

West Macleod Area Structure Plan

Office Consolidation

2019 February



calgary.ca/planning/landuse



THE CITY OF
CALGARY
LAND USE PLANNING & POLICY

Note: This office consolidation includes the following amending Bylaws:

Amendment	Bylaw	Date	Description
1	59P2017	2017 September 12	<ul style="list-style-type: none"> (a) Delete references to “Map 6” and replace with “Map 7”. (b) Delete references to “Map 7” and replace with “Map 8”. (c) Delete references to “Map 8” and replace with “Map 9”. (d) Delete references to “Map 9” and replace with “Map 10”. (e) Delete references to “Map 10” and replace with “Map 11”. (f) Delete references to “Map 11” and replace with “Map 12”. (g) Delete references to “Map 12” and replace with “Map 13”. (h) Delete references to “Map 13” and replace with “Map 14”. (i) Delete references to “Map 14” and replace with “Map 15”. (j) Delete references to “Map 15a” and replace with “Map 16”. (k) Delete references to “Map 15b” and replace with “Map 16”. (l) Delete references to “Map 16” and replace with “Map 17”. (m) Delete and replace the “Maps” portion of the Table of Contents to include new maps. (n) Delete section entitled “Executive Summary” and replace with the following: (o) Delete and replace Section 2.2 entitled “Existing Site Description”. (p) Delete and replace Section 2.5.1 entitled “Map Interpretation”. (q) Delete and replace Section 2.5.2 entitled “Policy Interpretation”. (r) Delete and replace Section 3.1 entitled “Community Function”. (s) Delete and replace Table 1 from Section 3.3.1 entitled “Community Structure”. (t) Delete and replace Section 4.1. (u) Delete and replace Subsection 5.2.2(1)(a)(i)(D). (v) Delete and replace Section 5.2.2(3). (w) Delete and replace Section 5.13.1 entitled “Purpose”. (x) Delete and replace Section 5.14.1 entitled “Purpose”. (y) Delete and replace Section 5.14.2(2) entitled “Interpretation”. (z) Delete and replace Section 5.19.1 entitled “Purpose”. (aa) Delete and replace Subsection 5.19.2(3) entitled “Acquisition”. (bb) Delete and replace Subsection 6.2.2(2)(b)(i). (cc) Delete and replace Section 11.1.2 entitled “Regional Road Network Policies”. (dd) Delete and replace Section 11.2.2 entitled “Internal Road Network Policies”. (ee) Delete and replace Section 11.3 entitled “Creek Crossings”. (ff) Insert a new Section 11.7 entitled “Heavy Rail” in report, update and renumber the Table of Contents accordingly.

Amendment	Bylaw	Date	Description
1 cont'd	59P2017	2017 September 12	<ul style="list-style-type: none"> (gg) Delete Section 12.3 entitled "Sanitary Servicing" and replace with revised Section 11.3. (hh) Delete and replace Section 12.4.2(2). (ii) Insert a new Section 12.6 entitled "Lighting" in report and update and renumber the Table of Contents accordingly. (jj) Delete and replace Section 14.2 entitled "Intermunicipal Coordination Policies". (kk) Delete and replace Map 1 entitled "Plan Location". (ll) Delete and replace Map 2 entitled "Air Photo". (mm) Delete and replace Map 3 entitled "Communities". (nn) Delete and replace Map 4 entitled "Land Use Concept". (oo) Delete and replace Map 5 entitled "Transit Station Planning Area". (pp) Insert new Map 6 entitled "Environmental Open Space Study Area" at the end of Section 5.14. and renumber the subsequent maps accordingly. (qq) Delete the newly renumbered Map 7 entitled "Density" and replace with revised Map. (rr) Delete the newly renumbered Map 8 entitled "Environmentally Significant Areas" and replace with revised Map. (ss) Delete the newly renumbered Map 9 entitled "Transportation" and replace with revised Map. (tt) Delete the newly renumbered Map 10 entitled "Transit" and replace with revised Map. (uu) Delete the newly renumbered Map 11 entitled "Water Service" and replace with revised Map. (vv) Delete the newly renumbered Map 12 entitled "Sanitary Services" and replace with revised Map. (ww) Delete the newly renumbered Map 13 entitled "Storm Services" and replace with revised Map. (xx) Delete the newly renumbered Map 14 entitled "Design Innovation Area" and replace with revised Map.
2	15P2019	2019 February 25	<ul style="list-style-type: none"> (a) Under the Executive Summary in the second paragraph, delete and replace the word "four" with "three". (b) Under Section 1.1.1, in the first paragraph, delete and replace the word "four" with "three". (c) Delete and replace the existing Map 3 entitled "Communities". (d) Under Section 3.1, in the first paragraph, delete and replace the word "four" with "three". (e) Under Section 3.3 in the second paragraph, delete and replace the word "four" with "three". (f) Under Section 3.3.1, in the first paragraph, delete and replace the word "four" with "three". (g) Under Section 3.3.1, Table 1: Communities within the West Macleod Plan Area, delete the information for Community C and renumber accordingly. (h) Under Section 3.3.1, Table 1: Communities within the West Macleod Plan Area, replace the number for the gross developable area for Community B with "233 hectares (576 acres)", replace the number for the Population for Community B with "10,000", replace the number for the Jobs for Community B with "4,100", and replace the People and Jobs per Gross Developable Hectare for Community B with "61".

Amendment	Bylaw	Date	Description
2 cont'd	15P2019	2019 February 25	<ul style="list-style-type: none"> (i) Delete and replace the existing Map 4 entitled "Land Use Concept". (j) Delete and replace the existing Map 5 entitled "Transit Station Planning Area". (k) Under Section 5.8.2, Policy 7, delete and replace "b." item. (l) Under Section 5.8.2, insert a new Policy 15. (m) Under Section 5.10.2, Policy 4, after the first paragraph, add new "a.", "b." and "c." items. (n) Under Section 5.11.2, Policy 1, delete and replace "e." item. (o) Under Section 5.12.2, delete Policy 2 entitled "Size of the Main Street Retail Area", in its entirety and renumber accordingly. (p) Under the newly renumbered Section 5.12.2, Policy 2, delete and replace "b." item. (q) Under the newly renumbered Section 5.12.2, Policy 2, renumber the existing "c." as "d." and insert a new "c." item. (r) Under Section 5.15.2, Policy 3a, delete and replace "i." item. (s) Under Section 5.16.2, Policy 3a, delete and replace "i." item.

Amended portions of the text are referenced with specific amending Bylaw.

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 all amendments are available from the City Clerk and should be consulted when interpreting and applying this Bylaw.

PUBLISHING INFORMATION

TITLE:	WEST MACLEOD AREA STRUCTURE PLAN
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EXECUTIVE SUMMARY

The West Macleod Area Structure Plan provides a Vision for the future development of 861 hectares (2,127 acres) of land located within the south section of Calgary; bound by 194 Avenue South to the north, the Municipal boundary to the south and west and Macleod Trail S and the Canadian Pacific Rail (CPR) tracks to the east.

The Plan Area will be home to approximately 35,800 residents, located across three communities with distinct identities that function together as an integral part of the city. It will be an area where public amenities are located within comfortable walking distance, with excellent pedestrian connections, public transport and cycling facilities providing access to wider employment, retail, leisure and cultural destinations. Conservation of the unique natural environment within West Macleod, including wetlands, the Priddis Slough, Pine Creek, Radio Tower Creek and the Western slopes, ensures protection of the existing ecosystem and associated wildlife and enables residents, workers and visitors to enjoy their natural surroundings.

Bylaw 15P2019

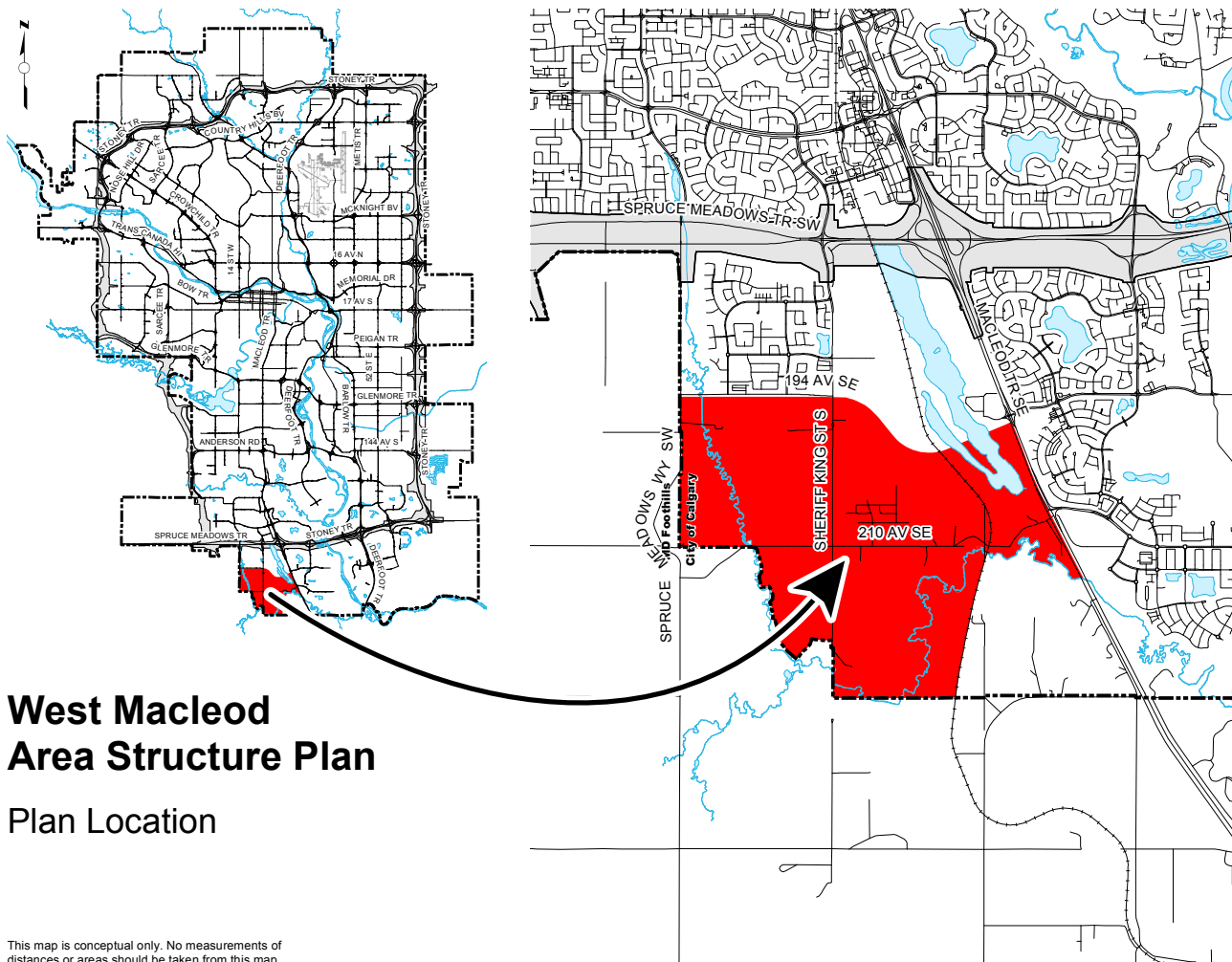
The Area Structure Plan refines and implements the strategic objectives and policies identified within the South Macleod Trail Regional Policy Plan and has been influenced by The City's broader planning and sustainability objectives. It has been informed by specific engineering, transportation and land use studies and transportation and servicing constraints in the area. The Plan has evolved through a consultation exercise involving landowners, developers, 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 West Macleod area to achieve the Plan Vision.

Bylaw 59P2017

Map 1: Plan Location

APPROVED: 10P2014
AMENDED: 59P2017



West Macleod Area Structure Plan

Plan Location

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

OVERVIEW



1.0 INTRODUCTION

1.1 Vision & Objectives

The Vision and Objectives for West Macleod outline the aspirations of The City of Calgary, its partners and stakeholders. They have been influenced by a review of relevant City policy, community and stakeholder consultation and a thorough understanding of the Plan Area. The Policies contained within this Area Structure Plan (ASP) aim to guide development in order to achieve the Plan Objectives and realize the West Macleod Vision.

1.1.1 Vision

*"In 2035, West Macleod is firmly established as a desirable place to live, work and enjoy life. It is a place that provides three complete communities with distinct identities that function together as an integral part of the city. Each community demonstrates best practices in place-making to ensure the creation of a culturally enriched, inclusive, diverse, easily accessible, and resource efficient society. Each includes a diverse choice of housing, public spaces, parks and vibrant walkable neighbourhood nodes that are the focus of daily social and economic activity. These nodes meet people's everyday needs through a range of shops, workplaces, restaurants, public space and community and leisure facilities. West Macleod is an area where public amenities are within comfortable walking distance and excellent pedestrian connections, public transport and cycling facilities provide access to wider employment, retail, leisure and cultural destinations. **Bylaw 15P2019***

Conservation of the unique natural environment within West Macleod, including wetlands, the Priddis Slough, Pine Creek, Radio Tower Creek and the Western slopes ensures protection of the existing ecosystem and associated wildlife and enables residents, workers and visitors to enjoy their natural surroundings. Development has responded to this natural environment, working with the terrain through conservation design and slope adaptive building forms, conserving these natural features to enhance the individuality and identity of the area and increasing amenity and biodiversity value."

1.1.2 Objectives

1. Complete Community

Foster the development of vibrant, diverse and attractive communities that have access to ample opportunities for recreation, cultural development, education and employment. Complete communities provide a physical and social environment where residents and visitors can live, work and play.

2. Safe and Healthy Neighbourhoods

Promote safe and healthy neighbourhoods through the delivery of good design, safe public realm and recreational facilities that complement the quality of the built environment.

3. Built Design

Improve the quality of new buildings, homes and public realm in terms of design, diversity, character, performance specification, health, sustainability and management in order to create attractive, vibrant, livable complete communities.

4. City Image

Enhance Calgary's image through the city entranceway built form and design features along Macleod Trail to provide visitors with a positive impression when entering Calgary.

5. Community Diversity

Enhance community diversity and sustainability by encouraging affordable home ownership and rental opportunities by providing access to a range of housing opportunities and community facilities to enable social integration.

6. Walkable Communities

Develop integrated and well connected, compact communities based on a network of streets (e.g., grid-like) that encourage walking and cycling and are complemented by efficient public transport in order to increase accessibility to schools, retail, services and places to work and play.

7. Natural Area Conservation

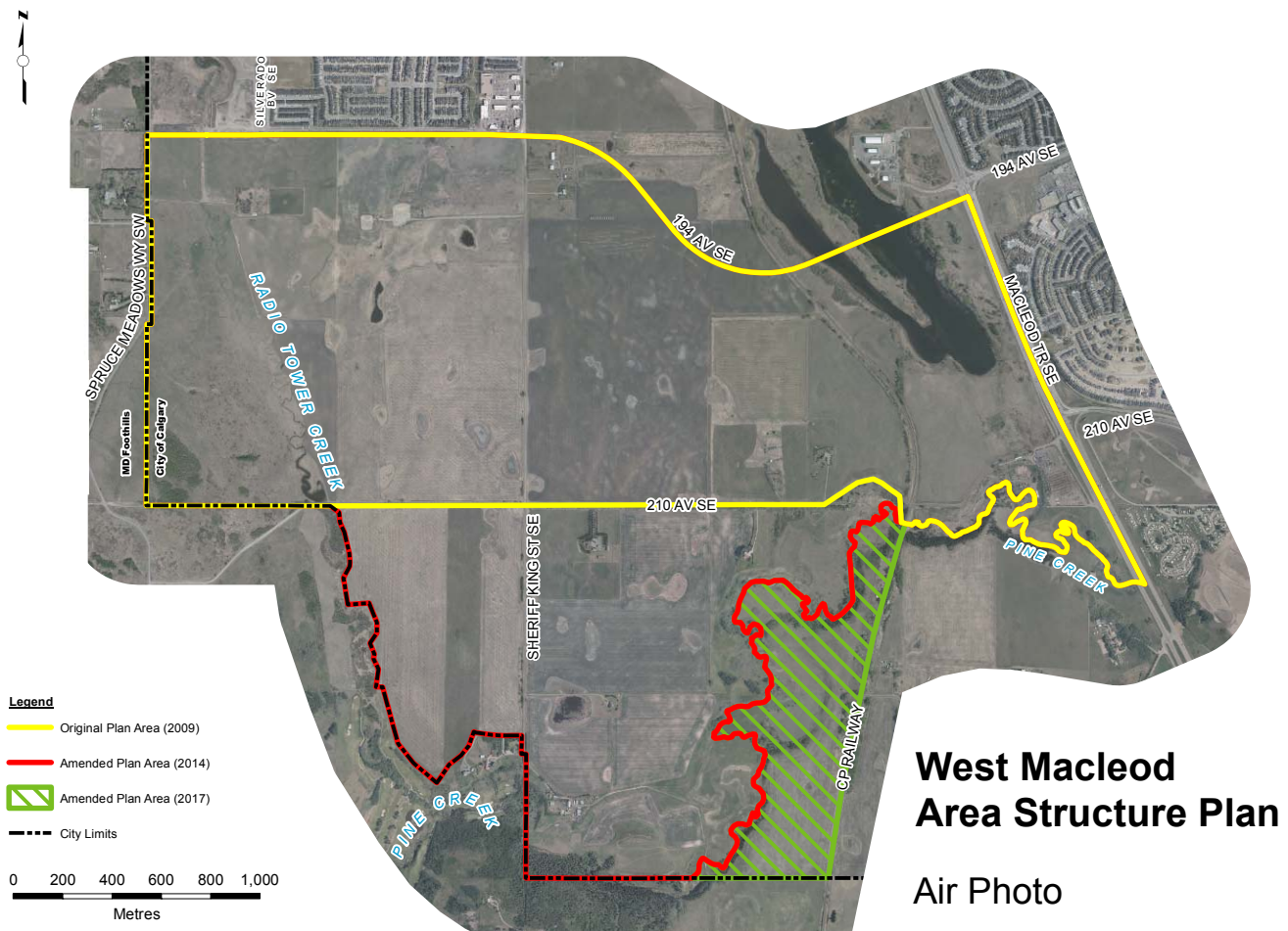
Conserve and enhance the existing wetlands, habitats and gradients in order to ensure a visually appealing and biologically diverse development, where the built form is designed to respect the functions and values of the natural environment.

