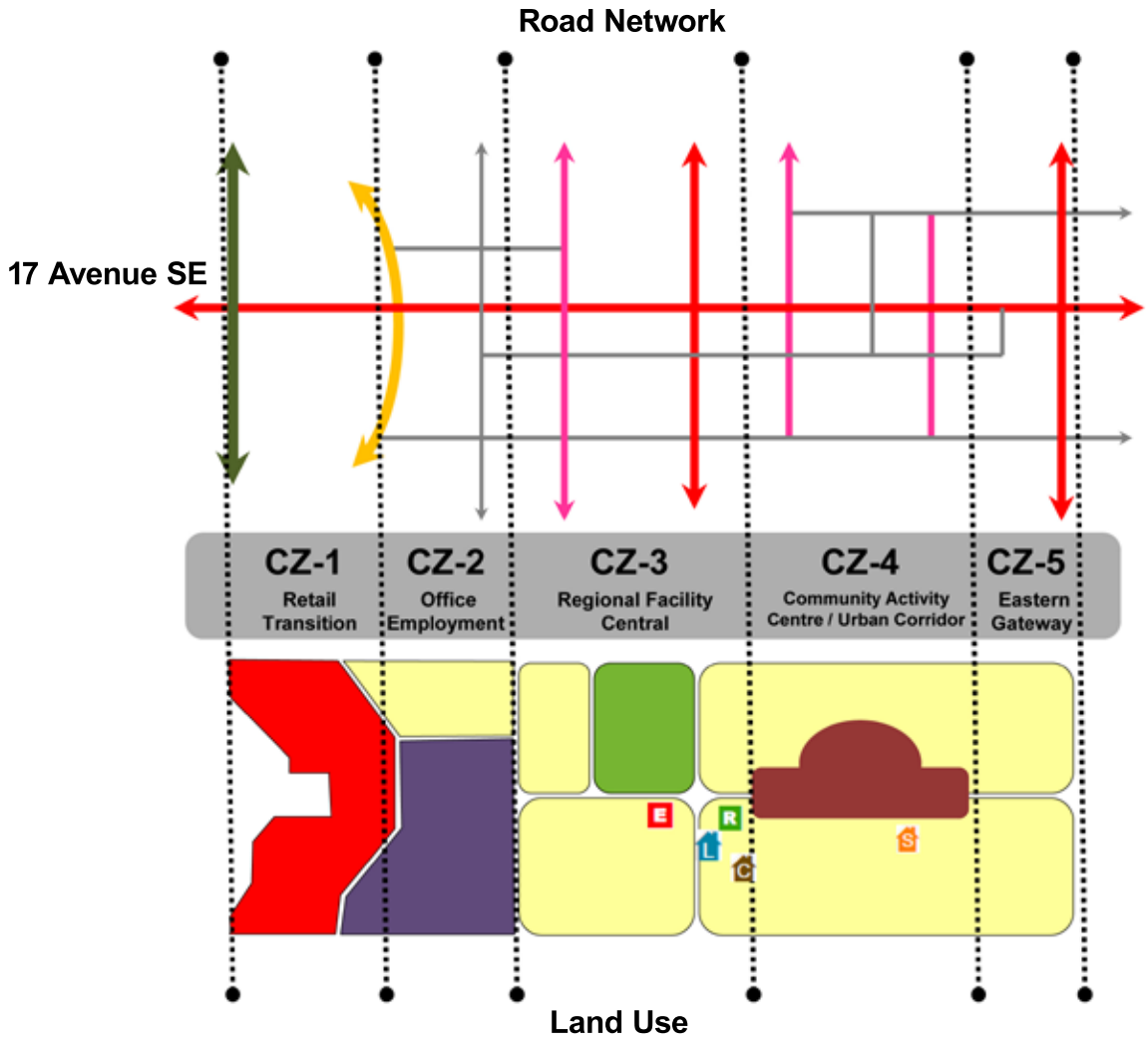
6.10 17 Avenue SE

Purpose

The main gateway to the Plan Area, 17 Avenue SE, will be a TOD corridor with future extension of BRT service, which will require moderate additional investment to enable high level transit service. The anticipated development in the Belvedere ASP area will further support and enhance the International Avenue initiative and 17 Avenue SE as an Urban Corridor, and will serve to complete the commercial spine that represents the economic heart of this larger collective on Calgary's east side.

The exhibit below illustrates the basic Character Zones (CZ) envisioned for 17 Avenue SE (Stoney Trail to 116 Street SE). The base principles of 17 Avenue SE in Belvedere comprise:

- Core transportation route of Belvedere Plan Area
- Multi-modal urban boulevard
- Mixed-use
- Job hub and a place to live
- Safe place



1. **Character Zone 1: Retail Transition Parkway (Stoney Trail to 84 Street SE)**
   a. Providing a smooth transition from Stoney Trail into the Plan Area's large format retail zone
   b. Providing good connectivity to the major transportation routes and destination retail uses
   c. Allowing for efficient regional commuting

2. **Character Zone 2: Office Employment (84 Street SE to 92 Street SE)**
   a. Transitioning land use from large and medium format retail with high consumer traffic to local level office use employment
   b. Offering employment centre opportunity to reduce commutes out of the Plan Area
   c. Adjacent residential transition allowing live, work play opportunity

3. **Character Zone 3: Regional Facility Central (92 Street SE to 102 Street SE)**
   a. Predominantly Neighbourhood Area
   b. Appropriate level of mixed-use development facing onto 17 Avenue SE
   c. Integrating the Mountain View Memorial Gardens Cemetery

4. **Character Zone 4: Community Activity Centre / Urban Corridor (102 Street SE to 112 Street SE)**
   a. Promoting a high degree of activity, design and population/employment thresholds
   b. Slowing of vehicular traffic in favour of improving pedestrian flow
   c. Transition of activity into less dense Neighbourhood Areas
5. **Character Zone 5: Eastern Gateway (112 Street SE to 116 Street SE)**
   a. Welcoming visitors and defining sense of place between Calgary and Chestermere
   b. Reducing traffic speed into Plan Area
   c. Visually defining the entranceway through building design and a pedestrian-friendly streetscape

6.10.1 Character Zone Policy

1. **The City of Calgary should commission a Corridor Study for 17 Avenue SE from Stoney Trail to 116 Street SE to comprehensively guide development along this important roadway through the Belvedere Plan Area.**

7. CREATING GREAT COMMUNITIES

***Municipal Development Plan* Goal**: Create great communities by maintaining quality living and working environments, improving housing diversity and choice, enhancing Community character and distinctiveness and providing vibrant public spaces.

Purpose

The purpose of these policies is to provide a good quality of life for Plan Area residents and workers by providing various housing choices, community services, leisure opportunities and quality amenity spaces.

7.1 Housing Diversity

Purpose

Providing for housing diversity ensures that housing needs of all ages, abilities, incomes, and sectors of society are met. Furthermore, diversity in housing forms allows residents to remain in their Community through all stages of life.

7.1.1 Housing Diversity Policies

1. Housing Forms

a. The variability in housing mix should be attractive to, and meet the needs of all ages, abilities, incomes, and sectors of society.

b. Residential land use districts that allow secondary suites should be the standard land use district for single detached housing within the Neighbourhood Area.

c. A minimum of 30% of the housing units within each Neighbourhood shall be non-single detached housing units to meet the needs of different income groups and lifestyles.

d. Non-single-detached housing units shall include, but are not restricted to the following:

   i. attached housing (duplexes, semi-detached dwellings, and townhouses);

   ii. Multi-Residential Developments (triplexes, fourplexes, stacked townhouses, apartments, and other types with three or more units in one building);

   iii. Live-Work Units;

   iv. housing that is designed to allow residents to convert their space to meet their changing needs;

   v. innovatively designed or managed housing projects such as cooperative housing developments;

   vi. secondary suites; and

   vii. cottage housing developments.

e. Multi-Residential Development units with three or more bedrooms should be included where possible.

2. Accessible Housing

a. Development of housing units accessible for persons with limited mobility should be included in each Neighbourhood as an important component of inclusivity and aging in place.

b. Development of Accessible Housing units should comprise all forms including Multi-Residential Developments and single detached dwellings.

c. Buildings with Accessible Housing units should be designed in accordance with The City of Calgary's Access Design Standards.

3. Affordable Housing

Affordable Housing is housing for which the price is income-driven rather than market-driven, and provides for the housing needs of low and moderate income households at costs below those generally found in the Calgary market. Affordable Housing can include non-market rental and non-market home ownership, and be provided by a builder, non-profit organization, or The City (or through partnerships).

a. Guidelines for Housing Affordability and Affordable Housing are intended to support and provide a framework for implementing the housing Policies which recommend the inclusion of 10% of new residential developments greater than 10 units as entry-level housing and 5% of new residential developments greater than 20 units as affordable housing. Although The City cannot currently legally require the provision of Affordable Housing, The City may work on its own or in collaboration with private developers and other organizations to meet this objective.

b. At least 10% of Affordable Housing that receives Municipal or Provincial funding shall be Adaptable Dwelling Units.

c. An Affordable Housing Needs Assessment should be required at the Development Permit stage, or when deemed appropriate by The City, to assess housing needs within the Plan Area. Considerations should include the financial viability of the development, the viability from an operator's perspective, the availability of public funding and the availability of cost off-sets and incentives. The City can work with Applicants to determine the location, size and type of Affordable Housing.

d. Affordable Housing should be dispersed at suitable locations throughout a Community, without concentrating in any one area. Potential Affordable Housing should, wherever possible and practical, be located

   i. in close proximity to the Community Activity Centre, a Neighbourhood Activity Centre, Urban Corridor and / or the Transit Station Planning Area;

   ii. near transit stops on the Primary Transit Network, close to well connected pedestrian routes; and / or

   iii. in conjunction with complementary community facilities and amenities.

e. Affordable Housing should be visually indistinguishable in quality from market housing and well integrated within Neighbourhoods.

f. Applicants should include small-scale Affordable Housing and Affordable Housing integrated within market residential developments.

g. Parking relaxations should be considered for the Affordable Housing units in developments that include an Affordable Housing component, where it is demonstrated that it is appropriate for the development, however, parking relaxations shall not impact the number of accessible parking spaces.

h. Affordable Housing units should be provided and designed in accordance with the City's *Affordable Housing Development and Design Guidelines*.

4. Visitability

Bringing visitability into the public realm enhances accessible communities. Visitability is a movement to change home construction practices so that virtually all new homes, not merely those custom-built for occupants who currently have disabilities offer a few specific features making the home easier for people with mobility challenges to live in and visit. This is even more important as average age increases, requiring more aging in place

Communities. The spirit of visitability requires homes that do not have barriers, so that people can be included in their Communities of choice and visit their friends, regardless of their mobility challenges.

a. With an aging population, applicants should consider incorporating visitability design techniques into housing, including
   i. at least one zero-step entrance approached by an accessible route on a firm surface;
   ii. wide passage doors and hallways; and
   iii. at least a half bath/powder room on the main floor.

7.2 Community Services and Facilities

Purpose

The Plan Area will provide for a full range of Community services and facilities which include community centres, recreation facilities, schools and libraries. These services, which are the shared responsibility of The City and public agencies with the participation of the private sector, are an essential component of Complete Communities. The policies from section 2.3.6 of the *MDP* will apply to all Community services and facilities in the Plan Area. For detail *Design Guidelines* see *Appendix G: Public Facilities Design Guidelines*.

7.2.1 Community Services Policies

Uses that provide a sense of community or meet the social, spiritual and family needs of residents are promoted and supported in the Plan Area. These uses may include, but are not restricted to, Child Care Facilities, Care Facilities, Places of Worship and other similar uses.

1. Child Care Facilities

a. Community child care needs should be provided for through such measures as
   i. accommodating Child Care Facilities in locations with good transportation access by all modes within Neighbourhoods;
   ii. dispersing Child Care Facilities throughout the Plan Area to maximize coverage, and avoid traffic congestion issues which can result from clustering facilities in one area; and
   iii. providing for various sizes and types of Child Care Facilities.

b. Child Care facilities should be located:
   i. within or in close proximity to Neighbourhood Activity Centres;
   ii. close to open space, parks, and other amenity areas; and
   iii. along collector streets, where possible.

c. Child Care Facilities should be planned and designed in accordance with the City's Child Care Service Policy and Development Guidelines.

2. Care Facilities

a. Care housing needs in the Community should be provided for through such measures as
   i. enabling Care Facilities, such as residential care, addiction treatment, and custodial care to locate in residential and mixed-use areas as appropriate to provide for a broad range of specialized accommodation and care to meet a diverse array of needs including nursing homes, adult group homes, youth care facilities, and rehabilitative and transitional facilities;
   ii. dispersing different types of Care Facilities throughout the Plan Area;
   iii. designing Care Facilities to be compatible in height and scale with other buildings in the community, and in a form that fits with local Neighbourhood character;
   iv. locating Care Facilities within walking distance of transit routes and stops; and
   v. locating larger Care Facilities along collector or arterial streets.

3. Places of Worship and Other Similar Uses

Places of Worship and other similar uses provide a sense of Community and contribute to strengthening of community identity. Other similar Community supportive uses can include cultural centres, health centres, and social service facilities, as deemed appropriate by the Approving Authority.

a. Cultural, Recreational Use and spiritual needs in the Community should be included through such measures as

i. Accommodating development of Places of Worship and other similar Community supportive uses in locations with good transportation access by all modes within residential Communities;

ii. Siting the development of Places of Worship and other similar Community supportive uses where they can serve as Community focal points, such as in Neighbourhood Activity Centres, Community Activity Centres, in conjunction with a Community Retail Centre, or in proximity to a JUS;

iii. Dispersing Places of Worship and other similar Community supportive uses at appropriate locations throughout the Plan Area to maximize coverage, and avoid traffic congestion issues that can result from clustering of such facilities in one location; and

iv. Ensuring that Places of Worship and other similar Community supportive uses are compatible in height, scale and size with adjacent buildings in the Community.

7.3 Joint Use Sites (JUS)

Purpose

The purpose of JUS is to provide for the development of public and separate schools together with sports fields and recreational areas on sites dedicated as reserve land pursuant to the *Municipal Government Act*. JUS are jointly owned, designed, and built by The City and the respective school board in accordance with the principles of the *Joint Use Agreement (JUA)*. The timing of the development of JUS is dependent on school board needs and funding. School needs may be met by transporting children to adjacent communities where facilities exist during the interim until schools are built.

7.3.1 Joint Use Sites Policies

1. Location of Joint Use Sites

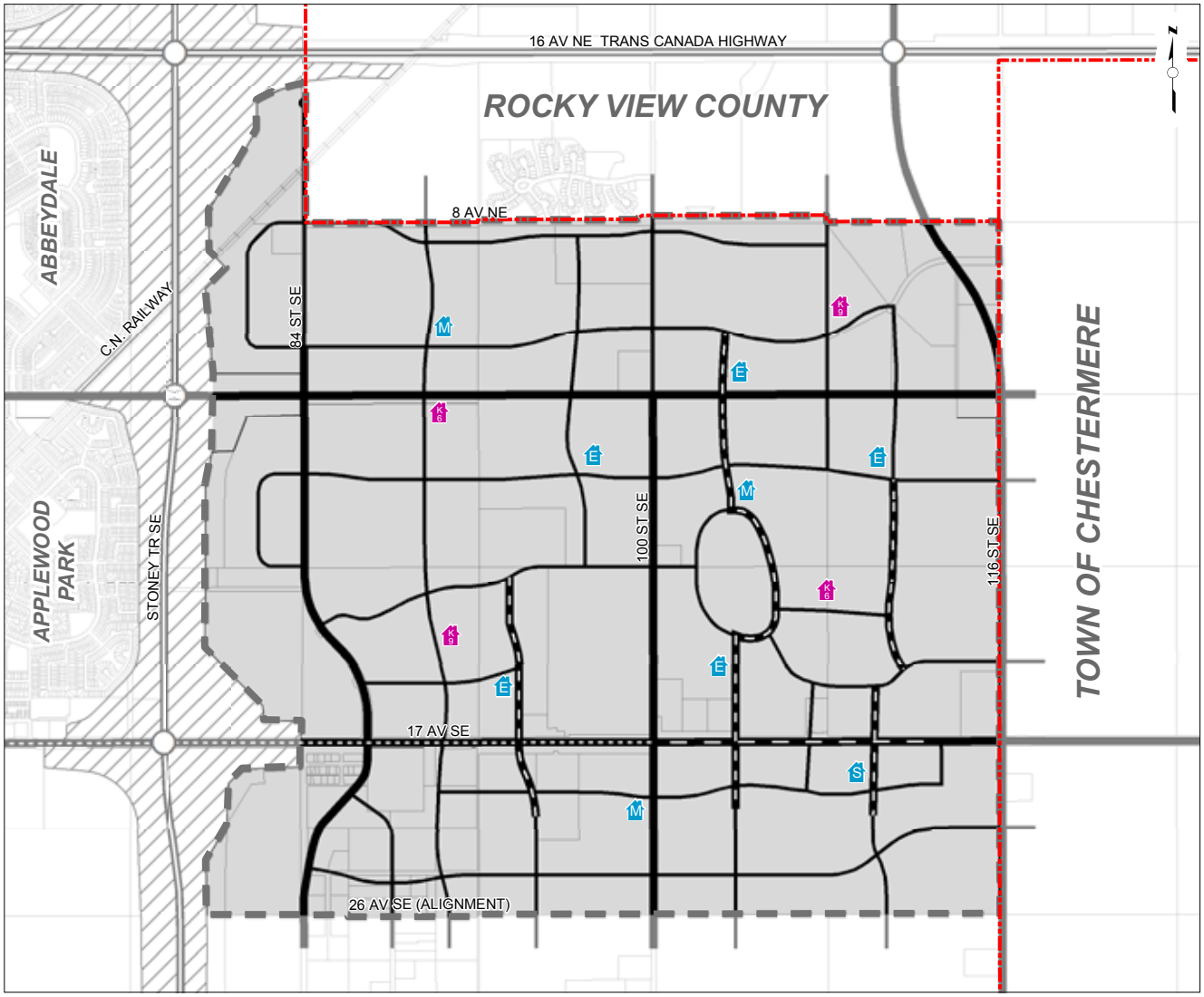
a. The JUS are shown conceptually on ***Map 5: Land Use Concept*** and ***Map 7: Joint Use Sites.*** A JUS shown on ***Map 7: Joint Use Sites*** may be relocated to the opposite side of an adjacent Collector or local road within an Outline Plan / Land Use Amendment application without requiring an amendment to the map.

b. A JUS should be suitably located in relation to its student catchment area and optimal walking distance radii.

c. A JUS shall require dual frontages to accommodate separate on-street parent and bus pickup and drop-off areas.

d. Where JUS are located within or adjacent to Activity Centres, the school building envelope should be located closest to and integrated with the Activity Centre. Schoolyards and parking for the JUS shall be located adjacent to the Activity Centre.

e. The school building envelope within a JUS should be located at the intersection of two Collector roads or a Collector road and a residential road with Collector-width standard road immediately adjacent to the site.



Map 7

Joint Use Sites

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area

Schools

- CBE - Elementary School
- CBE - High School
- CBE - Middle School
- CCSD - K-6
- CCSD - K-9

- Skeletal Road
- Arterial Street
- Urban Boulevard
- Neighbourhood Boulevard
- Parkway
- Collector Road
- Full Interchange
- Overpass

0 200 400 600 800 1,000
Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

f. Prior to Outline Plan / Land Use Amendment approval, a Concept Plan showing the proposed layout for a JUS within the application area and a preliminary grading plan should be prepared to the satisfaction of the Approving Authority, and the respective school board having regard to the requirements of the Joint Use Agreement, Site Planning Team (SPT) and Joint Use Coordinating Committee (JUCC). The requirements of the Joint Use Site Concept Plan are found in ***Appendix A: Required Studies, Analysis and Concept Plans***.

g. Detailed criteria for school sites and building requirements shall refer to the *Preferred Standards for School Sites* and ***Appendix C: Joint Use Sites***.

2. Size of Joint Use Sites

a. The size of a JUS shall be determined through the Outline Plan / Land Use Amendment process in accordance with the requirements of the Subdivision Authority, the JUCC, and the SPT and having regard to ***Appendix C: Joint Use Sites***.

b. In conjunction with the school building envelope within a JUS, suitable land should be provided for active playfields (including all required setbacks) and park space to meet the recreational needs of students.

c. The size of the JUS can be reduced if required facilities and open space are suitably shared with an adjacent use, to the satisfaction of the Approving Authority, The City and School Boards.

d. See section 7.6.5, Creditable Reserve Policies.

3. Composition of Joint Use Sites

a. The predominant use of land within a JUS shall be for educational and recreational uses including, but not limited to, public and separate schools, sports fields, parks and playgrounds.

b. JUS should provide comprehensive pedestrian and bicycle route connections to the surrounding Neighbourhood and Community and have adequate transit service as determined by Calgary Transit.

7.4 Community Centre Sites

Purpose

Three Community Centre Sites are provided for in the Plan Area to serve the physical, cultural, recreational and social needs of the Communities and enhance the quality of life for residents.

7.4.1 Community Centre Sites Policies

1. Location

a. Locations of Community Centre Sites are shown conceptually on ***Map 5: Land Use Concept***.

b. Community Centre Sites should be appropriately integrated with a JUS, NAC or other suitable Public, Recreational, Cultural, Institutional or Local Commercial Uses where possible.

c. The exact location of Community Centre Sites may be refined at the time of Outline Plan / Land Use Amendment.

2. Size of Community Centre Sites

a. Three Community Centre Sites should be approximately 1.2 hectares (3.0 acres) to 1.6 hectares (4.0 acres) each.

3. Composition of Community Centre Sites

a. The Community Centre Site should be comprised of Municipal Reserve land that is suitably sized and configured to accommodate a Community Centre and its related facilities.

7.5 High School Site

Purpose

A high school, as identified on *Map 5: Land Use Concept* and *Map 7: Joint Use Sites*, is required to provide for the educational needs of senior high school students of surrounding Communities and for recreational and community space for residents.

7.5.1 High School Site Policies

1. Location of High School

a. The high school site should be located within 500m of a Bus Rapid Transit stop.

b. The high school site should have two street frontages, ideally located at the corner of two Collector roads.

c. The location of the high school site shown is conceptual. Its exact location, size and configuration shall be determined through the Outline Plan / Land Use Amendment process.

2. Size of High School Site

The high school site should be approximately 9.2 hectares (23 acres) in size. The size of the site may be refined through the Outline Plan / Land Use Amendment process without an amendment to this ASP.

3. Composition of the High School Site

a. The high school site shall contain a high school building and associated recreational and educational facilities, and can also contain other facilities as required by the school board, subject to the ***MGA***.

b. As the high school site is in close proximity to the Urban Corridor, the School Board should develop partnerships to provide other public, institutional or complementary activities on the high school site that benefit being in close proximity to the Urban Corridor.

c. The high school site should

i. connect to sidewalks and regional pathways, and be conveniently and directly accessible to pedestrians both within and adjacent to the site; and

ii. have convenient and efficient road and regional pathway network, sidewalk, pedestrian and cyclist connections converge on the high school from the surrounding residential area, transit nodes and the BRT stops.

7.6 Open Space

Purpose

The Open Space system shall promote, conserve and enhance an interconnected ecological and recreational system within the Plan Area. It is a system of active and passive open space, with physical and pathway connections to the Environmental Open Space (see *section 10.5 Environmental Open Space*).

The Open Space system should be an interconnected system of parks, schools, public plazas, Neighbourhood parks, natural areas and other open spaces, and utility corridors and rights-of-way that shall provide social, biophysical, and aesthetic functions.

7.6.1 Open Space Policies

1. Social Function

The social function recognizes the need to create an overall sense of individual well-being and to foster social gathering. To achieve this function, the following policies should be incorporated into the open space design where appropriate and feasible.

a. Integrate the open space into the wider Community through safe, pleasant and efficient pedestrian and bicycle routes.

b. Ensure seasonal adaptability for year-long usability through appropriate landscaping, site design, provision of street furniture and recreational facilities.

c. Provide public visibility to the Open Space System through visual corridors and / or single-loaded streets.

d. Design and locate amenities such as playfields and seating areas appropriately to limit negative impacts such as noise from major roads.

e. Foster a diversity of user activities and opportunities through provision of recreational equipment or interpretative trails and signage.

f. Design residential and commercial development to incorporate vistas into open space.

g. Promote “eyes on the street” by using active building edges to frame and define neighbourhood parks, plazas and playgrounds where possible.

h. Linear parks and linkages may be supported where appropriate to promote connectivity and facilitate walking and cycling.

i. Design parks and open spaces to provide opportunities for cultural enjoyment and artistic pursuits.

j. Ensure open spaces and amenities are located and designed in accordance with principles of universal access and barrier-free design.

k. Provide opportunities to connect people with nature and provide environmental education, where appropriate and feasible.

l. Provide opportunities for local food production such as community gardens.

2. Biophysical Function

The biophysical function promotes biodiversity and contributes to a positive impact on air and water quality as well as the ecology of the physical environment. To achieve this function, the following policies should be incorporated into the open space design, where appropriate and feasible.

a. Promote the protection and planting of native species and landscapes to enhance and / or restore the overall biodiversity and carbon sequestration capacity of the area.

b. Provide habitat blocks through corridors to ecological areas such as creeks, natural drainage systems, mature vegetation and biologically diverse areas to sustain and enhance viable natural plant and animal populations.

c. Design connections to Green Infrastructure such as bioswales and vegetated street corridors.

d. Provide drought tolerant vegetation and xeriscaping strategies to lower irrigation demands.

3. Aesthetic Function

The aesthetic function contributes to the overall visual attractiveness of urban areas. To achieve this function, the following policies should be incorporated into the open space design where appropriate and feasible.

a. Design open spaces to provide view corridors and focal points throughout the Communities.

b. Size and design open spaces to create spaces that are functional, safe, flexible and provide for a variety of recreational opportunities, and passive use for various ages and abilities.

c. Design for sunlight penetration into open spaces by avoiding extensive overshadowing from buildings.

d. Protect and restore natural features including, but not limited to: wetlands, natural vistas and slopes, mature vegetation, native prairie / native pasture grasslands and biologically diverse areas.

e. Design open spaces for passive and active recreational functions and locate them within an approximate 400m (4,305 ft) walking radius for all residents in the Communities.

f. The cemetery street frontage along 17 Avenue SE shall include a regional pathway to provide connectivity between Community C and D.

g. The cemetery street frontage along 17 Avenue SE should be well maintained and incorporated into the community through design techniques which may include, but not limited to, street furniture and lighting.

7.6.2 Irrigation of Open Space

To assist in achieving the Shepard Regional Drainage Plan and Forest Lawn Creek Master Drainage Plan, release rates and volume targets, manicured open space, including sports fields for school sites, should be located adjacent to storm ponds (where allowed) to promote use of stormwater for irrigation purposes.

7.6.3 Acquisition of Open Space

Acquisition of land for the Open Space System can occur through dedication of Municipal Reserve, Municipal School Reserve, Environmental Reserve (all as defined in the ***MGA***), a conservation easement, voluntary conservation, voluntary reserve dedication, land purchase or other means.

7.6.4 Private Open Space

Private open spaces and recreational amenities of various sizes and forms should be provided within Multi-Residential Developments, Mixed-Use and commercial developments. Public access to these amenities should be provided where appropriate.

7.6.5 Creditable Reserve Policies

These policies provide for the dedication of reserve land to meet the educational, recreational and social needs of residents.

1. Reserve Dedication

a. Reserve land shall be dedicated through the subdivision process in the full amount owing in accordance with the requirements of the Approving Authority, Joint Use Coordinating Committee (JUCC) and pursuant to the ***MDP*** and ***MGA***.

b. The allocation of reserve shall be determined at the time of Outline Plan / Land Use Amendment application in accordance with the priority of use of reserve lands as set out in the Joint Use Agreement, at the discretion of the Approving Authority.

c. JUS and Community Centre Sites serving the Plan Area should comprise reserve land and located and sized as indicated on ***Map 7: Joint Use Sites***.

d. A minimum of 4 hectares (10 acres) of reserve land shall be dedicated to the identified high school site, at the discretion of the JUCC.

e. Cash-in-lieu may be accepted in place of reserve land for the subdivision of land within industrial areas, subject to the approval of the JUCC and in compliance with the ***MDP*** and ***MGA***.

f. Reserve dedication in land shall not be accepted within oil and gas setback areas.

2. Transfer of Municipal Reserve

a. A transfer of creditable reserve between communities may be allowed, if agreed to by the Landowner(s), in accordance with the *MGA*, and subject to approval by JUCC, as outlined in ***section (2) (b)*** to achieve

i. optimal distribution / location of school sites within communities;

ii. optimal distribution / location of open space typologies as outlined in ***The City of Calgary Open Space Plan***;

iii. optimization of reserve contribution towards the high school site; and

iv. flexibility to utilize Municipal Reserve (MR) for integration of Environmental Open Spaces (EOS) that otherwise do not qualify as Environmental Reserve (ER).

7.7 Recreation Facility

Purpose

The Small Regional Recreation Facility should be responsive to the needs of the residents in the Plan Area. It may provide access to nature, cultural events, sport, recreation and social gathering areas, that support residents' arts, fitness, leisure and sports interests. Easily accessible by a variety of modes of transportation, including pedestrian, it functions as a Community gathering place for residents of all ages. Moreover, the facility should be age-friendly and incorporate Access Design Guidelines.

7.7.1 Small Regional Recreation Facility Site Policies

1. The Small Regional Recreation Facility should
   a. be integrated with the open space and pathway system, where practical;
   b. provide good pedestrian connections to residential areas through sidewalks, pathways and bikeways;
   c. comprise creditable reserve, if agreed to by the JUCC and / or Approving Authority, and subject to the ***MGA***; and,
   d. be flexible and adaptable in design with opportunities to accommodate a wide range of uses for all ages and be easily convertible to other uses in the future.

2. The exact size, location and configuration of the recreation facility shall be determined at the Outline Plan / Land Use Amendment stage without requiring an amendment to ***Map 5: Land Use Concept***.

7.8 Public Library Site

Purpose

The purpose of the public library is to provide universal access to resources for information, learning, inspiration and enjoyment for Plan Area residents.

7.8.1 Public Library Site Policies

1. Location of the Public Library

a. The public library should be
   i. located in a highly visible and accessible location in close proximity to the Urban Corridor, as conceptually identified on ***Map 5: Land Use Concept***;
   ii. located at minimum 3.5 km (2.2 miles) from another public library;
   iii. located adjacent to a collector road;
   iv. located adjacent to, or integrated within the Small Regional Recreation Facility site to animate and define a public space for the surrounding Community;
   v. appropriately integrated with other public uses within the Community; and
   vi. multi-purpose in design to respond to diverse needs, interests, levels of ability and skill.

2. Composition of the Library

The library shall be suitably configured to meet the needs of the Plan Area and, where applicable, work in conjunction with the recreation facility or other suitable public facilities.

3. Size of the Library

The library shall require a parcel of land approximately 2 hectares (4.9 acres).

7.9 Emergency Response Station

Purpose

An Emergency Response Station is required in the Plan Area as an essential service to meet the needs of a safe and Complete Community. It acts to promote and maintain safe and healthy behaviours, provide emergency response and offers protection to people and their property.

1. Location and Size of Site

a. Location of Emergency Response Station site is shown conceptually on Map 5: Land Use Concept.

b. Emergency Response Station sites require

i. approximately 0.8 hectares (2 acres);

ii. all turns access to a major roadway;

iii. control of signals;

iv. minimum of two vehicular access points (one public, one for apparatus);

v. a rectangular lot; and

vi. being situated at the highest elevation of the district where possible.

2. Response Time

The location of an emergency response station is mainly dependent upon projected response times. Based on the planned road network, land uses and other deciding factors, the ultimate location must minimize response times to all areas within the service district.

8. URBAN DESIGN

Municipal Development Plan Goal: Make Calgary a liveable, attractive and functional city by recognizing its unique setting and dynamic urban character and creating a legacy of quality public and private development for future generations.

Purpose

The policies in this section are intended to guide important design elements of the streetscape, including buildings in new Communities, with a goal of ensuring a high-quality public realm. All of these policies are achievable through a variety of design solutions, allowing developers and builders flexibility to achieve the policies in a manner that suits the context of individual sites.

8.1 Neighbourhood Design

8.1.1 Neighbourhood Design Policies

1. Principles of universal design contained in The City's *Access Design Standards* should be incorporated in all parts of the Neighbourhood.
2. Development adjacent to Environmental Open Space should strive to maintain the environmental integrity and amenity value of these areas. Sightlines and / or access to the Environmental Open Space should be provided where possible.

8.2 Activity Centre and Urban Corridor

8.2.1 Activity Centre and Urban Corridor Policies

1. Activity Centres and Urban Corridors shall be designed with a focus on providing vibrant, Mixed-Use pedestrian environments that support transit services.
2. The scale, form, and character of buildings in Activity Centres and Urban Corridors should transition gradually to provide an appropriate interface with surrounding areas.
3. Activity Centres and Urban Corridors should be designed in accordance with the policies of ***section 6: Shaping a More Compact Urban Form***, ***Appendix D: Neighbourhood Design Guidelines*** and ***Appendix E: Environmental Design Guidelines in Appendix E***.

8.2.2 Streetscape Design Policies

1. The design of the streetscape in Activity Centres and Urban Corridors shall accommodate elements such as street trees, street furniture, bicycle parking and appropriate lighting to enhance the experience of cyclists and pedestrians.
2. Parcels facing amenity spaces or other Open Space, as described in ***section 7.6: Open Space***, in Activity Centres and Urban Corridors should utilize lane access only to provide pedestrians with sidewalks that are free from conflict with automobiles.
3. Public art should be incorporated at prominent locations along streets to provide points of interest and to serve as landmarks for local residents, business patrons and visitors.

8.2.3 Building Design Policies

1. To provide a high-quality pedestrian environment, buildings in Activity Centres and Urban Corridors shall be designed to provide
   a. a consistent setback from the public sidewalk; and
   b. active frontages with primary public entryways facing the public sidewalk.
2. Multi-Residential Developments in Activity Centres and along Urban Corridors should be designed to provide ground floor units with individual entryways to the public sidewalk, where possible.
3. Buildings adjacent to amenity spaces should be designed to provide an appropriate sense of enclosure for the space. The Enclosure Ratio (ratio of building height to width) varies depending on the type of Activity Centre / Urban Corridor as per ***Table 4***.

Table 4: Activity Centre / Urban Corridor Enclosure Ratio

Type of Activity Centre or Corridor	Minimum Enclosure Ratio (height to width)	Maximum Enclosure Ratio (height to width)
NAC	1:6	1:3
CAC	1:6	1:2
Urban Corridor	1:6	1:1

4. The design of buildings over 1,000m^2 (10,763 ft^2) gross floor area should include architectural treatments that reduce the perceived massing of the building.

8.2.4 Parking Design Policies

To increase Intensity and Density, improve the pedestrian environment and promote other forms of mobility such as cycling and transit use, the following policies apply to development in Community Activity Centres, Urban Corridor and in Retail Centres.

1. Parking should include a mix of short and long stay parking, bicycle parking and on-street parking to accommodate different users and mitigate any potential parking impacts on adjacent residential areas.
2. Surface parking facilities
   a. shall be located away from transit and pedestrian areas to enhance the pedestrian function of the streetscape and reduce conflict between active modes of travel and automobile traffic;
   b. should be designed to provide safe, convenient sidewalk and pathway connections for pedestrians and cyclists to access building entrances; and
   c. shall be designed to transition over time allowing for structured or underground parking requirements as needed.
3. The minimum number of motor vehicle parking stalls required should be reduced by 10% for all uses where a building is located within 400m (1,312 ft) of a BRT stop.
4. Developments and buildings should be designed to
   a. limit the amount of long-term parking stalls wherever possible;
   b. utilize strategies that qualify for parking requirement reductions such as
      i. installation of bicycle parking stalls; and
      ii. installation of locker and shower facilities.
   c. provide structured and / or underground parking to accommodate any parking stalls that exceed the minimum requirements established by The City of Calgary Land Use Bylaw 1P2007 and the policies contained in this ASP.

8.2.5 General Amenity Space Design Policies

Amenity spaces, including central amenity spaces in NAC and Transit Plazas in CAC and Urban Corridors should act as destinations for people to spend time, socialize and access services and amenities.

1. Amenity spaces shall be designed to facilitate a range of passive and active recreation. In higher-order Activity Centres (e.g., CAC) and Urban Corridors, these functions may be achieved across separate amenity spaces (as opposed to each amenity space being multi-function).
2. Public art should be incorporated into the design of amenity spaces to create a unique sense of place and to serve as a distinctive landmark in the Neighbourhood.

3. In addition to the policies found here in ***section 8***, amenity space design should also comply with the policies found in ***section 6.5: Neighbourhood Activity Centres, section 7.6: Open Space*** and ***Appendix D: Neighbourhood Design***.