8. Environmentally Sustainable Design

Encourage sustainable design solutions by creating communities where energy and resource use are minimized and building designs incorporate green building methods and alternative energy solutions.

Map 2: Air Photo

APPROVED: 10P2014
AMENDED: 59P2017



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

9. Economic Viability

Provide a wide and diverse range of opportunities for capital investment in the future development of the West Macleod area.

10. Employment

Provide for a range of employment opportunities in a mixed-use context focussed around the LRT station. Additionally, encourage mixed uses, home occupation, accessory dwelling units and live-work units around nodes within the Plan area to maximize the opportunities for a positive jobs-to-housing balance.

1.2 Growth Rationale

The strategic decision to proceed with land use planning policy for the West Macleod Area was based on the following growth management rationale:

- The City of Calgary has a general practice of maintaining approximately 15 years of land supply with approved policy plans in place. This Plan will help ensure that there is a sufficient supply of pre-planned land to respond to variations in growth rates and to support a healthy, competitive suburban land market.
- The financial capital costs for infrastructure are required to be prepared and addressed as part of the consideration to proceed with any Outline Plan / Land Use Amendment application.
- Residential development within the Plan area supports The City's job/housing balance policies and provides an opportunity to house a significant population base adjacent to the employment opportunities offered within the Plan area and surrounding region.
- A greater mixture of land uses is required to meet commercial and employment needs for the community and the region.
- There is a need to replace an existing Area Structure Plan from the Municipal District of Foothills with City of Calgary policy.

1.3 Strategic Policies

In developing the West Macleod Area Structure Plan, a wide range of existing plans, policies and guidelines that have been adopted by Council to provide direction for development within Calgary have been reviewed and considered. The Vision and Policies for the West Macleod Area Structure Plan have been influenced by these documents and the Plan both complies with these policies and aims to deliver the identified aspirations and principles. A summary of the interrelationship between these adopted plans and policies and the West Macleod Area Structure Plan Objectives is provided in Table 4, Appendix I.

2.0 REGULATORY PROCESS

2.1 Purpose of the Plan

Land use planning is the process of shaping the physical environment to achieve an orderly, sustainable and compatible pattern of growth and to enhance the quality of life of the community's residents. Growth is also contingent on placement of services.

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

2.2 Existing Site Description

The West Macleod Area Structure Plan, (referred to from hereon as the Plan) is bounded by 194 Avenue South to the north, the Municipal boundary to the south and west and Macleod Trail S and the Canadian Pacific Rail (CPR) tracks to the east (see Map 1 and Map 2). The Municipal District of Foothills borders the Plan Area to the west and south.

The Plan Area covers 861 hectares (2,127 acres) of land. Areas of significant natural features in the Plan area include Radio Tower Creek to the west, Priddis Slough to the northeast and Pine Creek to the south. To the west of Radio Tower Creek lie the most significantly sloped lands within the western portion of the Plan boundary. The land surrounding Pine Creek contains an escarpment to the north. The remainder of the land is relatively flat with no discernible slope.

Bylaw 59P2017

2.3 Authority of the Plan

The Area Structure Plan (*the Plan*) was adopted through a bylaw passed by Council in accordance with the **Municipal Government Act** (MGA). Section 633 of the Act 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.*

An ASP must conform to the MGA, the Calgary Municipal Development Plan (MDP) and all statutory plans. Subdivision approvals may only be made where they comply with an ASP and Direct Control Districts must comply with ASPs.

2.4 Timeframe of the Plan

The Plan 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 Plan although most of the proposed development is expected within a 20 to 25 year horizon.

2.5 Interpretation of the Plan

2.5.1 Map Interpretation

Unless otherwise specified within the Plan, the boundaries or locations of any symbols or areas shown on a map are approximate only, not absolute and shall 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 and utility rights-of-way.

The Environmental Open Space (EOS) Study Area depicted on Map 4 is identified using the ecological inventory data available at the time of the plans adoption. Data was collected through field and desktop methods using established municipal, provincial and federal protocols, where applicable.

Bylaw 59P2017

2.5.2 Policy Interpretation

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

Where “shall”, “will” or “must” is used in a policy, the policy is considered mandatory. However, where actual quantities or numerical standards are contained within a mandatory policy (e.g., density policies), the quantities or standards may be deviated from provided that the deviation is necessary to address unique circumstances that will otherwise render compliance impractical or impossible, and the intent of the policy is still achieved.

Where “should” is used in a policy, the intent is that the policy is to be complied with. However, the policy may be deviated from in a specific situation where the deviation is necessary to address unique circumstances that will otherwise render compliance impractical or impossible or to allow an acceptable alternate means to achieve the general intent of the policy to be introduced.

Where a policy requires compliance at the Outline Plan/Land Use Amendment stage, that requirement may be deferred to the Subdivision Approval or Development Permit Approval stage without requiring an amendment to the Plan.

Bylaw 59P2017

2.5.3 Guideline Interpretation

The appendices contain guidelines that are not mandatory but are encouraged to be applied at the Outline Plan/Land Use Amendment and Development Permit Application stages.

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 Plan.

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

2.6 Monitoring and Review

The policies within the Plan shall be monitored over time in relation to development to ensure they remain current and relevant. Where determined necessary, these policies shall be updated through the plan amendment process either generally or in response to a specific issue.

2.7 Plan Amendments

Any change to the text or maps within the Plan requires an amendment to the Plan, in accordance with the MGA. Where an amendment to the Plan is requested, the applicant shall submit the supporting information necessary to evaluate the potential amendment.

2.8 Plan Limitations

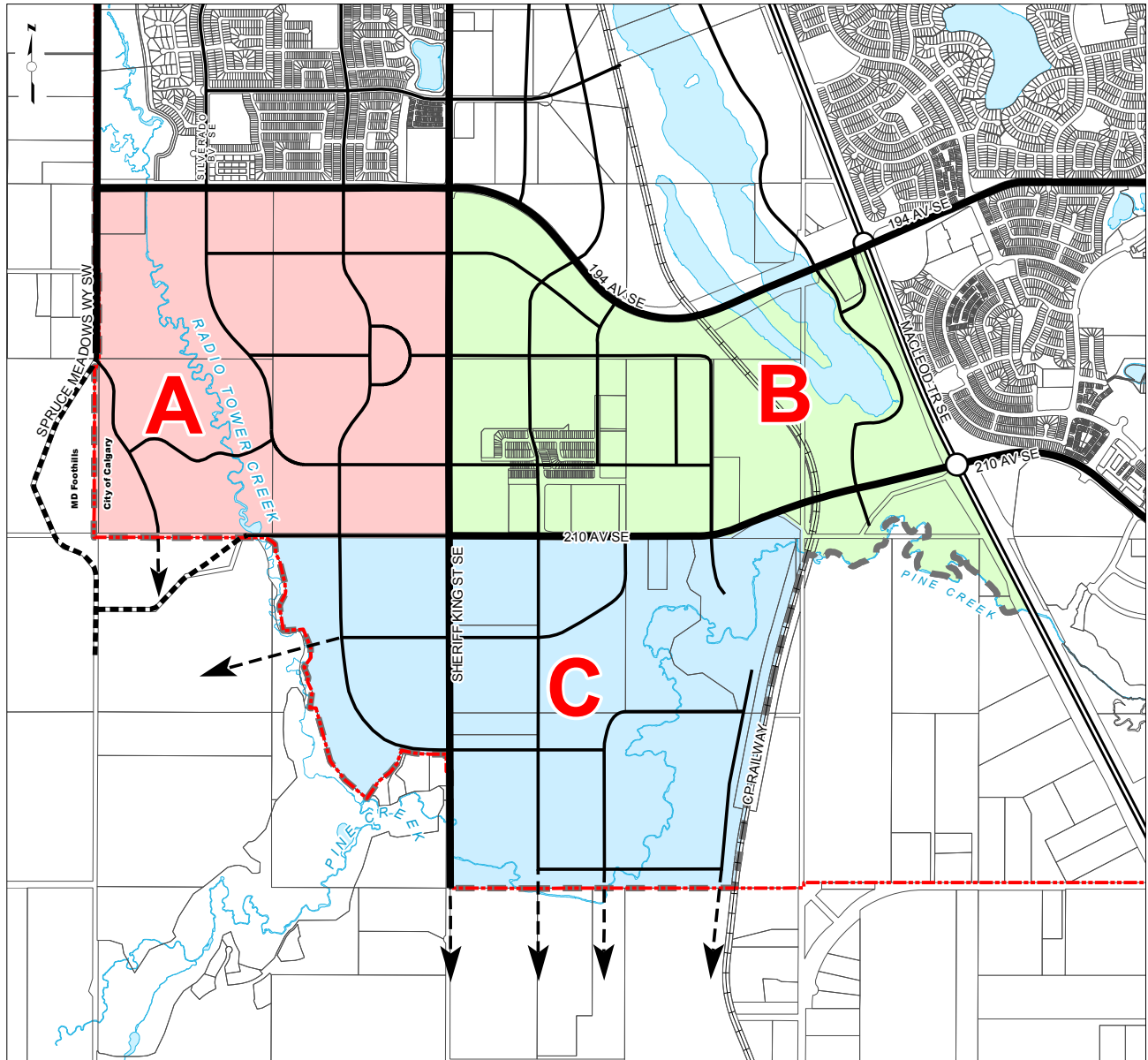
Area Structure Plans are long-term planning documents by nature. As such, they promote a vision for a community and put in place policies and guidelines that work towards achieving that vision over time. However, policies and guidelines in an ASP are not to be interpreted as an approval for a use on a specific site, as the policies do not address the specific situation or condition of each site within the Plan area.

In that regard, no representation is made herein that any particular site is suitable for a particular purpose as detailed site conditions or constraints, including environmental contamination, must be assessed on a case by case basis as part of an application for land use, subdivision or development permit approval.

Map 3: Communities

APPROVED: 10P2014
AMENDED: 15P2019

OVERVIEW



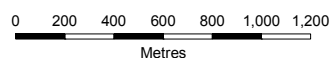
West Macleod Area Structure Plan

Communities

Legend

- | | | |
|-------------------------|---------------------|---------------------|
| Study Area Boundary | Expressway | Full Interchange |
| City Limits | Arterial Street | Partial Interchange |
| Community Areas* | | |
| A | Collector Road | |
| B | Potential Road | |
| C | M.D. Foothills Road | |

* Communities A-C does not dictate order of development



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

3.0 COMMUNITY CONCEPT

3.1 Community Function

The Plan accommodates three distinct communities within Calgary (Map 3), which provide a combined forecasted population of approximately 35,800 people.

Bylaw 59P2017, 15P2019

3.2 Community Identity

Each community within the Plan Area will be developed with a distinct identity and theme. This will be achieved through such measures as nodes and corridors, street names, identification signage, architecture and other social and recreational facilities and amenities. At the Outline Plan/Land Use Amendment stage, information should be submitted that demonstrates compliance with these objectives.

3.3 Community Structure

The City of Calgary promotes strong neighbourhoods through the development and support of integrated communities with a varied social composition and strong sense of place.

To promote walkability, accessibility and complete communities, the three communities within West Macleod will each be divided into a series of 'neighbourhoods' surrounding community focal points as identified on the Land Use Concept (Map 4). The ambition is for all residential properties to be located within a 10 minute walk (800m) of a neighbourhood node so residents can access the facilities required for daily life by foot and with ease.

Bylaw 15P2019

3.3.1 Community Structure

The projected area and population base of each of the three communities is described in Table 1 below. The intensity of the Plan area is calculated based on people and jobs per gross developable hectare.

Bylaw 15P2019

Table 1: Communities within the West Macleod Plan Area

COMMUNITY	GROSS DEVELOPABLE AREA	POPULATION	JOBS	PEOPLE AND JOBS PER GROSS DEVELOPABLE HECTARE
A	237 hectares (585 acres)	14,500	850	64
B	233 hectares (576 acres)	10,000	4,100	61
C	197 hectares (487 acres)	11,300	700	61
TOTAL	667 hectares (1,648 acres)	35,800	5,650	62 (average)

Bylaw 59P2017, 15P2019

Note:

The number, area, estimate of Environmental Reserve (ER) and size of communities are approximate only and can generally be deviated from at the Outline Plan/Land Use Amendment stage and, accordingly, any resulting change to the area of population figures shall not require an amendment to Table 1.

4.0 LAND USE CONCEPT

4.1 Land Use Concept Map Policies

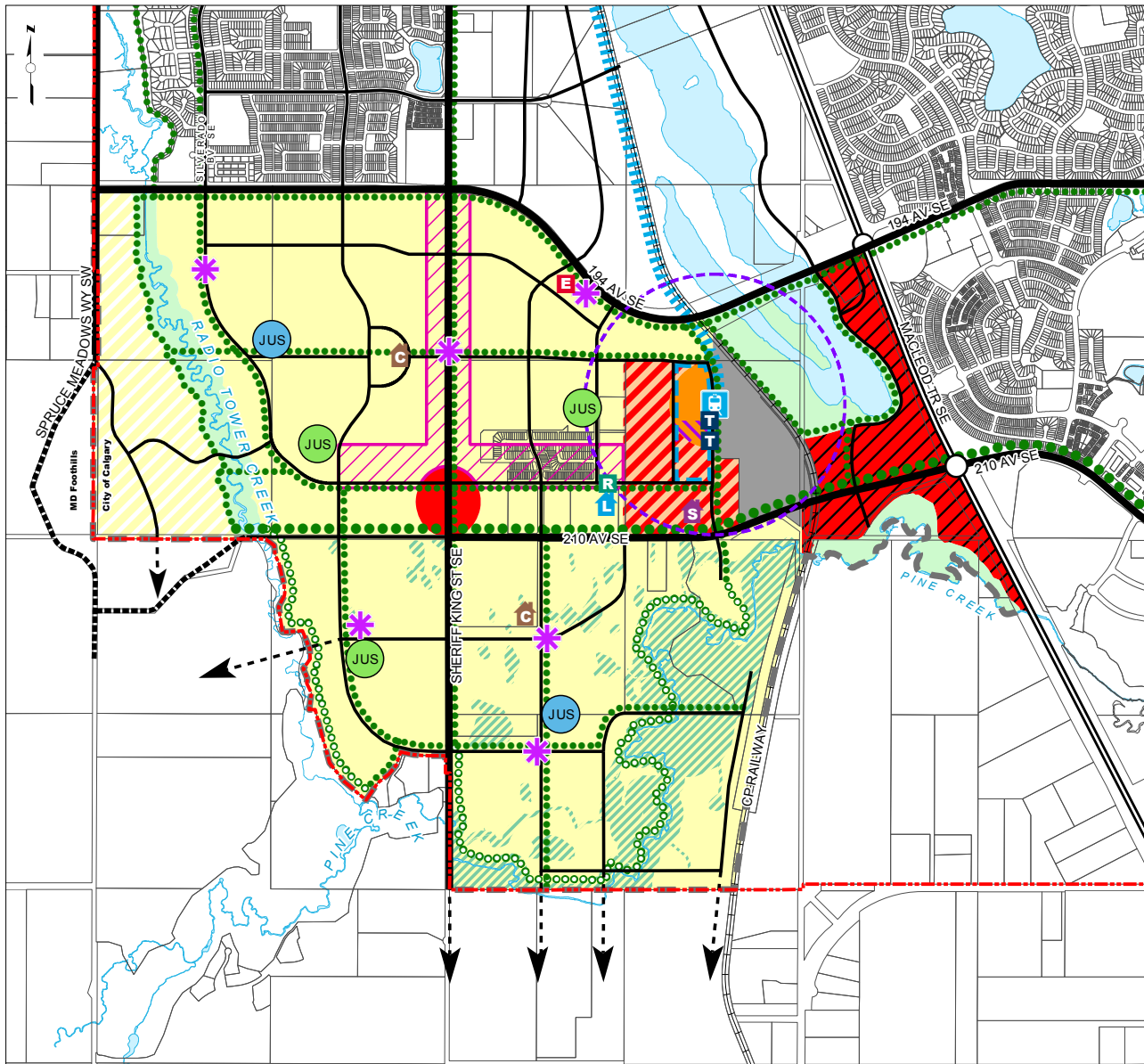
The Land Use Concept for the Plan is shown on Map 4 and Map 5. These maps consist of a series of areas and symbols that define a future land use pattern for the community. Section 5.0 of the Plan contains policies that apply to specific land use areas and symbols shown on the Land Use Concept.