8.2.6 Central Amenity Space Design Policies

1. To serve as a focal point and destination for local residents, the central amenity space found in NAC shall
   a. provide residents with a multi-functional area that can accommodate both passive and active recreation as well as local gatherings and events;
   b. be located close to one or more transit stops; and
   c. provide bicycle parking.
2. The length to width ratio of the central amenity space should not exceed 3:1 to create an appropriate proportioned focal point for the Neighbourhood.

8.2.7 Transit Plaza Design Policies

1. Each Transit Plaza should be designed to provide
   a. heated, well-lit structures that effectively shelter transit patrons from inclement weather;
   b. seating areas;
   c. space to accommodate convenient transfer of transit patrons between feeder lines and primary transit routes, to the satisfaction of Calgary Transit;
   d. bicycle parking;
   e. route information and appropriate signage; and
   f. services and amenities such as stores, food services, civic facilities and other active uses.

8.2.8 Streetscape Design Policies

1. The design of the streetscape in Activity Centres and Urban Corridors shall accommodate elements such as street trees, street furniture, bicycle parking and appropriate lighting to enhance the experience of cyclists and pedestrians.
2. Public art should be incorporated at prominent locations along streets to provide points of interest and to serve as landmarks for local residents, business patrons and visitors.

8.3 Transit Station Planning Area Design

8.3.1 Transit Station Planning Area Design Policies

1. All development within the Transit Station Planning Area should be in accordance with ***The City's Transit Oriented Development Policy Guidelines***.
2. Development in this area should be designed in accordance with the ***Neighbourhood Design Guidelines*** in ***Appendix D*** and the ***Environmental Design Guidelines in Appendix E***.
3. Transit Station Planning Area development should take into consideration possible incorporation of emergency response services into community design.

8.4 Retail Centres Design

8.4.1 Retail Centres Design Policies

1. Retail centres shall be designed with a focus on providing retail and Employment Uses and over time to accommodate residential uses wherever possible and applicable.
2. Retail centres shall be designated to:
   a. Provide amenity use and space, reduce travel demand, and promote public transportation access.

b. Promote pedestrian use by providing sites which include high quality streetscape along public and private streets and include high quality public space

c. Create comfortable and attractive pedestrian and cycling environments

3. Loading areas, outdoor storage and waste management practices areas exert visual and noise impacts on surrounding Neighbourhoods. When visible from adjoining properties and / or public streets they shall be screened, recessed or enclosed.

4. Retail centres should be designed in accordance with the ***Appendix D: Neighbourhood Design*** and the ***Appendix E: Environmental Design Guidelines***.

8.4.2 Streetscape Design Policies

1. The design of the streetscape in Retail Centres should incorporate elements such as street trees, street furniture, bicycle parking and appropriate lighting to enhance the experience of cyclists and pedestrians.

2. Public art should be incorporated at prominent locations along streets to provide points of interest and to serve as landmarks for local residents, business patrons and visitors.

8.4.3 Building Design Policies

1. To provide a high-quality street-oriented environment, buildings in Retail Centres should be designed to provide active frontages with primary public entryways facing the public sidewalk.

2. Provide site furnishings, such as benches, bike racks and shelters, at building entrances and amenity areas

3. Facades

a. General Facades and Exterior Walls: Facades shall be articulated to reduce overall massing and scale of typical large retail buildings. Moreover, this articulation will provide visual interest consistent with the anticipated or existing Belvedere, character and scale of the adjacent community.

b. Facade Definition: Design the facade of buildings with multiple uses so that each use is defined separately through individual signage, individual entrances and individual canopies.

c. Facade Transparency: Use clear windows and doors to make the pedestrian level facade of walls facing the street highly transparent. Locate active uses at grade, such as restaurants, specialty in-store boutiques, food concessions and waiting areas

d. Facade Orientation: Where possible, the front facade of any retail centre buildings on the perimeter of the site, should face the street (i.e., public or Primary Retail Street) that is designed to provide greater pedestrian activity.

e. Rear and Side Facades: All facades of a building which are visible from adjoining residential properties and / or public streets should contain architectural features similar in scale and quality to the front facade so as to encourage integration with the surrounding community. The rear or sides of buildings often present an unattractive view of blank walls, loading areas, storage areas, HVAC units, garbage receptacles, and other such features. Architectural, screening, and landscaping features should mitigate these impacts.

f. Roofs: Variations in roof lines should be used to add interest to, and reduce massing and scale of large buildings.

8.4.4 Site Design

Smaller scale buildings on Large-Format Retail sites shall be located in a block-based design to facilitate the creation of a pedestrian-friendly environment with a clustering of street-oriented retail frontages and a continuous, connected and comfortable pedestrian realm. A 300 metre (1,000 feet) walking radius around an anchor store is an ideal distance to reach shops in a short time while parking only once. Sensitive location and integration of the retail anchors embedded into a pedestrian friendly environment with many shops within this radius can encourage and intensify pedestrian activity.

1. Perimeter Large-Format Retail Building Placement

a. Large Format retail buildings shall not be located at the perimeter of Large Format site unless:

i. perimeter street elevations are designed and articulated appropriately, and retail entries located to promote active pedestrian edges.

ii. where active pedestrian edges and retail entries may not be deemed appropriate (e.g., facing skeletal and arterial roads) rear elevations facing streets shall be enhanced with significant articulation and material changes combined with generous landscape screening.

iii. buildings located at site entry points shall in every case be designed to accentuate and enhance the site entry points through use of strong architectural forms and through the creation of active pedestrian edges as these points, connected to the internal street environment.

2. Primary Retail Street Large-Format Retail Building Placement

   a. Large-Format Retail buildings shall only be permitted along Primary Retail Streets when 80% of the parking is located within the footprint of the retail structure. Where this is not possible, a minimum of 70% of surface parking area shall be screened (by buildings) from view, from the Primary Retail Street.

   b. The frontage of Large-Format Retail buildings located along Primary Retail Streets should be multi-storey.

3. Block Pattern

   a. Development should be based on an internal circulation pattern that allows logical movement throughout the site that will accommodate, and not preclude, intensification over time such as a block type pattern. The internal circulation pattern should be designed with direct connections to the surrounding streets.

   b. The internal road pattern within retail sites should be configured to form a grid of blocks which form compact retail "quadrants" which allow for the creation of a comfortable, walkable street-oriented shopping environment. Buildings shall be located to emphasize the grid, along with the associated internal network of landscaped pedestrian routes.

8.4.5 Parking Design Policies

1. Surface parking facilities should be located away from transit and pedestrian areas to enhance the pedestrian function of the streetscape and reduce conflict between active modes of travel and automobile traffic.
2. Surface parking facilities should be designed to provide safe, convenient sidewalk and pathway connections for pedestrians and cyclists to access building entrances.
3. Parking areas should provide safe, convenient, and efficient access for motorists, pedestrians and cyclists. They should be distributed around large buildings to shorten the distance to other buildings and public sidewalks and to reduce the overall scale of the paved surface. If buildings are located closer to streets, the scale of the complex is reduced, pedestrian traffic is encouraged, and architectural details take on added importance.
4. Design the site circulation to minimize the conflict between pedestrians and vehicles. This can be achieved by orienting car parking spaces to minimize the number of traffic aisles that pedestrians must cross.
5. Vehicle surface parking areas for Large-Format Retail uses should be designed as block-based 40-50m (131-164 ft) by 100-120m (328-393 ft) to allow for safe pedestrian walkability and intensification with buildings over time.
6. Applicants should provide only the minimum number of parking spaces required by the Land Use Bylaw.

8.5 Joint Use Sites Design

8.5.1 Joint Use Sites Design Policies

1. Where a JUS is located adjacent to a NAC or the Urban Corridor, the school building should be situated next to the NAC or Urban Corridor.
2. A pedestrian and bicycle circulation plan should be provided for a JUS where a JUS is contained within an Outline Plan / Land Use Amendment application.
3. Schoolyards should incorporate natural features and vegetation.
4. Access and egress, drop off points and parking should be designed with Best Practices and may require further study, approved by The City, at the Outline Plan / Land Use Amendment stage.

8.6 High School Site Design

8.6.1 High School Site Design Policies

1. The high school site should
   a. provide for a compatible interface treatment with adjacent development;
   b. contain a visually appealing site design and landscaping treatment, particularly when visible from roads with higher volumes of traffic;
   c. be well integrated with and / or connected to the Urban Corridor;
   d. be suitably integrated with other Institutional, Recreational, and Public Uses within or adjacent to the site; and
   e. employ Street-Oriented design
2. The design of the high school should follow The City's Access Design Standards.
3. Access and egress, drop off points and parking should be designed with Best Practices and may require further study, approved by The City, at the Outline Plan / Land Use Amendment stage.

8.7 Community Centre Site Design

8.7.1 Community Centre Site Design Policies

1. The Community Centre and its site should be designed and landscaped in a manner that: supports and enhances the pedestrian environment; and in proximity to transit routes and well-connected to bicycle and pedestrian pathways.
2. The Community Centre and its site should include accessible pathway systems with curb-cut entries which provide barrier-free access for mobility devices, strollers, and cyclists.
3. The Community Centre and its site should be designed to adapt to the changing needs of residents over time.
4. Age-friendly principles and The City of Calgary's ***Access Design Standards*** should be included as criteria for development.
5. Community Centres are for functional uses, built using grants and fundraising. Within reasonable expectations, architectural design should enhance its role as a Community landmark.
6. Outdoor space should provide opportunities for community gardens.
   a. Community Centres:
      i. shall provide Community meeting space; and
      ii. should provide childcare and / or after-school programming space.

8.8 Library Site Design

8.8.1 Library Site Design Policies

1. Direct road networks, regional pathways, sidewalk, pedestrian and cyclist connections should converge on the library site from the surrounding area where possible.
2. The architectural design of the building should signify its importance and enhance its role as a Community landmark.
3. The library should be oriented towards the street, provide direct pedestrian access to the sidewalk and provide strong pedestrian connections to surrounding public transit.
4. The library should be located within 600m (6,458 ft) of a BRT stop.
5. The design shall consider Age-friendly principles and Access Design Guidelines.
6. Parking within the library site should be
   a. shared with the Recreation Facility and / or other surrounding public facilities where possible;
   b. screened from the street by the building façade or appropriate landscaping; and
   c. located in a manner that does not compromise the pedestrian orientation of the Transit Planning Area.
7. The building should incorporate flexible design so that it may adapt to reflect shifts in demographics and user needs and preferences; and
8. The library should integrate works of public art.

8.9 Design for Safety

8.9.1 Design for Safety Policies

1. Safety Design Policies

The planning of sustainable, smart Communities should incorporate “emergency services safe design” Community principles, which promote and maintain safe and healthy behaviours, support effective emergency responses, and offer protection to people and their property. These include but are not limited to the following

a. protecting Calgarians by ensuring an appropriate level of emergency protection, an adequate and equitable distribution of response service across Calgary and coverage to all Communities and developments;

b. safeguarding Communities through transportation, land use, building and housing designs that are safe for emergency service providers;

c. provision of essential public safety services such as fire protection, police services, emergency medical care and bylaw enforcement;

d. effective planning for response to a variety of types of emergencies that reduces the occurrence of emergencies, and should limit the extent of damage in those that do occur; and

e. enhancing Community safety through Community and building design that reduces opportunities for crime, controls fire spread, provides access for emergency vehicles, ensures adequate water supply for the fire load and locates emergency service stations and resources within the appropriate response time.

9. CONNECTING COMMUNITIES

Calgary Transportation Plan Goal: Maintain automobile, commercial goods and emergency vehicle mobility in Calgary while placing increased emphasis on walking, cycling and transit.

Purpose

These policies ensure multiple transportation choices are provided for both people and goods and ensure an appropriate interface where applicable.

All policies within this section are to follow the principles, guidelines, policies and goals contained within the *CTP*.

9.1 Calgary Transportation Plan (CTP)

Purpose

The *CTP* and *MDP* represent a shift for transportation and land use planning in Calgary. More compact forms of development as directed in the *MDP* will bring homes, jobs, services and amenities closer together, giving Calgarians more modal choices when travelling around the city. More travel choices means that Calgary's transportation system will

- improve overall mobility;
- better withstand rising energy costs or other economic shocks;
- reduce energy use and emissions;
- provide travel options to all Calgarians, regardless of age or income; and
- increase Calgary's competitive advantage in the global marketplace.

While the automobile will remain the dominant mode of transport for most Calgarians, there are other modes of travel that provide the benefits listed above. These will be emphasized, promoted and supported through the transportation network and policies in sections *9.2-9.7*.

9.2 Pedestrian and Bicycle Circulation

Purpose

The purpose of these policies is to provide for direct and convenient pedestrian and bicycle circulation within and through the Communities.

9.2.1 Pedestrian and Bicycle Circulation Policies

1. Regional Pathways

a. The regional pathway network should

i. conceptually align as shown on ***Map 8: Pathways and Green Corridors***;

ii. not be in conflict with commercial driveways / allies;

iii. be designed in accordance with The City's ***Access Design Standards***;

iv. aim to be located within or integrated with a park, linear park or natural feature;

v. be aligned with the Calgary Greenway System and / or the Green Corridors where possible and suitable; and

vi. aim to connect with other Communities and municipalities outside of the Plan Area.

b. Where the regional pathway cannot be located within or integrated with a park or natural feature, it can locate within a road right-of-way in the form of a multi-use or regional pathway or designated bikeway separated from vehicle traffic.

c. New pathway alignments could potentially be built within the TUC east of Stoney Trail; if appropriate, providing further network connectivity.

2. Local Pathways, Sidewalks, and Walkways

a. The alignment of local pathways, sidewalks and walkways should be determined at the time of Outline Plan / Land Use Amendment application.

b. The local pathway, sidewalk and walkway system should be designed to

i. achieve short, convenient, and direct non-motorized connections to and within Activity Centres, Urban Corridors, Retail Centres, schools, community centres, library, recreation facility and transit stops;

ii. promote walking and cycling to connect residential, commercial, institutional and industrial areas;

iii. provide convenient and practical access to transit stops;

iv. be designed in accordance with The City's ***Access Design Standards***;

v. link origin / destination points within the Plan Area; and

vi. connect to the regional pathway system and Green Corridors.

3. On & Off Street Bicycle Routes

a. On-street bicycle route design treatments should be determined at the Outline Plan / Land Use Amendment stage in accordance with ***The City of Calgary Bicycle Policy*** and ***The City of Calgary Pathway and Bikeway Plan*** and should coincide with the Primary Cycling Network as show within the ***East Regional Context Study***.

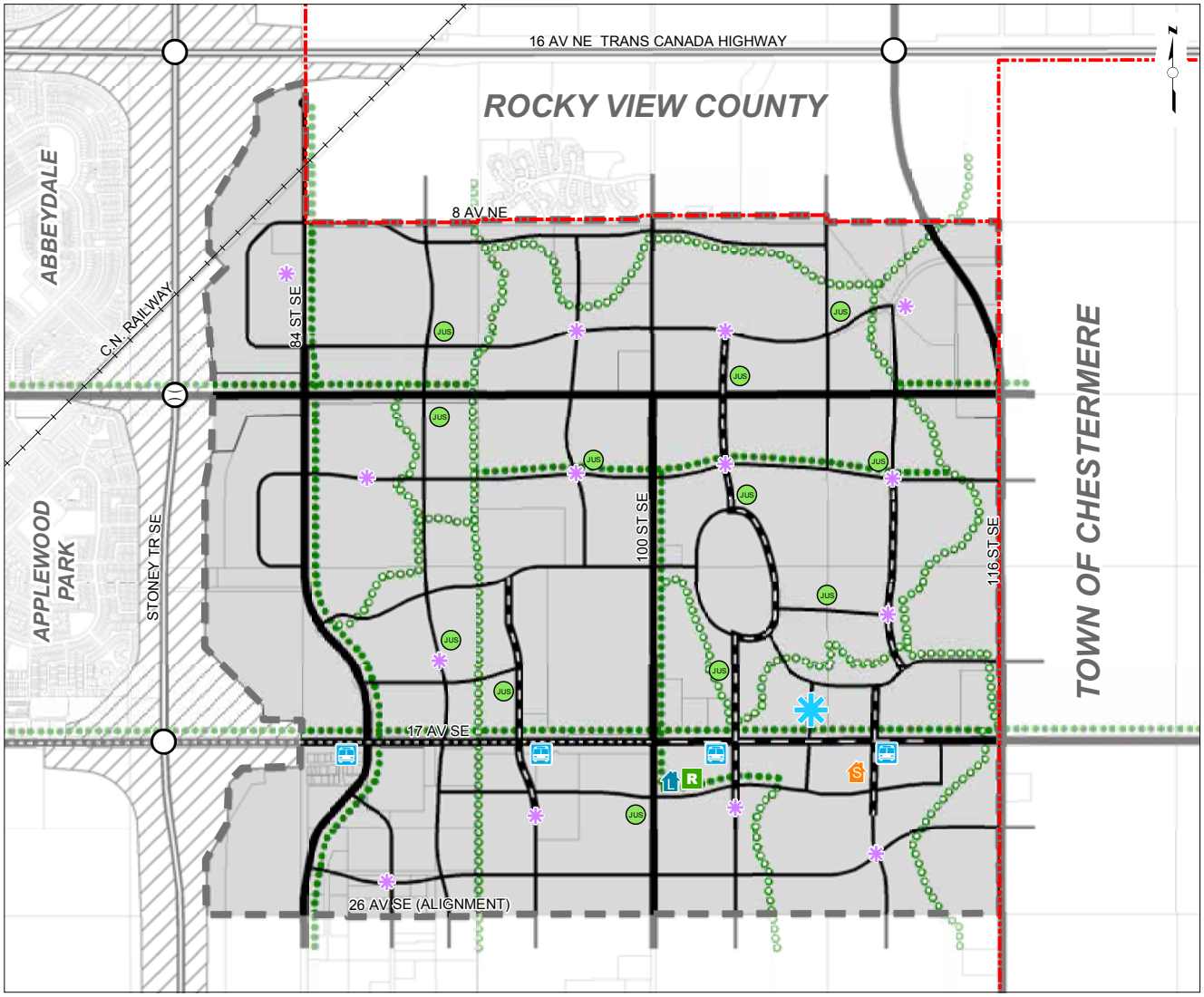
b. Appropriate cycle tracks for off-street cycling or bike lanes or wide curb lanes for on-street cycling should be provided. Off-street cycling through regional pathways or cycle tracks is preferred along Arterials in the Plan Area.

4. Active Mode Connectivity

a. Active Mode Connectivity shall be maximized for pedestrians and cyclists within the Plan Area as identified in the ***CTP***.

b. Pedestrian and bicycle connectivity should be established between the Plan Area and facilities to the west of the Plan Area.

c. All Outline Plan applications shall provide quantitative measures demonstrating the Active Mode Connectivity that is achieved for that specific outline plan and / or subdivision.



Map 8

Pathways and Green Corridors

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area
- Green Corridor
- Regional Pathway
- Skeletal Road
- Arterial Street
- Urban Boulevard
- Neighbourhood Boulevard
- Parkway
- Collector Road
- Full Interchange
- Overpass
- Recreation Facility
- BRT Stop
- Neighbourhood Activity Centre
- Community Activity Centre
- Joint Use Site
- High School
- Library

0 200 400 600 800 1,000
Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

9.3 Transit Service

Purpose

The purpose of these policies is to provide for direct, convenient and efficient transit service within the Plan Area. The Plan Area should eventually be served by Bus Rapid Transit service and feeder bus transit routes that will extend throughout the Plan Area. Transit service areas, stops and routes shall be identified at the time of Detailed Land Use and Design Analysis and / or Outline Plan / Land Use Amendment.

9.3.1 Transit Service Policies

1. Connectivity

a. Transit service area requirements should be achieved through the provision of

i. direct, convenient road, pedestrian and street connections and transit stops;

ii. transit stops located to facilitate direct pedestrian access; and

iii. transit facility location and design that adheres to the principles of universal design contained in The City of Calgary's ***Access Design Standards***.

2. Primary Transit

The BRT is shown conceptually on ***Map 9: Transit System*** running in and through the Plan Area. The BRT stops are located to connect uses along the Urban Corridor, Community Activity Centre, and other major destinations outside of the Plan Area by transit service.

a. The BRT is to run east-west along 17 Avenue SE. Specific alignment and stops are yet to be determined. A park and ride facility should be incorporated into the west end of 17 Avenue SE near the Super Regional Retail Centre.

3. Feeder Bus Transit

a. Feeder Routes are illustrated on ***Map 9: Transit System***. The conceptual feeder bus routes should provide direct and convenient connections within the Plan Area and to/from the Primary Transit Network to allow Plan Area residents and employees more direct and convenient connections outside the Plan Area.

b. Bus transit stops should be located to

i. serve higher density Mixed-Use development in the CAC and NAC, schools, major institutional uses, industrial and commercial uses and standard suburban residential uses in the Plan Area;

ii. provide direct, convenient transit service; and

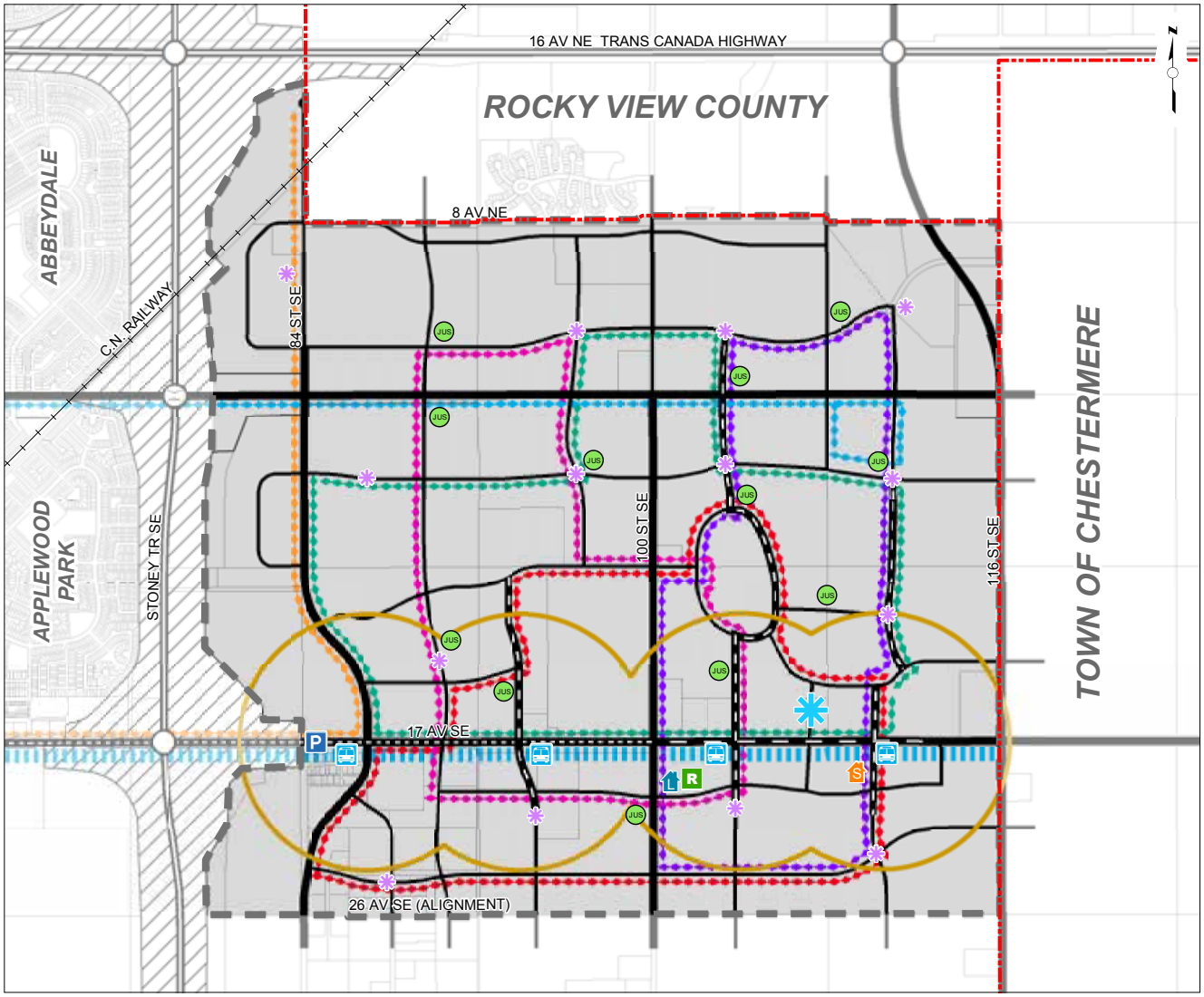
iii. be within a five-minute walk (400m / 1,312 ft) of 90% of homes to promote transit ridership.

c. Applications shall show bus transit stops equipped with suitable amenities such as benches, shelters and other amenities deemed necessary by the Approving Authority.

d. The design of the street network should provide for efficient transit routes within the Plan Area.

e. The transit routes are conceptually identified on ***Map 9: Transit System***, but shall be further refined at the Detailed Land Use and Design Analysis and / or Outline Plan / Land Use Amendment stage.

f. Bus routes can be refined without an amendment to this ASP.



Map 9

Transit System

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area
- Skeletal Road
- Arterial Street
- Urban Boulevard
- Neighbourhood Boulevard
- Parkway
- Collector Road
- Full Interchange
- Overpass
- BRT Route
- Central Feeder Route
- East Feeder Route
- LRT Direct
- North Feeder Route
- Northwest Feeder Route
- West Feeder Route
- TOD 600 m Radius
- BRT Stop
- Proposed Park and Ride
- Neighbourhood Activity Centre
- Community Activity Centre
- Joint Use Site
- High School
- Recreation Facility
- Library

0 200 400 600 800 1,000
Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

9.4 Road Network

Purpose

The purpose of these policies is to provide for a transportation network that is functional, safe and efficient. The road network shall minimize impacts on major natural features, integrate development within the Plan Area and accommodate walking, cycling and public transit. The road network in the Plan Area shall also accommodate emergency services ability to provide emergency protection and response.

9.4.1 Skeletal Road Network Policies

1. Skeletal Road Network Design

The Skeletal Road right-of-way, and the related interchange areas, is located as shown on ***Map 10: Transportation Network***. The only Skeletal Road directly adjacent to the Plan Area is Stoney Trail, which is under Provincial jurisdiction.

2. Emergency Access

As required, emergency access to the developing portion of the Communities shall be identified at the Outline Plan / Land Use Amendment stage and maintained in a satisfactory manner.

3. Interchange Function and Design

Two interchanges shall provide regional access to the Plan Area at Highway 1 and 116 Street SE, and Stoney Trail and 17 Avenue SE. Both Stoney Trail and Highway 1 are under Alberta Transportation jurisdiction. Functional plans for this infrastructure are available from the Province.

9.5 Internal Street Network

Purpose

The internal street network within the Plan Area will accommodate transit, non-motorized and vehicular traffic in a safe, efficient and balanced manner. The policies and design guidelines should balance the need for automobile movement and parking with the need for using streets to create a sense of Community and active modes mobility.

9.5.1 Internal Street Network Policies

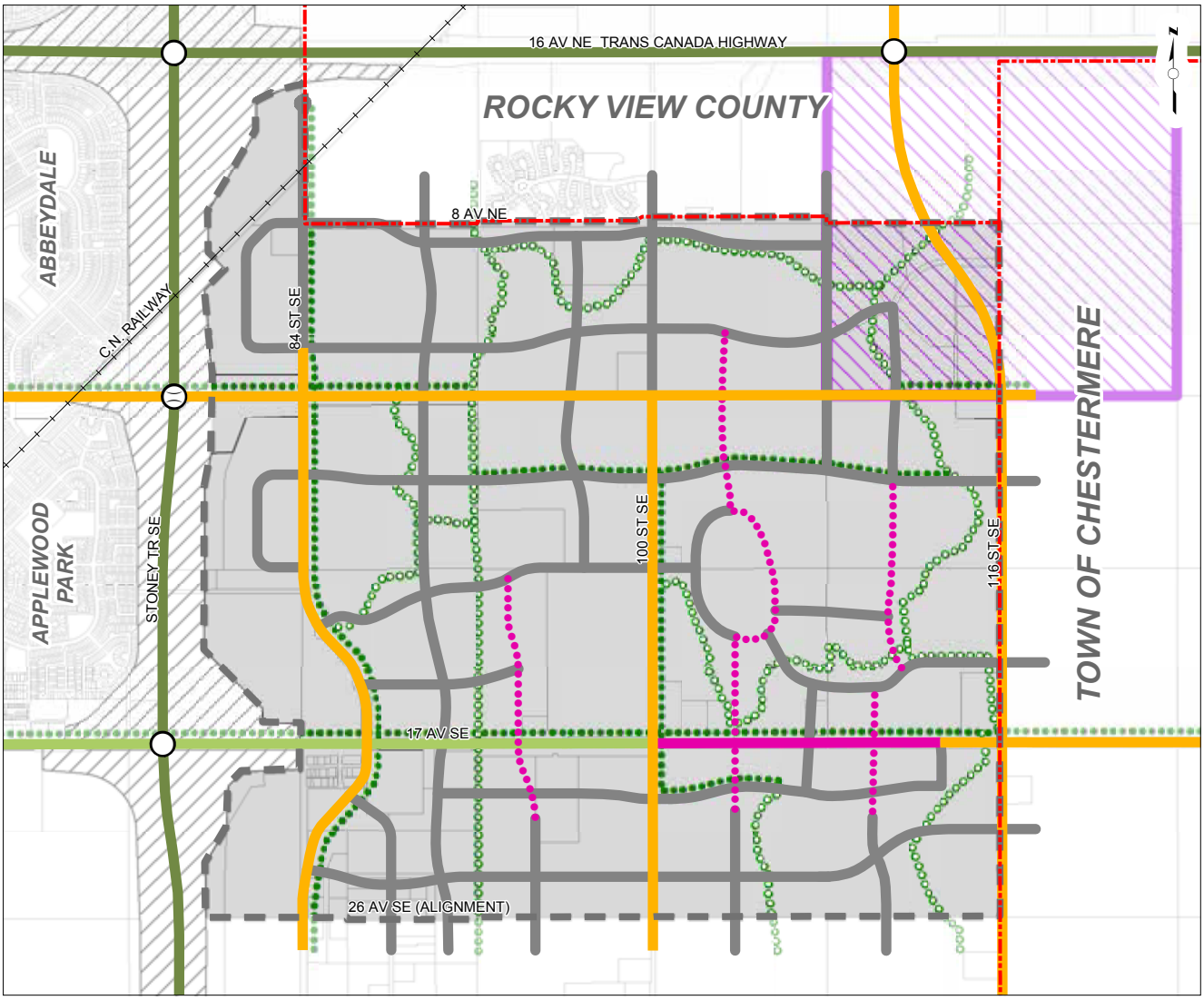
1. Local Transportation Connectivity

a. Streets should refer to the applicable typologies, guidelines and principles set out in The City of Calgary ***Interim Complete Streets Guide***.

b. The classifications of the street network shown on ***Map 10: Transportation Network*** are preliminary and should be refined at the Detailed Land Use and Design Analysis and/or the Outline Plan / Land Use Approval process and may not require an amendment to ***Map 10: Transportation Network.***

c. Road and street typologies should link Neighbourhoods together with many routes of travel being available for all modes of transportation.

d. Emergency vehicle and vehicular connectivity shall be maximized for emergency vehicles and passenger vehicles in the Plan Area as per the ***CTP***.



Map 10

Transportation Network

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area
- Intermunicipal Study Area
- Full Interchange
- Overpass
- Skeletal Road
- Arterial Street
- Urban Boulevard
- Neighbourhood Boulevard
- Parkway
- Collector Road
- Green Corridor
- Regional Pathway

0 200 400 600 800 1,000
Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

2. Collector Street / Arterial Street Network

a. Arterial and Collector streets comprising the Internal Street network within the Plan Area are conceptually shown as identified on ***Map 10: Transportation Network***.

b. 17 Avenue SE shall comprise a parkway standard from Stoney Trail to 100 Street SE and Urban Boulevard standard between 100 Street SE and 113 Street SE.

c. Green Infrastructure should be incorporated at the design stage, where it is deemed appropriate.

d. Roundabouts design shall follow The City of Calgary ***Roundabout Policy***.

e. The exact road and street pattern, including detailed design, typology / classification, street sizing and intersection / access spacing shall be determined at the Outline Plan / Land Use Amendment stage and may require a Detailed Land Use and Design Analysis, to the satisfaction of the Approving Authority.

3. Local Street Network

a. The local street network is not shown on ***Map 10: Transportation Network*** but shall be defined in the context of an Outline Plan / Land Use Amendment application.

b. The layout of the local street network should

i. provide direct connections and multiple route choices to origin / destination points and connectivity between sections of the Plan Area for all modes of transportation;

ii. provide street connections for all modes that converge towards the CAC, NAC, Community Retail 2 Centres and the Urban Corridor; and

iii. form an internal street network comprised of interconnected streets creating multiple routing options for pedestrians, cyclists and motorists.

4. Connectivity & Mobility Policies

a. To accommodate land use Intensification and diversity over time, the street network in a Retail Centre should feature a block-based street pattern.

b. An unobstructed 2 metre (6.6 ft) wide sidewalk shall be provided in the public right-of-way across private access driveways.

c. Sidewalks and pathways should be integrated throughout the retail site to provide pedestrians and cyclists with safe, convenient access to and between store entrances.

d. A direct, safe, continuous and clearly defined pedestrian access shall be provided from public sidewalks, parking areas and transit stops to building entrances.

e. Pedestrian walkways should be connected between adjacent properties in order to facilitate circulation between sites.

f. Walkways should be distinguished from driving surfaces by using varied paving treatments and by raising walkways to curb level.

g. Sheltered bicycle parking shall be provided in visible locations near building entrances and pedestrian walkways. These locations shall not conflict with pedestrian circulation.

h. Building and parking configurations shall consider emergency access and egress.

i. Weather protection should be provided at building entrances, close to transit stops, and in areas with pedestrian amenities.

j. Pedestrian and bicycle access between residential areas and Retail Centres should be well defined and safe to promote these activities.

k. Pedestrian and cycling accessibility opens retail centre developments to the rest of the Belvedere Plan Area and specifically to the adjacent neighbourhoods, reducing traffic impacts and enabling the development to project a friendlier, more inviting image.

5. Goods Movement

All Arterial streets can generally act as Goods Movement Routes and truck routes. Goods Movement Routes and truck routes shall be verified at the Outline Plan / Land Use Amendment stage(s) to the satisfaction of the Approving Authority.

6. Special Transportation Policies

a. Where the collector road alignment intersects Mountain View Memorial Gardens Cemetery, the following shall be ensured:

i. Certainty of vehicular and pedestrian access across the collector;

ii. Approaches and pedestrian crossing alignment to allow for a direct, future north-south connection; and

iii. Option for secondary access to land east of the identified Environmental Open Space Study Area.

b. The following transportation policies shall apply in the Plan Area interface with Rocky View County and the Town of Chestermere:

i. Further transportation planning and design shall be required for this area (see ***Map 10: Transportation Network***) prior to approval of comprehensive development.

ii. Notwithstanding ***section 12.5 subsection 3*** which articulates intermunicipal cooperation regarding Highway 1 East Corridor Planning, The City of Calgary, Rocky View County and Town of Chestermere shall work collectively with Alberta Transportation to resolve transportation requirements for this interface area.

iii. Amendments to the proposed transportation network may require amendment to this ASP.

9.6 Transportation Demand Management

Purpose

The purpose of these policies is to enhance people's travel choices to improve the efficiency of the transportation system.

9.6.1 Transportation Demand Management Policies

At the development permit stage, applicants should develop Transportation Demand Management (TDM) programs to

a. increase the attractiveness and convenience of employee and resident commuting by public transit, carpooling, cycling, walking, telecommuting and other appropriate methods;

b. reduce the use of personal automobile for commuting by employees and residents;

c. reduce the peak-period demands on the transportation system; and

d. reduce the need for onsite employee parking.

9.7 Heavy Railway Policy

The Plan Area includes a small portion of a Canadian National Rail (CNR) line in the northwest. The purpose of these policies is to address appropriate land use and interface treatment between development and CNR infrastructure.

9.7.1 Development adjacent to Heavy Rail Line Policies

1. Land uses which may be adversely affected by the safety and nuisance impacts of passing trains should not locate immediately adjacent to the railway. Such uses may include but are not limited to child care services and schools.
2. Appropriate mitigating and safety measures for development proposals adjacent to the railway should include, but are not limited to setbacks, berming and landscaped screening to the satisfaction of the Approving Authority.
3. Any Outline Plan / Land Use Amendment and Development Permit application adjacent to the railway shall be circulated to CNR for review.
4. Development adjacent to the railway should meet the guidelines in ***Appendix O***.

10. GREENING COMMUNITIES

Municipal Development Plan Goal: Conserve, protect and restore the natural environment.

Purpose

The purpose of these policies is to conserve, protect, and restore the natural environment, aligning with the *MDP* Section *2.6: Greening the City*. Following these policies may reduce the ecological footprint created by development in the Plan Area, restore bio-diversity and facilitate the natural functions of land, water, and air that sustain life. More detailed guidelines are provided in *Appendix E: Environmental Design Guidelines*.

10.1 Green Infrastructure

Purpose

The purpose of these policies is to ensure that Green Infrastructure is incorporated in the Plan Area, where appropriate, to reduce the ecological footprint.

10.1.1 Green Infrastructure Policies

1. An interconnected Green Infrastructure network should be incorporated into community, road and street design. The network includes but is not necessarily limited to
   a. Environmental Open Space;
   b. natural or constructed wetlands;
   c. natural vegetated areas;
   d. native prairie and native pasture lands;
   e. naturalized landscaping;
   f. community gardens;
   g. significant trees;
   h. tree-lined streets;
   i. Water Bodies;
   j. rain gardens and bioswales;
   k. permeable pavement areas;
   l. absorbent landscape; and
   m. buildings with green roofs.
2. The design of the interconnected Green Infrastructure network should incorporate the principles of Green Infrastructure by
   a. conserving or minimizing loss of natural green elements including vegetation, and natural topography prior to and during development;
   b. maintaining and increasing ecosystem connectivity by identifying and protecting strategic parcels, blocks, and corridors as identified on ***Map 11: Environmental Open Space Study Area***;
   c. supporting natural functions such as water and air filtration, food production, and composting;
   d. designing engineered green systems to mimic nature; and
   e. integrating Green Infrastructure horizontally and vertically through measures such as green buildings and Green Roofs.
3. The protection of Environmental Open Space should be provided in accordance with The City's ***Open Space Plan*** and the ***MDP***.
4. To support urban forestry, the existing significant trees (if any) in the Plan Area should be protected and incorporated into the site and street design. Applicants should incorporate tree planting into concept plans and refer to ***Calgary...A City of Trees: Parks Urban Forest Strategic Plan***. This can include planting of trees, bushes and shrubs on public and private land, in front yards, backyards, courtyards, plazas, and rooftops.
5. The City shall work with applicants to facilitate the implementation of Green Infrastructure initiatives through its approval, construction and acceptance process.

10.2 Land

Purpose

The purpose of these policies is to minimize any negative impacts of development on land within the Plan Area.

10.2.1 Land Policies

1. Disruption and fragmentation of natural habitats should be minimized by
   a. incorporating ecological features such as natural vegetation, topography, and watercourses into design at the Outline Plan / Land Use Amendment and development permit stages;
   b. clustering housing to retain greater amounts of open space and natural areas where possible and appropriate; and
   c. using slope adaptive design and conservation planning in accordance with ***The City of Calgary Slope Adaptive Development Policy*** and ***Guidelines and Conservation Planning and Design Guidelines***.

10.3 Water

Purpose

The purpose of these policies is to minimize any negative impacts of development on water quality and quantity within the Plan Area.

10.3.1 Water Policies

1. Watershed protection, conservation and enhancement of water quality and quantity should be achieved by
   a. protecting and integrating critical ecological areas such as wetlands, floodplains and riparian corridors, and critical aquifer recharge areas, hazardous slopes, geologically hazardous areas, and protective buffer zones into development areas;
   b. minimizing runoff and maximizing infiltration of stormwater by minimizing development on undisturbed lands, and other measures where appropriate such as
      i. preserving large areas of absorbent open space;
      ii. using natural vegetation to increase infiltration;
      iii. reducing land required by vehicles; and
      iv. designing to include pervious surfaces.
   c. implementing Low Impact Development (LID) solutions for Outline Plan / Land Use Amendment and Development Permit applications in accordance with the recommendations of Shepard Regional

Drainage Plan and subsequent Master Drainage Plans, including, but not limited to

i. natural Water Balance Modeling (using natural water storage and drainage solutions such as rain gardens, bioswales, bioretention areas, reduced flow and run-off rates, pervious surfaces and absorbent landscaping, etc.;

ii. Green Roofs (e.g., roof top gardens, vegetated roof surfaces and walls); and

iii. Stormwater source control best management practices.

d. promoting water conservation measures such as

i. water efficient open space, parks and other landscaped areas, including the use of drought tolerant vegetation for landscaping and xeriscaping strategies; and

ii. matching water quality to water use by incorporating rainwater collection systems onsite, and architectural design for the use of rainwater for irrigation and other uses, in accordance with applicable codes at the time of application.

e. achieving the water quality and quantity objectives and policies within the ***Bow Basin Watershed Management Plan, Shepard Regional Drainage Plan*** and ***the MDP***.

10.4 Ecological Networks

Purpose

The purpose of these policies is to minimize any negative impacts of development on ecological networks within the Plan Area.

10.4.1 Ecological Networks Policies

1. Biodiversity and landscape diversity should be retained by

a. giving the highest priority to protection of Environmentally Significant Areas (ESA) when assigning land uses in accordance with Section 2.6.4 of the ***MDP***;

b. creating an interconnected open space system within and between watersheds to develop a regional open space system that respects and enhances the region's ecological infrastructure;

c. aligning land uses and landscape elements to increase functional connectivity;

d. integrating natural features of the surrounding landscape into the design of urban development (including sites) to maintain a high degree of interconnectivity and permeability; and

e. locating and designing parks and open spaces to connect with Green Streets, green alleys, and lanes.

2. Promotion of the provision and maintenance of a healthy, viable urban forest should be achieved by

a. conserving existing trees in the site design and layout of new buildings and infrastructure;

b. meeting the target tree canopy for the Plan Area as outlined in ***Appendix L: ASP Indicator Scorecard*** and following the ***Calgary....A City of Trees: Parks Urban Forest Strategic Plan*** guidelines for tree planting intentions and opportunities;

c. providing street trees wherever possible within boulevards, on residential roads in the community;

d. ensuring tree sustainability through tree planting plans, proper planting practices, appropriate location of shallow utilities and development phasing; and

e. promoting the planting of trees and green spaces in yards, rooftops, and plazas.

10.5 Environmental Open Space

Purpose

Environmental Open Space (shown on *Map 11: Environmental Open Space Study Area*) comprises of the River Valley System, the urban forest, Environmentally Significant Areas and Natural Environment Parks (including wetlands, natural waterbodies, escarpments, riparian corridors, natural grasslands and native pasture and woodlots) that are protected through land use designations, conservation easements, or other mechanisms. Environmental Open Space policies provide direction to the Approving Authority for the acquisition of open space by The City.

10.5.1 Environmental Open Space Policies

Environmental Open Space (EOS) policies apply to those areas as identified on ***Map 5: Land Use Concept and Map 11: Environmental Open Space Study Area*.**

1. Legislation and Policy

a. EOS shall be protected, restored, salvaged, enhanced and managed in accordance with the provisions of the ***Water Act, EPEA, MGA, MDP, Open Space Plan, Calgary Wetland Conservation Plan*** and other existing legislation and policy at time of development.

2. Field Verification

a. Environmental Open Space areas (at time of approval of this ASP) were not necessarily field verified and may not reflect site conditions, and are subject to further study and shall be delineated at Outline Plan / Land Use Amendment stage.

b. In accordance with ***10.5.1.5.c***, only Environmental Open Space dedicated, acquired or otherwise protected by The City pursuant to ***10.5.1.5.b*** are subject to the use and preservation oriented Environmental Open Space policies in this ASP.

3. Environmental Open Space Map Delineation

a. Lands within the Environmental Open Space Study Area qualify as both or either Environmental Reserve (ER) as defined in the MGA or Environmentally Significant Area as defined in the Calgary Open Space Plan.

b. Environmental Open Space illustrated on Map 5: Land Use Concept identifies those areas of regional significance only.

c. ***Map 11: Environmental Open Space Study Area*** illustrates the composition of Environmental Open Space as applicable, for wetlands, waterbodies (stream orders), native prairie and pasture and other Environmentally Significant Areas. Policies herein shall be read in conjunction with ***section 7.6, Open Space; section 10.6: Wetlands and section: 10.8 Green Corridor Policies***.

4. Composition of Environmental Open Space

a. Recreational amenities such as pathways, observation areas, regional pathways, the Green Corridor, nature trails and boardwalks shall be allowed within EOS where it is demonstrable to the Approving Authority that there is no negative impact or net loss on ecological and hydrological connectivity.

b. Treated stormwater releases into existing Water Bodies may be acceptable if it can be demonstrated that the water contributes to the function of these natural features and provides for quality habitat, as demonstrated in a stormwater management plan (provided by an Applicant at Outline Plan / Land Use Amendment stage).

c. Treated stormwater may be allowed in Environmental Open Space where a net benefit to the ecological function can be demonstrated.

d. Roads may be allowed to cross EOS provided that ecological and recreational connectivity is maintained under the road, where feasible and appropriate.

e. Pathway crossings shall be located to integrate the Green Corridor into Communities.

f. The general categories of uses identified shall be refined through the land use districts applied within the EOS.

5. Protection of Lands within Environmental Open Space

a. Where lands within the EOS are determined to qualify as ER in accordance with the ***MGA***, these lands are to be dedicated as ER through the subdivision approval process, subject to the discretion of the Director of Parks.

b. Where EOS does not qualify as ER, the lands should be acquired and protected through alternative means where deemed appropriate by the Approving Authority. These alternative means include, but are not limited to

i. a land transfer or exchange undertaken in accordance with the "no net loss" policy pursuant to The City's *Wetland Conservation Plan*;

ii. the application of The City of Calgary ***Slope Adaptive Development Guidelines Policy and Conservation Planning and Design Guidelines***;

iii. dedication of the lands as reserve pursuant to the ***MGA***;

iv. registration of a conservation easement on title as per the provisions of the Alberta Land Stewardship Act;

v. purchase of the lands; and

vi. introduction of development controls or incentives to promote voluntary conservation of the lands, which may include, but are not limited to

A. density bonusing or credit systems;

B. increased building setbacks;

C. site grading restrictions; and

D. enhanced landscaping treatments.

c. Notwithstanding ***section 10.5.1 (3)(b)***, where lands within the EOS are not dedicated, acquired or otherwise protected by The City, the lands shall be considered to be developable, subject always to ***section 3.7 Plan Limitations*** and the policies of the adjacent Land Use Area shall apply to these lands without requiring an amendment to ***Map 5: Land Use Concept***.

d. Notwithstanding ***section 10.5.1 (3)(c)***, where these lands are subject to an Outline Plan / Land Use Amendment application without subdivision, the Applicant and the Approving Authority may agree the lands may be acquired or protected through alternative means referenced in ***section 10.5.1 (3)(b)***, or by applying the Special Purpose – Urban Nature (S-UN) District or another applicable district under ***The City of Calgary Land Use Bylaw*** where appropriate, or as per the policies in the Open Space Plan.

e. At all times, prior to disturbing any Water Body, an applicant shall obtain an approval(s) from the Province pursuant to Part 4 of the ***Water Act***, at the applicant's sole cost and expense.

6. Interface with Environmental Open Space

a. Where land abuts EOS, development shall occur in a sensitive manner such that

i. runoff is diverted from EOS, unless identified within a detailed drainage strategy provided at the Outline Plan / Land Use Amendment stage, that the runoff is required to supplement the

existing wetland habitat or drainage corridor; and

ii. an aesthetically appealing visual transition is provided between development and EOS.

b. Development adjacent to EOS shall ensure

i. systematic conservation of land and water by creating an interconnected open space system within and between watersheds or Environmentally Significant Areas to reduce habitat fragmentation;

ii. protection of the Plan Area watershed in its natural form, pursuant to the ***Water Act, Environmental Protection and Enhancement Act (EPEA)*** and the ***Municipal Government Act***; and

iii. protection, enhancement and integration of critical ecological areas such as wetlands, floodplains and riparian corridors with developed areas.

c. For the area to be visually accessible and to create viewsheds in the EOS, single loaded roads and / or pedestrian connections should be located adjacent to Environmental Open Space where deemed appropriate by the Approving Authority.

d. When developing adjacent to the Environmental Open Space, development should meet ***Appendix D: Neighbourhood Design and Appendix E: Environmental Design Guidelines***.

e. Site grades for Communities surrounding EOS shall demonstrate that the natural drainage channels and areas shall remain viable in a post-development state.

f. Grade-matching or development disturbance should occur only outside of EOS, unless otherwise approved by the Director of Parks.

g. Any consideration for waterbody crossings (for transportation and infrastructure purposes) should be determined within the wider context of urban need and treated with the utmost environmental sensitivity. Factors to be considered when planning, designing and constructing these crossings include

i. city-wide street connectivity that integrates (as opposed to separates) stream corridors into the Community;

ii. waterway constraints (stream corridor considerations and riparian areas);

iii. location and design of stream channel crossings;

iv. minimizing impacts on adjacent Communities and parks;

v. incorporating river crossing design principles; and

vi. adapting road design to accommodate at-grade crossings to recognize the highest priority of pedestrian and ecological connectivity of EOS (e.g., road bulb-outs, traffic calming devices, reduced speed limit, textured paving, tree plantings, etc.).

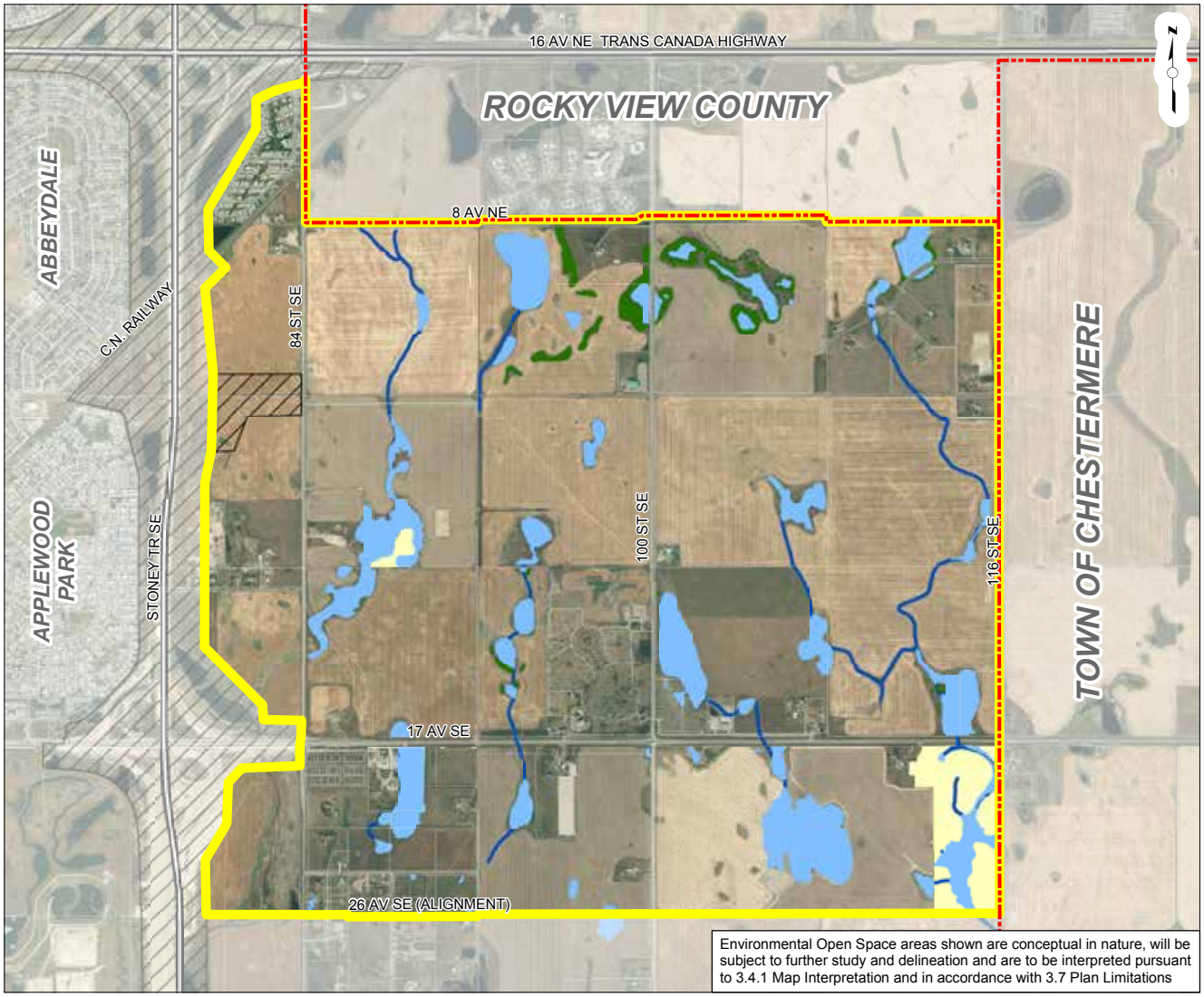
7. Delineated EOS

a. Delineated EOS (normally at time of Outline Plan / Land Use Amendment), integrated into development (as ER or other) shall be preserved to

i. enhance air, soil and water quality through watershed and groundwater protection and carbon dioxide sequestering;

ii. ensure that the ecological integrity of public open spaces is recognized and protected as the most critical element of the Plan Area's Green Corridor (see ***section 10.8, Green Corridor Policies***);

iii. strengthen the connection between natural areas, public parks and Neighbourhoods, enhance opportunities for outdoor recreation, retain Calgary's natural and cultural heritage and conserve



Map 11

Environmental Open Space Study Area

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area Boundary
- Potential Water Body
- Wetlands
- Non-Native Grassland
- NativeTrees / Tall Shrubs

0 200 400 600 800 1,000

Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

biodiversity and important environmental systems;

iv. add to the aesthetics of the urban fabric by means of natural features and diverse landscapes; and

v. contribute to the physical, emotional and spiritual well-being of Calgarians by providing areas of respite from the built environment.

8. Natural Area Management Plan

a. A Natural Area Management Plan should be completed prior to the approval of an Outline Plan / Land Use Amendment or detailed land use planning for lands protected within EOS. See the ***Calgary Parks and Recreation Natural Area Management Plan*** or most updated version for report guidelines and specifications.

9. Development

a. At the time of the Outline Plan submission, construction level details for road crossings and typical cross-sections of adjacent properties shall be required.

b. Prior to tentative plan or stripping and grading permit approval, it should be demonstrated that critical ecological material such as native grasses, forbs and trees in development areas are to be salvaged and integrated into the Environmental Open Space, where determined practical and feasible by the Director of Parks.

c. Prior to tentative plan or stripping and grading permit approval, it shall be demonstrated that critical cultural material such as glacier erratics from the development areas are to be salvaged and integrated into EOS at the discretion of the Director of Parks.

d. Applicants should restore the land within the Environmental Open Space to native habitat through the use of native plant species, as per the ***Calgary Parks and Recreation Natural Area Management Plan***.

10.6 Wetlands

Purpose

The purpose of these policies is to provide for the protection and enhancement of wetlands and their related uplands within the Plan Area. The policies also address the potential to allow development of certain wetlands within the Plan Area, in accordance with the "no net loss" wetlands policy, pursuant to The City's *Wetland Conservation Plan*.

***Appendix A* identifies any additional studies that may be required to assess these wetlands in detail at the Outline Plan / Land Use Amendment, Subdivision and / or Development Permit stage.**

10.6.1 Wetland Policies

1. Wetlands that qualify as Environmental Reserve: Protection and Acquisition

a. Wetlands which are considered Class III and above (as defined by the ***Stewart and Kantrud Wetland Classification System***) qualify as Environmental Reserve in accordance with the provisions of the Municipal Government Act and the ***Calgary Wetland Conservation Plan***. These lands shall be dedicated as ER through the subdivision process unless the Approving Authority determines, in its sole and unfettered discretion, not to require the dedication.

b. Where wetlands qualifying as ER are not dedicated to The City, the applicant shall provide compensation, per the ***Calgary Wetland Conservation Plan***, to the satisfaction of the Approving Authority.

c. When an Outline Plan / Land Use Amendment application is submitted without subdivision, and when the wetlands meet the criteria required pursuant to section 664 of the ***MGA***, the landowner and the Approving Authority may agree that the wetlands may be acquired or protected through alternative means referenced in ***section 10.6.1 (3)***, or by applying the Special Purpose - Urban Nature (S-UN) District or another applicable district under The City of Calgary *Land Use Bylaw* to the area of the wetland, or as per policies identified in the Open Space Plan (for example a conservation easement).

d. When a Development Permit application is submitted without subdivision, and when the wetlands meet criteria required pursuant to section 664 of the ***MGA***, the wetlands should be protected by applying a setback pursuant to The City's ***Environmental Reserve Setback Guidelines***.

2. Wetlands that qualify as Environmental Reserve: Disturbance

a. The Approving Authority can exercise its discretion to allow an applicant to disturb Class III and above wetlands (as defined by the *Stewart and Kantrud Wetland Classification System*) pursuant to The City's ***Wetland Conservation Plan***.

b. In the event the Approving Authority allows an applicant to disturb Class III and above wetlands, the applicant shall execute a ***Wetland Compensation Agreement*** with The City, with contents and form acceptable to The City of Calgary Parks and Law departments.

c. Where a wetland is not dedicated, acquired or otherwise protected, the lands shall be considered developable, subject always to ***section 3.7: Plan Limitations***, and the policies of the adjacent policy area shall apply to these lands without requiring an amendment to ***Map 5: Land Use Concept***.

3. Wetlands or related habitat that do not qualify as Environmental Reserve

Where wetlands which are considered Class I or II wetlands (as defined in the ***Stewart and Kantrud Wetland Classification System***) or their related upland or native grassland habitat, do not qualify as ER, the lands can be acquired and protected through alternative means where deemed appropriate by the Approving Authority. These alternative means include, but are not limited to

a. a land transfer or exchange undertaken in accordance with the "no net loss" policy pursuant to The City's ***Wetland Conservation Plan***;

b. the application of The City's ***Slope Adaptive Development Guidelines Policy*** *and* ***Conservation Planning and Design Guidelines***;

c. dedication of the lands as Municipal Reserve pursuant to the ***MGA***;

d. registration of a conservation easement on title as per the provisions of the ***Alberta Land Stewardship Act*** *(Alberta)*;

e. purchase of the lands;

f. introduction of development controls or incentives to promote voluntary conservation of the lands, which can include, but are not limited to:

   i. density bonusing systems;

   ii. increased building setbacks;

   iii. site grading restrictions; and

   iv. enhanced landscaping treatments.

Wetlands that are not protected are considered suitable for development under the policies of this plan, subject always to ***section 3.7: Plan Limitations***.

4. Additional Protective Measures Land within Environmental Setback

a. Applicants should restore the land within the Environmental Reserve setback area, pursuant to The City's ***Environmental Reserve Setback Guidelines,*** to its native habitat through the use of native plant species.

5. Land adjacent to Environmental Setback

Applicants should create a compatible interface with the Environmental Reserve lands and retain the natural function of the area through the use of native plant species and increased building setbacks.

6. Water Act approval

Prior to disturbing any wetland, an applicant shall obtain an approval(s) from Alberta Environment and Sustainable Resource Development pursuant to Part 4 of the ***Water Act (Alberta)***, at its sole cost and expense.

10.7 Environmental Reserve Dedication

Purpose

The purpose of these policies is to provide a basis for making decisions on the dedication of Environmental Reserve within the Plan Area. Where appropriate, a natural wetland or an environmentally significant feature shall be dedicated as ER land in accordance with the *MGA*. Where this is not possible or feasible, other alternatives for addressing the protection of the wetland or feature shall be considered.

10.7.1 Environmental Reserve Dedication Policies

1. Dedication of Environmental Reserve

2. Lands located within the Environmental Open Space, or elsewhere within the Plan Area, comprising environmentally significant areas that qualify as ER under the ***MGA***, should be dedicated as ER through the subdivision process. Environmental Reserve Setbacks

   A site-specific variable setback width shall be applied to Water Bodies qualifying as ER based on the following waterbody type:

   a. In accordance with The City's Environmental Reserve Setback Guidelines, setbacks from streams shall be applied according to stream order:

Stream Order	Setback (m)
1st	6
2nd	30
3rd	50
4th	50

   b. A base 30m setback from Stewart-Kantrud Class 3 or higher wetlands considered to be ER shall be applied in accordance with The City of Calgary's ***Environmental Reserve Setback Guidelines.*** Additional setbacks may be required based on the setback modifiers stated in the ***Development Guidelines and Standard Specifications Landscape Construction***.

3. Alternative Protection of Environmentally Significant Areas

   a. Where determined practical and feasible, lands within the Environmental Open Space or elsewhere within the Plan Area that are environmentally significant but do not qualify as ER under the ***MGA***, may be protected in their natural state through alternative means as determined appropriate by Council or an Approving Authority including, but not limited to:

      i. dedication of the lands as Municipal Reserve;

      ii. purchase of the lands;

      iii. introduction of development controls or incentives to promote voluntary protection of the lands.

      iv. a land transfer or exchange undertaken in accordance with the 'no net loss' policy stated in The City of Calgary's ***Wetland Conservation Plan***; or

      v. registration of a conservation easement on title as per the provisions of the ***Environmental Protection and Enhancement Act***.

4. Voluntary Dedication of Environmental Reserve

ER can be dedicated on a voluntary basis through the subdivision process subject to a site specific evaluation of the proposal by the Subdivision Authority even though the lands may not meet the ER requirements set out in the ***MGA***.

10.8 Green Corridor Policies

Purpose

The Green Corridor is the recreational component of Environmental Open Space. Green Corridors are intended to

- **create a connected pathway system within and beyond the Plan Area;**
- **connect culturally and ecologically significant natural features and passive recreation areas within the Plan Area, while being contiguous and multi-purpose oriented;**
- **integrate with the city-wide regional pathway and bikeway network and the Calgary Greenway;**
- **connect natural features of the surrounding landscape into the design of urban development to maintain a high degree of interconnectivity and permeability; and**
- **provide mobility networks to connect citizens with major employment areas, places of learning and cultural and recreational destinations.**

The land area for the Green Corridor shall be provided within EOS to the greatest extent possible (see *section 10.5: Environmental Open Space*).

10.8.1 Green Corridor Policies

1. Recreational Amenities

a. The Green Corridor shall

i. provide opportunities for a diversity of user access and activity;

ii. incorporate seasonal adaptability to provide year-long usability;

iii. where appropriate, connect to or be integrated with parks, recreation spaces and Joint Use Sites; and

iv. be 3.5m wide, where feasible and appropriate.

2. Accessibility

a. The Green Corridor shall

i. achieve connections to open spaces and the local and regional pathway network;

ii. provide walking and cycling opportunities;

iii. link major origin and destination points within the Communities; and

iv. maximize opportunities to connect with natural features and large ecological areas such as watersheds, watercourses, significant vegetation and biologically diverse areas.

3. Acquisition

See ***section 10.5 Environmental Open Space*** for policies regarding acquisition of land for the Green Corridor.

10.9 Energy

Purpose

The purpose of these policies is to ensure alternative energy and energy efficiency is considered in the design of developments, per the *MDP*.

10.9.1 Energy Policies

1. Energy efficiency shall be part of the design considerations for all subdivisions and buildings. Design considerations should include
   a. Neighbourhoods, streets, buildings, and parks oriented to maximize passive solar gain;
   b. Densities and a land use pattern that support district energy and co-generation / combined heat and power;
   c. Creating tree corridors to serve as windscreens that protect buildings and activity areas from extreme temperature fluctuations;
   d. Mixed-Use buildings to balance heat and power demand;
   e. Resource and energy-saving design and building techniques and standards, such as green building standards (e.g., Leadership in Energy and Environmental Design (LEED) or Built Green Alberta Standards); and
   f. Solar orientation, natural light and ventilation, xeriscaping, and ecological landscaping that supplements efficient heating and cooling systems.
2. In consultation with Calgary Roads, applicants should use street light fixtures that are energy efficient, minimize light pollution and are aesthetically pleasing.
3. Applicants should design urban forms and infrastructure that support alternative and renewable energy production, sources, and systems, and reduced energy consumption (e.g., solar-ready housing).
4. Site and community design should incorporate micro-energy systems (e.g., solar panels).
5. A district energy and co-generation/combined heat and power assessment should be conducted for all Outline Plan / Land Use Amendment applications that include all or a portion of the Urban Corridor or a Community Activity Centre to determine feasibility and plan for future infrastructure, where appropriate.

10.10 Waste Management

Purpose

The purpose of these policies is to reduce waste created by residents and developments per the *Waste Diversion Strategy* and the *MDP*. The City of Calgary's 80/20 by 2020 Waste Diversion Strategy sets a target of recycling 80% of current product being taken to city landfills by 2020.

10.10.1 Waste Management Policies

1. The City's current goals and targets for waste diversion should be met by
   a. minimizing waste production in construction and operation including
      i. development of construction waste management plans and materials strategy, targets and associated monitoring and reporting;
      ii. on-site waste management and recycling; and
      iii. employing design techniques that reduce waste generated from construction, as well as design techniques which enhance deconstruction opportunities at the end of the life of the buildings.
   b. maximizing the re-use of materials and the recycled content in the products selected for construction;
   c. maximizing waste diversion and recycling in operation through the provision of sufficient and practical space, facilities and access for

waste segregation, diversion and pick-up in all developments;

d. employing design solutions which create an adaptable and flexible space for change of use over time to accommodate changes in lifestyle and development of new technologies;

2. One Community Recycling / Diversion Depot shall be provided in each of Communities A, B, C and D, and be located in conjunction with a non-residential use (e.g., in an Activity Centre).

10.10.2 Special Study Area **Bylaw 84P2018**

1. A Special Study Area (SSA) is included on lands surrounding the non-operating landfill site in the Plan Area (see ***Map 5: Land Use Concept***). The intent of the SSA is to highlight additional study required within the 300 metres restricted Subdivision Development Regulation setback. All land use proposals must be supported by the appropriate studies carried out by the private landowners at their sole cost and expense.

   Amendment(s) to the ASP should be required concurrently with Outline Plan/Land Use Amendment application changing the proposed land use map and/or text to uses appropriate within the vicinity of the non-operating landfill. Refer to section ***4.2.8 Non-Operating Landfill Site***, and ***Appendix F: Background Information for the Non-Operating Landfill***.

2. In conjunction with an Outline Plan/Land Use Amendment application, the Applicant shall:

   a. submit a current Phase I Environmental Site Assessment (ESA) to the satisfaction of the Approving Authority to identify any actual or potential or off-site human health impacts, soil and groundwater contamination and determine if the site is suitable for the intended use;

   b. if the Phase I ESA identifies any actual or potential or off-site contamination, submit a current Phase II ESA to the satisfaction of the Approving Authority to determine if there is a requirement for remediation or risk management on the site; and

   c. if the Phase II ESA determines a need for site remediation, or risk management, submit a Remedial Action Plan or Risk Management Plan to address the manner and extent that the site will be remediated or managed to render it suitable for the intended use.

deleted **Bylaw 84P2018**

10.11 Agricultural Operations

Purpose

Much of the land within the Plan Area is currently being used for extensive agricultural production, therefore the intent of the following policies is to ensure the protection of agricultural resources in accordance with the *MDP*.

10.11.1 Agricultural Operations Policies

1. Existing agricultural operations should be protected until the land is serviced for urban development in accordance with ***MDP*** policy 4.3.2b by
   a. avoiding stripping and grading until such time that it is required to facilitate development(s);
   b. maintaining access to agricultural lands for farm machinery;
   c. working with agricultural operators to limit any nuisance impacts to adjacent residents if applicable; and
   d. ensuring that adjacent or nearby development and building activities do not negatively impact land being used for agricultural production.
2. Compatible and appropriate agricultural operations should be incorporated into community design to provide for local food production.

11. INFRASTRUCTURE & UTILITY POLICIES

***Municipal Development Plan* Goal:**
Build a globally competitive city that supports a vibrant, diverse and adaptable local economy, maintains a sustainable municipal financial system and does not compromise the quality of life for current and future Calgarians.

Purpose

These policies ensure applicable development and safety regulations associated to existing and future infrastructure and utilities are implemented.

11.1 Oil and Gas

Purpose

Once established, both a residential subdivision and an oil or gas facility are persistent land uses, destined to exist for many years, if not decades. The co-existence of these activities, where they occur in proximity, is of importance to all stakeholders for reasons of public safety, quality of life, nuisance mitigation, environmental management, sound land use planning and financial viability of land development and energy companies. Therefore, policies relating to oil and gas facilities (e.g., wells, batteries, pipelines and processing plants) are intended to ensure appropriate residential development around such facilities at all stages of ASP implementation and construction process while minimizing potential disturbances to the Plan Area's future residents.

11.1.1 Oil & Gas Policies

1. Applicants shall obtain a Land Development Information package from the ERCB when proposing development within 1.5 km (4921 ft) of the sour gas pipeline.
2. Development around oil and gas facilities will adhere to the policies, setbacks and requirements established by the ERCB and The City.
3. A Risk Assessment shall be required as part of an Outline Plan / Land Use Amendment application for lands within 1.5 km (4921 ft) of oil and gas facilities, within associated setbacks and / or an associated EPZ. This assessment shall be used by The City of Calgary to determine whether or not the development should be submitted to a greater setback distance, and if additional mitigation measures (e.g., increased network connectivity, lower residential density) should be integrated at the development stage.
4. Prior to any Outline Plan / Land Use Amendment application within 1.5 km (4921 ft) of oil and gas facilities and / or within the EPZ (whichever is greater), additional consultation with The City, the operator of the facility and the ERCB shall be required for the purpose of determining how the Emergency Response Plan will be affected.
5. The Applicant should identify the location, development setbacks, emergency planning zones and emergency response planning of all oil and gas facilities in its marketing information.

11.1.2 Abandoned Oil & Gas Well Policies

Within the Plan Area there are two known abandoned well sites as identified on ***Map 3: Attributes and Constraints***. See ***Table 1: Gas Well Data***. The following policies apply for land located in proximity to abandoned well sites

1. All development around an abandoned well site shall comply with the ERCB setback and access requirements and any other applicable laws or regulations.
2. In conjunction with an Outline Plan / Land Use Amendment or Development Permit application for any parcel containing an abandoned well, the Applicant shall provide
    a. surveyed locations of abandoned wells and pipelines and confirmation from the ERCB of any setbacks;
    b. a Phase I Environmental Site Assessment specific to the abandoned well;
    c. a Phase II Environmental Site Assessment specific to the abandoned well as deemed appropriate by the Approving Authority;
    d. an evaluation of the integrity of the well abandonment; and
    e. a reclamation certificate for the well, if possible.
3. The City shall not provide Municipal Reserve credit within ERCB setbacks.
4. Pending the results of a risk assessment, abandoned wells can be incorporated into Municipal Reserve areas at the discretion of the Approving Authority.
5. Abandoned wells and their associated setbacks shall not be granted a residential or commercial land use designation and should only assume land uses that allow for immediate maintenance should servicing be required.
6. Roads shall not be located over abandoned wells.
7. All abandoned well sites shall be marked with temporary signage identifying abandoned well, operator and contact information at time of excavation and servicing to prevent damage both to the well and to equipment and injury to equipment operators.

11.1.3 Low Vapour Pressure Pipeline Policies

There is a low vapour pressure pipeline within the Plan Area. This pipeline currently exists within a utility right-of-way. For land located within pipeline rights-of-way

1. At the time of approval of this ASP, it was understood that the utility right-of-way was 30m (98 ft). This is to be confirmed at the Outline Plan / Land Use Amendment stage.
2. Lands containing pipeline rights-of-way should have separate title and not be granted a residential land use designation.
3. The City shall not grant Municipal Reserve credit for land containing pipeline rights-of-way.
4. Crossing and access agreements shall be in place prior to tentative plan approval over lands encumbered by a pipeline right-of-way.
5. Pathways and other recreational uses can be allowed on pipeline rights-of-way at the discretion of the Approving Authority.
6. All land uses on pipeline rights-of-way shall have regard for the safe, ongoing operating of these facilities.

11.1.4 Discontinued / Abandoned Pipeline Policies

The Plan Area is bisected by an abandoned sour gas pipeline that starts in the lower southeast corner and runs diagonally towards 17 Avenue SE, crossing 17 Avenue SE and running north parallel to the proposed Shepard Regional Drainage System conveyance, connecting to the abandoned well and then adjacent to 84 Street (see ***Map 3: Attributes and Constraints***).

As of January 2013, the pipeline has been abandoned. A setback equivalent to the right-of-way remains on the pipeline as it is not being removed from the ground. Any Landowner affected by the setback should build a relationship with the pipeline operator so that a timeframe for the infrastructure is understood and setbacks and EPZs are confirmed.