Bylaw 59P2017

Map 4: Land Use Concept

APPROVED: 10P2014
AMENDED: 15P2019

OVERVIEW



West Macleod Area Structure Plan

Land Use Concept

Legend

- | | | |
|---|-------------------------------|-------------------------|
| Study Area Boundary | Active Connectivity Area | L.R.T. Alignment |
| City Limits | Transit Station Planning Area | L.R.T. Station |
| Residential Area | Joint Use Site | Expressway |
| Residential Area of Interest | Joint/Joint Use Site | Arterial Street |
| High Density/ Mixed Use | Neighbourhood Node | Collector Road |
| Medium Density/ Mixed Use | Community Centre | Potential Road |
| Mixed Use Community Node | Fire Hall/ EMS | M.D. Foothills Road |
| Gateway Planning Area | Library Site | Full Interchange |
| Conservation Study Area (subject to further review) | Public High School Site | Partial Interchange |
| LRT Station and Facilities | Recreation Centre | Primary Cycling Network |
| Main Street Retail Area | Tower Sites | Regional Pathway |
| Environmental Open Space Study Area | | Green Corridor |
| Corridor Planning Area | | |

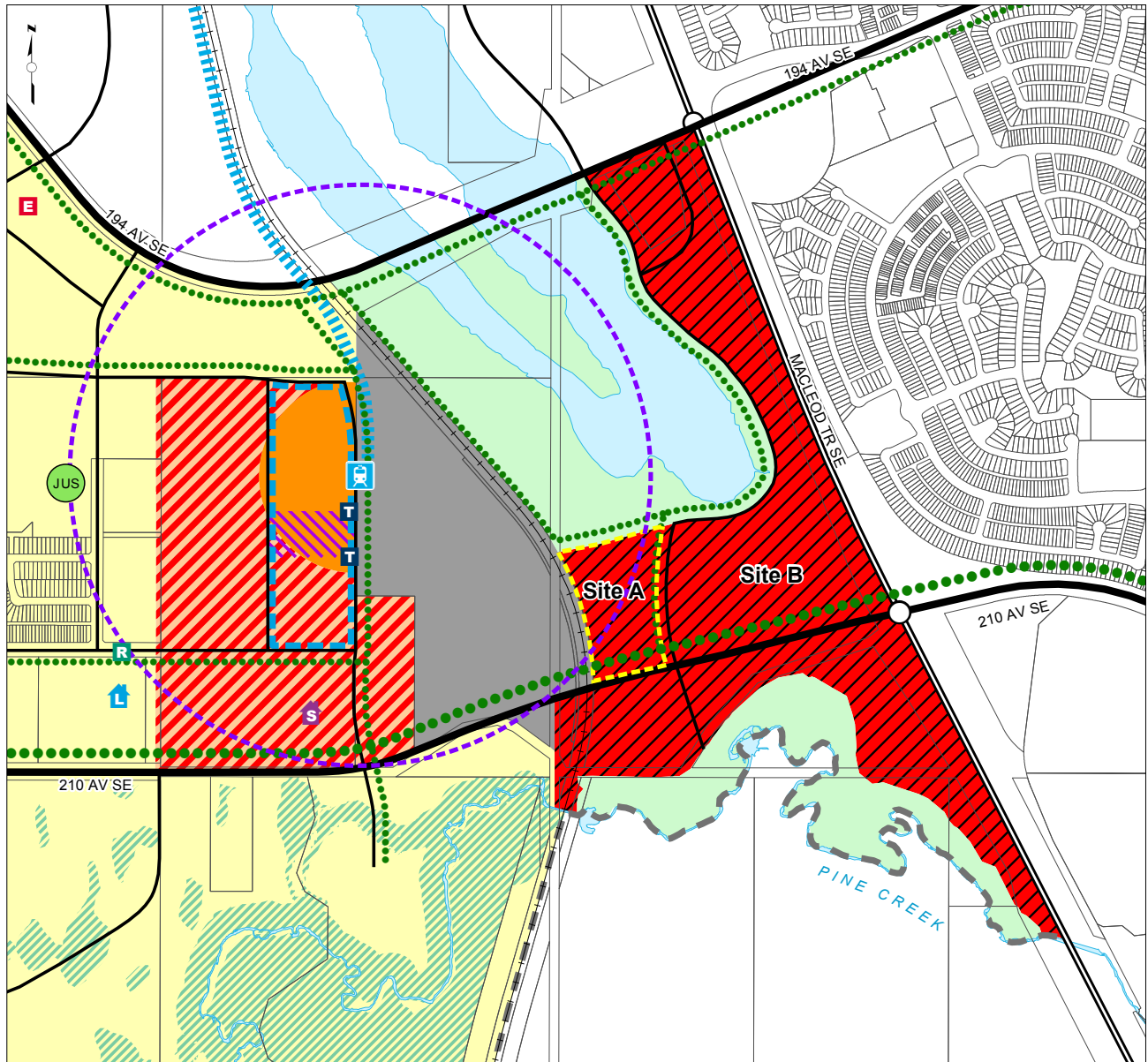
0 200 400 600 800 1,000 1,200
Metres

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

Map 5: Transit Station Planning Area

APPROVED: 10P2014
AMENDED: 15P2019

OVERVIEW



West Macleod Area Structure Plan

Transit Station Planning Area

0 200 400 600
Metres

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

Legend

- | | | |
|---|-------------------------|-------------------------------|
| Study Area Boundary | Joint Use Site | Arterial Street |
| City Limits | Community Centre | Collector Road |
| Residential Area | Fire Hall/ EMS | Potential Road |
| Residential Area of Interest | Library Site | M.D. Foothills Road |
| High Density/ Mixed Use | Public High School Site | Partial Interchange |
| Medium Density/ Mixed Use | Recreation Centre | Full Interchange |
| Mixed Use Community Node | Tower Sites | Primary Cycling Network |
| Gateway Planning Area | Expressway | Regional Pathway |
| Conservation Study Area (subject to further review) | | L.R.T. Alignment |
| LRT Station and Facilities | | L.R.T. Station |
| Main Street Retail Area | | Transit Station Planning Area |
| Active Connectivity Area | | |

POLICIES



5.0 LAND USE CONCEPT POLICIES

5.1 Residential Area

5.1.1 Purpose

The purpose of these policies is to provide the framework for the establishment of residential neighbourhoods within the Plan area that are pedestrian oriented, allow for diverse housing options and create a sense of community. The Residential Area comprises the majority of lands within the central and eastern portions of the Plan area.

The character of each community will be established through urban design principles, the placement of homes and buildings and their relationship to the street they front, street widths and landscaping of the public and private realms. The detailed residential design will be determined through the Outline Plan/Land Use Amendment process.

5.1.2 Residential Area Policies

1. Composition of Residential Area

- a. Subject to policies of the Plan:
 - i. a range of residential housing forms shall be allowed within the Residential Area;
 - ii. Multi-Residential Development within the Residential Area shall be designed to be compatible with the built form of the surrounding lower density residential area;
 - iii. alternative housing forms (e.g., three or more bedroom dwelling units within multi residential development, secondary suites etc.), community-oriented institutional uses, recreational uses, public uses, neighbourhood commercial uses, 'live-work' and other similar and accessory uses to the above may be allowed within the Residential Area where determined to be compatible and appropriate;
 - iv. affordable housing, either through home ownership or rental tenure should be provided throughout the Residential Area;
 - v. open space and other public focal points such as public gathering areas and landmark buildings shall be provided throughout the Residential Area; and

- vi. Home Base Child Care uses and special care facilities are encouraged to be located in the Residential Area.

- b. The general categories of uses identified under subsection (1)(a) shall be refined through the Land Use Districts applied within the Residential Area.

2. 'Live-Work' Units within the Residential Area

In accordance with the Land Use Bylaw 1P2007, 'Live-Work' units compatible with the surrounding area are encouraged throughout the Residential Area. In particular, 'Live-Work' units are encouraged to be located, but not limited to:

- a. Within a Neighbourhood Node;
- b. Adjacent to or in close proximity to commercial uses; and
- c. Adjacent to or in close proximity to transit routes, collector and major roads.

3. Neighbourhood parks and recreation facilities in the Residential Area

- a. Detailed design and development plans for each of the parks and recreation areas will be prepared by the developer in consultation with The City of Calgary.
- b. Neighbourhood parks and recreation facilities within the Residential Area shall be:
 - i. connected to each community by suitable pedestrian and bicycle routes; and
 - ii. visibly located and designed to be easily and safely accessible by all residents.
- c. Neighbourhood parks and recreation facilities should be:
 - i. designed to be durable, particularly with regard to the size of plant materials, types of landscapes and building materials;
 - ii. sized and configured to create spaces that are functional, safe and flexible and provide for a variety of sporting, recreational and cultural opportunities;
 - iii. designed to be environmentally sensitive and apply sustainable technologies where appropriate, for example, permeable materials on pathways, energy efficient lighting, use of stormwater for irrigation

where possible and water efficiency measures for irrigation requirements;

- iv. provided with low water vegetation to encourage low demands in irrigation;
- v. sited in prominent locations at the terminus of streets and/or at intersections;
- vi. allocated to provide enhanced visibility to natural open space systems; and
- vii. inclusive of residential frontage to ensure “eyes on the street”.

4. Transit Service to the Residential Area

- a. The Residential Area shall:
 - i. be served by public transit; and
 - ii. achieve Calgary Transit standard coverage for residential dwellings located within a 400 m (five minute walk) distance of transit service.

5. Design of the Residential Area

- a. Development in this area should be designed in accordance with the Development Design Guidelines in Appendix D and the Environmental Design Guidelines in Appendix E.
- b. The design of the Residential Area shall be reviewed in further detail at the Outline Plan/ Land Use Amendment application stage.

5.2 Residential Area of Interest

5.2.1 Purpose

The Residential Area of Interest applies to the identified far west portion of the Plan area, which is characterised by sloping lands, gullies and associated habitat. The purpose of the Residential Area of Interest is to encourage residential development in a variety of development forms that adapt to and integrate with the existing natural features and topography of the area. The policies of the Residential Area of Interest apply to those areas affected by Council's *Slope Adaptive Development Guidelines Policy and Conservation Planning and Design Guidelines*.

Conservation Planning and Design is a planning tool for the protection of Environmentally Significant Areas that do not qualify as Environmental Reserve under the ***Municipal Government Act***. The detailed residential design will be determined through the Outline Plan/Land Use Amendment process.

5.2.2 Residential Area of Interest Policies

1. Composition of Residential Area of Interest

- a. Subject to the policies of the Plan and in addition to the policies of Section 5.1: Residential Area, the Residential Area of Interest is intended to provide for a maximum gross residential density of 7.4 units per gross developable hectare (3 units per gross developable acre) for all areas that fall within the requirements of the *Slope Adaptive Development Guidelines Policy and Conservation Planning and Design Guidelines document*. Map 17 in Appendix G provides slope information in this area. Within these areas, the Residential Area of Interest may:

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- i. allow for higher residential densities that result in the conservation of land areas within the Residential Area of Interest subject to the following:
 - A. compliance with the policies and objectives of the Council approved *Slope Adaptive Development Guidelines Policy and Conservation Planning and Design Guidelines*;

- B. providing for the voluntary conservation of natural areas and unique topographical features, particularly those of higher quality and/or, which contribute to ecological continuity and connectivity;
- C. providing public access to the conserved areas and features;
- D. proposing buildings that are oriented, where applicable, to benefit from sunlight and to take advantage of views to the open space;

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- E. limiting the impact of internal roads on existing topography and natural features within the site;
 - F. providing connections with other natural and / or recreational areas and trails; and
 - G. building heights and/or development densities not unreasonably impacting upon adjacent developments.
- ii. provide a variety of residential housing forms and special care facilities within the Residential Area of Interest.
- b. Areas within the Residential Area of Interest that are not subject to the Slope Adaptive Development Guidelines Policy and Conservation Planning and Design Guidelines document shall be permitted to develop in accordance with the policies contained within the Residential Area (Section 5.1).
 - c. Access to the Residential Area of Interest shall be determined at the Outline Plan/Land Use Amendment stage.

2. Design of Residential Area of Interest

Development within this area should be designed in accordance with the Development Design Guidelines in Appendix D and the Environmental Design Guidelines in Appendix E.

3. Transit Coverage to the Residential Area of Interest

The provision of bus transit to serve residents within the Residential Area of Interest is encouraged, acknowledging that an ideal 400 metre walking distance to the nearest bus stop may not be achievable given the specific access and environmental constraints associated with

this area. Transit service should align with what is shown on Map 10. Direct, attractive and environmentally sensitive pedestrian connections from the Residential Area of Interest across Radio Tower Creek are encouraged to minimize the distance to transit stops and maximize the desire of residents to access transit service.

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5.3 Neighbourhood Node

5.3.1 Purpose

The purpose of a Neighbourhood Node is to provide a community focus and meeting place for the surrounding residential areas. Neighbourhood Nodes are identified on Map 4 and are intended to contain mixed use development that would include a concentration of transit supportive uses such as medium density housing and neighbourhood commercial uses. Connectivity of the Neighbourhood Nodes to the surrounding neighbourhood(s) will be achieved through the convergence of roads and/or pathways at or near the node. The design of the Neighbourhood Node will ensure a strong pedestrian orientation and emphasize the street as the focus of neighbourhood activity.

5.3.2 Neighbourhood Node Policies

1. Composition of Neighbourhood Node

- a. Subject to the policies of the Plan, a Neighbourhood Node shall contain:
 - i. one or more transit bus stops;
 - ii. a variety of multi-residential developments such as street townhouses, stacked townhouses, apartments, and/or 'live-work' units within multi-residential developments;
 - iii. a park, or, a Joint Use Site (see Section 5.4), provided that the location and design of the Joint Use Site meets the open space needs of surrounding residential development in terms of size, design and access;
 - iv. neighbourhood-scale recreational, cultural, institutional or commercial uses that are determined to be complementary and compatible; and
 - v. local commercial use unless a commercial demands analysis/study is submitted that provides appropriate justification for not providing a local commercial use to the satisfaction of the approving authority.
- b. Residential development within a Neighbourhood Node should transition outward from higher to lower densities.
- c. To facilitate adaptive change in the community over time, the land use districts applied within a Neighbourhood Node should also provide for the following uses:

- i. community-oriented institutional, recreational, cultural, local commercial, or other uses determined to be transit-supportive ('live-work' units, corner stores, child care services, special care facilities, restaurants, senior centres, local small offices, personal service businesses); and
- ii. up to four storey mixed-use development with retail uses and/or live-work units.

2. Location of Neighbourhood Node

- a. A Neighbourhood Node shall be located:
 - i. along the collector road system in the general vicinity of the area shown on Map 4; and
 - ii. in an appropriate location that is central to the surrounding neighbourhood(s).