1. For discontinued pipeline
    a. In accordance with ERCB regulations at the time of approval of this ASP, setback distances are retained as though the pipeline were active. Level 1 segments of a pipeline shall have a setback equivalent to the right-of-way in which development cannot occur. The setback is determined by the operator to be 15m (49 ft). The City of Calgary shall apply an additional 15m (49 ft) safety setback. Therefore the total setback is 30m (98 ft) (15m (49 ft) on either side of the centre line of the pipeline).
    b. In accordance with ERCB regulations at the time of approval of this ASP, level 2 segments of a pipeline shall have a setback of 500m (1640 ft) for urban centres and public facilities, and a setback of 100m (328 ft) for unrestricted country development and permanent dwellings, all as defined by the ERCB.
2. Abandoned pipelines shall have setback equivalent to the right-of-way.
3. The applicant should regularly provide the pipeline operator with updates on the status of development.
4. The operator and ERCB should be circulated any Outline Plan / Land Use Application within 1.5 km (4921 ft) of the pipeline.
5. The applicant should identify the location of the pipeline and the associated development setbacks and emergency planning zones in its marketing development information.

11.2 Utility Infrastructure

Purpose

The purpose of these policies is to ensure that adequate utility infrastructure is provided to service urban development throughout the Plan Area.

11.2.1 Utility Infrastructure Policies

1. Municipal and Shallow Utilities

a. Urban development in the Plan Area shall be serviced with municipal water, sanitary sewer, a stormwater system and shallow utilities (i.e., gas, cable, electricity, telephone).

b. The provision, alignment and capacity of water distribution mains and water mains, sanitary sewer mains and trunks and stormwater mains and trunks shall be in accordance with City standards, based upon utility servicing studies and analysis.

c. The location of all utilities and the provision of rights-of-way and easements and related line assignments should be addressed to the mutual satisfaction of The City, the applicant and the utility companies.

d. Utility rights-of-way and easements shall be provided to accommodate municipal utilities at the discretion of the Approving Authority, and shallow utilities as determined necessary by utility providers.

e. Utility rights-of-way and easements, public utility lots and road rights-of-way shall be required as determined necessary to facilitate orderly and sequential urban development.

f. Utility rights-of-way should be designed to reduce the setback of buildings from the street wherever possible, with particular attention on the Activity Centres and Urban Corridors and other higher Density areas where the pedestrian environment is paramount.

g. Utility rights-of-way and easements should be located to ensure the long-term viability of street trees in the Plan Area.

2. Utility Alignments

a. Utility alignments should be refined at the Outline Plan / Land Use Amendment approval phase without an amendment to this ASP.

b. Utility rights-of-way and easements and public utility lots shall be provided as required to accommodate the development or the extension of municipal utilities necessary for development.

c. Prior to Outline Plan / Land Use Amendment approval, an Applicant shall submit studies and information determined necessary to identify the location and alignment requirements for utilities within the development.

d. An applicant should 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 municipal utilities through or adjacent to a site to allow for the servicing of a site.

e. Utilities should be aligned to avoid Environmental Open Space lands to be retained as natural open space in the approved Outline Plans, unless otherwise approved by the Director of Parks. Temporary disturbance to Environmental Open Space for utility installation shall be reclaimed to the satisfaction of the Director of Parks.

deleted **Bylaw 48P2023**

11.3 Water Servicing

Purpose

The purpose of these policies is to provide for the design and development of a suitable and efficient water distribution system is provided to service urban development throughout the Plan Area.

The Plan Area encompasses two water pressure zones: The Foothills Pressure Zone and the Glenmore Pressure Zone (see Map 12: Water Services).

The majority of the Plan Area is within the Glenmore Pressure Zone. Development in the Plan Area shall be serviced by a new 900mm water main running east from the existing 750mm water main along Memorial Drive SE, following 100 Street SE, south into the Cell C of the East Regional Context Study Area, to connect to an existing 900mm water main on 50 Avenue SE. Refer to Map 12: Water Services for the proposed conceptual alignment of the water main. Upgrades to the existing Memorial Drive water main shall also be required.

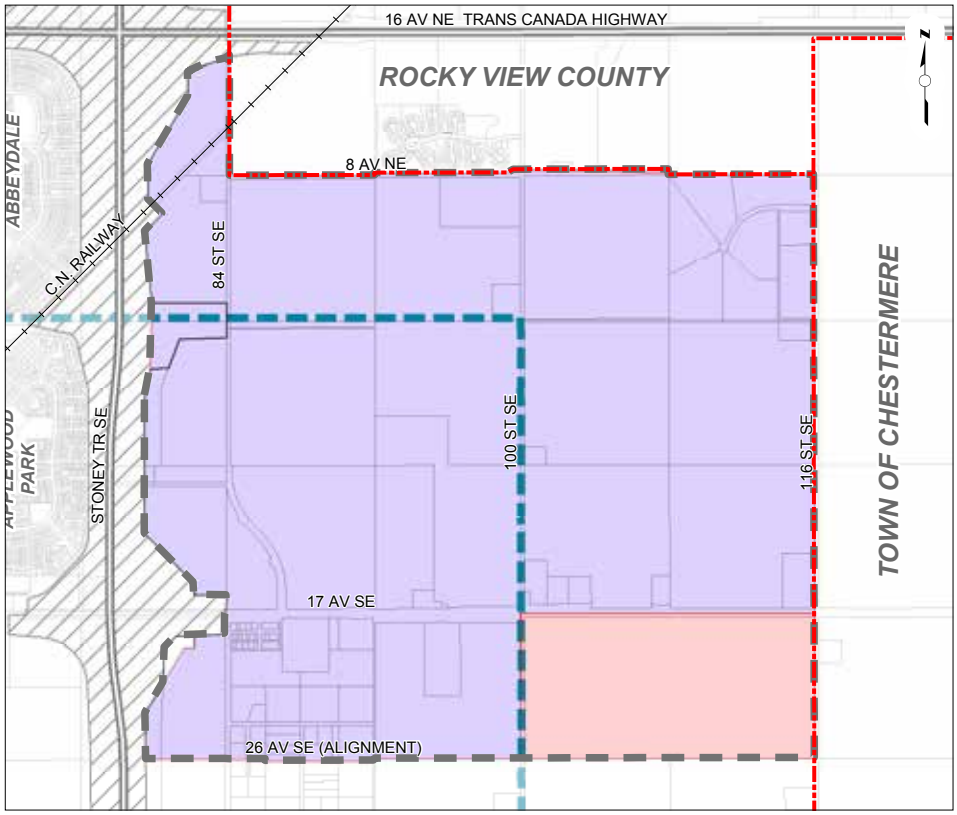
11.3.1 Water Servicing Policies

1. Design of Water Distribution System

The water distribution system should be aligned to minimize its impact on natural features. The water distribution system for the Plan Area shall be designed to adequately, safely and efficiently serve the full build out of the Plan Area as per the ASP. Conceptual alignments of the proposed water main are illustrated on ***Map 12: Water Services***.

2. Review of Water Distribution System

a. Any proposed distribution systems for the Outline Plan Area shall be reviewed and, if required, modelled by The City as part of an Outline Plan / Land Use Amendment application.



Map 12

Water Services

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area Boundary
- Proposed Water Main

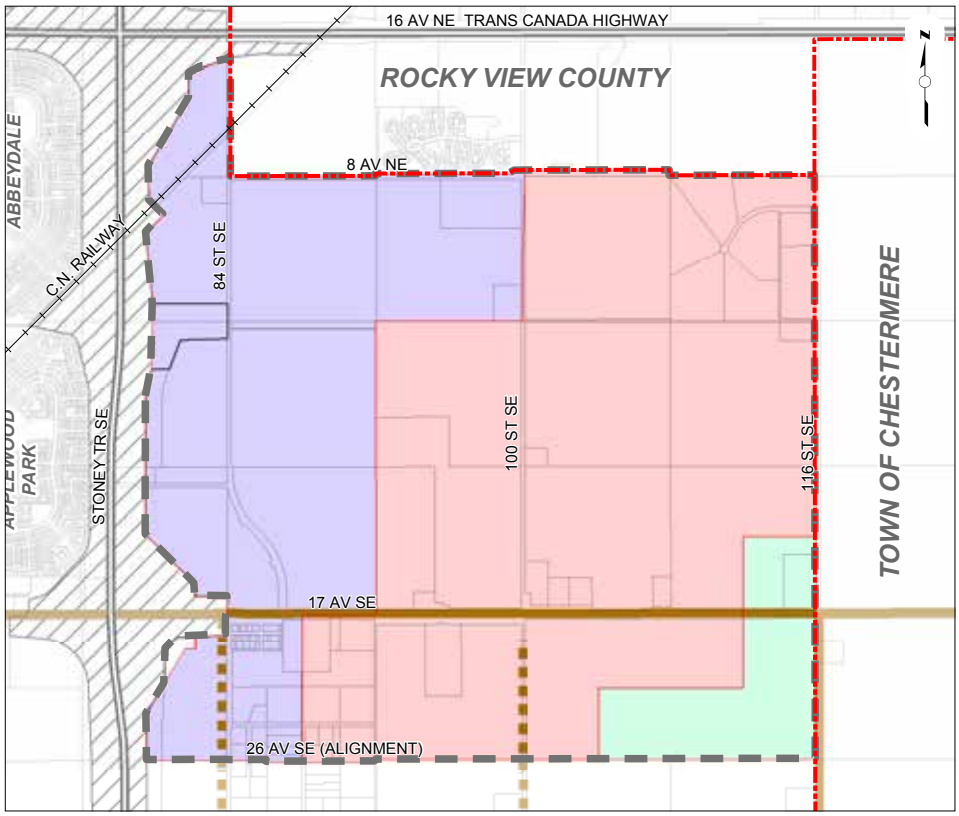
Water Service Pressure Zones

- Foothills
- Glenmore

0 200 400 600 800 1,000
Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.



Map 13

Sanitary Services

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area Boundary
- Existing Sanitary Service
- Proposed Sanitary Service

Sanitary Catchment Areas

- Central
- Southeast
- West

0 200 400 600 800 1,000
Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

b. Water Resources shall identify any offsite distribution mains and / or transmission water mains required to be installed to provide municipal water to an Outline Plan / Land Use Amendment area.

c. Alternative and more cost effective alignments and locations can be considered at the Outline Plan / Land Use Amendment stage at the discretion of the Approving Authority.

d. Impact to Environmental Open Space shall be minimized.

11.4 Sanitary Servicing

Purpose

The purpose of these policies is to ensure a suitable and efficient sanitary sewer system is provided to service urban development throughout the Plan Area.

The Plan Area is divided into three sanitary subcatchments.

The westerly subcatchment shall be serviced by the future sanitary trunk along 84 Street SE, ranging from 600mm to 1,350mm diameter, tying to an existing sanitary trunk on 68 Avenue SE and 68 Street SE.

The central subcatchment shall be serviced by the new sanitary trunk along 100 Street SE, ranging from 675mm to 750mm diameter, tying into the future 84 Street sanitary trunk.

The southeast subcatchment shall be serviced by a future lift station and a 400mm diameter forcemain to tie into the future trunk on Peigan Trail SE.

11.4.1 Sanitary Servicing Policies

1. Design of Sanitary Sewer System

The sanitary sewer system for the Plan Area shall be designed to adequately and efficiently serve the full build out of the Plan Area as per the ASP. Conceptual alignments of the sanitary sewer system are illustrated on ***Map 13: Sanitary Services*.**

2. Analysis of Sanitary Sewer System

a. As part of an Outline Plan / Land Use Amendment application, a Sanitary Sewer Servicing Study / Analysis can be required at the discretion of the Approving Authority to demonstrate that the subject site can be serviced in accordance with the overall design of the sanitary sewer system for the area.

b. Alternate and more cost effective alignments and locations can be considered at the Outline Plan / Land Use Amendment stage. Impacts on Environmental Open Space shall be minimized.

c. At the time of an Outline Plan / Land Use Amendment application, an Applicant should contact Water Resources to discuss opportunities for reclaimed water use.

11.5 Stormwater Management

Purpose

The purpose of these policies is to provide for the design and development of a suitable and efficient stormwater management system to serve urban development while preserving the local stream network and significant wetlands within and beyond the Plan Area.

The Plan Area is located in the Bow River Watershed Basin, Shepard Regional Drainage Corridor and Forest Lawn Creek catchments. Stormwater from the majority of the Plan Area shall drain into required stormwater facilities located within the Plan Area, discharging into the Shepard Regional conveyance system at controlled release rates and volumes, with ultimate discharge into the Bow River as per the Shepard Regional Drainage Plan, 2011.

Map 14 delinates the area that shall discharge into Forest Lawn as per Forest Lawn Creek Catchment Drainage Study Master Drainage Plan, 2010.

The area surrounding 84 Street SE, predominantly north of 17 Avenue SE, shall discharge into Forest Lawn Creek as per Forest Lawn Creek Catchment Drainage Study Master Drainage Plan, 2010.

11.5.1 Stormwater Management Policies

1. Stormwater Release Rate

a. The stormwater management system for the Plan Area shall align with the rates set in the Shepard Regional Drainage Plan, Master Drainage Plan (to be prepared in accordance with Shepard Regional Drainage Plan), Forest Lawn Creek Catchment Drainage Study Master Drainage Plan, 2010, The City of Calgary Stormwater Management Strategy (2005), the Bow River Basin Watershed Management Plan (2008), the Municipal Development Plan (2010), and other relevant and applicable City of Calgary policies.

b. Recommendations for maximum allowable release rate and runoff volume control targets identified within the Shepard Regional Drainage Plan and Forest Lawn Creek Catchment Drainage Study Master Drainage Plan shall be adhered to for the Plan Area.

2. Stormwater Ponds

a. Stormwater ponds should be located on a public utility whenever possible and should not be located in Environmentally Significant Areas as documented by a Biophysical Impact Assessment accepted by the Director of Parks. To the greatest extent possible, school and recreation sites should not be located on land needed for storm ponds.

b. Engineered natural stormwater wetlands may be integrated within Environmentally Significant Areas to ensure long term sustainability, in a manner that continues to provide viable habitat.

c. Treated stormwater releases into existing water bodies may be acceptable, consistent with ***10.5.1 (4) b***, if it can be demonstrated that the water contributes to the function of these natural features and provides for quality habitat, as demonstrated in an approved Master Drainage Plan.

3. Design of Stormwater Management System

a. The stormwater management system for the Plan Area shall be designed to adequately and efficiently serve the full build out of the Plan Area as per the ASP, while preserving the local stream network and significant wetlands and adhering to the Master Drainage Plan (to be prepared in accordance with Shepard Regional Drainage Plan), Shepard Regional Drainage Plan and Forest Lawn Creek Catchment Drainage Study Master Drainage Plan.

b. Prior to an Outline Plan / Land Use Amendment application review, a Master Drainage Plan shall be prepared.

c. As part of an Outline Plan / Land Use Amendment application, the Applicant shall submit a Staged Master Drainage Plan consistent with the overall design of the stormwater management system for the area as per the approved Master Drainage Plan.

d. The Staged Master Drainage Plan shall also be required to comply with any new stormwater management policies and current interim servicing policies. Interim servicing solutions in advance of the ultimate storm infrastructure are discouraged but may be considered on an individual basis at the sole discretion of The City of Calgary where deemed viable and in alignment with the Master Drainage Plan.Interim servicing shall be aligned with priorities and infrastructure timing set through the Corporate Framework for Growth and Change and shall adhere to applicable City policies, principles, and City specified technical performance requirements. Developers may be required to enter into an agreement with The City to the sole satisfaction of the City of Calgary.

e. Stormwater facilities are shown conceptually on ***Map 14: Storm Services***. Alternate and more cost effective alignments may be considered at the Outline Plan / Land Use Amendment stage. Impact to Environmental Open Space shall be minimized.

4. Best Management Practices for Staged Master Drainage Plans

a. As part of the preparation of staged Master Drainage Plans, "Best Management Practices" and alternatives for stormwater quality and quantity enhancement should be assessed with regard to introducing

i. stormwater facilities with a preference for source controls as opposed to end-of-pipe solutions;

ii. Low-Impact Development methods, such as constructed wetlands and bio-swales, to mitigate the effects of stormwater run-off into local watercourses as opposed to hard engineering measures.

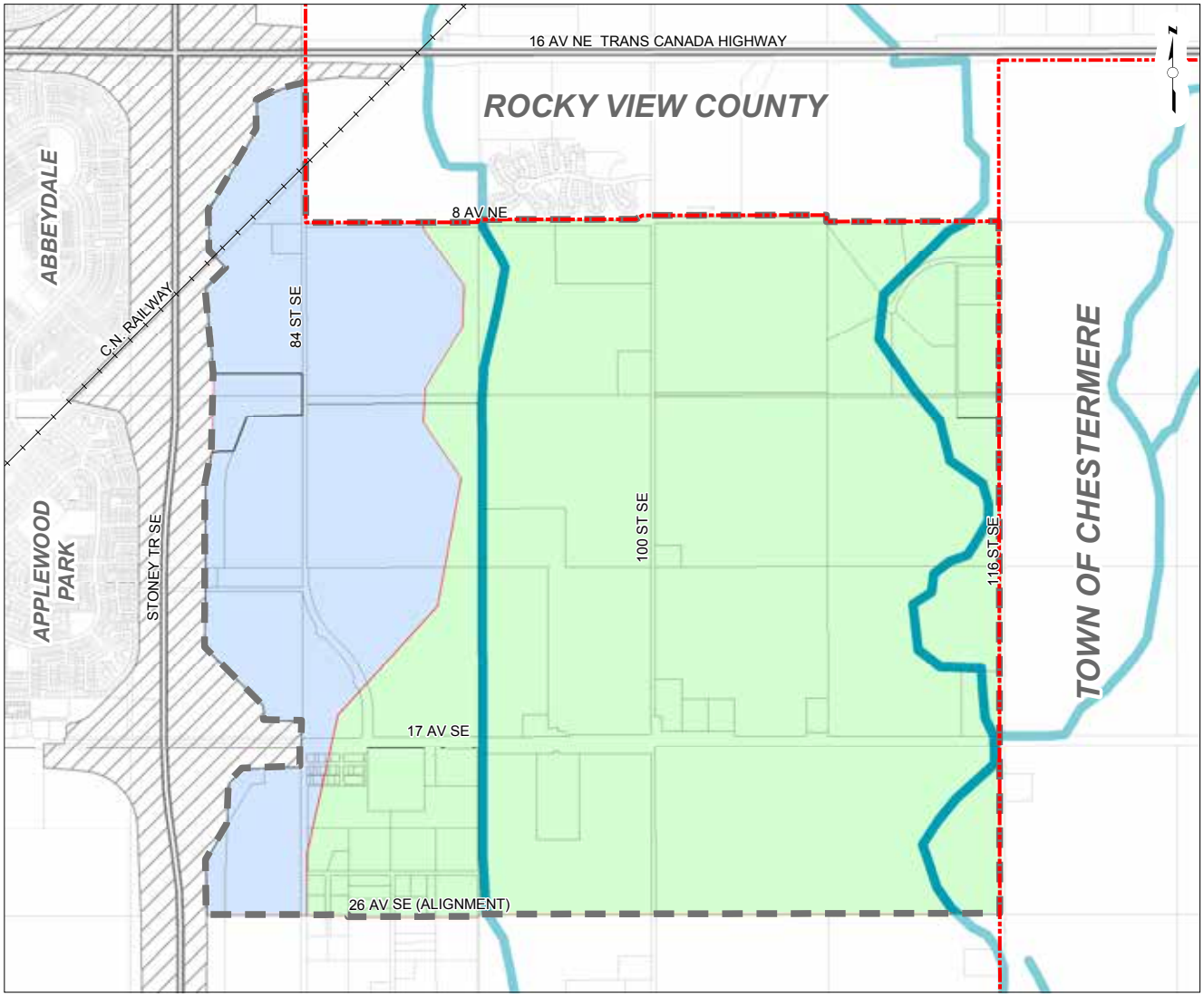
iii. Stormwater measures that reduce impermeable surface runoff and correspondingly increase the permeable area such as permeable pavement, rain gardens, etc., to achieve 10 to 20 percent imperviousness, as per the Municipal Development Plan (2010).

iv. Stormwater reuse such as irrigation, to the satisfaction of the Approving Authority.

b. Where appropriate, the stormwater management system should be designed to

i. operate on a gravity basis and preserve the function of the existing wetlands pursuant to The City of Calgary's Wetland Conservation Plan; and

ii. introduce mitigation measures to address the potential impact of water quality on existing wetlands pursuant to the Shepard Regional Drainage Plan and Forest Lawn Creek Catchment Drainage Study Master Drainage Plan (2010).



Map 14

Storm Services

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Storm Conveyance (Shepard Regional Drainage System)

Storm Catchment Areas

- Forest lawn
- Shepard

0 200 400 600 800 1,000

Metres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

5. Floodway/Floodplain

a. Design of utilities, transportation and other infrastructure features shall address flood conditions.

6. Outline Plan/Land Use Amendment

a. As a condition of approval of an Outline Plan / Land Use Amendment application that provides for the discharge of stormwater from the application area to privately owned lands, a public utility easement(s) or equivalent legal instruments, to the satisfaction of the Approving Authority, shall be registered against the title of the subject privately-owned lands addressing and resolving issues relating to the discharge of the stormwater flows to those lands.

12. IMPLEMENTATION POLICIES

Purpose

The purpose of these policies is to establish how Intensity thresholds and Density targets will be implemented. The ASP will primarily be implemented through the Outline Plan / Land Use Amendment applications in addition to Development Permit and Subdivision Applications.

12.1 Intensity / Density

12.1.1 Intensity / Density Policies

1. Each subsequent Outline Plan / Land Use Amendment application shall demonstrate, to the satisfaction of the Approving Authority, that the following Intensity / Density requirements for the overall community or applicable areas are being achieved as per ***Table 5: Intensity / Density Requirements by Area***.
2. Each Outline Plan / Land Use Amendment application shall demonstrate how the Community can accommodate additional housing and / or jobs to achieve an intensity of 70 people and jobs per Gross Developable Hectare.
3. A shadow plan should be provided with each Outline Plan / Land Use Amendment application to demonstrate how Intensification may occur.
4. Land Use approvals should allow for additional Density or Intensity to be achieved.
5. Minimum density requirements are to reflect the policies and knowledge at the time of each land use/outline plan application. The minimums identified in this ASP may not be appropriate at that time and should be adjusted as required as long as they can be serviced by the approved infrastructure.

Table 5: Intensity / Density Requirements by Area

Area	Description	Intensity (people and jobs per GDHa)	Density (units per GDRHa)	Refer to Policy
Overall Community	This includes an entire Community	Minimum 60 Ultimate 70	N/A	6.2.1
Neighbourhood Area	This includes all Residential Uses within a Neighbourhood (see Map 5: Land Use Concept, "Neighbourhood Area") excluding NAC	N/A	8 upa	6.4.1
Neighbourhood Activity Centre	All land considered to be within the NAC	100	N/A	6.5.1.2
Community Activity Centre	All land identified within the CAC (see Map 5: Land Use Concept)	150	N/A	6.6.1
Urban Corridor	All land within the UC (see Map 5: Land Use Concept)	200	N/A	6.7.1.2

12.1.2 Intensification Policies

1. A block-based road network pattern should be provided in Activity Centres and Urban Corridors to facilitate Intensification in these areas.
2. Intensification should be strategically directed to occur primarily in Activity Centres and Urban Corridors.
3. Intensification can occur through means including, but not limited to
    a. flexible land use districts that allow for mixed-use development;
    b. initial development that generates activity by being pedestrian-oriented and facilitating direct and efficient transit connections;
    c. site design that enables and facilitates infilling to occur; and
    d. development of an initial built form that facilitates Intensification, such as buildings and uses that front onto public streets.

12.2 Evaluation of Neighbourhood Composition and Design

12.2.1 Evaluation of Neighbourhood Composition and Design Policies

1. Application Requirements

a. All applications shall provide a design statement in accordance with ***Appendix L: Design Statement*** indicating how the proposed development conforms to the policies of this ASP and any other relevant policies.

b. An Outline Plan / Land Use Amendment application shall provide

i. a concept plan for one or more complete Neighbourhoods, with defined boundaries between each Neighbourhood;

ii. a concept plan showing the boundaries of the Activity Centre, Urban Corridor and Community Retail 2 Centre and how it connects with surrounding Neighbourhood Areas; and

iii. sufficient information for the Approving Authority to ensure the concept complies with the policies in this ASP.

c. Where a Neighbourhood encompasses the land of more than one owner, an Outline Plan may comprise less than the complete Neighbourhood, but shall be accompanied by a shadow plan demonstrating how the entire Neighbourhood could be planned in accordance with policy.

d. Where an Activity Centre encompasses the land of more than one owner, an Outline Plan may comprise less than the complete Activity Centre, but shall be accompanied by a shadow plan demonstrating how the subject site could be planned to connect and integrate with adjacent lands in accordance with policies of this ASP.

e. Community Activity Centres and Urban Corridors may, at the discretion of Administration and with the agreement of the landowners, become the subject of future policy plans incorporating Form-Based Controls. In such cases, the Form-Based Control shall be developed by The City in consultation with landowners and stakeholders and should comply with the policies of this ASP.

f. A District Energy Assessment can be required at the Outline Plan / Land Use Amendment stage for applications containing or within a Community Activity Centre or Urban Corridor at the discretion of the Approving Authority.

g. Sites of First Nations heritage and significance should involve First Nations in any discussions and planning.

12.3 Form-Based Control Opportunities

Purpose

Given the importance of the Urban Corridor and Community Activity Centre, a special approach for dealing with the subdivision and development of land within these areas may be used. A separate Local Area Plan may be developed containing Form-Based Controls.

Form-Based Control is a method of development regulation that focuses more attention on attaining a specific desired urban form with less emphasis on individual land use. Form-Based Controls have a number of characteristics that are not found in conventional land use controls, including:

- **a strong focus on the context of the site and the quality of the public realm;**
- **an emphasis on built form and streetscape appearance with considerable flexibility conveyed to the use of the land;**
- **the coordination of the subdivision and development processes through a common set of rules;**
- **the "right-sizing" of standards for roads, parks and services; and**
- **the inclusion of a broad range of design elements, primarily through diagrams and maps as opposed to text.**

Form-Based Controls provide direction to the Approving Authority in making decisions on subdivision applications and Development Permit applications within the Plan Area. These controls supplement the land use district rules applied to the subject site through The City of Calgary Land Use Bylaw, as well as the conditions of the approved Outline Plan / Land Use Amendment.

Form-Based Controls are appropriate to be used in the Activity Centres and Urban Corridors to ensure compact, walkable development. Form-Based Controls should be applied for the entire area of an Activity Centre or Urban Corridor. When used, the Form-Based Controls should reflect the intent of the guidelines in *Appendix D: Neighbourhood Design*.

12.3.1 Statutory Plan Policies

1. Any Outline Plan / Land Use Amendment application including a Community Activity Centre or the Urban Corridor, and utilizing Form-Based Controls, should include a proposed ASP amendment or separate Local Area Plan to be adopted as a Statutory Plan, and may be accompanied by Direct Control Bylaws. The proposed ASP amendment or Local Area Plan should include
    a. An outline of the extent of each Activity Centre or Urban Corridor within the Outline Plan area where Form-Based Controls shall be utilized, including
        i. land use pattern,
        ii. block layout to allow for staged subdivision,
        iii. development Intensity,
        iv. parking requirements,
        v. street cross sections which may include widths of travel lanes and sidewalks, street tree and street furniture placement, and locations of transit and bicycle lanes,
        vi. the placement of buildings, building envelopes, configuration, features and functions of buildings,
        vii. physical form of public spaces vegetation and furniture placement within parks, and
        viii. any other content as deemed necessary by the Approving Authority to define the area.

b. A demonstration of the above using maps, tables and diagrams that work together in a coordinated manner.

12.3.2 Form-Based Control Policy Compliance Policies

All Form-Based Controls proposed within the Plan Area shall reflect the policies contained in this ASP and any other relevant policies.

12.4 Approval Process

Purpose

The purpose of these policies is to provide for the implementation of the Plan's policies through the Outline Plan / Land Use Amendment process.

12.4.1 Land Use Approval Policies

1. The timing, direction, and extent of urban growth within the Plan Area should be determined primarily through the Outline Plan / Land Use Amendment process, which establishes the design and land use pattern for the subject site and enables subdivision and development to proceed.
2. Each submitted Outline Plan / Land Use Amendment application should consist of one or more complete Neighbourhoods and be no more than 150 hectares (370 acres). Where servicing or infrastructure solutions warrant a larger catchment area, Outline Plans in excess of 150 ha (370 ac) may be considered. Additionally, master planning for an entire community is encouraged to provide context for the Outline Plan / Land Use Amendment applications within it.
3. An Outline Plan / Land Use Amendment application should not be supported until all associated infrastructure and servicing costs associated have been addressed, in accordance with the ***Urban Growth Policies of section 5.1*** and The City's *Corporate Framework for Growth and Change* (pending approval).
4. The land use designations in effect at the time of approval of the Plan shall
   a. continue to apply in accordance with the provisions of the MGA; and
   b. remain in effect until a land use amendment application is approved by Council in accordance with the policies of the Plan, as amended.

12.4.2 Outline Plan Approval Policies

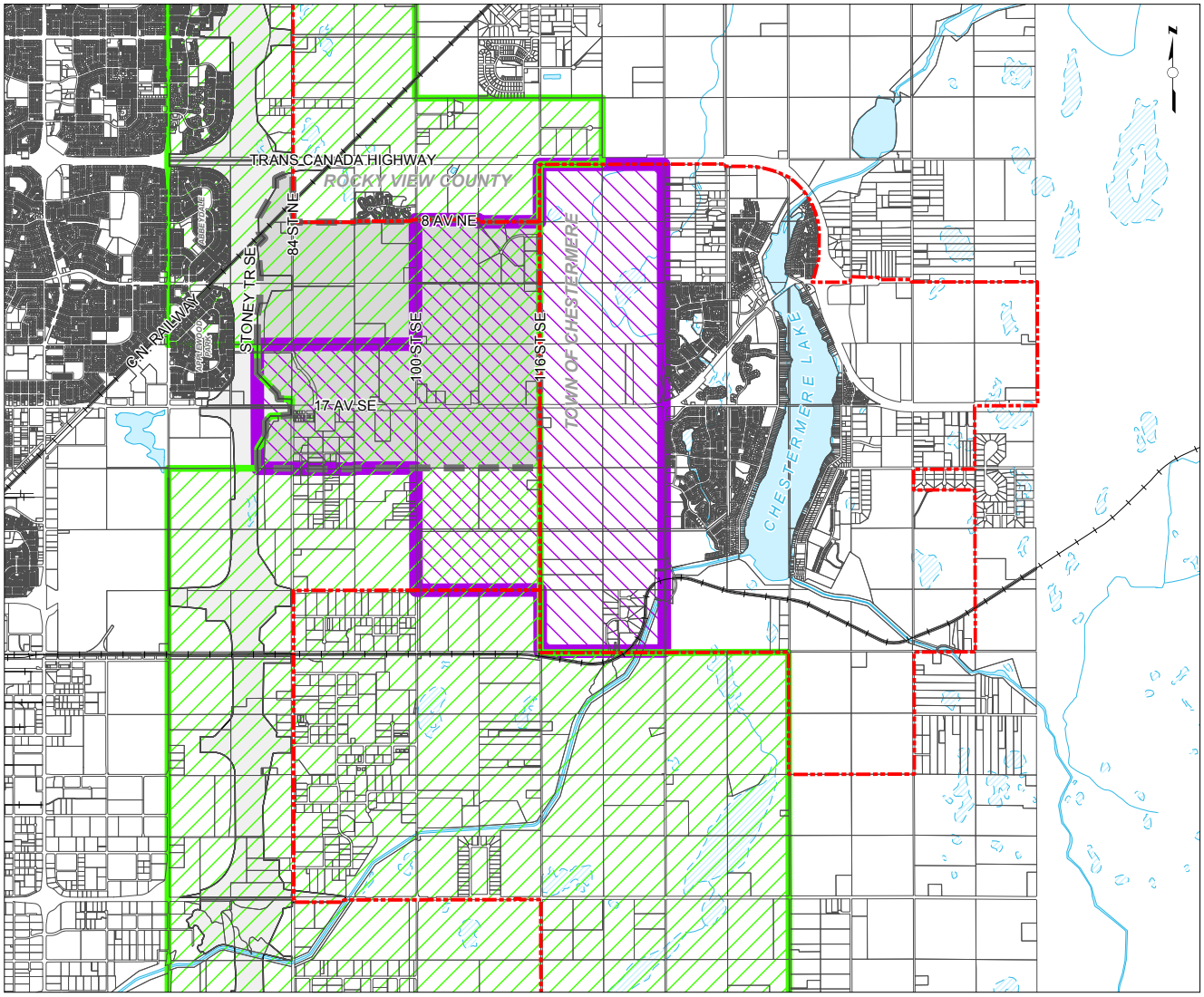
1. Land Use approval should not be granted unless an Outline Plan for the site has been approved.

12.4.3 Transitional Development Policies

1. Proposed uses under *The City of Calgary Land Use Bylaw* in the Special Purpose Future Urban Development District that do not compromise development of the site and do not impact the objectives of the ASP may be allowed where deemed to be compatible and appropriate by the Approving Authority.

12.4.4 Comprehensive Studies Policies

1. Prior to Outline Plan / Land Use approval, an Applicant may be required to submit further supporting information to assist Council and the Calgary Planning Commission in evaluating a proposal in terms of its conformity with the ASP.
2. When an Applicant does not provide the required supporting information in a satisfactory manner, the Outline Plan / Land Use Amendment application may not be approved.
3. Once economic forecasting and employment methodologies have been completed, a review of employment targets for the Plan area shall occur in order to meet the policies of Complete Communities as outlined in Section 2.2.4 of the MDP and results of that work and recommendations will be brought back to CPC for its review within two years of the adoption of this Plan.



Map 15

Calgary / Rocky View IDP Area & Calgary / Chestermere Planning Referral Agreement Area

Legend

- City / Town / County Limits
- Transportation / Utility Corridor
- Plan Area
- Calgary / Rocky View IDP Area
- Calgary / Chestermere Courtesy Circulation Agreement Area

0 1 2 3 4
Kilometres

Approved: 2P2013
Amended:

This map is conceptual only. No measurements of distances or areas should be taken from this map.

12.5 Intermunicipal Coordination

Purpose

The Plan Area is bordered by Rocky View County to the north and the Town of Chestermere to the east. Historically, the lands in the Plan Area were part of Rocky View County. Annexations from Rocky View County by The City in 2007 and the Town of Chestermere in 2009 have resulted in both urban to rural interface between Calgary and Rocky View County and for the first time, an urban to urban interface between Calgary and Chestermere.

The 2007 annexation agreement between Rocky View County and The City led to the identification of a number of key focus areas and planning principles which were refined through the *2011 Rocky View / Calgary Intermunicipal Development Plan (IDP)*. The entire Plan Area is included in the IDP "Policy Area" as shown on *Map 15: Calgary / Rocky View IDP Area and Calgary / Chestermere Planning Referral Agreement Area*.

Through the *IDP*, a number of policies and intermunicipal processes shall be considered. The following specific *IDP* policy areas are applicable to the Belvedere Plan Area

- **a. Key Focus Areas**
- **b. Highway 1 East Corridor**
- **c. Interface Planning**
- **d. IDP Policy Review Area**
- **e. Circulation and Referral Process**

Recognizing the intermunicipal complexity of the area, the following policies and processes that shall guide cooperative intermunicipal planning as part of the implementation of the Belvedere ASP. Rocky View County, the Town of Chestermere and The City of Calgary shall endeavour to work collaboratively with regulatory agencies and other stakeholders to develop coordinated planning for geographical areas of mutual interest.

12.5.1 Intermunicipal Coordination Policies

1. Intermunicipal Coordination

a. The Plan Area shares municipal borders with Rocky View County and the Town of Chestermere as shown on ***Map 2: Plan Area***. The City shall consult with Rocky View County and the Town of Chestermere on intermunicipal planning, transportation and servicing matters that may arise within the Plan Area to achieve cooperative and coordinated outcomes.

b. To address intermunicipal interests, The City shall work with Rocky View County and the Town of Chestermere to develop a coordinated planning process and ensure continued meaningful communication between the three municipalities. The coordinated planning process can include the establishment of future Intermunicipal Development Plans involving two or more of The City of Calgary, Rocky View County and The Town of Chestermere.

2. Rocky View / Calgary Intermunicipal Development Plan, Policy Review Area

The lands illustrated in the Rocky View / Calgary as a Policy Review Area, were identified as lands requiring a coordinated intermunicipal planning process to ensure continued, meaningful communication between The City, Rocky View County, and the Town of Chestermere.

a. Intermunicipal circulation of planning proposals between The City of Calgary, Rocky View County, and the Town of Chestermere shall comply with the ***IDP***.

b. Outline Plan / Land Use Amendment applications, subdivision applications, or development permit applications should consider, at an intermunicipal level, regional drainage, intermunicipal connectivity and transportation, local planning initiatives, urban municipalities interface, and any other matters as mutually deemed appropriate.

c. Specific items to address, as required at the Outline Plan / Land Use Amendment, stage for lands within Calgary which abut Rocky View County lands at the north portion of the Plan Area, include the following

i. Preparing interface planning policies and development guidelines to plan for undetermined future land uses in Rocky View County, in accordance with the ***IDP***;

ii. These policies shall direct future Applicants in the City to ensure equal contribution to interface planning measures along intermunicipal areas. The policies should include specific transition tools (e.g., density transitioning, open space buffer areas including appropriate landscaping and berming, road alignment and access provisions, site / building design orientation tools, and other fencing and screening provisions).

3. Highway 1 East Corridor Planning

a. Development within the Rocky View / Calgary IDP, Highway 1 East Corridor Key Focus Area shall be coordinated between The City of Calgary and Rocky View County subject to the policies of the ***IDP***.

b. Where planning processes occur in lands that abut the Town of Chestermere boundary, the Town of Chestermere shall be circulated.

4. Intermunicipal Circulation

a. Intermunicipal Development Plans contain circulation and referral sections. All development and planning proposals within the Plan Area shall be circulated in accordance with current Intermunicipal Development Plan policies.

b. Circulation and referral processes with the Town of Chestermere are outlined in the Planning Referral Agreement between Chestermere and Calgary (2010). The area affected by this agreement is illustrated on ***Map 15: Rocky View / Calgary Intermunicipal Development Plan Area & Chestermere / Calgary Courtesy Circulation Agreement Area.***

12.6 Design Innovation Area

Purpose

The purpose of these policies is to provide a means to address and promote design innovation within the Plan Area. Implementation of these policies is on a voluntary basis.

These policies shall include the following steps

a. Identification of the area that is the subject of the innovation as a Design Innovation Area where new standards can be applied on a test-basis without setting precedence for other areas of The City;

b. A review process for evaluating the innovations to be introduced within the Design Innovation Area and administered by the Approving Authority; and

c. Introduction of a monitoring process for the Approving Authority to assess the success and benefits of the innovation introduced.

12.6.1 Development within Design Innovation Area Policies

1. Designating a Design Innovation Area

a. Where innovations involving the introduction of new standards for public infrastructure (i.e., utilities, parks, streets, etc.) or private development are proposed within the Plan Area and are determined to provide sustainable development benefits, the applicant can request that Council identify the area that is the subject of the innovation as a Design Innovation Area on ***Map 5: Land Use Concept***, through an amendment to the ASP.

b. Where a Design Innovation Area is identified by Council

i. new standards for public improvements or private development may be applied within that area that are not available city-wide where the standards are determined to be practically, financially, and legally acceptable;

ii. new public or private sector financing and / or funding methods for dealing with the maintenance or operational costs of the innovations may be introduced; and

iii. a process for evaluating innovations proposed by an applicant in an efficient and timely manner, that includes a review of the risks and benefits should be created.

c. An ASP amendment to apply a Design Innovation Area can be processed in conjunction with an associated application.

2. Promoting Design Innovation

a. Outline Plans / Land Use Amendments should include innovation(s) provided the innovation

i. promote sustainability;

ii. provide public benefits; and

iii. can be developed in a safe and practical manner.

b. Based on the policies within the ASP, candidates for design innovation within the Plan Area include, but are not limited to, the introduction of

i. revised street standards for providing tree-lined streets;

ii. best management practices for stormwater control;

iii. addressing local commercial development in Neighbourhoods;

iv. Green Infrastructure and building techniques not required through existing City policies;

v. revised street standards for providing marked on-street bicycle routes (e.g., bicycle lanes on collector roads);

vi. addressing slope adaptive design;

vii. energy efficiency measures including district heating, solar energy, etc.; and

viii. other approaches to the satisfaction of the Approving Authority.

c. Design innovation should be supported through interdepartmental coordination across The City to facilitate innovative initiatives.

13. ABBREVIATIONS & DEFINITIONS

13.1 Abbreviations

ASP:	Area Structure Plan
BIA:	Biophysical Impact Assessment
BRT:	Bus Rapid Transit
CPTED:	Crime Prevention Through Environmental Design
CTP:	Calgary Transportation Plan
EPZ:	Emergency Planning Zone
EOS:	Environmental Open Space
ER:	Environmental Reserve
ERCB:	Energy Resources Conservation Board
ESA:	Environmentally Significant Area
FAR:	Floor Area Ratio
GDHa:	Gross Developable Hectare
GDRHa:	Gross Developable Residential Hectares
HRIA:	Historical Resources Impact Assessment
IDP:	Intermunicipal Development Plan
JUA:	Joint Use Agreement
JUCC:	Joint Use Coordinating Committee
JUS:	Joint Use Site
LEED:	Leadership in Energy and Environmental Design
LID:	Low Impact Development
LUB:	Land Use Bylaw
MDP:	Municipal Development Plan
MGA:	Municipal Government Act
MR:	Municipal Reserve
OWC:	Operations Workplace Centre
SPT:	Site Planning Team
SSIP:	Stormwater Site Implementation Plan
TUC:	Transportation and Utility Corridor

13.2 Definitions

The following definitions shall apply. In the case where a definition differs from *The City of Calgary Land Use Bylaw (1P2007)*, the LUB shall prevail.

3-year Capital Budget: A document that establishes funding for City projects and programs, including infrastructure investments. They are approved by Council as part of the three-year business planning and budgeting cycle.

10 Year Capital Plan: A document that outlines the major City investments that are anticipated over a ten year time frame. It ensures appropriate planning for required projects and their related funding to demonstrate the complete impact of major, multi-year projects.

A

Active Modes: Any form of human-powered transportation including, but not limited to, walking, running, cycling, using a wheelchair, in-line skating or skateboarding.

Active Mode Connectivity: An assessment of the degree to which a comprehensive, connected network for Active Modes is achieved in the Plan Area.

Activity Centres: All areas identified on the Land Use Map as either a Community Activity Centre or Neighbourhood Activity Centre.

Accessible Housing: Dwellings that provide barrier-free, adaptable design in both common areas and individual units to meet the needs of the disabled.

Adaptable Dwelling Units: A dwelling unit that has been designed to allow it to be altered to make the dwelling unit consistent with the principles of barrier-free design.

Affordable Housing: The City of Calgary Council approved definition of affordable housing addresses the housing needs of those households that can qualify for a housing subsidy. These households are both low income (defined using 2006 Census terms as being below $44,000 of combined household income) and who are paying a minimum of 30% of their pre-tax-income on shelter.

Affordable Housing Needs Assessment: Examines the need for non-market and entry-level housing in the local community based on the current and future supply of and demand for non-market and entry-level housing. It should consider characteristics such as housing form, number of bedrooms, accessibility and barrier-free design and income levels. The Affordable Housing Needs Assessment should be complete to the satisfaction of The City's Affordable Housing Division.

Approving Authority: The Subdivision Authority, Development Authority or Subdivision and Development Appeal Board of The City of Calgary, as the context implies.

Arterial: A common type of street that accommodates all modes of transportation in a high quality environment. Arterial streets provide reasonably direct connections between multiple communities and major destinations. Ideally, Arterials should be spaced approximately 800 metres to 1600 metres apart, and may include Green Infrastructure strategies such as vegetated swales, rain gardens, filter strips, and native vegetation.

B

Bed and Breakfast: a use where the provision of overnight accommodation is provided to guests, in a bedroom in a Contextual Semi-detached Dwelling, Contextual Single Detached Dwelling, Semi-detached Dwelling or Single Detached Dwelling that is occupied by its owner or operator, who may also provide breakfast but no other meals to the guests; and that must not provide liquor.

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

C

Calgary Greenway System: A planned linear pathway that will encircle Calgary and encompass off-leash dog parks, rest areas, family fitness parks and educational wetlands.

Calgary Planning Commission: The Calgary Municipal Planning Commission constituted pursuant to the Calgary Planning Commission Bylaw.

Calgary Transportation Plan: The document that guides the transportation system and its development in Calgary.

Care Facilities: Provide a broad range of accommodation and care within residential communities to meet the physical, emotional and rehabilitative needs of residents as they change over time, such as nursing homes, adult group homes, youth care facilities, rehabilitative homes and transitional facilities.

Child Care Facility: A place where temporary care and supervision is provided to seven or more children for periods of less than 24 consecutive hours.

The City: The corporation of The City of Calgary.

City Administration: Employees of The City of Calgary.

Civic Use: Civic uses may include neighbourhood-scale Cultural or Recreational Uses, educational uses as well as Child Care and other Care facilities.

Collector: A low to moderate-capacity road that serves to move traffic from local residential streets to higher capacity streets such as Arterials.

Community Activity Centre: Community Activity Centres (CAC) provide for a concentration of jobs and population and provide a local destination for multiple Communities. CACs are also important within new greenfield areas to provide convenient locations for a range of higher Density housing types, local employment and retail services to new Communities, in an area well served by the Primary Transit Network. CACs within greenfield areas will be identified through an ASP process.

Community Recycling/Diversion Depot: A facility or location where the public can deposit mixed paper, cardboard, newspaper, magazines, clear or coloured glass food and beverage containers, metal food cans and lids, milk jugs and cartons, plastic bags, plastics, and other items for recycling.

Community Retail 2 Centre: A retail centre comprising a total floor area of all units ranging between 1,900m^2 and 9,300m^2 (20,000 - 100,000ft^2) which serves one or more communities.

Complete Community: A logical, physical and social planning area, defined by significant natural or man-made features and containing an adequate population base to support schools, parks and community facilities.

Compact Urban Form: A land-use pattern that encourages efficient use of land, walkable Neighbourhoods, mixed land uses (residential, retail,

workplace, and institutional) all within one Neighbourhood, proximity to transit and reduced need for infrastructure.

Concept Plan: A plan that may be required, at the discretion of the Approving Authority, to be submitted at the time of Outline Plan / Land Use Amendment application, showing the relationship of the design of the subject site with adjoining parcels, the possible development of adjoining parcels, and/or the next phases of development.

Core Infrastructure: Water utilities, transportation and facilities required to accommodate subdivision and development activity in the Plan Area.

Corporate Framework for Growth and Change: A directive that will guide the future sequencing of growth in Calgary to ensure investments in infrastructure and services are within the financial capacity of The City, pending approval.

Council: The elected council of The City of Calgary.

Creditable Reserve Land: The reserve owing on a parcel of land that is to be dedicated as Municipal Reserve (MR), school reserve (SR) or municipal and school reserve (MSR) through the subdivision approval process in accordance with the Municipal Government Act.

Crime Prevention Through Environmental Design (CPTED): Promotes design principles in planned environments that encourage safe behaviour and reduce the opportunities for crime to occur.

Cultural Uses: Use of land, buildings or structures for the purpose of arts, educational, recreational or Multicultural activities. Cultural uses may include, but are not limited to, galleries, museums, libraries, and recreation centres.

Cycle Track: is an off-street one-way bicycle lane next to the sidewalk with a width of 1.5m to 2.0m, designated for cyclists. They provide clear separation between moving vehicles and cyclists, as well as between pedestrians and cyclists.

D

Density: A measure of the number of dwelling units on a parcel of land, expressed in units per hectare (calculated using GDRHa versus GDHa). This measure is used for Neighbourhood Areas only.

Development Permit: A Development Permit indicates permission from the Approving Authority for construction or changes of use in accordance with The City of Calgary Land Use Bylaw.

Direct Control District: A land use district providing for developments that, due to their unique characteristics, innovative ideas or unusual site constraints, require specific rules unavailable in other land use districts.

District Energy: The distribution of thermal energy using a pipeline distribution system (Canadian District Energy Association). District Energy systems produce steam, hot water or chilled water at a central plant and then pipe that energy out to buildings in the district for space heating, domestic hot water heating and air conditioning (International District Energy Association).

District Energy Assessment: An assessment of the feasibility of establishing a district energy system. A district energy assessment may examine, but is not limited to, the technical, cost, regulatory and ownership options. District Energy Assessments may be done at the Outline Plan / Land Use Amendment or Development Permit stage.

E

Eco-Industrial Park: Development of industrial areas in accordance with MDP policy 3.7.1 g. including water conservation, clean production, reduced energy needs, maximum efficiency, and best environmental practices.

Emergency Planning Zone (EPZ): A geographical area surrounding a sour gas well, pipeline, or facility that requires specific emergency response planning by the operator. The EPZ is the area where response measures are initially focused during an incident. The size and shape of the EPZ shall reflect site specific features of the area, factors such as population density, topography, and access/egress, as well as the hydrogen sulphide content of the well, pipeline, or facility.

Employment Uses: Uses which are employment intensive and determined to be compatible and appropriate in the context of employment areas such as Activity Centres. Employment Uses may include, but are not limited to, offices, manufacturing plants, colleges and laboratories, and does not include retail uses.

Enclosure Ratio: Defined by the ratio between the horizontal dimension and the vertical dimension of a space. These ratios typically fall into whole number categories ranging from 1:1, 2:1, 3:1, and greater. Generally, the closer the horizontal dimension is to the vertical dimension (i.e., 1:1) the greater the sense of enclosure and the stronger the spatial feeling.

Energy Resources Conservation Board (ERCB): An independent, quasi-judicial agency of the Government of Alberta that regulates the safe, responsible, and efficient development of Alberta's energy resources: oil, natural gas, oil sands, coal, and pipelines.

Environmental Open Space: A city-wide network composed of the River Valley System, the urban forest, Environmentally Significant Areas, and natural environment parks. Lands within the Environmental Open Space qualify as both or either Environmental Reserve or Environmentally Significant Area. Where an area identified as Environmental Open Space is not protected or acquired, it may be considered developable according to the policies of this Area Structure Plan, subject always to section 3.7 Plan Limitations.

Environmental Reserve: From the Municipal Government Act, section 664(1) Subject to section 663, a subdivision authority may require the owner of a parcel of land that is the subject of a proposed subdivision to provide part of that parcel of land as environmental reserve if it consists of (a) a swamp, gully, ravine, coulee or natural drainage course,(b) land that is subject to flooding or is, in the opinion of the subdivision authority, unstable, or (c) a strip of land, not less than 6 metres in width, abutting the bed and shore of any lake, river, stream or other body of water for the purpose of (i) preventing pollution, or (ii) providing public access to and beside the bed and shore

Environmentally Significant Area: A natural area site that has been inventoried prior to potential development and which, because of its features or characteristics, is significant from an environmental perspective to Calgary, and has the potential to remain viable in an urban environment. (See Open Space Plan (current edition) for complete definition.)

F

Floor Area Ratio (FAR): The ratio of the total floor area of a building on a certain location to the size of the parcel of land on which it is located. Floor Area Ratio is calculated by dividing the total area of a building by the total area of the parcel the building is located on.

Form-Based Controls: Policies or guidelines that address such design matters as the land use pattern, block layout, street network, development Intensity, parking requirements, building envelopes and open space system. Such policies or guidelines place a strong emphasis on built form and the quality of the public realm, contain maps, tables and diagrams that work together in a coordinated manner.

G

Goods Movement Routes: A network of designated routes, identified by City bylaws, on which heavy and medium trucks are allowed while travelling within Calgary city limits.

Green Infrastructure: An interconnected network of natural green and engineered green elements applicable at multiple scales in the land use and mobility framework. Natural green elements include the conservation and integration of traditional green elements such as trees, wetlands and riparian areas and parks. Engineered green elements include systems designed to mimic ecological functions or to reduce impacts on ecological systems.

Green Roofs: An extension of an above grade roof, built on top of a human-made structure that allows vegetation to grow in a growing medium. A green roof assembly includes, as a minimum, a root repellent system, a drainage system, a filtering layer, a growing medium and plants, installed on a waterproof membrane of a roof.

Green Street: A street and a component of Green Infrastructure that seeks to reduce stormwater runoff and associated pollutants, bring natural elements into streets, and improve access for pedestrians and bicycles.

Gross Developable Area: Gross Developable Area (acre or hectare) is equivalent to the total developable area of a parcel of land. It is also used as the base measurement for intensity.

Gross Developable Acre / Hectare: Gross developable acre/hectare is calculated by starting with the gross area of land and deducting non-developable lands.

Gross Developable Residential Area: Gross Developable Residential Area is the total developable area available for general residential development. It is also used as the base measurement for density. GDRA is calculated by starting with the gross area of land and deducting non-developable land and land required for regional uses.

H

Home-Based Business: The operation of a business or occupation within a dwelling and/or its accessory building(s), or on a parcel on which a dwelling is located and where one or more residents of the parcel is/are involved in the occupation or business.

Housing Affordability: Addresses the housing needs of those households who do not qualify for subsidy, but cannot afford market housing.

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, reformatory or correctional facilities, medical clinics, cemeteries, and daycare centres.

Intensification: The development of land at a higher Intensity than currently exists. Intensification can be achieved through redevelopment, development of vacant or underutilized land, conversion of existing buildings to a higher-intensity use, or through infill development in previously developed areas.

Intensity: A measure of the concentration of people and jobs within a given area (Gross Developable Area) calculated by totalling the number of people either living or working in a given area.

Intermunicipal Development Plan: A statutory plan that is jointly prepared by neighbouring municipalities which includes areas of land lying within the boundaries of the municipalities, as they consider necessary. Intermunicipal Development Plans are further defined in the Municipal Government Act.

Internal Street: An industrial major road, standard road, or other type of road that provides internal access to sites within the Plan Area and connections to the regional road network.

J

Jobs to Housing Balance: A measure of the relationship between the number of residents and the number of jobs in a specific area, calculated by dividing the number of residents by the number of jobs in that specific area.

Joint Use Site: Lands set aside for or including a school building, a location for a school building or a school playing field and community playing fields with facilities and grounds which are accessible to both school and non-school users.

L

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

Land Use Bylaw: Refers to The City of Calgary Land Use Bylaw, as it may be amended or replaced from time to time.

Large Format Retail: A term applied to large floor plate (over 6,000m^2/60,000ft^2), for a single use tenant one-storey retail outlet, usually operated as part of a chain, that locate on individual sites or that cluster on a large site, sometimes adjacent to each other. Large-format stores, commonly referred to as “big-box” stores, serve a region-wide market and typically locate at highly visible locations at major intersections or adjacent to highways.

Leadership in Energy and Environmental Design (LEED): A green building rating system that encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria. LEED is a third-party certification program and an internationally accepted benchmark for the design, construction and operation of high performance green buildings.

Leading Infrastructure: The Core Infrastructure required at the start of development, including water, sanitary sewer, stormwater, transportation and emergency response facilities.

Live-Work Unit: A land use where a business is operated from a dwelling unit, by the resident of the dwelling unit.

Local Commercial Use: The use of land, buildings or structures for the purpose of providing retail goods and services on a limited scale primarily to employees or residents in the area and may include, but is not limited to, restaurants, convenience stores, service stations and gas bars, and financial institutions.

Low Impact Development: An approach to land development that uses various planning and engineering practices and technologies that create and/or utilize natural resource systems to replace traditional engineering systems, reducing infrastructure costs.

M

Master Drainage Plan: A stormwater drainage plan prepared for a large drainage area, usually serviced by one or more outfalls.

Medium Format Retail: Retail units ranging from 1200m^2 to 6000m^2 (12,000ft^2 to 60,000ft^2) in floor area.

Mixed Use: The development of land, a building or a structure with two or more types of uses such as residential, office and retail.

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

Municipal Development Plan (MDP): The planning policy document guiding growth and development within The City. It reflects the kind of community Calgarians would like to see in the future. It is visionary, strategic and long term and provides the basis for actions and decisions to both protect and improve quality of life for all Calgarians, present and future.

N

Natural Environment Park: A city-owned park where the primary role is the protection of an undisturbed or relatively undisturbed area of land or water, or both, and which has existing characteristics of a natural/ native plant or animal community and/or portions of a natural ecological and geographic system. Examples include wetlands, escarpments, riparian corridors, natural grasslands and woodlots. A relatively undisturbed Natural Environment Park would either retain or have re-established a natural character, although it need not be completely undisturbed.

Natural Water Balance Modelling: A model run used to determine if development can comply with specific stormwater targets.

Neighbourhood: A portion of a community generally based on a quarter section of land or equivalent area (65 hectares; 160 acres) in which residents are within a five minute walk of a Neighbourhood Activity Centre.

Neighbourhood Activity Centre: Neighbourhood Activity Centres or NACs are Neighbourhood scale centres that provide opportunities for residential Intensification and local jobs, retail, services and civic activities. In new Communities, NAC's should be planned at the outset through the Area Structure Plan process.

Neighbourhood Area: The Neighbourhood Area is the residential catchment area outside of the NAC. It consists of primarily residential uses with a variety of housing type and a street network that connects residents, jobs and commercial services through direct automobile, transit, bicycle and pedestrian routes.

Neighbourhood Boulevard: These streets form the backbone of Neighbourhood Corridors and Activity Centres. Pedestrians are given the highest priority on these streets, which are fully integrated with adjacent land uses and provide the highest level of connectivity of all street types. Similar to Urban Boulevards, high quality urban design and green infrastructure strategies are incorporated into Neighbourhood Boulevards.

Net Developable Area: The area that is available for development after undevelopable land has been removed.

O

Operations Workplace Centre: An Operations Workplace Centre (OWC) is a service centre and staging point for operational business units such as Water Services, Water Resource, Roads, Parks, Waste & Recycling, Fleet Services, Calgary Transit and Finance & Supply.

OWCs typically have a combination of activities and functions such as:

- storage of materials (e.g. road salt and sand);
- vehicle storage and maintenance;
- vehicle fuelling stations; and / or
- office space for training and administrative support.

Outline Plan/Land Use Amendment Application: Detailed planning and design of new communities, or the redevelopment of large areas of existing communities, is done through the outline plan and subdivision process. This involves design details such as the preservation of environmental areas, open space locations and reserve dedications, development patterns, land use mixes and local street networks.

P

Park and Ride: Parking lots located at BRT stops that allow automobile users to park their private vehicles, access and transfer to and from public transportation service in a convenient manner.

Parkland Ecoregion: The Parkland Ecoregion of Alberta is located in central eastern Alberta. The region includes lands, woodlands, grasslands, shrublands, wetlands, badlands and hoodoos. The landscape of the Parkland Ecoregion can be described as grassy and shrubby with green meadows.

Pedestrian–Oriented: An environment facilitating safe, convenient, attractive and comfortable foot travel for pedestrians of all ages and abilities. Considerations include providing direct pedestrian routes, safety, separation of pedestrians from traffic, attractiveness of the pedestrian route including visual interest, street furniture, sidewalk width and material, intersection treatment, curb cuts, ramps and landscaping.

Pedestrian-scale: Refers to the scale (height/proportions) and comfort level that the street level and lower stories of a building provide for pedestrians as they walk alongside a building or buildings.

Place of Worship: A place where people assemble for religious or spiritual purposes.

Policy Review Area: Lands designated on the Land Use Concept which require further study (to the satisfaction of the Approving Authority) in addition to submission of an Outline Plan/Land Use Amendment.

Primary Cycling Network: A network of high priority bicycle routes that will connect major destinations such as Activity Centres, Urban Corridors and major institutions. Each segment of the network will include the best possible cycling infrastructure that can reasonably be accommodated. Connections will be as direct as possible, making cycling between these locations direct and expedient, while also safe and appealing. The Primary Cycling Network should have high priority for maintenance and be kept clear of debris, snow and ice.

Primary Retail Street: classified as a principal street within a retail centre site. Characterized by (as a minimum) one or two driving lanes in each direction, pedestrian sidewalks on both sides, amenity locations, on-street parking, cycle paths and marked crosswalks. The street is faced with front-facades of buildings and functional priority of the street is provided to pedestrians.

Primary Transit Network: A permanent network of high-frequency transit services, regardless of mode, that operates every 10 minutes or better, 15 hours a day, seven days a week.

The Province: The Province of Alberta.

Public Facility: A public building, such as a hospital, rural school, or major recreational facility, situated outside of an urban centre that can accommodate more than 50 individuals and/or that requires additional transportation to be provided during an evacuation.

Public Use: The use of land, buildings or structures for the purpose of accommodating public or quasi-public services, utilities or facilities and may include, but is not limited to, essential public services, municipal utilities and municipally owned facilities.

R

Recreational Use: The use of land, buildings or structures for the purpose of active or passive leisure pursuits, cultural activities, sporting activities and other customary and usual recreational pursuits.

Residential Housing Types: Within the Plan Area, may be defined as Low, Medium and High density.

a. Low Density (up to 35 units per hectare)

   Low density residential development consists of grade-oriented housing forms including:

   - Single-detached;
   - Single-detached with secondary suites;
   - Semi-detached;
   - Duplex;
   - Rowhouses;
   - Townhouses; and
   - Manufactured Homes.

b. Medium Density (up to 148 units per hectare)

   Medium density residential development consists of grade-oriented and low profile multi-residential housing forms including:

   - At-grade multi-dwelling housing forms with a minimum of 3 units per building; and
   - Low profile multi-dwelling buildings.

c. High Density (over 150 units per hectare)

   High Density residential development includes high density multi-residential housing forms with a minimum density of 150 units per hectare (60 units per acre). These include low, medium and high-rise building forms that meet the Density criteria.

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

River Valley System: Includes all land within the geographic and visual limits of Calgary's river valleys and creek corridors, as described in The City's Open Space Plan.

S

Service Commercial Use: The use of land, buildings or structures for the purpose of providing goods and services to the travelling public on sites dependent upon exposure and efficient access from roads carrying higher volumes of traffic and may include, but is not limited to, hotels, motels, restaurants, gas bars, and convenience food stores.

Site Planning Team: An administration body comprised (at minimum) of representatives from City's Planning, Development and Assessment, and Parks business units and local school boards (Calgary Board of Education, Calgary Separate School Division).

Skeletal Road: A high-volume road that promotes the movement of vehicular traffic over longer distances, typically operating at high speeds and having little direct access and interaction with adjacent land uses. Skeletal roads may present opportunities to implement green infrastructure to maximize water infiltration, slow, detail and filter roadway runoff, and preserve and enhance biodiversity.

Small Format Retail: Retail units of less than 1200m^2 (12,000ft^2) in floor area.

Street-Oriented: Design that supports orienting building frontages and primary entranceways towards the street rather than internal to a site.

Sustainability: Meeting the needs of the present without compromising the ability of future generations to meet their own environmental, economic and social needs.

T

Transit Oriented Development: A compact, mixed-use Community within walking distance of a transit stop, that mixes residential, retail, office, open space and Public Uses in a way that makes it convenient to travel on foot or by public transportation instead of by car.

Transit Plaza: An area developed to serve as a public transportation centre, including onsite driveways, walkways, benches, bus shelters, and landscape areas.

U

Unrestricted Country Development: Any collection of permanent dwellings situated outside of an urban centre and having more than eight permanent dwellings per quarter section; for the purpose of applying the requirements of *ID 97-6*, includes any similar development that the ERCB might so designate.

Urban Boulevard: A street type that forms the backbone of Urban Corridors and Activity Centres. It gives the highest priority to walking, cycling and transit, but accommodates reasonably high volumes of vehicular traffic. Urban Boulevards are fully integrated with adjacent land uses and provide high levels of connectivity to surrounding communities or destinations. High quality urban design and green infrastructure are critical components of Urban Boulevards.

Urban Centre: A city, town, village, summer village, or hamlet with no fewer than 50 separate buildings, each of which must be an occupied dwelling, or any similar development the ERCB may designate as an urban centre.

Urban Corridor: Urban Corridors, the highest scale corridors, provide for a high level of residential and employment Intensification along an Urban Boulevard street type, as defined in the CTP. Urban corridors emphasize a pedestrian environment fronted by a mix of higher intensity uses.

W

Water Body: Any location where water flows or is present, whether the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers. See *Water Act*, Province of Alberta, for a complete definition.

Part 2
Appendices

PART 2 - APPENDICES

LIST OF TABLES

APPENDICES

The appendices that follow provide supporting information, guidelines and checklists to aid in the implementation of the ASP. They are not adopted as Bylaw.

APPENDIX A: REQUIRED STUDIES, ANALYSIS & CONCEPT PLANS

01.1 Introduction

This section identifies the specific technical studies and concept plans that may be required, at the discretion of the Approving Authority, to be submitted with an Outline Plan / Land Use Amendment application.

01.2 Concept Plans

Purpose

The purpose of these guidelines is to provide for the submission of Concept Plans with an Outline Plan / Land Use Amendment application. Concept Plans shall be required to demonstrate that a site shall be suitable in terms of its size and configuration to accommodate the intended future development or to ensure that a subdivision design shall be appropriately integrated with adjacent areas. A Concept Plan is provided for information purposes only, has no legal status, and is subject to change.

Guidelines

1. Concept Plans

a. Prior to Outline Plan / Land Use Amendment approval and as determined necessary, an Applicant may be required to submit a Concept Plan to assist the Approving Authority in evaluating a proposal in terms of its conformity with the Plan.

b. Where a Concept Plan is required, either through a policy in the Plan, or as part of the Outline Plan / Land Use Amendment review process, the Concept Plan:

i. may be shown on the Outline Plan; and

ii. should show the proposed:

- land use areas;
- building locations;
- vehicular access / egress routes;
- parking areas;
- public roads;
- transit stops;
- pedestrian connections;
- regional pathways;
- bikeways;
- utility alignments;
- public parks;
- stormwater connections;

- green infrastructure;
- slope adaptive areas of interest; and
- adjacent roads and development.

c. The above requirements may be relaxed or modified as determined necessary in response to a specific proposal.

d. Where a Concept Plan is required and is not provided with the required information necessary for the Approving Authority to render a decision, the Outline Plan / Land Use Amendment may not be approved.

13.2.1 Specific Concept Plans

The Municipal Development Plan identifies a number of unique elements based upon new urbanism planning principles that need to be addressed in the design of the Plan. To evaluate these elements, a series of concept plans may be required in conjunction with an Outline Plan / Land Use Amendment application, at the discretion of the Approving Authority. These Concept Plans are as follows:

a. Neighbourhood Concept Plan

b. Community Activity Centre Concept Plan

c. Urban Corridor Concept Plan

d. Pedestrian and Bicycle Circulation Concept Plan

e. Joint Use Site Concept Plan

f. Park Concept Plan

g. Community Street Network Concept Plan

The general content of these Concept Plans and the content of the guidelines that follow are to be incorporated into land use controls and Outline Plan conditions applied to the site, or introduced directly through the subdivision and development approval process. Inherent in these Concept Plans and guidelines is the recognition that alternative design solutions are possible.

These guidelines shall be applied in a flexible manner and may be varied or revised as determined appropriate, provided that it can be demonstrated that the proposed design is equivalent to or is an improvement over what would be achieved if the guidelines were followed. In an effort to reach the optimal design solution, it is anticipated that negotiation, tradeoffs, and innovation will occur.

13.2.2 Neighbourhood Concept Plan

Purpose

The purpose of a Neighbourhood Concept Plan is to provide an overall concept for a Neighbourhood that addresses its overall design and Intensity and specifically addresses the edge conditions of the Neighbourhood and the Neighbourhood Activity Centre.

Guidelines

1. **Neighbourhood Concept Plan Submission**
   a. In conjunction with an Outline Plan / Land Use Amendment application, a Neighbourhood Concept Plan for each Neighbourhood contained within the application should be submitted.
   b. Where an Outline Plan / Land Use Amendment application comprises a portion of a Neighbourhood, the entire Neighbourhood should be included within the Neighbourhood Concept Plan.
2. **Neighbourhood Concept Plan Requirements**
   a. The Neighbourhood Concept Plan should:
      i. demonstrate compliance with the requirements of (but not limited to) section 6.5: Neighbourhood Activity Centre, section 6.6: Community Activity Centre and section 6.7 Urban Corridor Design Policies;
      ii. provide information addressing the design and Intensity of Neighbourhood Activity Centres, refer to Appendix A 4.2;
      iii. show the 400m pedestrian shed from focal points, including Neighbourhood stores, services, open space and transit stops.
      iv. include a Neighbourhood Name and Street Name application for the Neighbourhood; and
      v. contain such other information as determined necessary by the Approving Authority to evaluate the compliance of the proposal with the policies of the Plan.

13.2.3 Community Activity Centre Concept Plan

Purpose

The purpose of the Community Activity Centre Concept Plan is to provide details of the design and intensity of each Community Activity Centre.

Guidelines

1. **Community Activity Centre Concept Plan Submission**

   In conjunction with an Outline Plan / Land Use Amendment application for lands which include part or all of a Community Activity Centre, a Community Activity Centre Concept Plan encompassing the entire Community Activity Centre, as defined on Map 5: Land Use Concept, should be submitted.

2. **Community Activity Centre Concept Plan Requirements**

   A Community Activity Centre Concept Plan should:

   a. demonstrate compliance with section 8.2: Activity Centre and Urban Corridor Design Policies;

   b. demonstrate compliance with section 6.6: Community Activity Centre;

   c. demonstrate compliance with Appendix D: Development Design Guidelines and Appendix E: Environmental Design Guidelines.

   d. contain the elements listed in section A.2, Concept Plans of Appendix A.

   e. include information addressing the urban design and Intensity of the Community Activity Centre, refer to Appendix A 4.1,

   f. show a 400m pedestrian shed from focal points, including neighbourhood retail, services, open space and transit stops, and

   g. contain such other information as determined necessary by the Approving Authority to evaluate the compliance of the proposal within the policies of the Plan.

13.2.4 Pedestrian and Bicycle Circulation Concept Plan

Purpose

The purpose of the Pedestrian and Bicycle Circulation Plan is to define the regional and local pedestrian and bicycle routes within the community and, in particular, the connections to transit service, educational and recreational facilities, Neighbourhood and Community Activity Centres, Urban Corridors, Community Retail Centres, Community Centres, and other key destinations for residents.

Guidelines

1. **Pedestrian and Bicycle Circulation Plan Submission**

   In conjunction with an Outline Plan / Land Use Amendment application, a Pedestrian and Bicycle Circulation Plan is required.

2. **Pedestrian and Bicycle Circulation Plan Requirements**

   a. The Pedestrian and Bicycle Circulation Plan should

      i. contain the elements listed in A.2, Concept Plans.

      ii. demonstrate compliance with the policies of section 9.2 Pedestrian and Bicycle Circulation Policies, of this ASP;

      iii. identify the pedestrian and bicycle destinations such as schools, shopping, parks, pathways, etc. as well as:

      - pedestrian destinations (e.g., parks, BRT Stations, recreational facilities, public amenities, etc.) within a one kilometre radius of the community;
      - bicycle destinations (e.g., parks, BRT Stations, recreational facilities, public amenities, etc.) within a three kilometre radius of the community;
      - other notable pedestrian destinations (e.g., parks, BRT Stations, recreational facilities, public amenities, etc) outside the one kilometre radius of the community; and

      iv. other notable bicycle destinations (e.g., parks, BRT Stations, recreational facilities, public amenities, etc) outside the three kilometre radius of the community. demonstrate that a convenient and efficient routing network is provided for local and commuter pedestrian and bicycle trips in relation to the site and the surrounding community including sidewalks, walkways, pathways, bikeways and crosswalks;

      v. provide for efficient connections to educational, recreational, commercial, and other key destinations within the community;

      vi. identify the barriers for pedestrian and bicycle circulation (e.g., high volume roads, natural areas, etc.);

      vii. address how barriers for pedestrian and bicycle connectivity can be mitigated or overcome; and

      viii. contain such other information as determined necessary by the Approving Authority to evaluate the compliance of the proposal with the policies of the Plan.

13.2.5 Transit Station Planning Area Concept Plan

1. Transit Station Planning Area Requirements

The Transit Station Planning Area Concept Plan should:

a. Show the conceptual land use pattern and road network for the area;

b. Provide an Intensity analysis for the area, refer to Appendix A 4.2;

c. Contain the elements listed in A.2, Concept Plans.

d. Show a 400m pedestrian shed from focal points, including Neighbourhood stores, services, open space and transit stops.

e. Contain any other such information as determined necessary to evaluate the compliance of the proposal with the policies of the plan;

f. Demonstrate compliance with the requirements of:

i. Section 6.2: Complete Community Policies;

ii. Section 8.3: Transit Station Planning Area;

iii. Appendix D: Development Design Guidelines and Appendix E: Environmental Design Guidelines.

13.2.6 Road Network Plan

Purpose

The purpose of a Road Network Plan is to describe an internal street pattern for the Community that balances the needs of motorists, transit service, pedestrians and cyclists, and treats the street as an important component of the public realm.

Guidelines

1. Road Network Plan Submission

a. In conjunction with an Outline Plan/Land Use Amendment application, a Road Network Plan should be submitted.

2. Road Network Plan Requirements

a. The Road Network Plan should:

i. demonstrate compliance with the policies of section 9: Connecting Communities, and any other relevant policies of the Plan;

ii. show the internal road network for the application area and adjacent areas;

iii. identify the classification of the roads within the network;

iv. include cross sections showing the standard of improvements within the roadways;

v. identify road sections that will incorporate green infrastructure and serve as green streets that connect parks, open space and natural areas; and

vi. contain any other such information as determined necessary to evaluate the compliance of the proposal with the policies of the Plan.