3. Transit Service to Neighbourhood Node

- a. A Neighbourhood Node should be served by public transit and contain:
 - i. transit bus stop(s); and
 - ii. in accordance with Section 13.3 Financing, related transit-service amenities such as an accessible and attractive shelter and seating for pedestrians and convenient passenger drop-offs, where determined appropriate.



4. Mixed Use Development within a Neighbourhood Node

- a. A Neighbourhood Node should contain:
 - i. a minimum of 2.0 gross developable hectares (4.9 gross developable acres) of residential land developed at a minimum density of 49.4 units per gross developable hectare (20 units per gross developable acre) located immediately adjacent to the transit stop(s);
 - ii. a minimum of 0.4 gross developable hectares (1.0 gross developable acre) and a maximum of 2.0 gross developable hectares (5.0 gross developable acres) land for the purpose of a local or neighbourhood commercial centre located immediately adjacent to the transit stop(s).
- b. Within a Neighbourhood Node, residential and commercial uses may be provided in a mixed use development form (retail at grade and residential above). To be able to achieve this, the policies of Section 5.3.2 (4)(a)(i) and (ii) will need to be reviewed and integrated to the satisfaction of the Approving Authority.
- c. At the Outline Plan/Land Use Amendment stage, the Residential Area Concept Plan should address the boundaries, composition and density of residential development within a Neighbourhood Node.
- d. Street-front retail uses should be supported by on-street parking in the vicinity of the retail frontage.

5. Connections to Neighbourhood Node

- a. The road pattern and pedestrian and bicycle routes from the surrounding neighbourhood should converge at the Neighbourhood Node to provide multiple convenient connections to the Node from the surrounding neighbourhood areas.
- b. The use of culs-de-sac, p-loops and similar self-contained road patterns should be avoided within and around the Neighbourhood Node to support pedestrian orientation and connectivity.

6. Design of Neighbourhood Node

- a. The design of a Neighbourhood Node should:
 - i. complement the surrounding neighbourhood(s) and maintain a distinct and identifiable character;
 - ii. emphasize a strong relationship between built form, streets, parks and other public spaces to ensure a pedestrian oriented public realm is achieved;
 - iii. provide a gathering area within each neighbourhood node that allows for a central community meeting place;
 - iv. utilize lane access where appropriate for all lots facing a park or other open space; and
 - v. be designed in accordance with the Development Design Guidelines in Appendix D and Environmental Design Guidelines in Appendix E.

7. Size and Configuration of Neighbourhood Node

The size and configuration of a Neighbourhood Node should be identified at the Outline Plan/Land Use amendment stage to the satisfaction of the Approving Authority.

5.4 Joint Use Sites

5.4.1 Purpose

The purpose of Joint Use Sites (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 and jointly owned by The City and the respective school board in accordance with the principles of the Joint Use Coordinating Committee (JUCC).

5.4.2 Joint Use Sites Policies

1. Composition of Joint Use Sites

- a. Subject to the policies of the Plan, the predominant use of land within a Joint Use Site shall be for public and/or private educational and recreational uses including, but not limited to, public and separate schools, sports fields, parks and playgrounds.
- b. School buildings should be designed and encouraged to integrate a variety of uses and services for different users that benefit the community and reinforce the role of the school as a social beacon and activity centre for residents.

2. Size of Joint Use Sites

- a. The size of a Joint Use Site should be determined through the Outline Plan/Land Use Amendment process in accordance with the requirements of the Subdivision Authority and the JUCC and having regard to Appendix C.6 Joint Use Site (JUS) Guidelines.
- b. In conjunction with the school building envelope within a Joint Use Site, suitable land shall be provided for active playfields or park space to meet the recreational needs of the students.

3. Location of Joint Use Sites

- a. A Joint Use Site shall be suitably located in relation to its student catchment area and optimal walking distance radii.
- b. To comply with subsection (3)(a) above, a Joint Use Site shown on Map 4 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.

4. Design of Joint Use Sites

- a. Prior to Outline Plan/Land Use approval, a concept plan showing the proposed layout for a Joint Use Site within the application area and a preliminary grading plan should be prepared to the satisfaction of the Subdivision Authority, having regard to the requirements of the JUCC. The requirements of the Joint Use Site Concept Plan are found in Appendix C, Map 15. **Bylaw 59P2017**
- b. The school building envelope within a Joint Use Site should be located along the collector roads immediately adjacent to the site.
- c. Buildings shall be oriented to offer direct pedestrian access to the primary building entrance from the sidewalk.
- d. A Pedestrian and Bicycle Circulation Plan should be provided for a Joint Use Site where a Joint Use Site is contained within an Outline Plan/Land Use Amendment application.

5. Joint Use Site Reserves

- a. Once reserves are assessed at the Outline Plan / Land Use Amendment stage, it may be necessary to reduce the size of a Joint Use Site as little or no reserve is available for other community open space uses, including but not limited to, neighbourhood/sub-neighbourhood parks and lands not provided as Environmental Reserve.
- b. Where an over dedication of Municipal Reserve exists, Council may explore options for early acquisition of lands.

5.5 Community Centre Sites

5.5.1 Purpose

The purpose of the sites is to accommodate a community centre to serve the physical, cultural, recreational and social needs of the community and enhance its quality of life.

5.5.2 Community Centre Site Policies

1. Composition of Community Centre Sites

The Community Centre Sites should comprise Municipal Reserve land that is suitably sized and configured to accommodate a community centre and its related facilities.

2. Size of Community Centre Sites

- a. The Community Centre Site located north of 210 Avenue SE should be approximately 1.2 hectares (3.0 acres) to 1.6 hectares (4.0 acres).
- b. The Community Centre Site located south of 210 Avenue SE should be approximately 1.2 hectares (3.0 acres).
- c. Each Community Centre site should be appropriately integrated with a Joint Use Site, Neighbourhood Node or other suitable public or institutional uses.

3. Design of Community Centre Sites

- a. The community centre and its site should be designed and landscaped in a manner that supports and enhances the pedestrian environment and is compatible with the overall community vision.
- b. The community centre and its site should be designed to adapt to the changing needs of residents over time.
- c. The community centre should be located on a site to allow direct pedestrian access to the primary entrance from the sidewalk.
- d. The architectural design of the community centre should signify the importance of the building, enhance its role as a community landmark and provide a strong relationship to the street.
- e. A community garden is encouraged to be developed within the Community Centre Site.
- f. As part of an Outline Plan/Land Use Amendment application, a concept plan should be submitted addressing the location, size and site layout of the Community Centre Site.

- g. Landowners are not responsible for design, construction and programming of community centres including any associated costs.

5.6 Mixed Use Community Node

5.6.1 Purpose

The purpose of this area is to create a community and pedestrian-oriented mixed use development at the intersection of 210 Avenue SE and Sheriff King Street S.

5.6.2 Mixed Use Community Node Policies

1. Composition of the Mixed Use Community Node

- a. The predominant use of land within the Mixed Use Community Node should be retail, commercial, office uses and multi-residential development.
- b. The creation of a cohesive shopping, living and leisure environment within the Mixed Use Community Node should be created through:
 - i. complementary and compatible institutional, recreational, cultural, office and employment-oriented uses and, where possible, mixed-use buildings such as retail with dwelling units above; and
 - ii. multi-dwelling residential uses shall be required to be integrated into or adjacent to the node.
- c. A minimum residential density of 50 units per hectare (20 units per acre) is required within or adjacent to each Mixed Use Community Node over a minimum area of 2 hectares (5 acres).
- d. A range of 14,865 square metres (160,000 square feet) to 22,297 square metres (240,000 square feet) of retail and commercial gross floor area shall be allowed within the Mixed Use Community Node identified on Map 4. Proposed commercial development in excess of the above shall require the submittal of a market demand study and other applicable studies, to the satisfaction of the Approving Authority.
- e. A site for a food store should be provided within the Mixed Use Community Node.
- f. Drive-thru businesses and service stations shall minimize disruption to the pedestrian-oriented street environment and internal pedestrian movement through appropriate design solutions (e.g., landscaping, berming, raised pedestrian walkways, etc).

2. Transit Service to the Mixed Use Community Node

- a. The Mixed Use Community Node should be served by public transit.
- b. Higher quality transit stops containing an attractive shelter, seating for pedestrians and schedule information should be provided within the Mixed Use Community Node.

3. Size of the Mixed Use Community Node

The Mixed Use Community Node, as shown conceptually on the Land Use Concept Map should be comprised of 3.0 - 4.8 gross developable hectares (12 gross developable acres) of land in each location.

4. Design of the Mixed Use Community Node

- a. As part of its design, the Mixed Use Community Node should contain a well defined pedestrian and bicycle oriented component with elements such as:
 - i. a highly visible and accessible location; and
 - ii. a public plaza or focal point that provides a meeting/gathering space for the surrounding community.
- b. The size and function of development in the Mixed Use Community Nodes should be clear and distinct from the Gateway Planning Area including building size and scale.
- c. In conjunction with the initial development permit application in the Mixed Use Community Node, a design Concept Plan for the entire area shall be submitted showing the overall concept design in relation to subsection 3.(a).
- d. The Mixed Use Community Node should be designed in accordance with the Development Design Guidelines in Appendix D and the Environmental Design Guidelines outlined in Appendix E.



5.7 Corridor Planning Area

5.7.1. Purpose

The purpose of the Corridor Planning Area is to provide for a high quality pedestrian environment along:

- i. Sheriff King Street SE, between 194 Avenue SE and 210 Avenue SE; and
- ii. The east/west street directly north of 210 Avenue SE, between the JUS site west of Sheriff King Street SE and the future LRT station to the east.

These streets are important linkages to a number of community destinations and it is important to ensure the area provides a well-designed environment for pedestrians, cyclists, and vehicular traffic.

The Corridor Planning Area will be characterized by a majority of development fronting onto streets, with individual ground-floor units (whether residential or commercial) having direct access to the public sidewalk. The road standard will ensure that all users can be accommodated and designed to a scale that fits with adjacent development.

5.7.2 Corridor Planning Area Policies

1. Composition

The Corridor Planning Area:

- a. Will provide, along areas identified in 5.7.1.i, a well-designed, pedestrian-oriented public realm with 70% or greater of the buildings oriented towards the street. Buildings oriented towards the street shall include:
 - i. Buildings that front the street; and
 - ii. Buildings that flank the street.
- b. Will allow, along areas identified in 5.7.1.i, a maximum of 30% of buildings to be oriented away from the street, with a maximum of 165 metres of buildings oriented away from the street to occur within a continuous 385 metre span.
- c. Will provide, along areas identified in 5.7.1.ii, a well-designed, pedestrian-oriented public realm with all buildings oriented towards the street, with the exception of wrap around frontages.
- d. Will ensure buildings oriented away from the street will incorporate a landscape buffer with planting, feature elements, pedestrian accessways, and decorative fencing, to

be refined at the Outline Plan/ Land Use Amendment stage.

- e. Shall provide a range of residential housing forms that, overall, achieve a density of 29 - 37 units per gross developable hectare (12-15 units per gross developable acre), including:
 - i. Multi-residential developments such as street-oriented townhouses, stacked townhouses, apartments, and/or 'live-work' units within multi-residential developments; and
 - ii. single-family and semi-detached dwellings.
- f. Is located on a street type that accommodates strong integration with adjacent land uses and provides for strong pedestrian and cyclist facilities.
- g. May also be designed to accommodate local-scale, non-residential uses.

2. Pedestrian Design

To meet the intent of the Corridor Planning Area in terms of pedestrian and bicycle orientation, the street design should be flexible to accommodate the intended form of development required. In creating a more pedestrian oriented corridor, design measures including, but not limited to bicycle pavement markings and roundabouts should be required where deemed appropriate.

3. Access

Should provide for vehicular access to all parcels from the rear via a laneway or internal, private or public street network.

4. Noise

Alternative solution to sound attenuation walls shall be required to accommodate the appropriate development interface along Sheriff King Street SE, in line with the intent of the Corridor Planning Area Policies.

5. Location

- a. As indicated on Map 4, the Corridor Planning Area shall be located along:
 - i. Sheriff King Street SE, between 194 Avenue SE and 210 Avenue SE; and
 - ii. The east/west street directly north of 210 Avenue SE, between the JUS west of Sheriff King Street SE and the future LRT station to the east.

6. Residential Area Policies

In addition to those listed above, the policies of the Residential Area shall apply to the Corridor Planning Area.

7. Connections

The transportation network should be designed to provide connectivity for pedestrians, cyclists, and drivers from surrounding areas to destinations within the Corridor Planning Area. This will be achieved by:

- a. using a block-based street network, such as grid or modified grid;
- b. using road design options, including reduced required intersection spacings, that contribute to a better quality pedestrian environment;
- c. providing safe and convenient walkway and pathway access to and from other areas of the community and within the Corridor Planning Area; and
- d. ensuring that convenient transit access and facilities are provided.

8. On-street Parking

At Outline Plan/Land Use Amendment stage (and through further detailed transportation analysis) Applicant(s) should work together with Transportation to achieve a road standard that may accommodate on-street parking on Sheriff King Street between 194 Avenue SE and 210 Avenue SE.

5.8 Transit Station Planning Area

5.8.1 Purpose

The purpose of these policies is to provide for transit-oriented development surrounding the future Light Rail Transit station. The Transit Station Planning Area supports higher residential densities, direct and convenient pedestrian routes to the LRT station and a built form that complements and supports the transit function. The intent of the Transit Station Planning Area is to make transit a more appealing, accessible and efficient transportation choice for residents.

5.8.2 Transit Station Planning Area Policies

1. Composition of the Transit Station Planning Area

- a. The Transit Station Planning Area should apply to the area conceptually identified on Map 4. Further detail of the Transit Station Planning Area is provided in the policies of Sections, 5.10, 5.11, 5.12, 5.13 and 5.14. The area may include, but is not limited to:
 - i. an LRT station;
 - ii. a light rail vehicle maintenance facility;
 - iii. a park and ride facility;
 - iv. high and medium density/mixed use areas, including 'live-work' uses;
 - v. a main street retail area;
 - vi. office uses;
 - vii. commercial uses;
 - viii. transitional uses within the Gateway Planning Area;
 - ix. active and passive recreational and cultural opportunities;
 - x. special care facilities;
 - xi. child care services; and
 - xii. public and institutional uses.
- b. District Energy plant(s) and innovative green building technology are encouraged in this area.

- c. No drive-thru businesses shall be located within the Transit Station Planning Area, unless developed as part of the Gateway Planning Area (Initial Development).
- d. Family oriented development in the form of two or more bedroom dwelling units is encouraged to be developed within Multi-Residential Developments within the Transit Station Planning Area.
- e. Opportunities for rooftop and community gardens are encouraged to be developed to support food production for local residents and businesses.

2. Residential Density within the Transit Station Planning Area

- a. The Transit Station Planning Area should:
 - i. achieve a minimum density of 98.8 units per gross developable hectare (40 units per gross developable acre) where located within the High Density/Mixed Use area, as identified on Maps 4 and 5; and
 - ii. achieve a minimum density of 49.4 units per gross developable hectare (20 units per gross developable acre) where located within the Medium Density/Mixed Use Area, as identified on Maps 4 and 5.
- b. As identified on Maps 4 and 5, and in accordance with the policies of Section 5.10 and 5.11, the highest density residential development within the Transit Station Planning Area shall be located closest to the future transit station. Conversely, the lower residential densities shall be located farthest from the future transit station.

3. Limited Land Supply

Notwithstanding sections 5.8.2 (1 and 2) above, the landownerships within the Transportation Station Planning Area (TSPA) is limited and achieving the goals of the TSPA rests principally on those lands west of the proposed LRT station. It is recognized that this small portion of the TSPA cannot achieve all of these goals.

4. Light Rail Vehicle Maintenance Facility

- a. A Light Rail Vehicle (LRV) Maintenance Facility should be located within the LRT Station and Facilities Planning Area, on City lands only.
- b. A functional study shall be completed to determine:
 - i. the land requirements and site design of the LRV Storage and Maintenance Facility;
 - ii. LRT alignment and station location in the Plan area;
 - iii. park and ride facilities; and
 - iv. transit terminal facilities.
- c. The design of the LRV Maintenance Facility shall provide appropriate interface treatment with any adjacent uses. Further, it should respect land ownership to the west of City lands and its intended transit oriented residential development.