13.2.7 Park Concept Plan

Purpose

The purpose of a Park Concept Plan is to illustrate the proposed park concept and layout for an Outline Plan Area, identify connectivity between park areas and describe proposed park landscaping, park equipment, structures and features. Guidelines are found in Parks Development Guidelines and Standard Specifications Landscape Construction.

Guidelines

1. **Park Concept Plan Submission**

   In conjunction with an Outline Plan / Land Use Amendment application, a Park Concept Plan should be submitted.

2. **Park Concept Plan Requirements**

   The Park Concept Plan should:

   a. demonstrate compliance with the policies of section 7.6.5: Creditable Reserve Policies, and any other relevant policies of the Plan;

   b. show all planned parks for the application area;

   c. contain the elements listed in A.2, Concept Plans.

   d. illustrate all pedestrian and cyclist connections between planned parks;

   e. illustrate and describe all planned landscaping and uses of park areas;

   f. identify and describe all park features, equipment and structures; and

   g. contain any other such information as determined necessary to evaluate the compliance of the proposal with the policies of the Plan.

01.3 Environmental Background Studies

Purpose

The purpose of these guidelines is to provide for the evaluation of the environmental impacts of an Outline Plan/Land Use Amendment application from an environmental perspective. This evaluation will involve the circulation of a proposal to the appropriate external agencies for review and comment and the submission of the appropriate environmental, biophysical, historical resources and grading information deemed necessary to undertake this review. All environmental background studies shall be prepared to the satisfaction of The City of Calgary.

Guidelines

1. Environmental Site Assessment (ESA)

a. Prior to Outline Plan / Land Use approval, an Applicant:

i. shall submit a current Phase 1 Environmental Site Assessment report for the subject site. The report shall:

- identify actual and potential soil and groundwater contamination; and
- be used to determine if the site is suitable for the intended use, as related to environmental issues.

ii. should be required by the Approving Authority to submit a current Phase 2 Environmental Site Assessment and resulting Remedial Action Plan and / or Risk Management Plan for the subject site.

b. The Remedial Action Plan and / or Risk Management Plan shall document how the site would be re-mediated or risk managed to such an extent that the site will be suitable for the intended land use.

c. An ESA report shall be:

i. prepared by a qualified professional;

ii. reviewed to the satisfaction of Environmental Development Review; and

iii. circulated to the appropriate regulatory agencies for review, as required.

d. Where required, an Applicant shall undertake those mitigative measures identified by the ESA report for the subject site.

e. Additional environmental information or monitoring at later stages of site development or as outlined in the ESA report should be required.

2. Biophysical Impact Assessment (BIA)

a. Prior to Outline Plan / Land Use approval, where the proposal may impact upon an Environmentally Significant Area, the Applicant shall submit a Biophysical Impact Assessment (BIA) report prepared by a qualified professional to evaluate the impact on biophysical resources and ecosystems and identify any mitigative measures to be introduced. The BIA shall be prepared according to the guidelines included in the current version of Parks' BIA Framework document.

b. Where required, the Applicant shall undertake those mitigative measures identified in the BIA report for the subject site.

3. Historical Resources Impact Assessment (HRIA)

a. Prior to Outline Plan / Land Use approval, an Historical Resources Impact Assessment (HRIA) report should be required for the subject site, as determined by Alberta Culture and Community Spirit.

b. Where required, the Applicant shall, to the satisfaction of Alberta Culture and Community Spirit, undertake those protective or mitigative measures identified in the HRIA report for the subject site.

01.4 Density & Intensity Analysis

Purpose

The purpose of these guidelines is to provide for the submission of appropriate information to allow for the evaluation of a proposal in terms of its compliance with the intensity and density requirements of the Plan. This information will take the form of a Density and Intensity Analysis submitted as part of an Outline Plan / Land Use Amendment application that is, in turn, refined and resubmitted at the Subdivision Approval stage.

Guidelines

1. Density and Intensity Analysis

In conjunction with an Outline Plan / Land Use Amendment application, information shall be submitted identifying:

i. the minimum, maximum and anticipated residential density of the subject site and adjacent area if applicable, measured in units per gross developable residential hectare;

ii. the minimum, maximum and anticipated intensity, measured as people and jobs per gross developable hectare for the application area; and

iii. the minimum, maximum and anticipated intensity measured as population and jobs per gross developable hectare within a Neighbourhood Activity Centre, Community Activity Centre, Urban Corridor and Transit Station Planning Areas located within the Plan Area.

Backgrounder on Density and Intensity for Applicants

What is Density?

A measure of the number of dwelling units on a parcel of land, expressed in units per hectares.

How is Density Calculated?

Residential Density is calculated based on gross developable residential hectare (GDRHa). This is calculated by starting with the gross area of land and deducting non-developable land and land required for regional land uses.

What is Intensity?

A measure of the concentration of people and jobs within a given area.

How is Intensity Calculated?

Intensity is calculated by totaling the number of people living and working within a gross developable hectare (GDHa). GDHa is calculated by starting with the gross area of land and deducting non-developable land.

An example of calculating Density and Intensity: Dalhousie

Total Area	**333 hectares**
Environmental Reserve	1
Expressways/large interchanges	44
Railways	0
Other non-developable	0
Less "Non-Developable" Area	44
Gross Developable Area	**289 hectares**
Regional Open Space	0
Major Commercial Centres >4.0 ha	14
Major Institutional Sites	0
Senior High Schools	0
Industrial Areas	0
Public Lakes/Water Bodies	0
Other regional uses	5
ss "Regional" Uses	19
Gross Developable Residential Area	**270 hectares**

Use GDHa for Intensity:
11,318/289 = 39

Use GDRHa for Density:
3,706/270 = 13.7

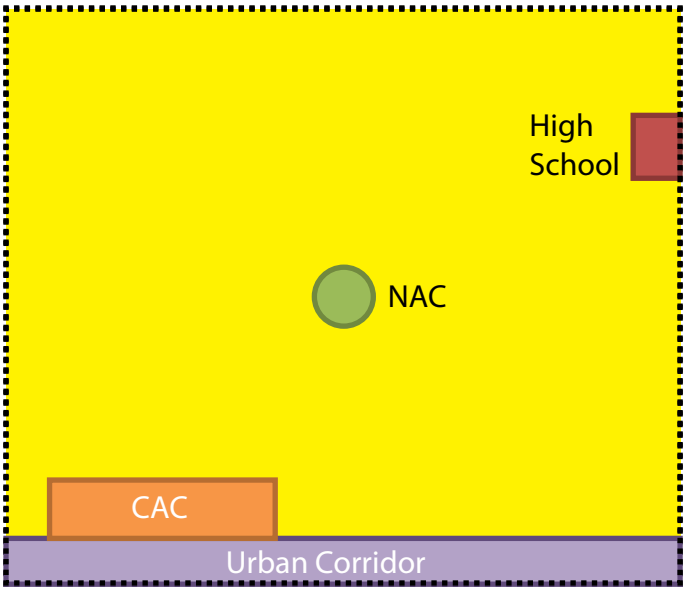
If we have 3,706 units, 9,098 people and 2,220 jobs in Dalhousie (City of Calgary civic census and Place of Work Survey, 2006) the Intensity would be 39 people and jobs per gross developable hectare and the Density would be 13.7 units per gross developable residential hectare.

Table A.1: MDP Typologies and Intensity / Density Thresholds

MDP TYPOLOGIES AND INTENSITY/DENSITY THRESHOLDS				
MDP Typology	Description	**Density or Intensity**	Target	Measure of Area (GDHA vs GDRHa)
Community	The entire Complete Community as identified within the ASP. Intensity includes the Neighbourhood Activity Centres, Community Activity Centres, Neighbourhood Corridor and Urban Corridors if applicable. The Intensity threshold for a Community does not include a Major Activity Centre (MAC) in its calculation.	**Intensity**	60 p+j/ha minimum 70 p+j/ha ultimate	
Neighbourhood Area	This includes all areas shown in yellow on Map 5: Land Use Concept. This density target excludes the NAC.	**Density**	20 uph (8upa)	GDRHa
Neighbourhood Activity Centres (NAC)	This includes the mixed use area identified in the ASP and conceptually shown on the Map 5: Land Use Concept. Must include medium density multi-residential development, central amenity space and a non-residential use.	**Intensity**	100 p+j/ha	GDAHa
Community Activity Centre (CAC)	Identified as such on the Map 5: Land Use Concept.	**Intensity**	150 p+j/ha	GDHa
Major Activity Centre (MAC)	Identified as such on the Map 5: Land Use Concept.	**Intensity**	200 p+j/ha	GDHa
Neighbourhood Corridor (NC)	Identified as such on the Map 5: Land Use Concept.	**Intensity**	100 p+j/ha	GDHa
Urban Corridor	Identified as such on the Map 5: Land Use Concept.	**Intensity**	200 p+j/ha	GDHa

Example of how to calculate Intensity/Density for MDP Typologies

This Community is 150 hectares in size with zero non-developable land. The Figure below shows the Land Use Concept and table below outlines the size and composition based on the MDP Typologies



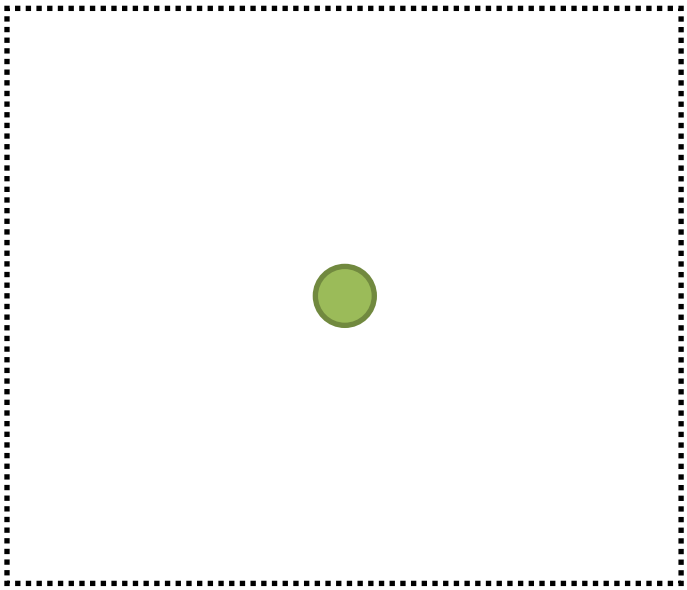
Total	150 hectares
NAC	5
High School	5
CAC	20
UC	30
Remaining Neighbourhood Areas	90

1. Density of Neighbourhood Areas

In this example, the density of the Neighbourhood Areas would be calculated based upon an area of 90 hectares as the High School site, NAC, CAC and UC are all excluded from that calculation.

If you were to propose 1900 dwelling units within that area you would then have a density of 20 uph.

2. Intensity of Neighbourhood Activity Centre



In this example, the intensity of the Neighbourhood Activity Centre would be calculated based upon an area of 5 hectares.

If you were to propose 350 people and 150 jobs you would have an intensity of 100 p+j/GDHa

3. Intensity of Community Activity Centre

In this example, the intensity of the Community Activity Centre would be calculated based upon an area of 20 hectares.

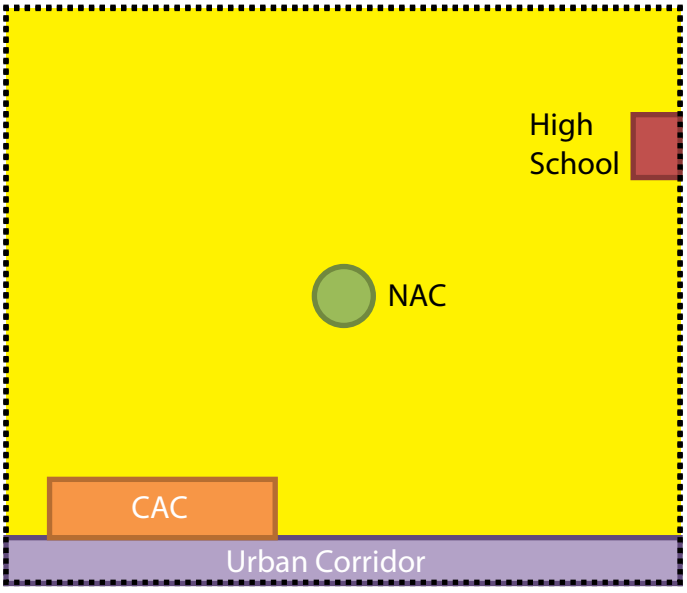
If you were to propose 2,500 people and 500 jobs you would have an intensity of 150 p+j/GDHa

4. Intensity of Urban Corridor

In this example, the intensity of the Urban Corridor would be calculated based upon an area of 30 hectares.

If you were to propose 5,000 people and 1,000 jobs you would have an intensity of 200 p+j/GDHa

5. Intensity of the entire Community



In this example, the intensity of the entire community would be calculated based upon an area of 150 hectares.

Based on this proposed example, you would need 9,000 people and jobs to achieve the intensity minimum threshold of 60 p+j/GDHa and 10,500 people and jobs to achieve the ultimate intensity threshold of 70 p+j/GDHa

Using this same example, if the land use concept was slightly different with some non-developable land (River) and regional uses then the intensity and density would be calculated based on the following areas:

Total Area	150 hectares
NAC	5
High School	5
CAC	20
UC	30
River	10
TUC	10
Remaining	70

Area	Density or Intensity	Example Area
Neighbourhood Area	**Density**	70
Neighbourhood Activity Centres (NCA)	**Intensity**	5
Community Activity Centre (CAC)	**Intensity**	20
Urban Corridor	**Intensity**	30
Community - Minimum	**Intensity**	130

13.4.1 Density/Intensity Analysis Checklist for Applicants

Fill out the following checklist as applicable

Section I: Application Details	
Does your application include a complete community?	☐ YES ☐ NO
If not, what portion of a complete community does it contain (% of total area)	

Does your application include an entire Neighbourhood?	☐ YES ☐ NO
If not, what portion of a complete Neighbourhood does it contain (% of total area)	

Provide a brief description of your application:

What is the total area of your application?	A	ha	ac
Are there any non-developable lands within your applicaton area? For example: Environmental Reserve, R.O.W., cemetaries, landfills, etc.		☐ YES ☐ NO	
If yes, what is the total area of the non-developable lands?	B	ha	ac
Are there any regional uses in your application area? For example: Regional Open Space, Senior High Schools, Industrial Areas, Major Commercial Sites		☐ YES ☐ NO	
If yes, what is the total area of the non-developable lands?	C	ha	ac
Calculate the Gross Developable Area of your application (A-B)	D	ha	ac
Calculate the Gross Developable Residential Area of your application (D-C)	E	ha	ac

Section II: Community Details

☐ Area of Complete Community (or Total application area)	ha	ac
☐ Estimated population		
or		
☐ Minimum dwelling units	SF	MF
☐ Maximum dwelling units	SF	MF
☐ Anticipated dwelling units	SF	MF
☐ Estimated jobs		
or		
☐ Anticipated retail floor area	sq. Ft	sq. M
☐ Anticipated office floor area	sq. Ft	sq. M
☐ Anticipated other non-residential floor area Specify type of use:	sq. Ft	sq. M

Section III: Community Details

☐ Area of Neighbourhood (or total application area if smaller than a complete Neighbourhood)	ha		ac
☐ Minimum dwelling units	SF		MF
☐ Maximum dwelling units	SF		MF
☐ Anticipated dwelling units	SF		MF

Section IV: Application Typologies (MDP Typologies)

Does your application contain the following?		
Neighbourhood Activity Centre?	If yes, fill out Section V	☐ YES ☐ NO
Community Activity Centre?	If yes, fill out Section VI	☐ YES ☐ NO
Major Activity Centre?	If yes, fill out Section VII	☐ YES ☐ NO
Neighbourhood Corridor?	If yes, fill out Section VIII	☐ YES ☐ NO
Urban Corridor?	If yes, fill out Section IX	☐ YES ☐ NO

Section V: Neighbourhood Activity Centre

☐ Area of Neighbourhood Activity Centre	ha	ac
☐ Estimated population		
or		
☐ Minimum dwelling units	SF	MF
☐ Maximum dwelling units	SF	MF
☐ Anticipated dwelling units	SF	MF
☐ Estimated jobs		
or		
☐ Anticipated retail floor area	sq. Ft	sq. M
☐ Anticipated office floor area	sq. Ft	sq. M
☐ Anticipated other non-residential floor area	sq. Ft	sq. M
☐ Area of community amenity space	ha	ac

Section VI: Community Activity Centre

☐ Area of Community Activity Centre	ha	ac
☐ Estimated population		
or		
☐ Minimum dwelling units	SF	MF
☐ Maximum dwelling units	SF	MF
☐ Anticipated dwelling units	SF	MF
☐ Estimated jobs		
or		
☐ Anticipated retail floor area	sq. Ft	sq. M
☐ Anticipated office floor area	sq. Ft	sq. M
☐ Anticipated other non-residential floor area	sq. Ft	sq. M
☐ Area of community amenity space	ha	ac

Section VII: Major Activity Centre

☐ Area of Major Activity Centre	ha	ac
☐ Estimated population		
or		
☐ Minimum dwelling units	SF	MF
☐ Maximum dwelling units	SF	MF
☐ Anticipated dwelling units	SF	MF
☐ Estimated jobs		
or		
☐ Anticipated retail floor area	sq. Ft	sq. M
☐ Anticipated office floor area	sq. Ft	sq. M
☐ Anticipated other non-residential floor area	sq. Ft	sq. M
☐ Area of community amenity space	ha	ac

Section VIII: Neighbourhood Corridor

☐ Area of Neighbourhood Corridor	ha	ac
☐ Estimated population		
or		
☐ Minimum dwelling units	SF	MF
☐ Maximum dwelling units	SF	MF
☐ Anticipated dwelling units	SF	MF
☐ Estimated jobs		
or		
☐ Anticipated retail floor area	sq. Ft	sq. M
☐ Anticipated office floor area	sq. Ft	sq. M
☐ Anticipated other non-residential floor area	sq. Ft	sq. M
☐ Area of community amenity space		

Section XI: Urban Corridor

☐	Area of Urban Corridor	ha	ac
☐	Estimated population		
	or		
☐	Minimum dwelling units	SF	MF
☐	Maximum dwelling units	SF	MF
☐	Anticipated dwelling units	SF	MF
☐	Estimated jobs		
	or		
☐	Anticipated retail floor area	sq. Ft	sq. M
☐	Anticipated office floor area	sq. Ft	sq. M
☐	Anticipated other non-residential floor area	sq. Ft	sq. M
☐	Area of community amenity space	ha	ac

Section XI: Density and Intensity Verification
For Internal Use Only
Calculate the Density and Intensity as applicable and fill out table. If the checklist is incomplete you will not be able to complete this step. Work with applicant to gather all necessary information.

Does the application meet the following density/intensity targets as applicable?				
Area	**Density Target**	**Intensity Target**	**Application Density/Intensity**	**Meets Target**
Community	n/a	60-70		☐
Neighbourhood Area	8	n/a		☐
Neighbourhood Activity Centre	n/a	100		☐
Community Activity Centre	n/a	150		☐
Major Activity Centre	n/a	200		☐
Neighbourhood Corridor	n/a	100		☐
Urban Corridor	n/a	200		☐

6. Density/Intensity Monitoring

Recognizing that residential density is calculated using Gross Developable Residential Hectares, the Density Analysis should:

i. be updated and resubmitted with each subsequent plan of Subdivision and, if determined necessary, each Development Permit for a residential project within the original Outline Plan / Land Use Amendment application area; and

ii. identify the actual number of dwelling units proposed within the Subdivision or Development Permit plans in relation to the actual and anticipated dwelling units within the balance of Landowners' lands within the Community.

01.5 Reserve Analysis

Purpose

The purpose of these guidelines is to provide for the review of the allocation of Creditable and Environmental Reserve within a community.

Guidelines

1. Creditable Reserve Analysis

Prior to approval of an Outline Plan / Land Use Amendment application, a Reserve Analysis shall be submitted by an Applicant identifying:

i. the amount of Creditable Reserve owing on an ownership basis within the community and the subject site; and

ii. the proposed allocation of this reserve.

2. Environmental Reserve Analysis

In conjunction with the Outline Plan / Land Use Amendment application, the following should be submitted when ER is to be dedicated:

i. a field surveyed boundary of any ER lands with the boundary shown on the Outline Plan;

ii. a Biophysical Impact Assessment report prepared by a qualified professional;

iii. a Preliminary Grading Plan showing the extent of any grading or disturbance proposed on reserve lands, including grading for roads, pathways and stormwater management connections;

iv. a Restoration Plan showing the proposed landscape and method of restoration for any ER lands that have been or are to be graded or disturbed;

v. a Concept Plan showing the design of stormwater connections and any related recreational amenities;

vi. a Stormwater Management Report consistent with the Master Stormwater Drainage Plan; and

vii. any other analysis or information considered necessary to evaluate the proposal.

01.6 Mobility Assessment & Plan (MAP)

Purpose

The purpose of a MAP is to assess the multi-modal transportation influences of new developments. The MAP is intended to be conducted around higher density transit nodes or transit corridors.

1. **Mobility Assessment & Plan**
   a. Unless determined otherwise, a MAP shall be submitted in conjunction with an Outline Plan/Land Use Amendment application.
   b. The MAP shall address:
      i. the internal road network, including the design, capacity and timing of the network improvements and transportation policy / service changes necessary to serve the subject site;
      ii. the perimeter road network, including the design, capacity and timing of network improvements and transportation policy / service changes required to serve the subject site; and
      iii. the coordination of the development of the subject site with timing of construction and capacity of any transportation improvements, or necessary transportation policy/service changes that need to be implemented.
2. **Update of MAP**

   The MAP may be required to be updated and resubmitted with a subsequent subdivision or Development Permit application within the Outline Plan / Land Use Amendment application area.

01.7 Transportation Impact Assessment

Purpose

The purpose of these guidelines is to provide for the submission of a Transportation Impact Assessment (TIA) to address the network improvements required to serve a proposed development.

Guidelines

1. **Transportation Impact Assessment (TIA)**
   a. Unless determined otherwise, a TIA shall be submitted in conjunction with an Outline Plan / Land Use Amendment application.
   b. The TIA shall address:
      i. the internal road network, including the design, capacity and timing of the network improvements necessary to serve the subject site;
      ii. the perimeter road network, including the design, capacity and timing of construction required to serve the subject site; and
      iii. the coordination of the development of the subject site with timing of construction and capacity of any transportation improvements.
2. **Update of Transportation Impact Assessment**

   The TIA should be required to be updated and resubmitted with a subsequent Subdivision application or Development Permit application within the Outline Plan / Land Use Amendment application area.

01.8 Transit Coverage Plan

Purpose
The purpose of a Transit Coverage Plan is to show the location and extent of transit service and coverage within the Community.

Guidelines
1. **Transit Coverage Plan**

   A Transit Coverage Plan should be submitted in conjunction with an Outline Plan / Land Use Amendment application.

2. **Transit Coverage Plan Requirements**

   a. The Transit Coverage Plan should:

      i. Show the proposed:

         - routing of public transit buses;
         - location of transit bus stops;
         - residential dwellings within and beyond the prescribed transit coverage areas; and
         - any enhanced transit facilities to be included into development.

      ii. demonstrate that the internal road network will accommodate:

         - convenient and efficient pedestrian connection to transit service; and
         - suitable transit coverage.

   b. In addition to subsection A.8(2)a, the Transit Coverage Plan should contain such other information as determined necessary to evaluate transit service coverage within the Community.

01.9 Retail Market Analysis

Purpose
The purpose of these guidelines is to establish criteria and a review process for evaluating a Retail Centre from a market perspective. This shall involve the submission of a Market Demand and Market Impact Analysis in conjunction with a Land Use Amendment application for a Retail Centre. This analysis is required to confirm that the scale and composition of the Retail Centre proposal significantly departs from the purpose and policies outlined for Activity Centres and Urban Corridors (sections 6.6 and 6.7) to ensure the viability of Activity Centres and Urban Corridors.

Guidelines
1. **Submission of Market Demand and Impact Analysis**

   Where determined appropriate and necessary due to its scale or composition, a Retail Centre should be required to be analyzed in terms of its market demand and market impact on the existing and planned retail hierarchy in the area. For further information, see the general guidelines in Part 4 of the MDP which provides a distribution of retail types within nine retail sectors identified in Calgary.

2. **Review of Market Demand and Impact Analysis**

   Where a Market Demand Analysis or a Market Impact Analysis is submitted, it should be required to be evaluated by an independent consultant as part of the review process with the cost of this evaluation to be borne by the Applicant.

3. **Local Commercial Policy: New Communities in Calgary**

   The Local Commercial Policy: New Communities in Calgary shall be reviewed in association with all new studies completed. Appropriate justification and analysis shall be provided for any deferral from its findings.

01.10 Risk Assessment

Purpose

While the Energy Resources Conservation Board (ERCB) outlines basic setbacks and guidelines for oil and gas facilities, further investigation such as a Risk Assessment is necessary to determine appropriate land uses adjacent to specific facilities. The purpose of a Risk Assessment is to evaluate the potential long and short term risks associated with urban development in proximity to existing oil and gas infrastructure such as sour gas infrastructure, oil wells, abandoned wells, pipelines, and other oil and gas facilities.

The Risk Assessment shall identify and document actual and perceived risks to human health or the environment, their likelihood, their consequences and any required mitigation. The Approving Authority shall consider the Risk Assessment and any associated mitigation strategies prior to approval of an Outline Plan / Land Use Amendment application.

Guidelines

1. Risk Assessment Requirements

a. The Risk Assessment should include, as applicable:

i. Brief project description;
ii. Source of risk;
iii. Existing ERCB setbacks;
iv. Likelihood of an incident occurring;
v. Analysis of the consequences of an incident;
vi. Emergency Planning Zone (EPZ) area and specific response provisions;
vii. Proposed risk mitigation measures;
viii. A risk communication plan;
ix. Potential nuisance effects, such as odour, lighting, noise, flaring, etc.; and
x. Analysis regarding how the facility will integrate with existing and future developments.

01.11 Utility Servicing Background Studies

Purpose

The purpose of these guidelines is to provide for the submission of municipal servicing studies and analysis considered necessary to evaluate a proposal.

Guidelines

1. Water Distribution System

In conjunction with an Outline Plan / Land Use Amendment application, a Water Distribution Analysis shall be completed to demonstrate that the subject site can be serviced in accordance with the overall design of the water distribution system for the area.

2. Sanitary Sewage System

In conjunction with an Outline Plan / Land Use Amendment application, a Sanitary Sewer Servicing Study shall be submitted to demonstrate that the subject site can be serviced in accordance with the overall design of the sanitary sewage system for the area.

3. Stormwater Management System

In conjunction with an Outline Plan / Land Use Amendment application, a Staged Master Drainage Plan, consistent in format with the Shepard Regional Drainage Plan and / or, Forest Lawn Creek Catchment Area and subsequent Master Drainage Plan as approved by The City and the Province, shall be submitted to demonstrate that the subject site can be serviced in accordance with the overall design of the ultimate stormwater management system for the area.

01.12 Infrastructure Improvements Budgeting Analysis

Purpose

The purpose of these guidelines is to ensure that major transportation and utility infrastructure improvements and facilities required to serve development within the planning area are identified prior to Outline Plan/Land Use Amendment approval.

Guidelines

1. Infrastructure Improvement Analysis

a. As part of an Outline Plan / Land Use Amendment application, an Applicant shall identify:

i. the major on-site and off-site transportation and utility infrastructure improvements and facilities necessary to serve the subject site;

ii. the financial obligations for these improvements and facilities;

iii. the anticipated timing of construction of the transportation and utility infrastructure improvements and facilities relative to projected land absorption rates;

iv. the timing or development thresholds required for any provincially, municipally or privately financed transportation and utility infrastructure improvements and facilities; and

v. as determined appropriate, the timing of any off-site transportation and utility infrastructure improvements and facilities.

2. Public Infrastructure Improvements in Relation to Council's 3-year Capital Budget

The Administration shall identify budgeting priorities in relation to any major provincially or municipally-funded transportation or utility infrastructure improvements and facilities necessary to serve the subject site identified under subsection (1) (above).

3. Report to Council

The report to Council accompanying a Land Use Amendment application should address the proposal in the context of subsections A.12.1 and A.12.2.

APPENDIX B: AREA STRUCTURE PLAN PRELIMINARY COST AND REVENUE ESTIMATION

The following information is presented as an estimation of potential costs and revenues that may be realized through the development of the land located in the Belvedere Area Structure Plan. The estimations should be viewed as high-level evaluations useful in providing a preliminary view of development costs and revenues associated with the Belvedere Area Structure Plan. Ultimate build-out of the Plan Area includes fiscal variables that will impact the accuracy and validity of these numbers over time, including the addition of costs or revenues not accounted for in Tables B1-B4.

It is recognized that the costs incurred by development of lands within the Plan Area and future services for the Community will be covered through a variety of revenue sources including acreage assessments, user fees, and general municipal revenue collected through the mill rate. Additional costs of growth shall require infrastructure and services outside of the Plan Area and are not included in this document.

It is important to note that some of these costs will not apply for several years after development begins. The operating costs for transit service will increase as the population and demand for service grows over time. Conversely, it is likely that the majority of the water servicing infrastructure is required in order for initial development to occur. The costs provided within the tables are the costs for full build out and are estimated costs only.

The figures contained Table B.1 of this Appendix can be refined at the Outline Plan/Land Use Amendment stage without requiring an amendment to this Plan.

The costs for infrastructure may include those inside and outside the Plan Area that are required to service the Plan Area.

It is also important to note that these costs do not represent the full costs to service the Plan Area. Complete Community costs would also include costs associated with program and service and delivery of various city business units (e.g., social workers, community recreation coordinators, parks programs, community and neighbourhood services staff, waste and recycling operations, etc.) which serve community needs and are an essential part of a Complete Community. Furthermore, there may be costs associated with the potential purchase of Environmentally Sensitive Areas and or land for a regional park, if so decided by Council.

Table B.1 outlines the estimated capital costs normally funded by The City of Calgary for a new suburban Plan Area. In the case of Belvedere, no capital expenditures are budgeted in the 3-year budget and only the Emergency Services Station is currently tracked in the 10-year Capital Plan. Costs were calculated based on best information available at the time of the writing of this ASP, but may be different at the time of development. Furthermore there may be additional costs not foreseen at time of approval of this ASP.

Table B.1 Estimated Capital & Operating Infrastructure Costs

Required Infrastructure Facilities	Estimated Capital Cost[1]	Estimated Annual Operating Costs[2]
Utility Servicing[3]		
Water[4]	$23M	$3M
Sanitary[5]	$24M	$3M
Stormwater[6]	$45M	$0.4M
Transportation (Roads & Transit)		
Primary Transit (BRT)	$12M	$1.7M
Transit (Bus)	$5.8M	$4.4M
Memorial Drive Flyover	$20M	-[7]
Pedestrian, Cycle, Streets	-[8]	$8M
Operations Worksplace Centre[9]	$28.2M	$1M
Community Services		
Emergency Response Station[10]	$15M	$4M
Police Service	-[11]	$6.5M
Library	$7.4M	$1.8M
Waste & Recycling		
Essential Waste Collection	-[12]	$2M
Recycling Services	-[12]	$2.3M
Waste Management Charge	-[12]	$1M
Parks & Recreation		
Small Regional Recreation Facility	$48.4M	$1M
Wetlands, Open Space Regional Pathways	-[13]	$2M

1 Capital costs in 2012 dollars. All costs are preliminary and subject to change. Wetland compensation costs not included.
2 Operating costs estimated in 2012 dollars.
3 Utility operating costs include both linear system and treatment plants costs as applicable.
4 Ultimate build-out of the Plan Area, as well as other contributing areas, will require upgrade of existing infrastructure, estimated at $41M.
5 Ultimate build-out of the Plan Area, as well as other contributing areas, will require upgrade of existing infrastructure, estimated at $76M.
6 Land cost is included in "Natural Channel" type of storm conveyance system.
7 Built into overall Street maintenance costs.
8 Capital costs of pedestrian, cycling and streets is borne by Developers.
9 Costs for Operations Workplace Centre (OWC) for Belvedere are shown. The OWC to be built in Belvedere will serve future areas as well. Additional contributing capital costs for future areas are not attributed to Belvedere.
10 ERS costs include land cost.
11 Built into EMS capital costs.
12 Assumed that no infrastructure is physically required in the Plan Area.
13 These parks and open space costs typically borne by Developers.

Table B.2 provides estimated acreage assessments generated by the Belvedere Plan Area. The calculations are based on 2012 City of Calgary Acreage Assessments for 1,150 hectares (gross land area of 1,204 hectares minus potential ER and The City purchases totalling 54 hectares). Revenue streams will be dependent upon multiple variables including market absorption and capital budgeting of The City of Calgary and its ability to extend servicing

Table B.2 Acreage Assessments for Belvedere Plan Area

Infrastructure	Assessment (2012 dollars)
Utility Servicing	
Water	$28.6M
Sanitary	$51.8M
Stormwater	$60.2M
Transportation	$139.8M
Community & Recreation	$87M

The Plan Area will also generate revenue through property taxes, user fees and utility rates. These are outlined to the extent possible for an ASP, in Tables B3 and B4.

Table B.3 Estimated Property Taxes[14]

Property Type	Unit # or Sf	Typical Unit or Psf Asmt Rate	Municipal Tax Rate	Est. Tax (2013) (municipal)
Single Family	14,080	375,000	.0036	18,500,000
Multi Family	8,270	200,000	.0036	5,800,000
Office	1,237,000	380.00	.0108	5,075,000
Big box	2,250,000	135.00	.0108	3,300,000
Retail Strip	1,770,000	305.00	.0108	5,825,000
Industrial	1,100,000	160.00	.0108	1,900,000
(2013-Jan-14)		**TOTAL Annual Municipal Tax Estimate for the ASP area**		**$40,400,000**

[14] Does not include provincial education tax (municipal only).
Includes Council's 5.5% projected 2013 municipal property tax increase.
Does not include business taxes which, by 2019, when fully consolidated with non-residential property, will increase the non-residential property, will increase the non-residential property tax component by approximately 28% on the above reported 2013 municipal property taxes or $44,900,000.

Table B.4 Additional Sources of Plan Area Revenue

Service / Facility	User / Utility Charge
Water	utility rate
Sanitary	
Stormwater	
Essential Waste Collection	
Recycling Services	
Waste Management Charge	
Primary Transit (BRT)	partially user pay & tax supported
Transit (Bus)	
Small Regional Recreation Facility	

APPENDIX C: JOINT USE SITES

01.1 Overview

The purpose of the Joint Use Site guidelines is to address the type, school jurisdiction and size of the Joint Use Sites shown on Map 7: Joint Use Sites of this ASP.

01.2 Joint Use Site

The Joint Use Site requirements for the Plan Area are identified in Section 7.3: Joint Use Sites and shown on Map 7: Joint Use Sites. The exact type of school, school board jurisdiction and size of the Joint Use Site shall be determined at the Outline Plan/Land Use Amendment stage. As such, if an inconsistency between section 7.3 and an Outline Plan/Land Use Amendment approval by Calgary Planning Commission and Council should arise, an amendment to section 7.3 shall not be required.

The number of Joint Use Sites should be reviewed by the Joint Use Coordinating Committee when detailed planning for Communities is undertaken through review of Outline Plan / Land Use Amendment applications. Should it be determined that an additional school site is required, then an amendment to the Plan shall be necessary.

APPENDIX D: NEIGHBOURHOOD DESIGN

This section is intended to illustrate the policies of Section 6: Shaping a More Compact Urban Form and Section 8: Urban Design, demonstrating some of the ways in which those policies may be met. These guidelines do not present an exhaustive list of possible design solutions and innovative approaches but help illustrate the intent of Neighbourhood design policies. Creative approaches that extend beyond these guidelines while meeting the intent of the policies are encouraged.

Figure D1 shows some of the design principles that are desired in Calgary's new Neighbourhoods. Some of these principles are required by policy while others are recommended. Figure D1 also demonstrates that a well-designed neighbourhood that complies with policy by focusing on walkability and mixing uses may be achieved in a variety of ways.

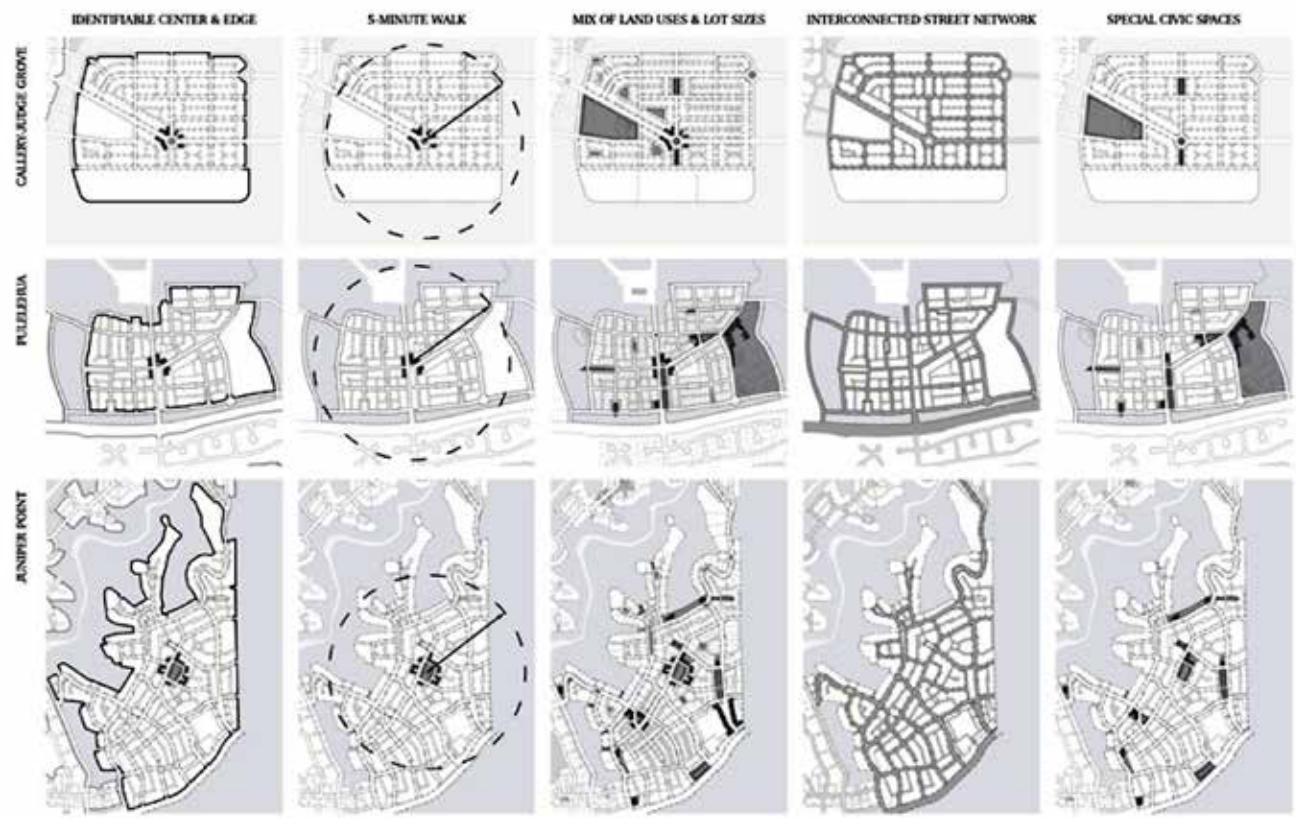


Figure D1: Illustration of three development projects highlighting several factors important to sound Neighbourhood design. (Source: Farr, D. Sustainable Urbanism)

Neighbourhood Design Guidelines

01.1 Size and Shape of Neighbourhoods

A Neighbourhood is meant to be a walkable component of the urban landscape, providing residents with access to a number of daily needs and amenities, including transit services, within a reasonable walking distance from their home. Both the size of the neighbourhood and the network walking distances (from the central amenity space to any residence in the Neighbourhood) are limited in order to meet this objective (see Figure D2).

Where an Environmental Open Space forms part of the boundary or edge of a Neighbourhood, it will be excluded from the size calculation of the Neighbourhood. If an environmental open space is contained within a Neighbourhood, it shall be counted as part of the Neighbourhood Area.

Neighbourhood Size

Minimum: 40 hectares (99 acres)

Maximum: 75 hectares (185 acres)

Ideal: 55–65 hectares (136–161 acres)

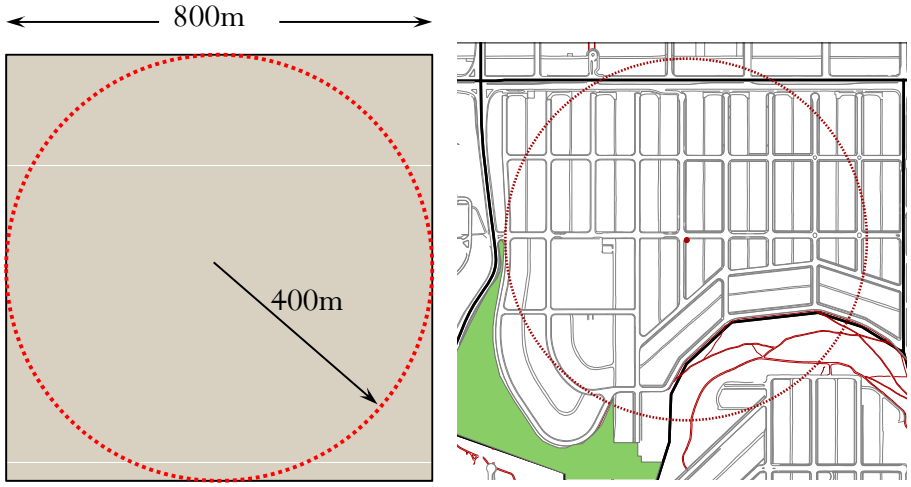


Figure D2: On the left, a quarter section of land measuring approximately 65 hectares. The red, dashed line represents the pedestrian shed, the theoretical distance people are willing to walk to access basic amenities. On the right, the Community of Rosedale measuring 66 hectare. The southern boundary, however, is partially delineated by Environmental Reserve that measures about 6 hectare, bringing the total Neighbourhood size to 60 hectare. This illustrates an ideal Neighbourhood size.

The shape of the Neighbourhood may vary, but whatever configuration proposed, the design of the Neighbourhood must comply with the size and walking distance metrics. Only in unique circumstances may either of these metrics be exceeded (see Figure D3).

Network Walking Distance

Maximum: 700 m (0.43 miles)

Ideal: < 600 m (0.37 miles)

Figure D3: Inverness, a Neighbourhood that measures 60 hectare. Due to a thoughtful orientation of well-connected streets and pathways, the maximum walking distance between the central amenity space and any residence in the Neighbourhood (green dashed line) is less than 600m. On the right is Rosedale. The grid-iron network provides a maximum walking distance between the centre of the Neighbourhood and the furthest residence of 700m.

01.2 Defining the Neighbourhood Edge

Creating a well-defined Neighbourhood edge helps provide residents with a sense of identity as well as giving them visual cues that help them navigate around the city. This not only generates an added sense of pride regarding where one lives, but it also encourages individuals to take a greater role in the welfare of the Neighbourhood (see Figures D4 and D5).

Some features, such as natural areas, topographical elements or large streets and expressways create clear and distinctive edges to Neighbourhoods. In some cases, however, portions of the Neighbourhood may need to be defined by design. Other elements that may be used to create a Neighbourhood edge include

- school sites,
- pathways and linear parks,
- water bodies, and
- large building/office complex.

Figure D4: This image shows a Neighbourhood with a well-defined edge. The orange line roughly delineates the edge of Inverness, a Neighbourhood in southeast Calgary. The edge is composed of an expressway to the west and Arterial streets to the north and northeast. The remainder of the Neighbourhood is delineated by school sites (southwest) and linear parks and a small Community lake (southeast).

Figure D5: In contrast, the second image shows the Community of Queensland (black outline), also in southeast Calgary. Queensland covers an area about the size of three Neighbourhoods. Although the community is separated from other Communities by an expressway, open space and a school site, there are no distinct edges between Neighbourhoods. Consequently, this is no longer an acceptable standard of design.

01.3 Location of Local Commercial Development

Local Retail Centres that are <2,800 m^2 (30,139 ft^2) provide a range of retail goods and services to Neighbourhood residents. In the proper location, these centres can be a destination for residents of a Neighbourhood that can be reached on foot or by bicycle. However, many of these centres are located along Arterial streets favouring convenient access by automobiles over that of pedestrians or cyclists.

Local commercial sites should

- be located in, adjacent to or near the Neighbourhood Activity Centre;
- strike a balance between maximizing pedestrian/cyclist access and accommodating automobiles; and
- not be located on or adjacent to an Arterial street, as shown in Figure D5.

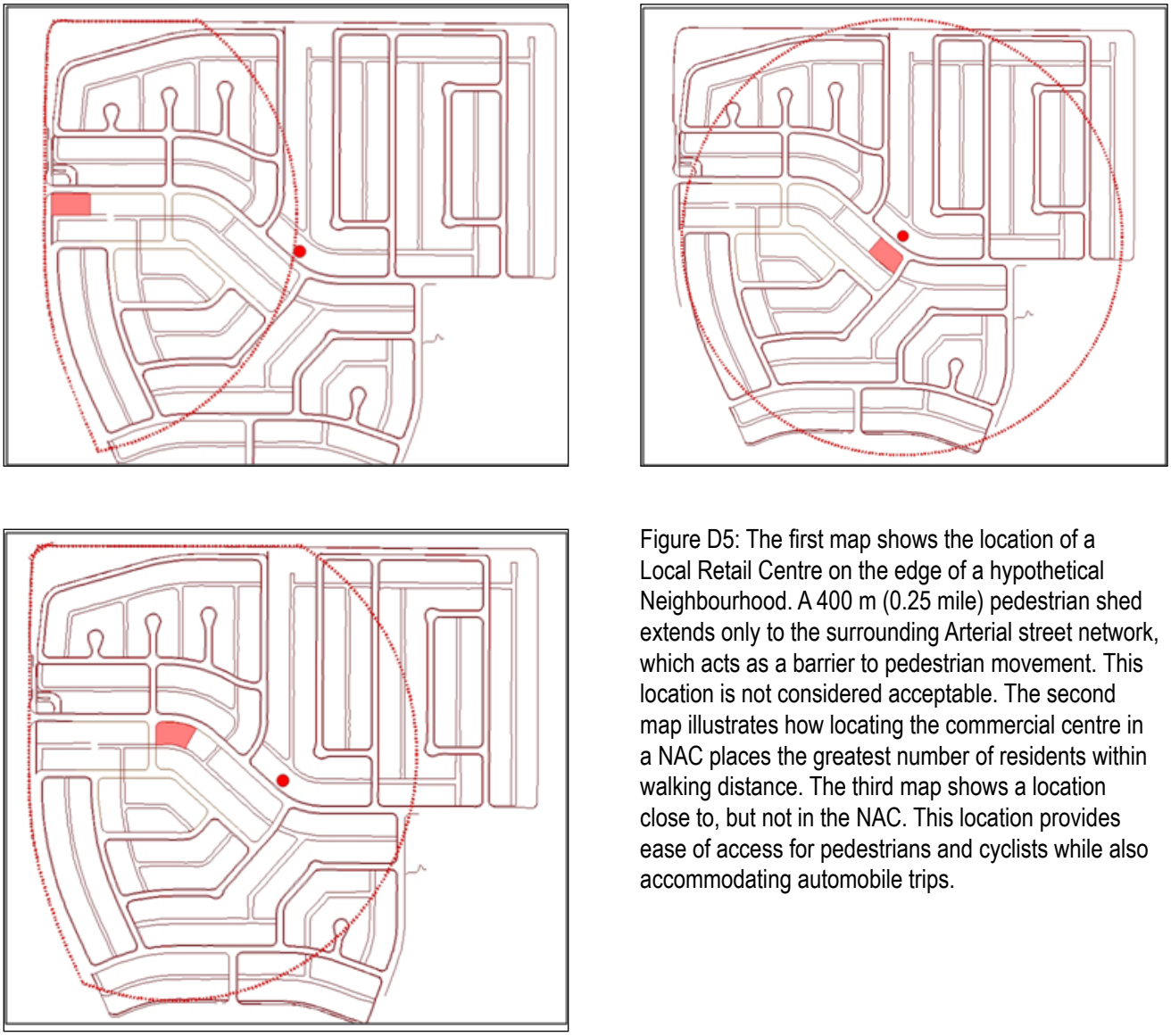


Figure D5: The first map shows the location of a Local Retail Centre on the edge of a hypothetical Neighbourhood. A 400 m (0.25 mile) pedestrian shed extends only to the surrounding Arterial street network, which acts as a barrier to pedestrian movement. This location is not considered acceptable. The second map illustrates how locating the commercial centre in a NAC places the greatest number of residents within walking distance. The third map shows a location close to, but not in the NAC. This location provides ease of access for pedestrians and cyclists while also accommodating automobile trips.

01.4 Central Amenity Space

The Central Amenity Space is the focal point of the Neighbourhood. It should act as the hub of local activity and provide residents with a place to interact with their neighbours, access transit services and enjoy a variety of recreational pursuits. It may take the form of a plaza or a park or some mixture of soft and hard landscaping and be designed in such a way as to be an engaging space during all seasons of the year.

Characteristics of a Central Amenity Space, as shown in Figures D6 and D7:

- between 0.2 and 1.0 hectares (0.5 and 2.5 acres);
- multi-function design;
- edges should be defined by streets and/or active building fronts ;
- close to one or more transit stops;
- provide bicycle parking;
- contain public art or landmark structures; and
- avoid elongated, linear designs.

Figure D6: A variety of well-designed parks and plazas are appropriate models for designing a Central Amenity Space.

The first image shows a traditional European town square featuring a prominent fountain at its centre, with a mixture of paved and landscaped areas and seating throughout.

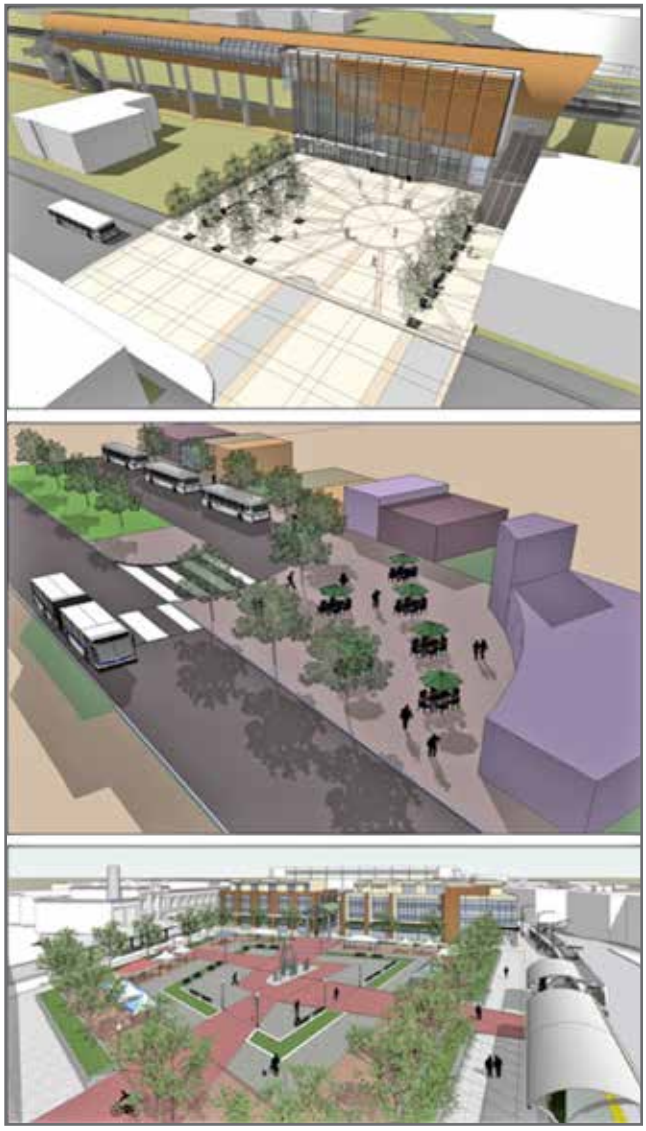
Figure D7: Haultain Park is a large, 1 hectare (2.5 acre) park in Calgary's beltline featuring a playground, plaza area with seating, small sports field and other recreational facilities. A smaller amenity space could utilize some of these design elements effectively.

01.5 Transit Plaza

The Transit Plaza is a particular type of amenity space required in Community Activity Centres and Urban Corridor. It should be located prominently and provide an area in which residents may access transit services or conveniently transfer between transit routes. The Transit Plaza should also incorporate a mix of uses to generate activity during off-peak hours, as illustrated in Figures D8, D9 and D10.

Characteristics of a transit plaza:

- contains space designed as a transfer point between transit routes;
- has a transit building to protect patrons from inclement weather;
- has edges defined by streets and active building fronts;
- provides bicycle parking; and
- contains public art.



Three transit station concepts featuring transit plazas each demonstrate how the design principles may be achieved through a variety of forms.

Figure D8: The first image shows a rendering of the Sunalta transit station in southwest Calgary.

Figure D9: The second image is a conceptual transit station in a mixed-use centre providing a transfer point between bus lines.

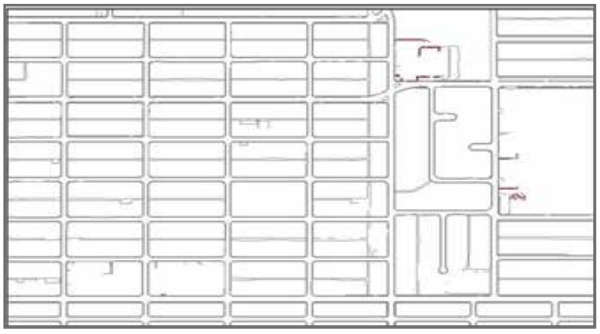
Figure D10: The third image shows a conceptual transit station in Baltimore, Maryland. (Source: Klaus Philipsen, ArchPlan Inc.)

01.6 Block-Based Street Network

Walkability is one of the most important objectives of Neighbourhood design, and a well-connected street network is a key characteristic to its achievement. Although a grid-iron network has the ability to provide a highly connected network with multiple routing options, it is not always the most practical or environmentally sensitive option. Instead, a block-based network featuring short block faces and multiple routing options is required. See Figures D11, D12 and D13.

Street network characteristics:

- block-based pattern;
- ±900 m (0.6 mile) block perimeter in Neighbourhood Area;
- ±600 m (0.4 mile) block perimeter in Activity Centres;
- single entry streets (such as cul-de sac and P-loops) should be avoided; and
- provide safe, convenient pathways to shorten walking distances to the Activity Centre.



These figures illustrate three street patterns found in Calgary. Grey lines outline streets and red lines indicate pathways.

Figure D11: A traditional gridiron pattern in West Hillhurst. This is an example of an acceptable street network design.

Figure D12: A modified-grid pattern in Inverness. This is another example of an acceptable street network design.

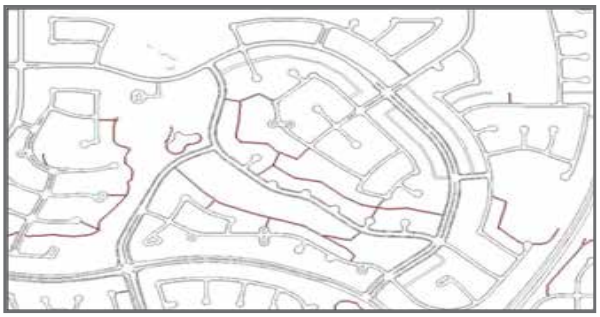


Figure D13: A curvilinear street network in the Community of Hawkwood. This is not an acceptable standard of design.

01.7 Neighbourhood Focal Point

Typically, the focal point of a Neighbourhood will be a Neighbourhood Activity Centre. This may not be the case, however, if a higher-order activity centre such as a Community Activity Centre or Urban Corridor is present in the Neighbourhood. In such cases, the higher-density housing component and the non-residential component normally required in a NAC may be located in the higher-order Activity Centre or Urban Corridor. A Central Amenity Space is still required in the Neighbourhood Activity Centre. See Figures D14, D15, and D16.

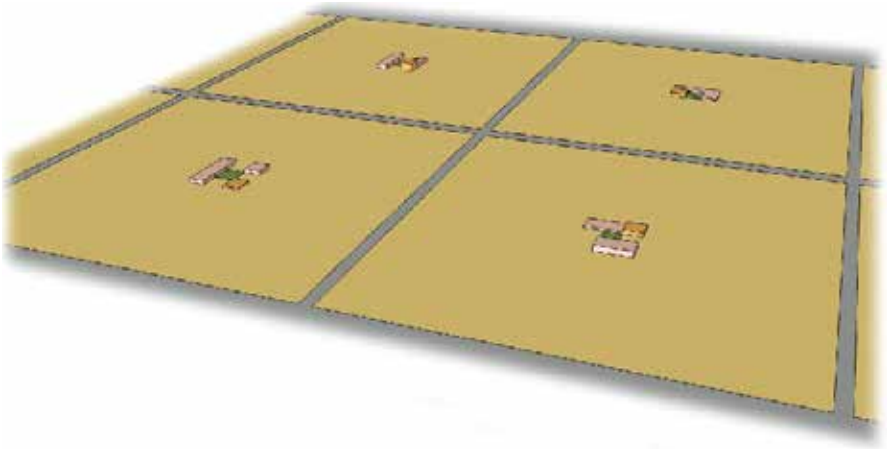


Figure D14: This illustration shows a set of four Neighbourhoods, each with its own Neighbourhood Activity Centre (NAC). Each NAC consists of a Central Amenity Space, a concentration of housing and a non-residential use. There are no higher-order Activity Centres or Corridors in these Neighbourhoods.

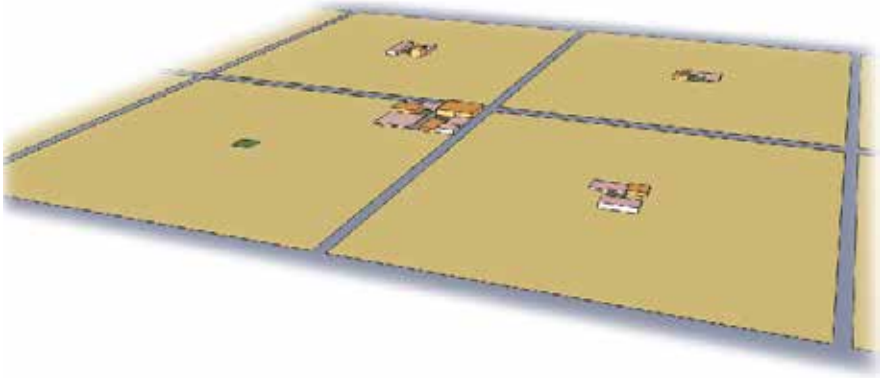


Figure D15: In this illustration, one of the Neighbourhoods contains a Community Activity Centre. As a result, the concentration of housing and the non-residential use are clustered as part of the Community Activity Centre instead of the NAC. The Central Amenity Space remains in the NAC as a central feature of the Neighbourhood.

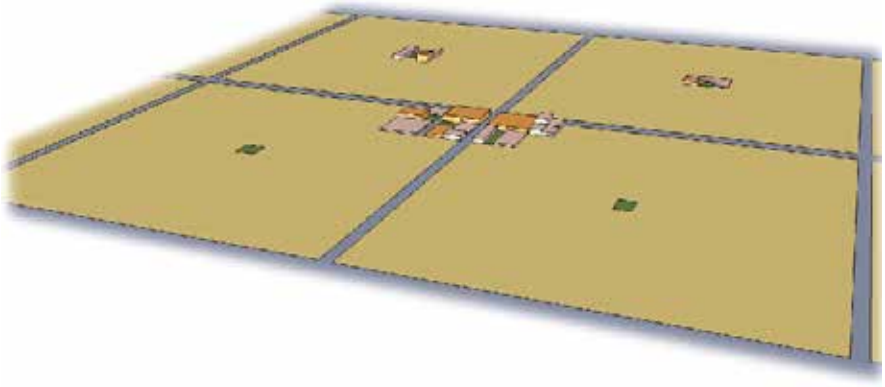


Figure D16: Where a higher-order centre spans a Collector or Arterial Street, the NAC may be modified in the neighbourhoods affected. In this case, two Neighbourhoods contain portions of a Community Activity Centre (CAC). As a result, the corresponding NACs each consist of a Central Amenity Space, with the concentration of housing and non-residential use located in the CAC.

01.8 Mix of Uses

A fundamental characteristic of Activity Centres is that it provides a mix of uses. The ways in which uses are mixed may include either vertical mixing, such as a residential building with retail uses at grade (see Figure D17), or horizontal mixing, such as a row of townhouses located beside a row of office and retail frontages along a corridor (see Figure D18). An important point, whatever form the mixed-use development take is that it provide convenient pedestrian movement between uses. Placing residential uses on one side of an arterial or collector street with retail uses on the other, for example, is not considered a mixed-use design (see Figure D19).

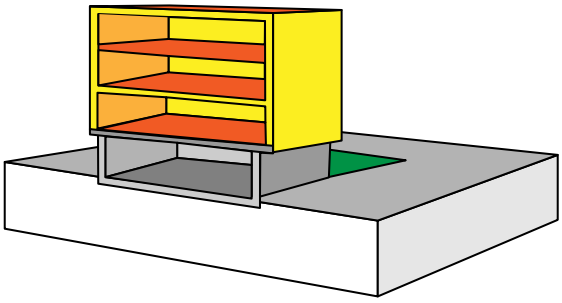


Figure D17: This illustration shows a vertically mixed-use building with residential uses occupying the top two floors and commercial uses occupying the bottom floors.

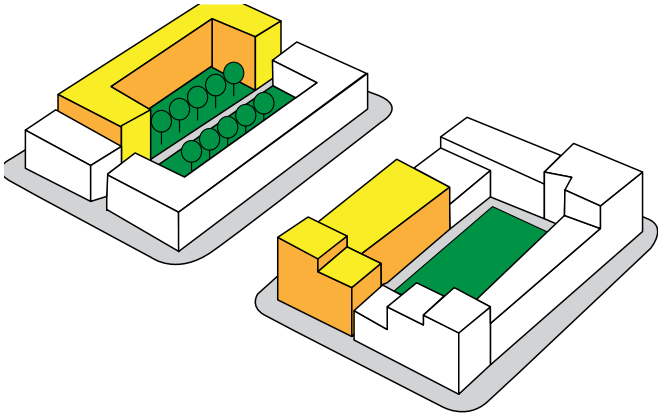


Figure D18: This illustration shows a horizontally mixed-use development. In this case, residential uses occupy one building on each block with commercial uses occupying the others.

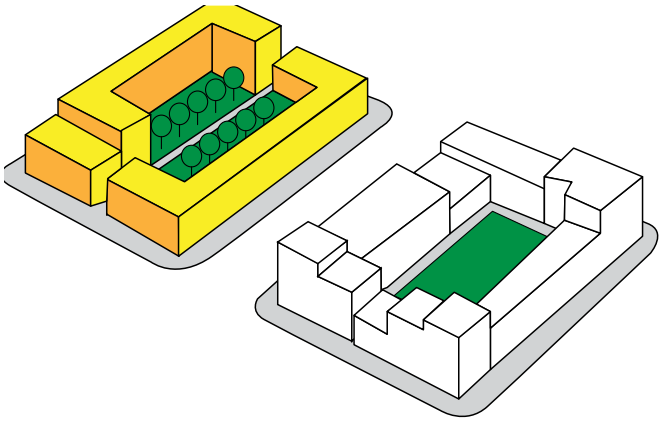


Figure D19: This illustration shows two blocks, one occupied by residential uses and the other occupied by commercial uses. This is not considered an ideal mixed-use development as uses are separated by a street. This configuration would require a street designed to prioritize pedestrian crossings.

01.9 Pedestrian-Oriented Street Design

Well-designed streets play an important role in encouraging residents to walk and cycle to destinations in their Neighbourhood. Pedestrian-Oriented design can also facilitate more social interaction between neighbours by providing them with an environment in which they will spend time lingering in public places such as the central amenity space, patios and along prominent streets. There are a number of elements to consider including characteristics of

- the roadway, which should provide lanes for automobile and bicycle movement and parking;
- the roadside, which should be divided into the boulevard zone for amenities such as lighting, trees and furnishings and the sidewalk zone for pedestrian movement; and
- the interface, which is the area between the sidewalk and the property front façade of buildings (see Figure D20).

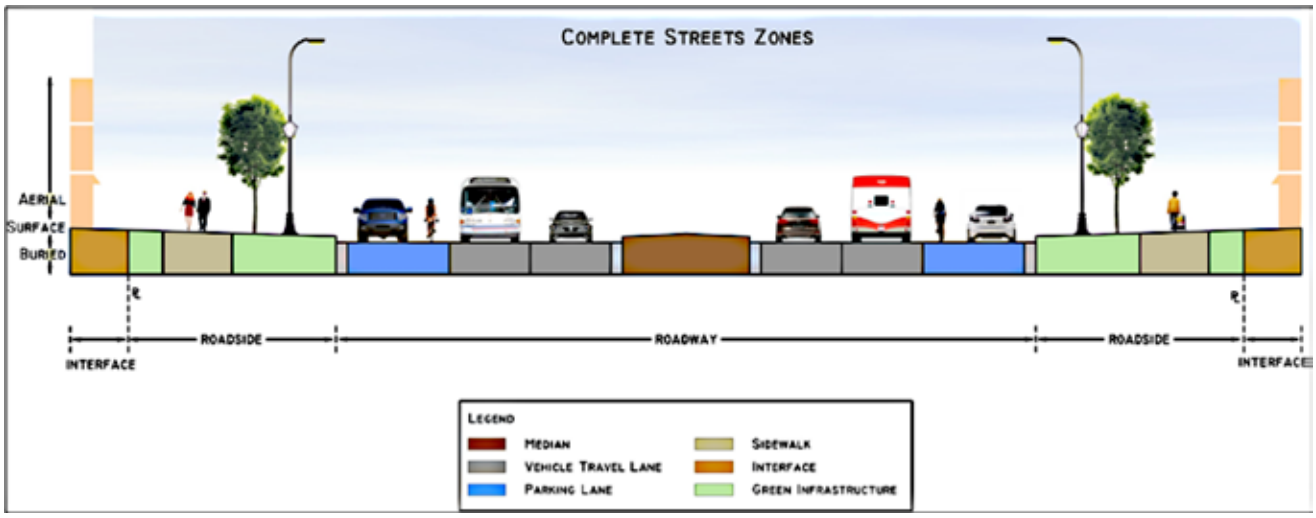


Figure D20: The three horizontal street zones include the roadway, the roadside and the interface. The configuration of these three zones varies depending on the land use context and transportation needs of the area in which they are set.

13.9.1 Roadway Design

In Activity Centres, the roadway zone (providing travel and parking lanes for motorized vehicles and bicycles) should be designed to match the context of the surrounding land uses, as per direction in the MDP and CTP. Efforts should be made to enhance the pedestrian experience by minimizing roadway widths, particularly at pedestrian crossings, and reducing traffic speeds through the use of various traffic calming measures, as illustrated in Figures D21, D22 and D23.

Figure D21: This image shows how the use of curb extensions, a centre median and on-street parking enhance a pedestrian street.

Figure D22: Angled parking provides a barrier between pedestrians on the sidewalk and traffic. The potential that a parked car will back out of a spot also serves to slow traffic on the street.

Figure D23: This shows a section of Stephen Avenue in downtown Calgary. The street may be used by automobile drivers but pedestrians have priority right-of-way, similar to a Woonerf Street in Europe.

13.9.2 Roadside Elements

The roadside portion of a street provides space for many elements that create a sense of safety, comfort and activity along a street. In Urban Corridors and Activity Centres, streets shall provide the following elements, as shown in Figures D24, D25 and D26:

- trees,
- street furnishings,
- appropriate lighting,
- bicycle parking, and
- wide sidewalks.

Figure D24: This image shows a well-designed roadside zone in Bridgeland, Calgary. It includes a boulevard with trees and streetlamps, a generously sized sidewalk lined with landscaping and an attractive transit shelter.

Figure D25: This image shows a bicycle shelter located at a transit stop in Toronto. The shelter provides secure lock-up in a prominent location.

Figure D26: This image shows a streetscape complete with a tree-lined boulevard, attractive streetlamps, benches and a wide sidewalk. This image also illustrates a well-designed mixed-use development that adds to the activity along the street.

Other roadside elements that may be considered in Activity Centres and elsewhere in the Neighbourhood, as deemed appropriate and as shown in Figures D28, D29 and D30, include

- green infrastructure,
- bicycle paths, and
- public art

Other features that may be included in the roadside portion of a streetscape are shown in these three images.

Figure D28: This shows a rain garden designed to capture rain water from adjacent rooftops. It has been incorporated in such a way as to delineate the private realm from the public realm and provide enclosure to a patio.

Figure D29: This image shows a set of bike lanes separated from automobile traffic and set between a boulevard and sidewalk. The physical barrier between cyclists and motorists creates a heightened sense of safety for cyclists.

Figure D30: This bicycle rack in Portland, Oregon doubles as public art and also serves as a landmark for the bakery that paid for its design and installation.

Lane Access Only

The streetscape along the Central Amenity Space in Activity Centres and Neighbourhood or Urban Corridors shall be designed to provide a public realm free of conflict between pedestrians and automobiles; see Figures D31, D32 and D33. This will be achieved by

- providing lane access only – no front driveways;
- providing lane access from side streets; and
- restricting the location of drive-through services to the rear of buildings only.

Local Commercial Centres may provide a single access point that crosses the sidewalk in an Activity Centre (though NOT along a corridor). However, the preferred design is for shops fronting the sidewalk with on-street parking and/or parking behind the building.

Designing other parts of the Activity Centre for lane access is also encouraged.

Figure D31: This image, a corner along 4th street S.W. in Mission, demonstrates ideal streetscape design for an Activity Centre. In this case, the building provides active fronts on both streets with parking accommodated on-street or in a small area behind the building.

Figure D32: This image demonstrates unacceptable streetscape design further south on the same street: A commercial building with a parking area between the building and sidewalk creates conflict between automobiles and pedestrian movement.

Figure D33: Finally, this image shows a residential street with front drives leading to cars on the sidewalk. This creates an unnecessary obstacle for pedestrians that would be remedied by parking in rear lanes.

13.9.3 Interface Zone

Consistent Building Setbacks

Buildings in Activity Centres shall be built with a consistent setback from the sidewalk in order to enhance the pedestrian experience. The setback may be varied somewhat to accommodate for spaces such as plazas and patios that bring increased activity to the street; see Figures D34, D35 and D36.

Figure D34: This photo shows a portion of 9th Avenue S.E. in Inglewood. The buildings provide a consistent setback from the street, creating a comfortable space for pedestrians.

Figure D35: This photo shows a portion of Kensington Road in Hillhurst. This photo demonstrates that some degree of variation to the setback can work well in the right circumstances. In this case, the extra space is used to accommodate a small patio, which serves as an informal gathering space for pedestrians to socialize with neighbours.

Figure D36: This photo shows Centre Street N.W. Adjacent buildings have widely varying setbacks. This not only diminishes the pedestrian environment from an aesthetic perspective, but it also poses the possibility of conflict between pedestrians and drivers.

Active Frontages

Buildings in Activity Centres and along Corridors must provide active entrances to the street in order to enhance the amount of activity along the street. Examples are shown in Figures D37, D38 and D39. In addition,

- commercial buildings shall provide entryways at regular intervals along sidewalks;
- commercial frontage shall provide extensive window coverage along sidewalks; and
- multi-unit residential buildings shall provide access from each main-floor unit to the sidewalk.

Figure D37: This photo shows a well-designed mixed-use street in Bridgeland. The building provides entryways to businesses at short and regular intervals, creating multiple points of interest for pedestrians. Extensive coverage of windows along the sidewalk also adds to pedestrian comfort by providing "eyes on the street."

Figure D38: This multi-unit residential building, also in Bridgeland, has townhouses at grade, each with their own point of entry from the sidewalk. This demonstrates acceptable design in an Activity Centre.

Figure D39: This photo shows a multi-unit residential structure with no entryways facing the street. The interface between building and street is not considered an acceptable design standard in an Activity Centre.

Enclosure Ratio

The enclosure ratio refers to the ratio of average building height to the width of area it is meant to frame, such as a street or amenity space (see Figure D40). Appropriate enclosure ratios create a sense of shelter and comfort for pedestrians and park users. For smaller-scale centres such as a Neighbourhood Activity Centre, appropriate building heights range between one-sixth and one-third the width of the adjacent street or amenity space. In a Major Activity Centre, the building height ratios may range up to 1:1. In some circumstances, buildings may be taller than these guidelines, however building design should be modified to provide an appropriate sense of scale from street level.

Note: not all buildings surrounding an amenity space should necessarily be designed to this standard. In some cases appropriate enclosure may be provided by one prominent building framing an amenity space.