5. Park and ride Facility within the Transit Station Planning Area

- a. A park and ride facility should be required within the Transit Station Planning Area.
- b. The park and ride facility should:
 - i. be located within 400 metres of the transit station, on City lands only;
 - ii. accommodate parking stalls integrated with adjoining land uses, located in an underground parkade, or multi-level parking facility;
 - iii. include surface parking facilities, only as an interim solution;
 - iv. have dual use possibilities with transit supportive uses;
 - v. be designed to reduce the visual impact of parking through landscaping and site design; and
 - vi. provide for direct pedestrian access from the facility to the station.

6. Parking within the Transit Station Planning Area

- a. At the Outline Plan/Land Use Amendment stage, opportunities for shared parking between other uses and the park and ride facility should be considered within the Transit Station Planning Area.
- b. Parking and related vehicular access should be located and designed in relation to the

future transit station so that it does not limit pedestrian access or endanger pedestrian safety.

- c. Surface parking for uses within the Transit Station Planning Area should be located at the rear of buildings.

7. Mobility within the Transit Station Planning Area

- a. The road network within the Transit Station Planning Area should provide for interconnected systems that accommodate convenient and efficient pedestrian access to the LRT station.
- b. Active mode connections shall be provided through development sites in the general area shown as the Active Connectivity Area on Map 5, to the satisfaction of the Development Authority, to increase connectivity and mobility in the Transit Station Planning Area.

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- c. The use of culs-de-sac and p-loops should be avoided within the Transit Station Planning Area and may be allowed only on a limited and select basis.

8. Pedestrian Linkages within the Transit Station Planning Area

- a. Pedestrian linkages should consist predominantly of a contiguous sidewalk system that creates efficient and contiguous routes to the LRT Station and adjacent neighbourhoods.
- b. Direct pedestrian access to the transit system should be provided within the Transit Station Planning Area, incorporating the Regional Pathway and Conservation Study Areas.

9. Building Orientation within the Transit Station Planning Area

- a. Building entrances within the Transit Station Planning Area should be oriented towards roads, sidewalks and pedestrian areas.
- b. The design of the transit station should be incorporated with nearby buildings, public spaces and other features.

10. Park Space within the Transit Station Planning Area

Public park space within the Transit Station Planning Area should be located in close proximity to higher density residential development and the transit station and be provided with accessible pedestrian linkages.

11. Design of Transit Station Planning Area

- a. A Concept Plan for the relevant portion of the Transit Station Planning Area should be considered at the Outline Plan/Land Use Amendment stage, the requirements of which are outlined in Appendix C.5.
- b. The City of Calgary *Transit Oriented Development Policy Guidelines* should be used to evaluate development within the Transit Station Planning Area.
- c. The Transit Station Planning Area should be designed in accordance with the Development Design Guidelines provided in Appendix D and the Environmental Design Guidelines outlined in Appendix E.

12. Community Recycling Depot

- a. A Community Recycling Depot may be provided within the Transit Station Planning Area, within the LRV facility lands.
- b. The Community Recycling Depot should be located within a surface parking area provided for a publicly accessed service. The Community Recycling Depot should not be visible from the street; however, appropriate signage may direct the public to its location.

13. Alternative Energy in the Transit Station Planning Area

- a. The use of District Energy (heating and cooling) as an alternative form of energy within the Transit Station Planning Area is encouraged.
- b. District Energy plant(s) should be located on sites that can contain dual land uses or located within buildings that provide for multiple uses.

14. Reserves

Where an over dedication of Municipal Reserve exists, Council may explore options for early acquisition of lands.

15. Active Uses

Active uses, such as retail stores and restaurants, are required at-grade within the Main Street Retail Area. Other uses, such as office and dwelling units, may be considered at grade for all other streets in the Transit Station Planning Area.

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5.9 Gateway Planning Area (Initial Development)

5.9.1 Purpose

The Gateway Planning Area, as identified on Maps 4 and 5, is to provide for a variety of commercial and office uses to service the local and regional markets as an initial form of development prior to the eventual desired intensification in accordance with the policies and guidelines of the Transit Station Planning Area. 'Site A' within the Gateway Planning Area is intended to provide for pedestrian oriented site development within walking distance of the future LRT Station.

'Site B' within the Gateway Planning Area is intended to generally provide for larger format regional commercial uses on the outer periphery of the Transit Station Planning Area. All development within the Gateway Planning Area will be designed to provide an appropriate entranceway design along Macleod Trail as the predominant southern gateway into Calgary.

5.9.2 Gateway Planning Area Policies

1. Composition of Gateway Planning Area

- a. The Gateway Planning Area shall be comprised of commercial uses, including office and retail uses.
- b. Existing development within the Gateway Planning Area shall be permitted to continue with its current use at the time of Council approval of the Plan in accordance with the Land Use Bylaw.
- c. Development adjacent to environmentally significant areas shall be sensitively treated to maintain the amenity values of these areas.
- d. District Energy plant(s) and innovative green building technology are encouraged to be developed in this area.
- e. All land areas within the Gateway Planning Area may develop initially in accordance with the Medium Density/Mixed Use policies, as identified in Section 5.11.

2. Design of Gateway Planning Area

- a. The design of the Gateway Planning Area:
 - i. shall provide a visually appealing entranceway to Calgary through the incorporation of signage, landscaping, and architectural features that enhance the image of the city;

- ii. where development does not front onto Macleod Trail, the rear of buildings shall be built to the same design quality and facade treatment as the front of the building;
- iii. should recognise the importance of the built form and public realm adjacent to the Priddis Slough and Pine Creek through landscaping, stormwater management, etc.; and
- iv. should be designed in accordance with the Development Design Guidelines provided in Appendix D and the Environmental Design Guidelines outlined in Appendix E.

3. Development within 'Site A'

'Site A' is located on the east side of the CP Rail tracks, as identified on Map 5. Development within 'Site A' shall:

- i. provide buildings that front and provide building entrances to the street, sidewalk or internal road;
- ii. provide vehicle parking areas that encourage safe and comfortable pedestrian movement within the site;
- iii. provide direct pedestrian connections to the Regional Pathway that leads to the LRT Station; and
- iv. provide for primarily smaller and medium format commercial uses.

4. Development within 'Site B'

'Site B' is located on the outer periphery of the Transit Station Planning Area, as identified on Map 4. Development within 'Site B' shall:

- i. provide clear and direct pedestrian connections from parking facilities to the entrance points of development;
- ii. provide direct pedestrian connections to the Regional Pathway that leads to the LRT Station;
- iii. encourage parking and road standard requirements to be reduced where it improves the pedestrian environment; and
- iv. provide for primarily larger format commercial uses.

5. Evaluation of Gateway Planning Area

- a. The detailed uses and size of the Gateway Planning Area shall be determined at the Outline Plan/Land Use application stage.
- b. A Concept Plan shall be submitted at the Outline Plan/Land Use application stage that shows how the area may transition to an ultimate form of development. The concept plan shall show the proposed initial concept for the Gateway Planning Area and ultimate concept plan for the Medium/Density Mixed Use Area for the subject site (Site A or Site B as generally identified on Map 5) that includes:
 - i. a grid-like street network to ensure that the subdivision, including both the block and street networks, does not compromise the transition to mixed use; and
 - ii. building envelope locations within the grid-like street network that meet the intent of the Medium Density/Mixed Use Area policies.

6. Transition from Gateway Planning Area to a Medium Density/Mixed Use Area

- a. Alternative Land Use districts may be proposed to allow development to transition over time, where considered appropriate by the Approving Authority.
- b. Once existing development within this area begins transition and proposes uses in compliance with the policies of the Medium Density/Mixed Use Area, no amendment to the Plan will be required.

5.10 High Density/Mixed Use Area

5.10.1 Purpose

The High Density/Mixed Use Area, as identified on Map 5, should provide the opportunity for high density residential development in a mixed use setting directly adjacent to the LRT station. Encompassing a Main Street Retail Area, this intensively developed area will ensure that land uses around the LRT station support ridership by generating high levels of transit use, including a mixed-use activity and employment node for the surrounding community, resulting in transportation network benefits. This will provide the residents with increased services, employment opportunities, and housing options within their community.



5.10.2 High Density / Mixed Use Area Policies

1. Composition of High Density/Mixed Use Area

- a. The predominant use of land within the High Density/Mixed Use Area shall be high density residential development.
- b. Mixed use development with increased building height is required surrounding the LRT Station.
- c. In addition, office, institutional, recreational, local commercial and retail uses may also be allowed within the High Density/Mixed Use Area where deemed compatible and appropriate by the Approving Authority.
- d. Local commercial uses should be:
 - i. provided to meet the needs of the residents;

- ii. comprehensively designed within a pedestrian oriented environment; and
- iii. refined through the land use districts applied within the High Density/Mixed Use Area.

- e. Open space, consisting of soft and/or hard landscaped areas, should be provided within the High Density/Mixed Use Area to meet the active and/or passive recreational needs of residents.
- f. District Energy plant(s) and innovative green building technology are encouraged to be developed in this area.
- g. Child Care Uses are encouraged in the High Density/Mixed Use Area.
- h. No drive-thru businesses shall be located within the High Density/Mixed Use Area.

2. Minimum Density within the High Density/ Mixed Use Residential Area

- a. The minimum residential development density in the High Density/Mixed Use Residential Area is 98.8 units per gross developable hectare (40 units per gross developable acre).

3. Compatibility of High Density/Mixed Use Residential Area

Development within the High Density/Mixed Use Area should be designed to be compatible both with development within the Medium Density/ Mixed Use Area in terms of building height and massing.

4. Design of High Density/Mixed Use Residential Area

The High Density/Mixed Use Area should be designed with a grid-like street network and in accordance with the Development Design Guidelines provided in Appendix D and the Environmental Design Guidelines outlined in Appendix E.

- a. Buildings shall be no higher than 10 storeys unless otherwise indicated in subsection b.
- b. Buildings may exceed 10 storeys in the tower site locations indicated on Map 5.
- c. Towers should exhibit high quality architectural design that includes articulation and elements of visual interest as a gateway feature to the community from the LRT Station.

Bylaw 15P2019

5. Outline Plan / Land Use Amendment Application Review within the High Density/Mixed Use Area

- a. As part of the submission of an Outline Plan / Land Use Amendment application within the High Density/Mixed Use Area the following information should be submitted:
 - i. a Concept Plan for the entire High Density/Mixed Use Area shall be required with the submittal of the initial Outline Plan/Land Use Amendment application, the requirements of which are outlined in Appendix C.5;
 - ii. identify the proposed land uses and configuration;
 - iii. a Transportation Impact Assessment (TIA) and/or Mobility Assessment Plan (MAP); and
 - iv. any additional information determined necessary by the Approving Authority.

5.11 Medium Density/Mixed Use Area

5.11.1 Purpose

The Medium Density/Mixed Use Area, as identified on Map 5 will provide for a medium density residential development area in a mixed use setting include residential, commercial, retail and office uses. The Medium Density/Mixed Use Area will provide for transit supportive development and a transition in density between the High Density/Mixed Use Area and the Residential Area.

5.11.2 Medium Density/Mixed Use Area Policies

1. Composition of Medium Density/Mixed Use Area

- a. The predominant use of land within the Medium Density/Mixed Use Area, as identified on Map 5 shall be medium density residential development including, but not limited to, multi-residential development buildings with retail and commercial uses located at grade.
- b. In addition, offices, institutional, recreational, local commercial and retail uses may also be allowed within the Medium Density/Mixed Use Area where deemed compatible and appropriate by the Approving Authority. These uses must be integrated into the medium density residential nature of the area in the form of mixed use buildings.
- c. Local and ancillary commercial uses should be:
 - i. provided to meet the needs of the residents;
 - ii. comprehensively designed within a pedestrian oriented environment, consisting predominantly of smaller scale businesses and shops;
 - iii. refined through the land use districts applied within the Medium Density/Mixed Use Area; and
 - iv. in the form of mixed use developments, integrated with uses such as residential dwelling units, employment uses, affordable housing, assisted/senior's living units and other appropriate and compatible uses to the satisfaction of the Approving Authority.

- d. Open space, consisting of soft and/or hard landscaped areas, should be provided within the Medium Density/Mixed Use Area to meet the active and/or passive recreational needs of residents.
- e. A Recreation Facility and Public Library should be provided in close proximity to the Transit Station Planning Area. **Bylaw 15P2019**
- f. Seniors housing facilities and special care uses are encouraged to be located within the Medium Density/Mixed Use Area.
- g. Child Care Uses and special needs housing are encouraged to be located in the Medium Density/Mixed Use Area.
- h. District Energy plant(s) and innovative green building technology are encouraged to be developed in this area.
- i. No drive-thru businesses shall be located within the Medium Density/Mixed Use Area unless developed as part of the Gateway Planning Area (Initial Development).

2. Density within the Medium Density/Mixed Use Area

The minimum residential development density within the Medium Density/Mixed Use Residential Area is 49 units per gross developable hectare (20 units per gross developable acre).

3. Compatibility of Medium Density/Mixed Use Area

- a. Development within the Medium Density/Mixed Use Area shall be designed to be compatible both with development within the High Density/Mixed Use area and with the surrounding low density residential area;
- b. Development in the Medium Density/Mixed Use Area, outside of the 600 metre radius, should transition downward in residential density towards the Residential Area.

4. Design of Medium Density/Mixed Use Area

The Medium Density/Mixed Use Area should be designed with a grid-like street network (public or private) and accordance with the Development Design Guidelines in Appendix D and Environmental Design Guidelines as identified in Appendix E.

5. Transition from Gateway Planning Area to Medium Density/Mixed Use Area

Once development within the Gateway Planning Area begins to transition to higher density uses in compliance with the policies of the Medium Density/Mixed Use Area, no amendment to the Plan will be required to change the Gateway Planning Area to the Medium Density/Mixed Use Area.

6. Outline Plan / Land Use Amendment Application Review within the Medium Density/Mixed Use Area

- a. As part of the submission of the initial Outline Plan/Land Use Amendment application within the Medium Density/Mixed Use Area the following information shall be submitted:
 - i. a detailed concept plan for the application area that illustrates integration with the remainder of the Medium Density/Mixed Use area and Transit Station Planning Area as a whole;
 - ii. the proposed land uses;
 - iii. a Transportation Impact Assessment and/or Mobility Assessment Plan; and
 - iv. any additional information determined necessary by the Approving Authority.

5.12 Main Street Retail Area

5.12.1 Purpose

The purpose of the Main Street Retail Area is to provide for a pedestrian oriented commercial development area, consisting of main street retail and commercial development with integrated multi-family residential development and located adjacent to the LRT station as a focal point within the Transit Station Planning Area.

5.12.2 Main Street Retail Area Policies

1. Composition of the Main Street Retail Area

- a. The Main Street Retail Area and its components should be justified based on a retail demand study being provided. Its location and composition shall include:
 - i. street oriented retail and commercial uses, located adjacent to the LRT station;
 - ii. office uses;
 - iii. multi residential uses on the upper floors;
 - iv. meeting places and a public plaza(s) containing direct pedestrian connections to the LRT station;
 - v. well integrated pedestrian and bicycle connections to the adjacent residential areas, transit facilities, the greater Transit Station Planning Area, regional pathways, bikeways and public and institutional facilities;
 - vi. well integrated and appropriate interfacing with surrounding residential areas; and
 - vii. 'live-work' uses where a transition is required or is desirable between residential and commercial uses.
- b. Institutional or public uses that complement and support the Main Street Retail Area may be considered.
- c. District Energy plant(s) and innovative green building technology are encouraged in this area.
- d. No drive-thru businesses shall be located on the Main Street of the Retail Area.

2. Design of Main Street Retail Area

- a. The design and layout of the Main Street Retail Area should incorporate the requirements of the City's transit oriented design guidelines.

- b. The general location of the Main Street Retail Area is indicated on Map 5. **Bylaw 15P2019**
- c. The base of a building or street wall should be oriented to the Main Street Retail Area with frontages lined with active uses. **Bylaw 15P2019**
- d. The Main Street Retail Area should be designed in accordance with the Development Design Guidelines in Appendix D and the Environmental Design Guidelines outlined in Appendix E. **Bylaw 15P2019**

5.13 Conservation Study Area

5.13.1 Purpose

The purpose of the Conservation Study Area is to provide for the protection of those identified Environmentally Significant Areas, which form part of an integral natural open space system, that have both local and regional significance and importance within Calgary. The Conservation Study Areas include the Priddis Slough, Radio Tower Creek, Pine Creek and any other additional areas of environmental significance, the specific areas of which will be determined at the Outline Plan/Land Use Amendment stage.

The Conservation Study Area applies to lands north of 210 Avenue SE and east of the CPR tracks, which comprise the original ASP Area approved in 2009. Environmental Open Space Study Area (Section 5.14) applies to lands south of 210 Avenue SE and west of the CPR tracks.

Bylaw 59P2017

5.13.2 Conservation Study Area Policies

1. Composition of the Conservation Study Area

- a. Subject to the policies of the Plan:
 - i. the Conservation Study Area applies to those areas as identified on Maps 4 and 5;
 - ii. public uses, in the form of roads, pathways, recreational and institutional uses, utilities and stormwater facilities, may be allowed to locate within the Conservation Study Area where they are determined to be required and it is demonstrated that they would not result in unacceptable environmental impacts or net loss of wetland functions subject to the *Calgary Wetland Conservation Plan*;
 - iii. supportive upland grassland habitat within the Conservation Study Area should be reviewed for conservation status at the Outline Plan/Land Use Amendment application stage;
 - iv. recreational amenities such as pathways, observation areas, regional pathways, nature trails and boardwalks shall be allowed within the Conservation Study Area where there is no demonstrated

detrimental impact on the existing Environmentally Significant Areas; and

- v. stormwater management facilities such as forebays, bioswales, drainage control mechanisms, and pipe and pumping systems may be allowed within the Conservation Study Area where determined to be necessary or appropriate. The release of treated stormwater into existing waterbodies may be acceptable if it can be demonstrated that it would not create a net loss of function, and habitat quality is not impaired subject to the *Wetland Conservation Plan*.
- b. The design and function of amenities within and surrounding the Conservation Study Area should support or provide educational and interpretive opportunities.
- c. The general categories of uses identified under subsection (1)(a) above shall be refined through the Land Use Districts applied within the Conservation Study Area.

2. Protection of lands within the Conservation Study Area

- a. Where lands within the Conservation Study Area are determined to qualify as Environmental Reserve in accordance with the ***Municipal Government Act***, these lands are to be dedicated as ER in their natural state through the Subdivision Approval Process.
- b. Any lands within the Conservation Study Area that are not acquired through the subdivision process as ER may be considered for acquisition or protection by other means including, but not limited to, density bonusing / transfers, conservation easements, voluntary Municipal Reserve dedication (above the required 10%), application of development controls and/or purchase.
- c. Notwithstanding subsection (2)(b) above, where lands within the Conservation Study Area are not dedicated, acquired or otherwise protected, the lands shall be considered to be developable and the policies of the adjacent policy area shall apply to these lands without requiring an amendment to Maps 4 or 5.
- d. Notwithstanding Policy 5.13.2 (2) (c) above, where these lands are subject to a Land Use Amendment application without subdivision, they should be protected by applying the Special Purpose - Urban Nature (S-UN) District

or other applicable districts under The City of Calgary Land Use Bylaw where appropriate.

3. Acquisition of lands within Conservation Study Area

- a. Where lands within the Conservation Study Area are determined to qualify as ER in their natural state under the *Municipal Government Act*, they shall be dedicated as ER.
- b. Wetlands qualifying as ER shall be protected in accordance with the policies of the *Calgary Wetland Conservation Plan*.
- c. Notwithstanding (a), where wetlands qualify as ER, all or a portion of the lands may be developed provided that all of the following requirements have been met:
 - i. the loss of the natural wetlands is acceptable to the Approving Authority;
 - ii. all other mitigation options have been exhausted;
 - iii. it can be demonstrated that there are no geotechnical or engineering constraints that would prevent the proposed development;
 - iv. the developer has obtained the requisite approvals from Alberta Environment under the *Water Act*; and
 - v. the developer enters into a compensation agreement with The City of Calgary in accordance with the *Wetland Conservation Plan*.
- iii. an aesthetically appealing visual transition is provided between development and the Conservation Study Areas; and
- iv. single loaded roads and/or pedestrian connections should be located adjacent to Conservation Study Areas where deemed appropriate by the Approving Authority.
- b. Development should meet the Interface Development Guidelines in Appendix D and the Environmental Design Guidelines outlined in Appendix E when developing adjacent to the Conservation Study Area.

4. Interface with Conservation Study Areas

- a. Where lands about the Conservation Study Areas, development shall occur in a sensitive manner to protect the environmentally significant areas identified such that:
 - i. runoff is diverted from Conservation Study Areas, 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;
 - ii. recreational uses are controlled in appropriate locations and access is restricted in areas containing sensitive habitat;

5.14 Environmental Open Space Study Area

5.14.1 Purpose

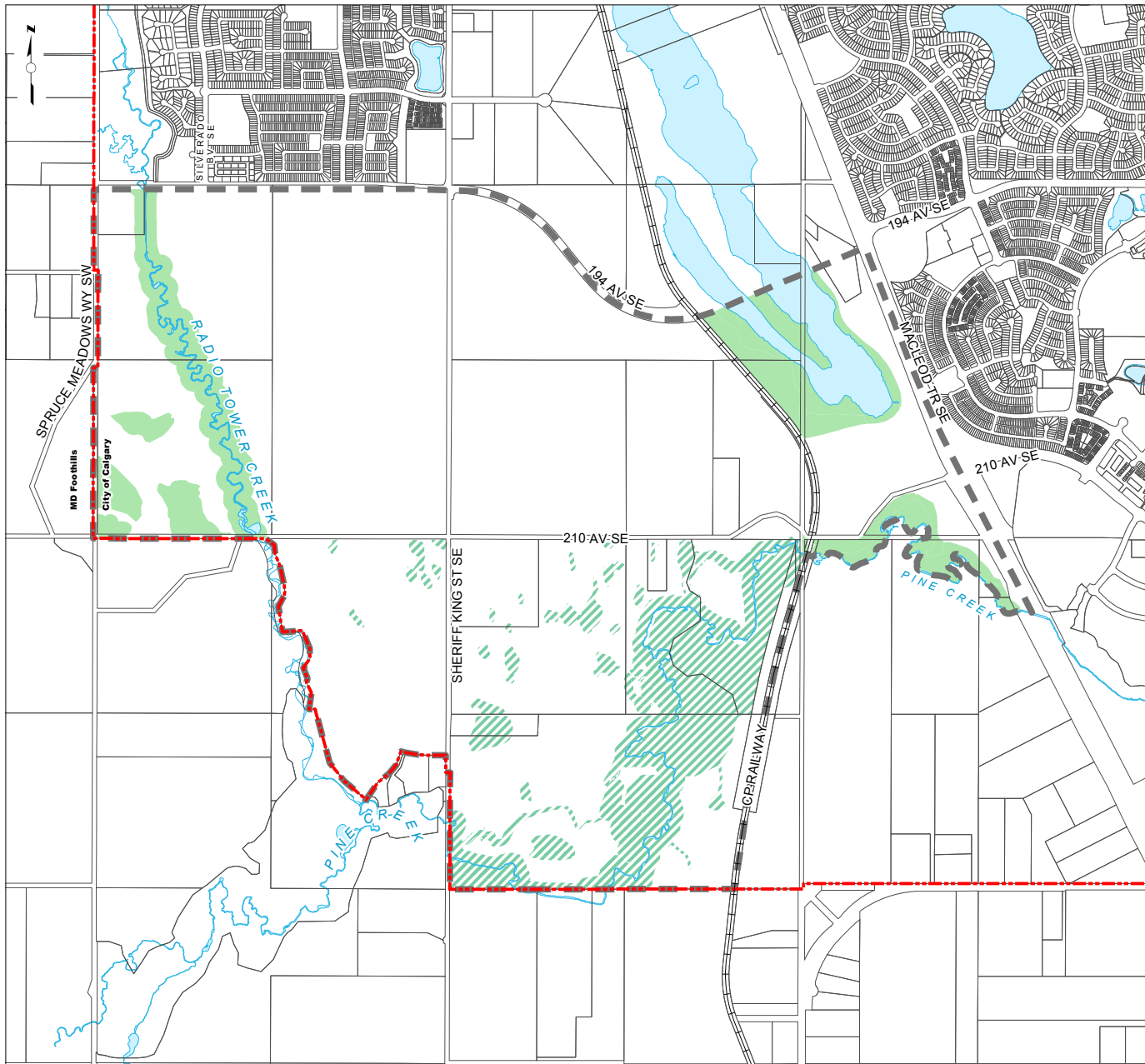
The Environmental Open Space (EOS) Study Area identifies lands that are environmentally significant. Where lands do not qualify as Environmental Reserve (ER), development may occur, provided there are no other limiting factors. Lands within the EOS Study Area have the potential to be incorporated into Neighbourhoods to provide for amenity value and ecological services.

EOS policies provide direction to the Approving Authority for the preservation of open space by The City for the purposes of:

- a. protecting the Plan Area watershed and integrating critical ecological areas;
- b. enhancing air, soil and water quality;
- c. ensuring ecological integrity of public open spaces; and
- d. strengthening connections between natural areas and public parks.

Tools that may be used to preserve features of the EOS Study Area may include conservation easements, land use designations, or detailed site design where they meet City policy direction, and Provincial or Federal criteria. Acquisition of these lands is dependent on availability of MR, availability of funds and willingness of the landowner to sell rights.

Bylaw 59P2017



West Macleod Area Structure Plan

Environmental Open Space Study Area

Legend

- Study Area Boundary
- City Limits
- Environmental Open Space Study Area
- Conservation Study Area

0 200 400 600 800 1,000 1,200
Metres

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

5.14.2 Environmental Open Space Study Area Policies

1. Application of EOS

The EOS policies apply to Community D (lands south of 210 Avenue SE and west of the CPR tracks).

2. Interpretation

Policies herein are to be read in conjunction with Section 8.0, Public Open Space System; Section 5.19 Green Corridor Policies; and Section 10.4.2, Wetland Policies. The EOS Study Area depicted on the Map 4 was identified using the ecological inventory data available at the time of the Plan's adoption (see Appendix - F: Biophysical Background Information). The specific delineation of EOS and protected lands therein shall be further refined at the time of Outline Plan/Land Use Amendment application. **Bylaw 59P2017**

3. Applicable Legislation and City Policy

Lands within the EOS Study Area comprise Environmental Reserve as defined in the MGA and/or Environmentally Significant Area as defined in the Calgary Open Space Plan. Further delineation of lands that qualify as Environmental Reserve will occur at the Outline Plan / Land Use Amendment stage subject to prevailing Provincial legislation and Municipal policy.

4. Interface with Environmental Open Space Study Area

Development adjacent to EOS Study Area shall consider:

- a. conservation of land and water by creating an interconnected open space system within and between watersheds or Environmentally Significant Areas to reduce habitat fragmentation;
- b. protection of the Plan Area watershed in its natural form, pursuant to prevailing Provincial legislation and Municipal policy;
- c. protection, enhancement and integration of critical ecological areas;
- d. site grades for communities surrounding EOS Study Area demonstrate that the natural drainage channels remain viable in a post-development state; and
- e. grade-matching or development disturbance occurs only outside of EOS Study Area, unless otherwise approved by the Director of Parks.

5. Natural Area Management Plan

Requirements for a Natural Area Management Plan shall be reviewed prior to the approval of an Outline Plan/ Land Use Amendment, or detailed land use planning for lands protected within EOS. If a Natural Area Management Plan is deemed required, it will be completed under the guidelines and specifications of the Calgary Parks and Recreation Natural Area Management Plan.

6. EOS Study Area and Stormwater Management

- a. Treated stormwater released 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.
- b. Treated stormwater released into existing water bodies shall only be accepted if water quality and quantity guidelines are met, and the ecological function and value of the waterbody is retained or enhanced, meeting the requirements of Parks and the Province.
- c. Conceptual stormpond locations (based on South Regional Policy Plan Master Drainage Plan) in Map 13 shall be confirmed at Outline Plan / Land Use Amendment stage through technical investigations (Staged-Master Drainage Plans or a revised Master Drainage Plan) to mitigate negative impacts on Environmental Reserve and/or Environmentally Significant Areas. **Bylaw 59P2017**

5.15 Recreation Facility Site

5.15.1 Purpose

The Recreation Facility, as identified on Maps 4 and 5, will serve the major active and passive recreational and cultural needs of residents within the Plan area. Accessible by vehicle, transit, bicycle, and pedestrian, it functions as a community gathering place for residents of all ages and is an integral part of the Medium Density/Mixed Use area.

5.15.2 Recreation Facility Site Policies

1. Composition of Recreation Facility Site

The Recreation Facility Site shall comprise Municipal Reserve and/or fee simple land that is suitably sized and configured to accommodate a Recreation Facility that is 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. Related facilities may include, but are not limited to, community facilities, cultural uses, a library, supportive office or retail uses, or other uses within the site that are deemed compatible and appropriate.

2. Size of Recreation Facility Site

The Recreation Centre Site should be approximately 5 hectares (12 acres).

3. Location of Recreation Facility Site

- a. The Recreation Facility shall be:
 - i. located in close proximity to the Transit Station Planning Area; **Bylaw 15P2019**
 - ii. adjacent to a collector road;
 - iii. adjacent to, or integrated with the Library site;
 - iv. appropriately integrated with other public uses provided for or required by within the community; and
 - v. located in a highly visible and accessible location.

4. Site Design for the Recreation Facility

- a. The Recreation Facility should:
 - i. be oriented towards the street;
 - ii. be architecturally designed so that the building signifies its importance to enhance its role as a community landmark;
 - iii. provide for a compatible interface treatment with adjacent land uses and development;
 - iv. contain a visually appealing site design and landscaping treatment, particularly when visible from roads with higher volumes of traffic;
 - v. be suitably integrated, and connected, with any residential, institutional, commercial, recreational, and public uses within or adjacent to the site;
 - vi. have strong pedestrian connectivity to the LRT Station;
 - vii. connect to sidewalks and regional pathways, and be conveniently and directly accessible to pedestrians both within and adjacent to the site;
 - viii. be multi-purpose in design to respond to diverse needs, interests, levels of ability, skill and changing community lifestyle needs over time;
 - ix. ensure buildings are oriented to offer direct pedestrian access to the primary entrance from the sidewalk;
 - x. create and define significant public spaces for the surrounding community, in association with the Public Library; and
 - xi. integrate works of public art.
- b. Direct and efficient road networks, regional pathways, sidewalks, and pedestrian and cyclist connections should converge on the Recreation Facility Site from the surrounding residential area.
- c. The exact location of the Recreation Facility Site shall be refined and determined through the required Concept Plan for the Transit Station Planning Area and at the Outline Plan/Land Use Amendment stage.
- d. Parking within the Recreation Facility site should:

- i. be shared with surrounding public facilities where legally permissible (e.g., Library, Community Facilities; and
- ii. be screened from the street by the building façade or appropriate landscaping.



South Fish Creek Arena

5.16 Public Library Site

5.16.1 Purpose

The purpose of the Library is to provide universal access to resources for information, learning, inspiration and enjoyment for all community residents. The exact location, size and configuration will be determined through the Outline Plan/Land Use Amendment process.

5.16.2 Public Library Site Policies

1. Composition of the Library

The Library will be suitably configured to meet the needs of the Plan area and, where applicable, work in conjunction with the Recreation Facility.

2. Size of the Library

The Library will require a parcel of land, approximately 2 hectares (4.9 acres) unless co-located within the Recreation Facility.

3. Location of the Library

- a. The Library should be:
 - i. located in close proximity to the Transit Station Planning Area; **Bylaw 15P2019**
 - ii. located approximately 3.5 kilometres from another public library;
 - iii. located adjacent to a collector road;
 - iv. integrated within the Recreation Facility site and complex to animate and define a public space for the surrounding community;
 - v. appropriately integrated with other public uses within the community;
 - vi. located in a highly visible and accessible location;
 - vii. multi-purpose in design to respond to diverse needs, interests, levels of ability and skill;
 - viii. flexible development to enable uncomplicated facility changes to reflect shifts in demographics and user needs and preferences; and
 - ix. integrate works of public art.

4. Site Design of the Library Site

- a. Direct road networks, regional pathways, sidewalk, pedestrian and cyclist connections should converge on the Library site from the surrounding area where possible.
- b. The architectural design of the building should signify its importance and enhance its role as a community landmark.
- c. The Library should be oriented towards the street, provide direct pedestrian access to the sidewalk and provide strong pedestrian connections to the LRT Station.
- d. Parking within the Library site should:
 - i. be shared with the Recreation Facility and/or other surrounding public facilities where legally permissible;
 - ii. be screened from the street by the building façade or appropriate landscaping; and
 - iii. be located in a manner that does not compromise pedestrian movement.