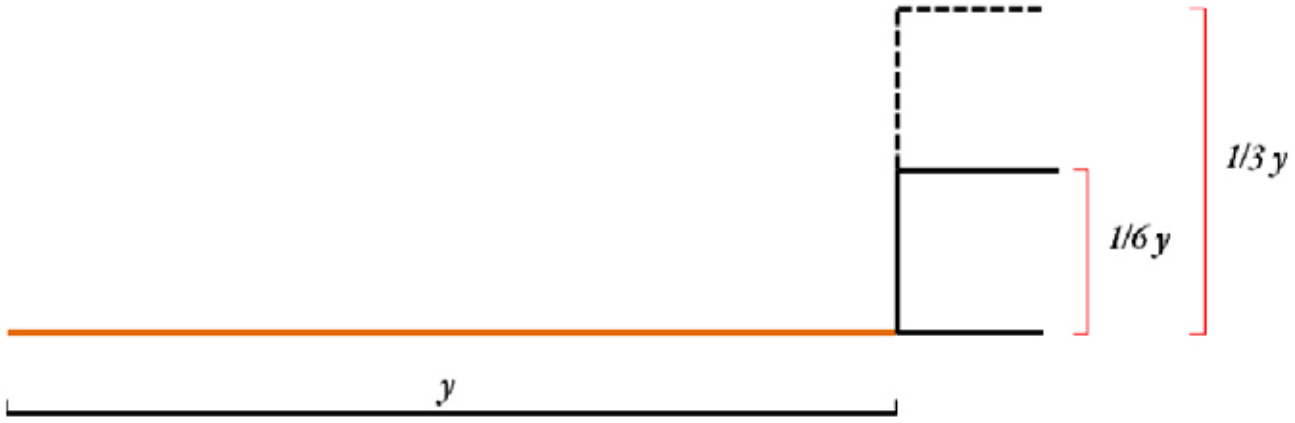


Figure D40: A simple schematic showing the range of building heights deemed appropriate in a Neighbourhood Activity Centre. In this case, ideal building heights range from one-sixth to one-third the width of *y,* which represents the width of a street (including sidewalk and boulevard), amenity space or both.

APPENDIX E: ENVIRONMENTAL DESIGN GUIDELINES

01.1 Overview

Council has directed that environmental sustainability is an important component in the growth of Calgary, including the City of Calgary's Triple Bottom Line Policy, The City of Calgary's Environmental Action Plan, Municipal Development Plan and Council's adoption of the Melbourne Principles.

The Environmental Design Guidelines address specific topics for the application of environmental sustainability considerations within the ASP. Outline Plan/Land Use Amendment applications and Development Permit applications should demonstrate how proposals achieve the following guidelines. Alternative environmentally sustainable design solutions that are not outlined in these guidelines should be considered by the Approving Authority provided that the proposed design is equivalent to, or an improvement over what would be achieved if the guidelines were followed. If an application does not address these guidelines, the Applicant should provide rationale for not complying.

01.2 Green Infrastructure

13.2.1 Purpose

The following guidelines provide an inventory of applicable Green Infrastructure initiatives for development within the Plan Area.

13.2.2 Guidelines

a. Incorporate, develop and manage species rich habitat through the preparation of Habitat Management Plans for the open space and landscaping associated with the application.

b. Support Urban Forestry by protecting existing tree stands and incorporating them within development design whilst planting additional trees to optimize aesthetic, social, environmental and economic benefits in line with best practice and City of Calgary Urban Forestry guidelines and targets.

c. Use Low Impact Development (LID) Solutions throughout the site, including, but not limited to:

   i. Green and Brown Roofs - encouraging the use of roof top gardens, vegetated roof surfaces (green or brown roofs) and vegetated walls that support a variety of insects and bird life and mitigate against climate change through the intake of carbon dioxide.

   ii. Natural Boundaries - promoting the use of vegetation for boundary definition (e.g., hedgerow) rather than the use of man-made materials (e.g., fencing and walling) to support a variety of species, mitigate against climate change through the intake of carbon dioxide and provide benefits of shelter and shading from weather conditions.

   iii. Natural Water Balance Modeling - using natural water storage and drainage solutions as part of a Staged Master Drainage Plan/ Subdivision Stormwater Management Reports/ DSSPs and Site Stormwater management Reports (e.g., bioswales, bioretention areas, reduced flow and run-off rates, pervious surfaces and absorbent landscaping, etc.).

   iv. Conservation Landscaping - changing landscape designs and practices to optimize the use of stormwater runoff while encouraging low water use plants or xeriscaping.

   v. Stormwater Capture and Reuse - promoting stormwater reuse for irrigation and other purposes, where potable water is not necessary, to encourage water conservation, reduce pollution discharges and stream erosion and improve watershed hydrology and restoration of the natural hydrologic regime.

01.3 Water

13.3.1 Purpose

Development within the Plan Area should consider the whole water cycle through the implementation of a water management hierarchy as outlined in the guidelines below.

13.3.2 Guidelines

a. Minimize Demand for Water by:
    i. Ensuring all water fittings in buildings (residential and non-residential) are specified and installed as recognized low flow technology while providing a suitable standard of service (e.g. low flow and aerated shower heads, low volume baths etc).
    ii. Limiting or eliminating the use of potable water for landscape irrigation by selecting and designing water efficient open space, parks and other landscaped areas; selecting regionally appropriate plant species; ensuring a minimum soil depth of six inches; encouraging the use of mulch and installing efficient, high performance irrigation infrastructure where irrigation is deemed necessary.

b. Supply Water from Local Sources by:
    i. Examining the potential for employing rainwater harvesting and non-potable water recycling for collection, storage and reuse for internal building functions requiring non-potable water (e.g. toilet and urinal flushing) with watermain backup to ensure no loss of operation at times of rainwater or non-potable water shortage (in accordance with Provincial & National Building Codes).
    ii. Providing rain barrels or other technology that captures and reuses rainwater for use in landscape irrigation and as a method for water conservation and stormwater management.
    iii. Maximizing permeable surfaces and bioretention in appropriate areas (e.g. sidewalks, parking and driveways) with the use of such materials as grasscrete, permeable asphalt and gravel pavers. This limits the disruption and pollution of natural water flows by managing stormwater runoff.
    iv. Developing Sustainable Drainage Systems, for example through the creation of wetlands, swales, ponds or vegetation strips for the storage of stormwater and to act as a filtering and cleaning system; reducing the level of surface water run-off from the development to assist with stormwater management.

01.4 Energy

13.4.1 Purpose

The following guidelines provide an inventory of applicable energy reduction initiatives for development within the Plan area.

13.4.2 Guidelines

a. Reduce energy demand by utilizing such measures that include, but are not limited to:
    i. Maximizing passive solar design by considering lot orientation, building orientation and internal layout, particularly to capitalize on sunlight access for the main living areas of residential development, commercial and retail development, and pedestrian sitting areas during cold periods of the year and minimizing it during warm periods of the year.
    ii. Each Outline Plan application should include a street design pattern that maximizes use of east-west streets for optimal solar orientation.
    iii. Building orientation should be encouraged to address the roof space available for the efficient use of photovoltaic and solar thermal panels.
    iv. Maximizing the energy efficiency of buildings (e.g., by reducing surface-to-volume ratio; by increasing levels of insulation and minimizing air leakage; utilizing whole building efficient mechanical ventilation with heat recovery; installing all low energy lighting and energy efficient appliances).
    v. New buildings constructed in the Plan Area should be solar-ready.

b. Encouraging local food production by individuals and the community for instance through the provision of allotments, which act as a strong magnet for community integration, reduce the energy used in transport (air and haulage) of food and encourage healthy eating and lifestyles.
c. Maximize efficiency of supply by:
    i. Encouraging local supply and community energy schemes such as District Energy and Co-generation / Combined Heat and Power (CHP) plants where feasible. Promoting a compact, high density mix of land uses and multi-use buildings will assist in moderating heat and power demand over the day and increase the feasibility of on-site energy supply, district heating or community CHP. As a minimum, buildings over 5,000m^2 floor area should complete an analysis on the technical and economic feasibility of employing a district energy and CHP scheme.
    ii. All Outline Plan applications including all or part of a Urban Corridor or Community Activity Centre should include an analysis of the feasibility of employing District Energy for areas contained within the Activity Centre or Urban Corridor.
d. Apply low and zero carbon energy generation by:
    i. Encouraging the use of low carbon and renewable energy sources at both the site-wide and individual unit level to reduce environmental impacts and climate change associated with fossil fuel energy use, e.g. ground and air source heat pumps; solar thermal (hot water); photovoltaic (PV); hydroelectric; wind turbines, etc.

01.5 Waste Reduction

13.5.1 Purpose

Development within the Plan Area should consider implementing the waste reduction measures outlined in the guidelines below.

13.5.2 Guidelines

a. Minimize waste generated in the construction and refurbishment of development by implementing waste management methods (e.g., Site Waste Management Plans, centralized materials handling, Modern Methods of Construction and Environmental Management Systems) that outline waste recovery targets and a waste monitoring protocol with quarterly reporting on waste generation and progress.

b. Provide the space and facilities to encourage the diversion of waste in all buildings and within the public realm.

c. Provide information for occupants of the Plan Area on matters related to minimizing waste (e.g., through refurbishment by providing design information, as-built information, maintenance recommendations and future refurbishment strategies).

d. Maximize the re-use of materials and the use of recycled materials in construction.

e. Consider the lifecycle of buildings and infrastructure (e.g., by implementing a strategy for adaptability and flexibility that allows easy maintenance and refurbishment cycles for all buildings and public realm to be carried out with minimum demolition and re-construction and maximum re-use of building structures and materials).

f. Consider composting at the individual, community or business scale to reduce valuable resources going to landfill for example, by using individual composting bins for residential units with gardens, or promoting the use of community composting units (e.g., associated with allotments).

APPENDIX F: BACKGROUND INFORMATION FOR THE NON-OPERATING LANDFILL

BYLAW 84P2018

The former landfill is located at 8775 17 AV SE and is conceptually illustrated on Map 3: Attributes and Constraints. Historically, the landowner at 8775 17 AV SE received a M.D. of Rocky View development permit to reclaim a portion of his land with clean fill. Between 1974 and 2005 commercial and residential inert demolition waste materials were accepted at the site. In 2005 the landowner received an Alberta Environment & Parks (AEP) order to cease landfilling activities and to remove the contaminated material. Although the site was never approved as a landfill, AEP indicated that the site was considered a landfill (2011).

At the time of the approval of the Belvedere Area Structure Plan (ASP) in 2013, a 300 metres provincially legislated setback was in place around the non-operating landfill site. Since the landfill material was not delineated the setback was measured from the edge of the landfill site property boundary.

Due to the uncharacterized potential impacts and risks from the landfill, two areas were established within the ASP: (1) a Policy Review Area (PRA) and (2) a Special Study Area (SSA). The purpose of the PRA was to highlight areas where additional study was required as part of the land use redesignation application process. As a conservative measure, the PRA extended well beyond the 300 metres landfill setback and specific protocol was included in the ASP for the removal of the PRA. The SSA generally coincides with the 300 metres landfill setback. The purpose of the SSA was to define an area surrounding the landfill that requires the applicant to submit appropriate studies to support land use proposals.

Since 2013, additional environmental investigation of the areas adjacent to the landfill has become available. No off-site contamination concerns associated with the landfill have been identified. In light of this new information and in consultation with AEP, The City submitted a modified list of requirements to AEP for endorsement. AEP in 2017 confirmed that:

- the landfill is considered non-operating;
- AEP does not have or is not aware of environmental reports that characterize the waste and environmental conditions of the Landfill.
- the landfill has not met and is not required by AEP to meet the reclamation, closure and post-closure care requirements; and,
- a modified approach to variance requests would be satisfactory.

AEP also confirmed that modifications to requests to AEP for consent to vary a landfill setback include:

- No Letter of consent from the landfill owner will be required;
- No landfill specific information will be required to be submitted; and,
- Any supporting environmental assessments should characterize the soil, groundwater, and soil gas conditions of the landowner's property to confirm that there are no impacts from the landfill.

No further action in regards to the landfill characterization has been deemed necessary by AEP. In light of AEP's position in regards to the current status of the landfill and the modified approach to variance requests, the PRA has been determined to be no longer required. However, the SSA remains applicable. The removal of the PRA area does not preclude the requirements for a landfill setback variance should a restricted use (as set out in the Municipal Government Act – Subdivision & Development Regulation) be proposed within the setback from the landfill. **LOC2016-0189**

APPENDIX G: PUBLIC FACILITIES DESIGN GUIDELINES

Table G.1: Public Facilities Design Guidelines

Emergency Response Station	Site Details	Comments
Site Size / Site Considerations	Fire only or Fire / EMS 0.8 ha (2 acres)	Rectangular Lot, wide frontage. Preferably situated at the highest elevation in the district.
Access	High Importance	Minimum of two vehicular access points (one for public, one for apparatus) Dedicated, all turns direct access to major roadway for apparatus. Control of signals if required.
Response Time	Provision for achieving Council adopted benchmarks for response times to fire rescue incidents and life threatening emergency medical incidents. Refer to Calgary Fire Department Service Levels and Response Time Benchmark report for response time standards.	Minimize response times to all areas within service district.

Park & Ride	Site Details	Comments
Site Size / Site Considerations	1.6 ha (4 acres)	Co-location to allow shared parking with facilities with different peak hours is preferable.
Access	High Importance	Locate on a collector or major road. Locate in neighbourhood centre.

High School	Calgary Board of Education	Calgary Catholic School District
Population Base	50,000 to 60,000	90,000 to 120,000
Students per School	1,500	1,000 to 1,200
Site Size	9 ha (23 ac)	9 ha (23 ac)

Synergies (applies to both CBE and CCSD)	No single model exists, although it is preferable to locate adjacent to Transit facility. Other possible uses near a high school could include one or a combination of the following: a recreation centre, library, skating rink, swimming pool, retail and/or community hall. Transportation impacts need to be considered when locating such facilities close to one another.

Recycling Depots	Site Details	Comments
Site Size / Site Considerations	160 - 200 m^2 (0.2 - 0.5 acres)	Prefer not to locate adjacent to residential uses.
Access	Adjacent to major / collector roads.	Close to frequent household uses (i.e., shopping centre, recreation areas, transit).
Required Population	1 / 10,000 residents	

Operations Workplace Centres	Site Details	Comments
Site Size / Site Considerations	40000m^2 – 80000m^2 (10 - 20 acres)	Prefer not to locate adjacent to residential uses.
Access	Adjacent to major / collector roads.	Preferably close to other industrial or heavy commercial uses.
Required Population	n/a	

APPENDIX H: BIOPHYSICAL BACKGROUND INFORMATION

The following important biophysical resources have been identified in the Study Area by O2 Planning + Design Inc. (May 2010):

- Glacial till ridge landforms
- Wetlands (Class I through Class V), wetland complexes and drainages (low lying drainage corridors/ephemeral streams)
- Remnant native vegetation primarily concentrated within wetland zones
- A treed/wetland complex near the northern margin of the ASP and scattered native tree patches
- Federally listed species in the area included American Badger (Sensitive), Great Blue Heron (Sensitive), and Northern Harrier (Sensitive). Burrowing Owl (At Risk), Piping Plover (At Risk), and Canadian Toad (May Be at Risk), have been historically observed in the area. Confirmation of the presence of these and other listed species in the ASP area shall require appropriate follow-up field surveys at key times of the year, notably spring, early summer, and late summer.

APPENDIX I: POLICY FRAMEWORK

A wide range of City of Calgary plans, policies and guidance documents have been influential in the preparation of the Belvedere Area Structure Plan. Some of these documents have been referenced within the main body of the ASP and consideration should be given to all of these documents at the Outline Plan, Subdivision and Development Permit stage for any development in the Plan Area.

The referenced documents are listed below.

Reference Policies: The following City of Calgary documents were referenced in the creation of the Belvedere ASP.

- Access Design Guidelines, 2010
- Affordable Housing Implementation Plan, 2003
- Affordable Housing Strategy, 2002
- Calgary....A City of Trees: Parks Urban Forest Strategic Plan, 2007
- Calgary Municipal Development Plan, 2010
- Calgary Snapshots, 2012
- Calgary Transportation Plan, 2009
- Environmental Action Plan, 2007
- Slope Adaptive Development Policy & Conservation Planning and Design Guidelines, 2009
- Community Association Policy Framework, 2003.
- Council Priorities
- Council's Sustainability Principles, 2007
- Design Guidelines for Subdivision Servicing, 2004
- Engage! Policy, 2003
- Environmental Action Plan, 2007
- Environmental Development Review Policy, 2006
- General Planning Criteria for Special Care Facilities in Residential Areas
- Guide to the Municipal Development Plan, 2011
- imagineCALGARY, 2006
- Integrated Risk Management Policy, 2004
- Intermunicipal Development Plan, 2010
- Local Commercial Policy: New Communities in Calgary Direction Input and Recommendations, 2007

- East Regional Context Study, 2009
- Open Space Plan, 2002.
- Parks & Recreation Policies and Priorities Manual
- Parks Urban Forest Strategic Plan 2007
- Pathway and Bikeway Plan, 2000
- Rocky View/Calgary Intermunicipal Development Plan, 2011
- Stormwater Management Strategy, 2006
- Strategic Growth & Capital Investment, 2009-2011
- Sustainable Suburbs Study: Creating More Fiscally, Socially and Environmentally Sustainable Communities, 1995
- Transit Friendly Design Guidelines, 1996
- Transit-Oriented Development Policy Guidelines, 2011
- Triple Bottom Line Framework, 2006
- Wetlands Conservation Plan, 2003

APPENDIX J: ASP INDICATOR SCORECARD

Indicators serve as an evaluation tool for the policies contained in the Plan. Each indicator is accompanied by a target which provides a desired performance outcome over a specific period of time. To effectively measure the success of policies contained in the ASP, implementation of a monitoring and reporting program will be required.

01.1 Connectivity

Connectivity index is a measure of the number of roadway links divided by the number of roadway nodes, and is intended to provide a quantitative measurement of route choice for both motorized and non-motorized traffic. Dead end and cul-de-sac streets decrease connectivity value. A connectivity index of 1.4 should be achieved throughout the Plan Area. P-loops and roads intersecting with themselves and T-intersections should not be counted as intersections. The connectivity index should be measured for each individual Outline Plan and Land Use Redesignation application to ensure compliance with this objective. Other modes that auto will also be evaluated for connectivity.

01.2 Transit Access

Transit access is measured by the percentage of jobs and population within 400 metres walking distance of transit service. Individual Outline Plan and Land Use Amendment applications should achieve a minimum of 90% of jobs and population within 400 metres of a transit stop. Upon full build out, all neighbourhoods within the Plan Area should achieve a minimum of 90% of jobs and population within 400 metres walking distance of a transit stop.

Table J.1: ASP Indicator Scorecard

Core Indicator	Metric	Baseline	60-Year MDP target	25-Year ASP target	Discussion
Connectivity	Number of roadway links divided by the number of roadway nodes. P-loops, roads intersecting with themselves and T-intersections are not counted as intersections.			Connectivity index of 1.4	Intended to provide a quantitative measurement of route choice for both motorized and non-motorized traffic. Dead end and cul-de-sac streets decrease connectivity value. Measured for each individual Outline Plan/Land Use Amendment application to ensure compliance with this objective.
Transit Access	Percent of population and jobs	0		90 percent of population 100 percent of jobs	Measured by percentage of population within 400 m (0.25 mile) walking distance of a transit stop.
Land Use Diversity Index		0.53 city-wide	0.7	0.7	Activity Centres and Corridors should provide a heterogeneous mix of land uses. Land use diversity index for each individual Outline Plan/Land Use Amendment application should be monitored throughout life of the Plan. Overall Land Use Diversity Index in the Plan should meet Municipal Development Plan city-wide target of 0.7 by time of ultimate build-out of the Plan.
Direct Energy Use	Percent district energy use	0	1.7 percent citywide	1.7 percent	Should be employed where sufficient intensity exists. Outline Plan/Land Use Amendment applications including an Activity Centre to include a District Energy Assessment.
Urban Forest	Size of overall tree canopy	0	14 percent	14-20 percent	Size of overall tree canopy in Plan Area. Tree cover and planting plans should be provided with Outline Plan/Land Use Amendment and Development Permit Applications demonstrating how sites will meet targets
Intensity Targets	Jobs and people per Gross Developable Hectare	0	UC – 200 CAC – 150 NAC – 100 BEI – 100 Community – 70	Urban Corridor – 200 CACs – 150 NACs – 100 BEI - 100 Community – 70	Measured by typology. Monitoring over life of Plan should be conducted to ensure intensity targets are being met.
Watershed health	Percent of impervious surface	32 percent city-wide	10-20 percentage		Land made up of roadways, parking and buildings that are impervious. Use of porous materials aids in natural drainage.

APPENDIX K: GUIDELINES FOR HOUSING AFFORDABILITY AND AFFORDABLE HOUSING

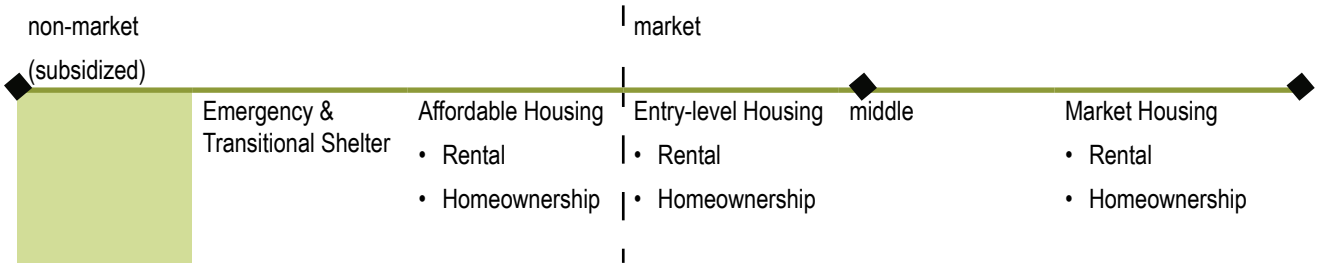
Affordable housing is an important part of the social and economic infrastructure of a healthy city, and is essential for attracting and maintaining a diverse workforce that ensures economic development and vitality. The need for affordable housing is consistent over time. In Calgary, this need has been recorded at approximately 18% of all households since 1991.

According to the 2006 Federal Census, there were 38,610 renter households in need of affordable housing and 33,585 owner households. This means, they earn less than 65% of the area median (2006 census) income ($44,000) and spend greater than 30% of income on housing costs.

The Guidelines for Housing Affordability and Affordable Housing are intended to support and provide a framework for implementing the Housing Policies (Section 8.1) which recommend the inclusion of 10% of new residential developments greater than 10 units as entry-level housing, and 5% of new residential developments greater than 20 units as affordable housing.

The rationale for these thresholds is that 10% of 10 units results in one unit and 5% of 20 units results in one unit.

Housing Continuum



The housing continuum comprises housing options that includes non-market and market housing. The degree of affordability is determined by the relationship between the cost of the housing option and the household income.

For housing to be affordable, the Canada Mortgage and Housing Corporation (CMHC) states that “a household should not spend more than 30 percent of gross income on rental shelter costs. And no more than 32 percent of gross household income should be spent on home ownership”, which includes “payments for mortgage principal and interest; and property taxes; and payments for utilities (water, fuel, and electricity); as well as condominium fees, where the dwelling is a condominium.”

Land Use policies that promote a range of housing affordability, encourage housing that can meet a broad range of household needs.

Entry-level housing includes rental and homeownership options generally provided by the market, at or below average market rents and median home sale prices (also falling within the broad definition of “housing affordability”).

Within this broader spectrum of affordability, affordable housing is specifically non-market rental and non-market homeownership options. The City sees affordable housing as adequately suiting the needs of low and moderate income households at costs below those generally found in the Calgary market.

The City of Calgary, working with other levels of government, non-profit and private sector organizations, communities and citizens, has chosen to focus its resources and efforts in the middle of the housing continuum – particularly on affordable and entry-level housing in both the rental and home ownership markets.

Opportunities

The Housing Diversity Policies (section 7.1.1) and Appendix K provide an opportunity and framework for residential builders and/or developers to enter into conversations with The City of Calgary and other housing interests regarding the voluntary contribution of housing that meets affordability criteria.

The previous section refers to the difference between housing affordability and affordable housing. With changing incomes and house prices, the affordability criteria for each will vary over time and therefore requires discussion at the time of development.

This applies to both new development and redevelopment.

The policies are broad to allow creativity and flexibility for how the housing units are created and managed. Builders and/or Developers could create the units (i.e., the builder/developer could sell units at less than market on its own, to a non-profit organization or to The City) or the units could be created by non-profit housing providers or The City, to sell or manage. There could be a partnership amongst several interested parties.

A range of housing types could be considered, including:

- non-market rental
- entry-level market rental
- non-market homeownership
- entry-level market homeownership
- mixed-use or live/work units

Development opportunities could exist, including:

- Incorporation into key nodes (Activity Centres, Urban Corridors, etc.)
- Incorporation into private residential and commercial developments, as well as institutional developments
- Incorporation into redevelopment areas and buildings
- Change of use on City-owned lands, including surplus or underutilized sites
- Multi-use facilities and developments on City-owned lands
- Consider vertical and horizontal integration opportunities

Suitable Mix

The suitable mix, as identified in Policy 7.1.1, could be determined by a housing needs assessment and the reasonable of the contribution, including the financial viability of the development, the viability from an operator's perspective, the availability of public funding, and the availability of cost off-sets and incentives.

Alternatives

Primarily, units should be provided in the development, but cash, land, or units elsewhere can be provided in lieu of this requirement. A framework would have to be established to determine how voluntary contributions of cash/land/units would be administered.

Design

There are two documents to help guide the design of residential developments, particularly for affordable housing developments. These include the Affordable Housing Development and Design Guidelines (2011) and The City of Calgary's Access Design Standards (2010). The first are intended to guide sustainability, appropriate mix, location and context, and good building design. The second are intended to support the principles of accessibility/visitability/universal design/adaptability.

Municipal Incentives and Cost Off-Sets

The City of Calgary, at various times, offers incentives for the inclusion of affordable and entry level housing. As a current source of information on Affordable Housing programs, visit www.calgary.ca/affordablehousing. At the time of writing, the following incentives are available:

1. **Density bonusing**

   Municipalities should offset increased density for affordable housing units (subject to appropriate land use designation). This is not a requirement that affordable housing be provided when increased density is requested. Rather, it is the voluntary provision of a public need in exchange for increased density. The City of Calgary has developed several site-specific density bonus policies in areas like the Chinook Station Area Redevelopment Plan and the Beltline ARP. Typically, a builder can choose from a list of amenities, including open space, cultural amenities, art and affordable housing.

   A density bonus can help off-set the cost of additional units of affordable housing.

2. **Parking relaxations**

   Municipalities can reduce the standard parking requirements of the land use bylaw at the discretion of Council and through specific policies which supports the consideration of parking relaxations for developments that include affordable housing.

   The full cost of parking could prohibit the development of affordable housing. Alternatives to mitigate expenses include parking relaxations, leasing out extra spaces for revenue or redesigning the site to accommodate some surface parking.

Other Incentives

Most of the funding available for affordable housing comes from the provincial and federal governments. The Government of Canada's Affordable Housing Initiative (AHI) program provides capital grant funding for development of affordable housing. Provinces are required to provide matching commitments and typically administer the federal funds as part of a Provincial program. The Government of Alberta, since 2001, has provided more than matching funds for the creation of new affordable housing across Alberta. Further, the Province has developed unique capital funding programs that are fully funded by the Province.

For more information, visit the Government of Alberta's Housing and Urban Affairs Department at www.housing.alberta.ca.

Implementation Tools

Each applicant should submit a Housing Plan that identifies how it will meet the Housing Policies 7.1, including entry-level and affordable housing options.

APPENDIX L: DESIGN STATEMENT

What are Design Statements?

Statements are documents that explain the design thinking behind a development application. For example, they should show that the person applying for a development approval (the applicant) has thought carefully about how everyone, including disabled people, older people and very young children, will be able to use the places they want to build.

When do they apply?

A Design Statement should be part of the architectural drawings of the proposed application such as plans elevations and cross-sections in addition to the application requirements. A Design Statement should be included at the Outline Plan, Tentative Plan, Land Use Re-designation and Development Permit stage of the planning process but excluding householder applications or changes of use.

What should they include?

Statements should include a written description and explanation of the planning application. They should provide the opportunity for developers and designers to demonstrate their commitment to achieving good design and ensuring accessibility in the work they undertake and allow them to show how they are meeting, or will meet, the various obligations placed on them by legislation and policy.

Sometimes photos, Maps and drawings may be needed to further illustrate the points made. They will be available alongside the application for anyone to see, so should avoid jargon or overly technical language. It is important that they are written specifically for the application they accompany. They need not be very long but the amount of detail they contain should reflect how complex the application is. So, a statement for a major development is likely to be much longer than one for a single building.

Typically, they should explain:

1. **The design principles and concepts that have been applied to the development.**
    - relating to the amount, layout, scale, landscaping and appearance of the development, and how the design of the development takes into account its context.
2. **How the design has come about and what it is trying to achieve?**
3. **How issues relating to access to the development have been dealt with?**
    - how relevant City policies have been taken into account;
    - whether any consultation has been undertaken;
    - how any issues which might affect access have been addressed;
    - how prospective users will be able to gain access to the development from the existing transportation network, (particularly pedestrians, cyclists and transit);
    - reasons for choosing the main points of access to the site and the layout of internal routes; and
    - how features which ensure access will be maintained.

Applications which need to be accompanied by a Design Statement but are submitted without one will not be validated until the statement has been received.

Design Statements Checklist

The Design Statement needs only be as simple or complex as the project it relates to. Below are headings that may need to be included in your statement if relevant to your application:

The Process

- Has the application assessed the site's full context, including physical, environmental, social, and economic characteristics and relevant planning policies particularly Municipal Development Plan and Calgary Transportation Plan policies, in addition to relevant Local Area Plan policies?
- Has the applicant demonstrated how the design has taken account of the results of any community involvement?
- Does the statement show that the scheme has emerged from a rigorous process of assessment, involvement, evaluation and design, rather than trying to retrospectively justify a pre-determined solution?

Environment and Landscaping

- How has the development been designed with the natural environment and the services it provides in mind (i.e., how does the design conserve and enhance the existing natural environment)?
- Has the environment and associated improvements and landscaping been properly considered from the start?
- Will it help to make the place look good and work well and will it meet any specific aims for the site?

Use

- Has the application outlined the use or function of all buildings and spaces?
- Would the application help to create an appropriate mix of uses in the area?
- Would different uses work together well or are they in potential conflict?

Amount

- For residential development, how many units are proposed? For all other development, how much floor space is proposed?
- Are the applicable density/intensity targets met?
- Could the neighbourhood's existing services and infrastructure support the amount of development planned?

Layout

- The Design Statement should show how the buildings, public and private spaces and street furniture will be arranged on the site and the relationship between them demonstrating why this is optimal in terms of access, walkability, connectivity, safety and the overall character and quality of the area.
- The Design Statement should show outline the purpose of all spaces?
- Will public spaces be practical, safe, overlooked and inclusive?
- Will private spaces be adaptable, secure and inviting?

Scale

- Will the buildings sit comfortably with their surroundings?
- Will they, and parts like doors and windows, be of a comfortable scale for people?

Appearance

- How will the development (including built form, open space, pathways, etc.) visually relate to its surroundings?
- Will it look attractive (e.g., in terms of urban design, building materials, landscaping, art and architectural details, etc.)?

Access & Connectivity

- Will the place be safe and easy for everyone to move around?
- What are the pedestrian, bikeway, transit and vehicular links and why have the access points and routes been chosen?
- How can everyone get to and move through the place on equal terms, regardless of ethnicity or social grouping?

General

- Does the approach to access run through the whole document, rather than being considered as a discreet issue?
- Has the applicant clearly described their policy approach and consultation process, whether carried out or planned.

How will they be used?

The Design Statements will be used as additional information within The City of Calgary planning application process. They will enable the applicant to provide the necessary information on how the development design has evolved to address to City of Calgary policies and guidance. They should help ensure well-informed and balanced decisions and allow the planning applications system work more smoothly.

APPENDIX M: FORM-BASED CONTROL PROCESS

01.1 Plan Components

As shown in the diagram below, the Statutory Plan containing Form-Based Controls should contain four types of policies: General Policies, Design Policies, Special Policies and Management Policies.

- General Policies address the land uses, blocks, density and parking within the Plan Area.
- Design Policies address the streets, buildings, parks and subdivision of land within the Plan Area.
- Special Policies address the transit, pedestrian, housing and environmental elements within the Plan Area.
- Management Policies address the financial, transportation, land and project management matters affecting the Plan Area.
- Land Use and General Definitions used in the Statutory Plan
- Appendices identify the various studies and information that will need to be submitted at the Development Permit or subdivision approval stages.

Except for the Appendices, all sections form part of the adopted Statutory Plan.

01.2 Decision-Making

A subdivision application or Development Permit application within the Plan Area shall be subject to the Land Use Bylaw. However, as shown in the following diagram, the Statutory Plan shall be referred to and applied as determined appropriate by the Approving Authority in recognition that it is an Area Structure Plan that provides the position of Council toward the subdivision and development of land within the Plan Area; and, in many cases, it contains more detailed and exacting design standards than the Land Use Bylaw.

01.3 Land Use Bylaw Compliance

1. **It is recognized that in certain instances an inconsistency may arise between a policy in this Station Area Plan and a provision of the Land Use Bylaw; and, if this occurs,**
   a. the Approving Authority shall consider granting a relaxation of the rules of the Land Use Bylaw in favour of the policy, in accordance with the powers contained in the Land Use Bylaw or the Municipal Government Act (as the case may be) where the Statutory Plan provides clear direction in support of the relaxation, and (b) where the Approving Authority lacks the jurisdiction to grant the relaxation of the rules contained in the Land Use Bylaw, the Land Use Bylaw shall prevail over the Station Area Plan.
2. **The statutory plan does not have the authority, nor is its intent, to add uses to a site that are not otherwise included in the prevailing land use district.**

APPENDIX N: SHEPARD REGIONAL DRAINAGE PLAN BACKGROUND

The City of Calgary, Town of Chestermere and Rocky View County formed the Shepard Regional Drainage Committee (SRDC) to develop a long range Regional Drainage Plan for the Shepard Drainage Corridor, located east of city limits.

Increasing development in the Shepard Drainage Corridor made it necessary to develop a regional drainage plan for the area. As development occurs, an opportunity exists to integrate stormwater management with the preservation of wetlands, riparian corridors and natural areas.

The Shepard Regional Drainage Plan will help protect the quality of water resources in the region by preserving established wetlands, riparian corridors (also known as riverbanks and flood plains) and natural areas. The goal of the plan was to develop a stormwater management solution for the region, including an alignment for future drainage infrastructure, and to identify options for stormwater servicing within the study boundary.

A Biophysical Impact Assessment was completed and was a key component of the project. The results and conclusion of the BIA were key to many of the decisions made during the development of the Shepard Regional Drainage Plan.

AECOM Canada Ltd. was retained by the SRDC to complete the study. A draft of the report has been completed, and it is now available to the public. This version of the report is still considered a draft, and has not yet been approved by The City of Calgary, Rocky View County or the Town of Chestermere. The report is subject to approval by each municipality through their respective processes.

Purpose of the Study

Why is the Shepard Regional Plan Needed?

Before new development can occur in the Study Area, a stormwater drainage system shall be planned and built to move rain fall and snow melt to the Bow River.

This Study will provide a comprehensive vision for the extent and sequencing of future regional development and will provide direction for the preservation of valuable open space and water features in the region.

Who is Conducting the Study?

Town of Chestermere, Rocky View County and The City of Calgary are the study sponsors. AECOM has been retained to complete the study.

Study Challenges and Principles

- The area is very challenging to drain as it is comprised of pot and kettle terrain in an overall flat topography
- The existing WH Irrigation Canal cannot receive stormwater flows due to water quantity and quality issues
- Development outside the 2004 Chestermere annexation area cannot drain to Chestermere Lake
- Protecting the existing wetlands and natural drainage systems is a high priority
- Large volume pumping of storm flows shall be avoided or minimized – the plan shall be based on gravity drainage to the Bow River
- The use of ‘naturalized’ open channels instead of high capacity engineered canals or pipes is preferred
- Follow existing low areas to minimize earth moving and other costs.

APPENDIX O: RAILWAY INTERFACE GUIDELINES

1. Where a development site is located adjacent to the railway, the distance from the railway right-of-way to the closest part of any habitable building should be a minimum of 27.5 metres as a safety measure in case of a derailment as well as provide noise and vibration attenuation. A lesser separation may be considered at the discretion of the Approving Authority, if:
   a. in the opinion of Calgary Planning Commission, a greater distance is warranted; or
   b. a berm, grade separation or structure creates appropriate safety measure and/or sound attenuation to the satisfaction of the Approving Authority.
2. Where an Outline Plan/Land Use Amendment and Development Permit application is proposed on a site adjacent to the railway, a noise analysis may be required at the discretion of the Approving Authority to ensure the proposed development complies with The City policy.
3. Where noise from the railway may adversely impact outdoor amenity areas, gathering places or playfields, the site design and building orientation should be configured to reduce the impact of the noise to acceptable levels, consistent with The City standards.