5.17 High School Site

5.17.1 Purpose

A Public High School, as identified on Maps 4 and 5 is required to provide for the educational needs of senior high school students within surrounding communities and recreational space for residents. The high school site is shown conceptually on Maps 4 and 5. Its exact location, size and configuration will be determined through the Outline Plan/Land Use Amendment process.

5.17.2 High School Site Policies

1. Size of High School

The high school will require approximately 8-9 hectares (20-23 acres) of land.

2. Location of High School

The high school will be located within the Medium Density/Mixed Use Area. The exact location shall be determined at the Outline Plan /Land Use Amendment stage and indicated on the Concept Plan for the Transit Station Planning Area.

3. Site Design of the High School

- a. The High School should:
 - i. provide for a compatible interface treatment with adjacent development;
 - ii. contain a visually appealing site design and landscaping treatment, particularly when visible from roads with higher volumes of traffic;
 - iii. be well integrated with and/or connected to the Medium Density/Mixed Use area;
 - iv. be suitably integrated with other institutional, recreational, and public uses within or adjacent to the site;
 - v. connect to sidewalks and regional pathways, and be conveniently and directly accessible to pedestrians both within and adjacent to the site;
 - vi. ensure that 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 LRT station;

- vii. be easily accessible on foot and by transit, and should be located within walking distance of the LRT station;
- viii. have two frontages, ideally located at the corner of two collector roads unless other siting options allow for optimization of co-locating the High School, Recreation Facility and Library to take advantage of proximity to future LRT Station. Further, to balance multiple TOD demands in the TSPA, a secondary road across may be required on the High School site; and
- ix. as an integral part of the Medium Density/Mixed Use area, encouraged the Calgary Board of Education to develop partnerships to provide other public, institutional or complementary uses.

4. Reserves

Where an over-dedication of Municipal Reserve exists (e.g., in the TSPA), Council may explore options for early acquisition of lands.

5.18 Regional Pathway

5.18.1 Purpose

The Regional Pathway provides convenient pedestrian and bicycle connections throughout the Plan Area for both commuting and recreational use. The Regional Pathway will extend throughout the Plan area and provide safe and convenient connections to the Transit Station Planning Area, recreational/athletic sites, LRT facilities, educational and community facilities, residential communities and connections beyond the Plan Area.

5.18.1 Regional Pathway Policies

The regional pathway should:

- i. be generally aligned as conceptually identified on Maps 4 and 5;
- ii. be located within or adjacent to a park, natural feature or Conservation Study Area wherever possible;
- iii. be located to increase the options of walking, cycling and other non-motorized activities throughout residential areas to enable direct and convenient access to surrounding services and facilities;
- iv. where the regional pathway cannot be located within or integrated with a park or natural feature, it may locate within a road right-of-way in the form of a pathway constructed in place of a sidewalk;
- v. not be adjacent to front driveways;
- vi. not be located along inactive building edges, however where this is required the pathway should be buffered through landscaping and/or berming; and
- vii. align with the local pathway system or private pathways in commercial areas to provide direct pedestrian and bicycle connections to building entrances, where applicable.

5.19 Green Corridor Policies

5.19.1 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 to:

- a. connect culturally and ecologically significant natural features and passive recreation areas within the Plan Area, while being contiguous and multi-purpose;
- b. integrate with the city-wide regional pathway and bikeway network and the Calgary Greenway;
- c. connect natural features of the surrounding landscape into the design of urban development to maintain a high degree of interconnectivity and permeability; and
- d. 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 5.14: Environmental Open Space Study Area). Logical connections between EOS will be made and shall be shown by Applicants at the Outline Plan/Land Use Amendment stage when applicable. Alignment of the Green Corridor is not shown on Maps in the ASP (except along Radio Tower Creek and Pine Creek).

Bylaw 59P2017

5.19.2 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. include a 3.5m wide pathway, where feasible and appropriate.
- b. The Green Corridor may, but not necessarily, include a Regional Pathway. Where a Regional Pathway is not provided, a pathway or a trail of

a different standard may be used, depending on site conditions.

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 5.14 Environmental Open Space Study Area for policies regarding acquisition of land for the Green Corridor. **Bylaw 59P2017**

5.20 Emergency Response Station

- a. An Emergency Response Station site requires:
 - i. approximately 0.8 hectares (2 acres);
 - ii. all turns access to a major roadway;
 - iii. a rectangular lot;
 - iv. being situated at the highest elevation of the district where possible; and
 - v. a minimum of two vehicular access points.
- b. The Emergency Response Station should, where applicable, work in conjunction with other suitable public facilities as long as they do not interfere with the safe operations and access to the Emergency Response Station.

6.0 DENSITY POLICIES

6.1 Density

6.1.1 Purpose

The purpose of these policies is to establish the minimum density requirements for each Community within the Plan area. The minimum density will vary for different areas within a community but the minimum density outlined in the following policies must be achieved for each Community overall, unless specific constraints prevent this (e.g., environmental conservation or infrastructure constraints). Compliance with this minimum density will be evaluated at the Outline Plan/Land Use Amendment stage as well as the Subdivision Approval stage and, if necessary, the Development Permit stage.

6.1.1 Density Policies

1. Community Development Areas

The Calgary Municipal Development Plan (Bylaw 24P2009) states:

ASPs for new communities in Future Greenfield Areas will achieve a minimum intensity threshold of 60 people and jobs per gross developable hectare. This community intensity level includes Neighbourhood Activity Centres, Community Activity Centres, Urban Corridors and Neighbourhood Corridors, as identified in the ASP. ASPs must also demonstrate how a target density of 70 people and jobs per gross developable hectare can be achieved over the life of the plan.

2. Plan Area Density

The minimum residential density required, when calculated over the entire West Macleod Area Structure Plan area, is encouraged to be 25 units per gross developable residential hectare (9 units per gross developable residential acre).

At full build out of the Plan area an intensity of 75 people and jobs per gross developable hectare should be achieved.

3. Map 7 - Density

Map 7 conceptually identifies areas within the Plan Area where various ranges of residential density should be located, in accordance with the policies of this Plan. **Bylaw 59P2017**

4. Minimum Densities

For the purpose of meeting the intent of the density policies of the Plan, the minimum residential densities identified within the Plan should be met or proposed within 5% of the minimum density requirement.

6.2 Special Density Area

6.2.1 Purpose

The purpose of these policies is to provide for Special Density Areas within a community on a voluntary basis. These areas will need to be identified on Map 7 and will need to contain densities established by Council. Special Density Areas can exceed typical service standard levels of the transportation network and will be characterized by a high quality community design that emphasizes an employment and transit supportive development pattern, and other elements that minimize the impact of vehicle traffic. **Bylaw 59P2017**

6.2.2 Special Density Area Policies

1. Application of Special Density Area

- a. At the request of a developer, or as a City initiative, prior to approval of an Outline Plan/Land Use Amendment application, Council may identify all or a portion of a community as a Special Density Area on Map 7 through the Plan amendment process. **Bylaw 59P2017**
- b. Where an area is identified as a Special Density Area on Map 7, new density requirements for the area shall be identified on Map 7 by Council. **Bylaw 59P2017**

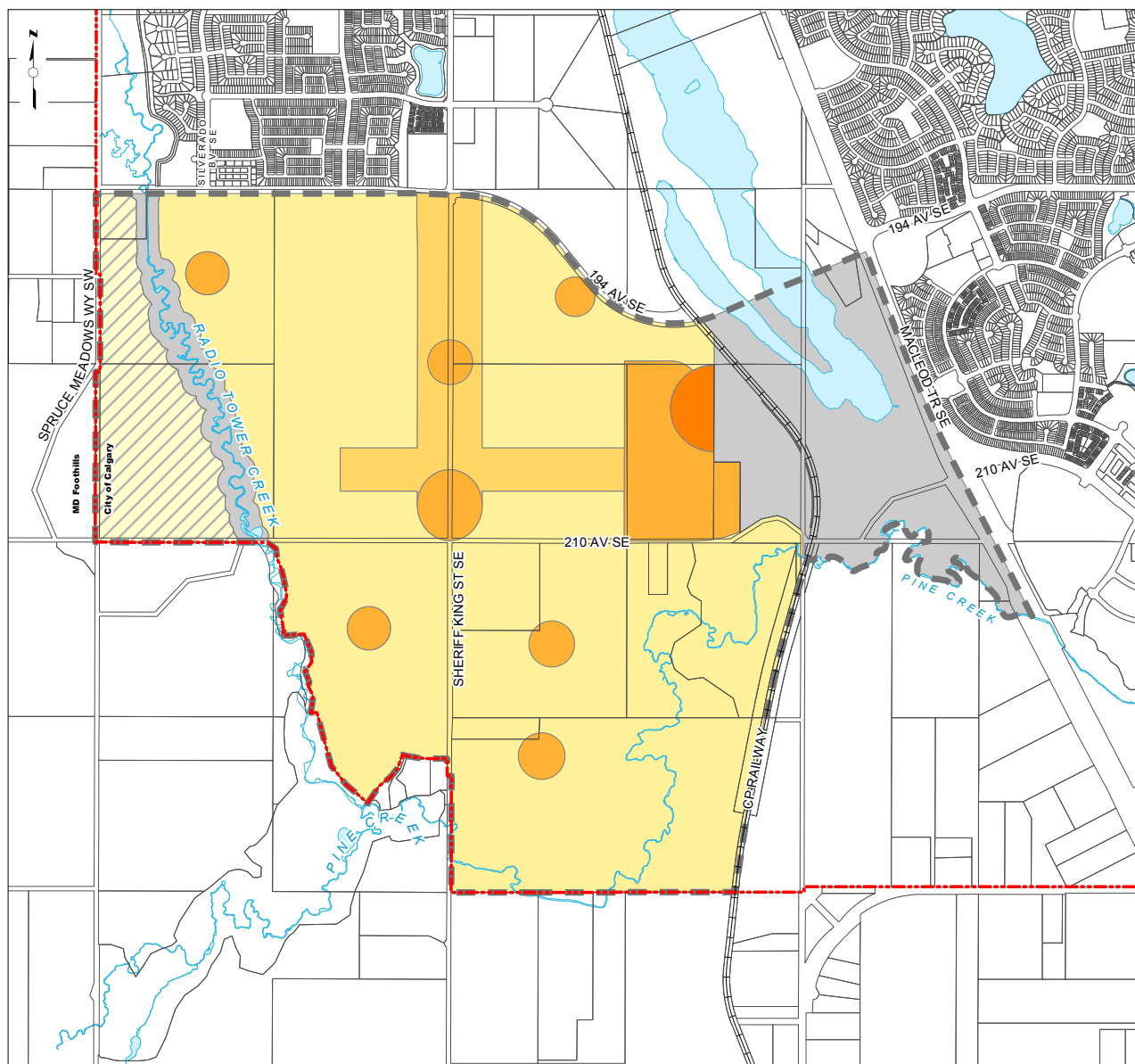
2. Purpose of Special Density Area

- a. A Special Density Area may be identified on Map 7 for strategic planning reasons, including, but not limited to the following: **Bylaw 59P2017**
 - i. to introduce an incentive development system to meet public objectives within an area;
 - ii. to recognize and accommodate economic development initiatives within an area;
 - iii. to address other constraints that present a limiting factor on development within an area; and

- iv. to achieve improved land efficiencies, and encourage transit use or employment opportunities within an area.
- b. A density within a Special Density Area that exceeds service standards of the transportation network may be allowed through an amendment to Map 7 provided that:

Bylaw 59P2017

- i. a Transportation Impact Assessment is completed that identifies the impact of the density on the network; and
- Bylaw 59P2017**
- ii. the level of transit service and employment is determined to be appropriate to minimize the impact of the density on the network.



West Macleod Area Structure Plan

Density

Legend

- Study Area Boundary
- City Limits

Minimum Density

- 17.3 uph (7upa) Special Residential Area
(7.4 uph (3 upa) maximum where Council's Slope Adaptive Development Guidelines Policy and Conservation Planning and Design Guidelines apply)
- 17.3 uph (7 upa) Residential Area
- 29-37 uph, (12-15 upa) Neighbourhood Corridor
- 49 uph (20 upa) Neighbourhood Node,
Medium Density/ Mixed Use,
Mixed Use Community Node
- 98.8 uph (40 upa) High Density/ Mixed Use
- Non Residential

0 200 400 600 800 1,000 1,200
Metres

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

7.0 COMMUNITY DEVELOPMENT POLICIES

7.1 Housing Diversity

7.1.1 Purpose

The purpose of these policies is to encourage a diversity of housing to meet the needs of different income groups and lifestyles within the Plan area. This includes the demand for affordable housing that is likely to increase as a community grows and matures.

7.1.2 Housing Diversity Policies

1. Alternative Housing Forms

- a. A minimum of 30 percent of the housing units within a community should be non-single detached housing units to meet the needs of different income groups and lifestyles.
- b. Alternative forms of housing to single-detached dwellings may include, but are not restricted to:
 - i. two-family housing (duplexes, semi-detached dwelling units);
 - ii. multi-dwelling housing (tri-plexes, fourplexes, townhouses, stacked townhouses, apartments);
 - iii. secondary suites;
 - iv. live-work housing;
 - v. innovatively designed or managed housing projects; and
 - vi. three or more bedroom dwelling units within multi-residential developments.

2. Affordable Housing

- a. A minimum of 10 percent of the housing units within a community should be developed as affordable housing units.
- b. Affordable housing could include at least two (2) of the following:
 - i. subsidised housing;
 - ii. apartment units less than 70 square metres;
 - iii. secondary suites;
 - iv. residential care housing;
 - v. co-operative housing;
 - vi. housing in conjunction with places of worship and recreation facilities; and

- vii. three (3) or more bedroom dwelling units within multi-residential developments to provide for families.

3. Location of Affordable Housing

- a. Potential affordable housing should, wherever possible and practical, be located:
 - i. in close proximity to the Transit Station Planning Area, Mixed Use Community Node, or a neighbourhood node;
 - ii. along public transit routes;
 - iii. within residential areas so that the units are integrated into communities to prevent segregation; and/or
 - iv. in conjunction with complementary community facilities and amenities.

7.2 Community Vitality

7.2.1 Purpose

The purpose of these policies is to provide for the development of a broad range of community facilities, in addition to the Recreation Facility and Public Library, considered necessary to serve the sporting, recreational, cultural, educational, social and spiritual needs of residents within the community and to enhance their quality of life. These uses will be encouraged and supported and should preferably be located in conjunction with the Transit Station Planning Area, Mixed Use Community Node, a Neighbourhood Node or other activity focus.

7.2.2 Community Vitality Policies

1. Community Uses

- a. Uses that provide a sense of community or meet the spiritual and family needs of residents and enhance their quality of life shall be encouraged in the community. These uses may include, but are not restricted to:
 - i. child care facilities,
 - ii. special care facilities,
 - iii. cultural spaces;
 - iv. sport and recreational facilities (soccer pitches, baseball fields, hockey rinks, cricket ovals, swimming pools, etc.); and
 - v. public and quasi-public uses (e.g., places of worship).

2. Community Use Location

- a. Wherever possible and practical, community uses should be located:
 - i. in conjunction with a Joint Use Site, a Neighbourhood Node, Mixed Use Community Node or the Transit Station Planning Area;
 - ii. along transit routes; and/or
 - iii. in proximity to open space or community facilities.



8.0 PUBLIC OPEN SPACE SYSTEM

8.1 Public Open Space System

8.1.1 Purpose

The purpose of the public open space system is to provide a range of passive and active recreational opportunities contributing to the social, environmental, cultural and economic well-being for residents and visitors. The design of the system should create an environment of connectivity, user safety, comfort and enjoyment. Success will be attained if the system is a part of a larger ecological area via watersheds, drainage systems, mature vegetation and biologically diverse areas. These connections could also be achieved through the inclusion of green infrastructure such as bioswales and vegetated streets corridors. The location, size and configuration of the system will be determined through the Outline Plan/Land Use Amendment process for Municipal Reserve, Municipal School Reserve lands and/or Environment Reserve Easements.

8.1.2 Policies

In the design of the public open space system three functions should be achieved: social function; biophysical function; and aesthetic function. Although each parcel may not equally achieve these functions, the overall diversity of the system should have a net benefit which meets these requirements.

1. Social Function

The intent of the social function is to create an overall sense of individual well-being and to encourage social gathering for a wide variety of user groups, ages, abilities, etc. The following objectives are encouraged to be demonstrated at the Outline Plan/Land Use amendment stage.

- Integration of the space into the wider community through pedestrian and bicycle routes.
- Seasonal adaptability to provide year-long usability.
- Visibility of the open space to encourage public access.
- Opportunities to connect with natural features.
- Ability to encourage public access.

- Impact on the open space by surrounding noise (e.g., major roads, etc.).
- Ability to encourage a diversity of user access and activity.
- Where possible, encourage the development of perimeter residential frontage to overlook open space.

2. Biophysical Function

The intent of the biophysical function is to promote biodiversity as well as contributing to a positive impact on habitat zones, air quality and the physical environment. The following objectives are encouraged to be demonstrated at the Outline Plan/Land Use amendment stage.

- The application of sustainable technologies, where appropriate; for example, permeable materials on pathways, energy efficient lighting, and water efficiency measures for irrigation requirements.
- The potential of the open space to maintain and enhance existing mature tree stock and overall biodiversity.
- The ability of the open space to provide shading and sunlight access.
- Connection via green infrastructure such as bioswales and vegetated streets.
- Linkages to larger ecological areas such as watersheds, drainage systems, mature vegetation and biologically diverse areas.

3. Aesthetic Function

The intent of the aesthetic function is to contribute to the overall urban form of the area. The following objectives are encouraged to be demonstrated at the Outline Plan/Land Use amendment stage.

- Provision of the open space to provide view corridors and terminuses throughout the community.
- Sizing and articulation of the open space to create spaces that are functional, safe, flexible and provide for a variety of sporting and recreational opportunities for varying user age groups.
- Maximize sunlight exposure by avoiding adjacent shadowing from buildings yet provide tree clusters for seasonal shading.

8.1.2 Implementation

Detailed design and development plans for each of the parks will be prepared by the developer in consultation with The City of Calgary. Such plans should address the requirements of Appendix C.8 Park Concept Plan and Appendix D.2.3 Open Space, including project design, landscaping, performance standards and maintenance. Issues related to visibility, access, use, lighting, safety and security, seating and solar exposure should also be addressed.

9.0 RESERVE POLICIES

9.1 Creditable Reserve Dedication

9.1.1 Purpose

The purpose of these policies is to provide for the dedication of reserve land in order to meet the educational and recreational needs of the community.

9.1.2 Creditable Reserve Dedication Policies

1. Dedication of Creditable Reserve

- a. Creditable Reserve shall be dedicated through the subdivision process as reserve land in the full amount owing in accordance with the requirements of the Subdivision Authority and Joint Use Coordinating Committee, as opposed to the payment of money-in-place of reserve land, unless unique situations arise.
- b. The allocation of Creditable Reserve between Joint Use Sites and other forms of open space shall be determined at Outline Plan/Land Use Amendment stage having regard to the Priority of Use of Reserve Lands as set out in the *Joint Use Agreement*.

2. Voluntary Dedication of Creditable Reserve

A developer may be allowed to dedicate Creditable Reserve land in excess of the requirements of the **Municipal Government Act** on a voluntary basis through the subdivision process subject to a site-specific evaluation and acceptance of the proposal by the Approving Authority.

3. Deferral of Creditable Reserve

The Subdivision Authority may register a deferred reserve caveat against the title of a parcel of land owing Creditable Reserve in order to defer a decision on reserve, pending the future subdivision of a parcel and provided that the parcel will retain its potential for further subdivision.

4. Creditable Reserve Lands Utilized for Joint Use Sites

Joint Use Sites and the Community Centre Site serving the Plan area shall be comprised of Reserve land.

5. Creditable Reserve Lands Utilized for High School Sites

A minimum of 5 hectares (12 acres) of Reserve shall be dedicated to the identified Public High School site, at the discretion of the Joint Use Coordinating Committee.

6. Use of Creditable Reserve Land

- a. Reserve will be used to create Joint Use Sites and a variety of parks such as neighbourhood parks. Passive and active recreational uses such as sporting facilities, children's play areas, off-leash dog areas, skateboard parks, cricket ovals, etc may be appropriate uses within Reserve Land. Use of the Creditable Reserve land should also be considered for, but not limited to:
 - i. upland grasslands surrounding wetlands; and
 - ii. linkages between areas of conservation.
- b. notwithstanding i. and ii., no creditable reserves may be available after Joint Use Sites are established and as such, the landowner shall work with the Approving Authority and JUCG to prioritize all reserve allocations which may include reducing the Joint Use Site footprint in order to accommodate other park types and uses.

7. Creditable Reserve land for a Recreation Facility

A minimum of 5 hectares (12 acres) of Reserve Land shall be purchased for a Small Regional Recreation Facility and Tier 1 Athletic Park that may include a Pool/fitness Centre or Arena and two rectangular fields, at the discretion of the Joint Use Coordinating Committee.

8. Transit Station Planning Area

Reserve in excess of 10% may be required in areas surrounding the LRT Station, based on the residential density proposed and will be subject to purchase by the City.

9. Reserve Analysis

Reserve Analysis requirements are contained in Appendix A.5.

10.0 WETLAND CONSERVATION POLICIES

10.1 Wetland Protection

10.1.1 Purpose

The purpose of these policies is to provide for the protection and enhancement of wetlands and their related upland and native grasslands within the Plan area in a sustainable state. The policies also address the potential to allow development of certain wetlands within the planning area in accordance with the “no net loss” of wetlands policy approved within the *Calgary Wetland Conservation Plan*.

10.1.2 Wetland Protection Policies

1. Retention of Wetlands and Associated Streams

Wetlands and streams that are dedicated as Environmental Reserve, or otherwise acquired or protected, shall be retained in their state at the time of acquisition except for:

- i. the addition of passive recreational amenities such as pathways, benches, viewing areas, and interpretive areas considered necessary to enhance public engagement within or access to the area;
- ii. naturalized planting or landscaping considered necessary to restore the wetland and its immediate shoreline; and
- iii. engineering improvements considered necessary to integrate the area with surrounding development and ensure its sustainability within an urban context.

2. Grading of Wetlands

- a. Grading or other disturbance of protected wetlands may be allowed where it is determined that such grading or disturbance is considered essential to improve, retain or enhance the function, sustainability and viability of wetland in the context of urban development.
- b. The grading of land for urban development adjacent to wetlands that are dedicated as ER, or otherwise acquired or protected, shall:
 - i. not allow drainage flows from public roads to enter this wetland; and
 - ii. except for approved (sheet flow) drainage from portions of the interfacing lots, or

other approved methods, avoid non-treated drainage flows from private lands being directed toward this wetland.

3. Engineering of Wetlands

Wetlands that are dedicated as ER, or otherwise acquired or protected, shall be engineered as necessary to:

- i. remain sustainable and viable over the longer term such that they continue to provide viable habitat; and
- ii. ensure that drainage flows to a wetland:
 - A. can be retained over time to approximate natural conditions; and
 - B. are managed through appropriate drainage flow control mechanisms.

4. Integration of Wetlands

- a. Urban development adjacent to a wetland that is dedicated as ER, or otherwise acquired or protected, should be integrated and designed through the use of native plant species and building setbacks to:
 - i. create a compatible interface with the lands; and
 - ii. retain the natural function of the lands.
- b. The developer(s) of lands adjacent to an ER dedicated wetland, and any associated area, should be required to:
 - i. restore any setbacks dedicated as ER; and
 - ii. encourage the use of native species in the landscaping of adjacent yards.
- c. Insofar as practical and possible, natural buffers, adjoining a wetland that is dedicated as Environmental Reserve, or otherwise acquired or protected, should be provided in the form of public or private open space in order to protect and enhance the function of the wetland.

5. Restoration of Wetlands

- a. Where determined practical and appropriate, wetland and stream restoration to a natural state is required for:
 - i. wetlands dedicated as reserve or acquired; and

- ii. wetlands already protected that have been or will be disturbed due to land use practices.
- b. The level of wetland restoration will be determined at the Land Use/Subdivision approval stages and subject to the applicable policies, guidelines and standards in effect to address wetland restoration.

10.1.3 Wetland Acquisition Policies

1. Wetland Approach

- a. Where wetlands qualify as ER in accordance with the provisions of the **Municipal Government Act**, the lands should be dedicated as ER through the subdivision process.
- b. Wetlands qualifying as ER shall be protected in accordance with the policies of the *City of Calgary Wetland Conservation Plan*.

2. Alternative Acquisition of Wetlands

- a. Where wetlands, or their related upland or native grassland habitat do not qualify as ER, the lands may be acquired and protected through alternative means where deemed practical, feasible and appropriate by Council or 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 approved within *The City of Calgary 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 Municipal Reserve;
 - iv. registration of a conservation easement on title as per the provisions of the **Environmental Protection and Enhancement Act**;
 - v. purchase of the lands;
 - vi. application of development controls to achieve mandatory protection of the lands; or
 - vii. introduction of development incentives to encourage voluntary conservation of the lands.

- b. Development controls and incentives introduced under (2)(a)(vi) and (viii) may include, but are not limited to:
 - i. density bonusing systems;
 - ii. amended building setbacks;
 - iii. site grading restrictions; and
 - iv. enhanced landscaping treatments.
- c. Those areas identified on Maps 4 and 5 as Conservation Study Area (Priddis Slough, Radio Tower Creek and Pine Creek) and EOS Study Area are the most environmentally significant areas within the Plan Area and as such:
 - i. the predominant use of land shall be the identified natural features and associated native habitat;
 - ii. recreational amenities, such as pathways, observation areas and nature trails shall be allowed where determined to be compatible and appropriate;
 - iii. lands within these areas may be dedicated, acquired or otherwise protected in accordance with the policies of this Plan;
 - iv. these areas may constitute a regional open space for the surrounding area, in addition to any future dedicated parkland within the Plan area;
 - v. treated stormwater may be allowed in this area where deemed compatible and appropriate, with the following conditions of the Open Space Land Use Policies:
 - A. the water entering these areas maintains the predevelopment character; and
 - B. the water will not cause any unacceptable environmental change to the natural area and does not compromise wetland function, water quality and quantity, and the natural fluctuations of the wetland.
 - vi. where lands within this area are not dedicated, acquired or otherwise protected, these lands shall be considered to be developable and the policies of the adjacent area, and other land use shall apply to these lands without requiring an amendment to Maps 4 or 5.

3. Compensation for Wetlands

Where wetlands or their related upland qualify as ER, all or a portion of the lands may be developed provided that:

- a. it is determined by The City that the lands are of lower environmental significance;
- b. the loss of the wetland is acceptable to the Approving Authority;
- c. all other mitigation options have been exhausted;
- d. it can be demonstrated that there are no geotechnical or engineering constraints that would prevent the proposed development;
- e. the developer has obtained the requisite approvals from Alberta Environment under the *Water Act*; and
- f. the developer, on a voluntary basis, provides to The City as compensation for the ER being developed, either an appropriate amount of:
 - i. land in another location that is determined to be of higher environmental significance and greater public benefit; or
 - ii. money-in-place of the land in an amount to be determined to the satisfaction of The City, with the land or money-in-place of land to be applied to the acquisition, protection or improvement of other wetlands in accordance with the policies of *The City of Calgary Wetland Conservation Plan*.



4. Development of Wetlands

Notwithstanding Policy 10.1.2 (1) and (2), where identified lands do not qualify as ER, in accordance with the provisions of the **Municipal Government Act**, and are not otherwise acquired or protected, the lands shall be considered to be suitable for urban development under the policies of this Plan.

10.2 Environmental Reserve Dedication

10.2.1 Purpose

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

10.2.2 Environmental Reserve Dedication Policies

1. Dedication of Environmental Reserve

Lands located within the Conservation Study Area and EOS Study Area or elsewhere within the Plan area, comprising environmentally significant areas that qualify as ER under the ***Municipal Government Act***, should be dedicated as ER through the subdivision process.

2. Environmental Reserve Setback

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

- a. In accordance with *The City of Calgary Environmental Reserve Setback Guidelines*, setbacks from streams shall be applied according to stream order:
 - 1st order: 6 m setback
 - 2nd order: 30m setback
 - 3rd order: 50m setback
 - 4th order: 50m setback
- 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 Environmental Reserve Setback Guidelines*. Additional set-backs may be required based on the set-back modifiers stated in the *Development Guidelines and Standard Specifications Landscape Construction 2008*.

3. Alternative Protection of Environmentally Significant Areas

- a. Where determined practical and feasible, lands within the Conservation Study Area or elsewhere within the Plan area that are environmentally significant but do not qualify as ER under the ***Municipal Government Act***, 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. application of development controls to achieve mandatory protection of the lands;
 - iv. introduction of development incentives to encourage voluntary protection of the lands;
 - v. a land transfer or exchange undertaken in accordance with the 'no net loss' policy stated in the *City of Calgary Wetland Conservation Plan*; or
 - vi. 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 may be allowed to be dedicated in excess of the requirements of the ***Municipal Government Act*** on a voluntary basis through the subdivision process subject to a site specific evaluation of the proposal by the Subdivision Authority.

10.3 Stormwater Management Facilities on Reserve Land

10.3.1 Purpose

The purpose of these policies is to provide a basis for addressing the development of stormwater management facilities on reserve land. These policies are intended to augment the already approved policies, standards and guidelines relating to this matter. As such, the policies focus on engineered stormwater wetlands on Environmental Reserve and the circumstances under which such a proposal will be acceptable.

10.3.2 Stormwater Management Facilities on Reserve Land Policies

1. Stormwater Management Facilities on Reserve Land

- a. Stormwater management facilities shall typically be located on a public utility lot.
- b. Notwithstanding Policy 10.3.2.(1)(a) above, and subject to the applicable policies, guidelines, and standards in effect addressing stormwater management facilities on reserve land:
 - i. stormwater detention ponds, forebays and bioswales may be allowed to be located on lands dedicated as Municipal Reserve provided that:
 - A. a maximum of one third of the Reserve land dedicated within the community is encumbered by dry ponds; and
 - B. a maximum of one third of the Reserve land on a landownership basis is encumbered by dry ponds, unless landowners within the community agree to apply this requirement to their combined ownership areas.

2. Development of Stormwater Ponds on Reserve Land

- a. Where an engineered stormwater wetland is dedicated as ER, the wetland shall be:
 - i. designed and managed in a manner satisfactory to the Approving Authority; and

- ii. developed to provide a quality wildlife habitat that balances function with the provision of habitat.
- b. An engineered stormwater wetland dedicated as ER shall be located and configured to enhance and support the natural open space system.
- c. MR land may be dedicated in conjunction with ER land accommodating an engineered stormwater wetland to act as a buffer of upland area and assist in the long-term sustainability of the ER and diversity of habitat.

3. Evaluation of Engineered Stormwater Wetlands on Reserve Land

Prior to Outline Plan/Land Use approval, where an engineered stormwater wetland is proposed to be located on reserve land, a developer should submit the following:

- a. biophysical impact assessment report;
- b. stormwater management report;
- c. wetland compensation proposal;
- d. conceptual design plan;
- e. preliminary grading plan;
- f. restoration/landscape plan; and
- g. other applicable information where determined necessary by the Approving Authority.

10.4 Wetland Decisions

10.4.1 Purpose

The purpose of these policies is to provide a framework for managing wetland conservation through the Outline Plan/Land Use Amendment approval process.

Map 8 illustrates Stewart-Kantrud Class 3 to 5 wetlands, which are considered to be of higher environmental significance. The analysis of a wetland can produce several outcomes including:

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- preservation of the wetland in a natural state with some engineering measures introduced, where required, to ensure its long term sustainability;
- modification of the wetland to serve primarily as a stormwater facility while retaining its natural character; and
- development of the wetland where its retention is determined to be unfeasible.

In choosing these outcomes, issues concerning compensation in accordance with the “no net loss” policy contained within *The City of Calgary Wetland Conservation Plan* will also need to be addressed. Direct evidence should be provided describing the efforts to avoid and mitigate disturbances to wetlands prior to negotiating compensation.

10.4.2 Wetland Decision Policies

1. Retention or Development of Wetlands

- a. Where a wetland is to be retained at Outline Plan/Land Use Amendment stage, the following issues shall be addressed:
 - i. function of the wetland;
 - ii. method of acquisition;

- iii. mitigation measures to be introduced;
 - iv. engineering improvements to be introduced, where required;
 - v. financial responsibility for the mitigation measures and engineering improvements;
 - vi. long term operational responsibilities for The City;
 - vii. land or monetary compensation to be provided by the developer; and
 - viii. other matters that are determined necessary to be resolved at this stage of the planning approval process.
- b. Where a wetland is to be developed, the Outline Plan/Land Use Amendment should address:
 - i. rationale for this decision;
 - ii. function of the wetlands (following the Calgary Wetland Conservation Plan and applicable Provincial legislation); and
 - iii. any land or monetary compensation to be provided by the developer in accordance with the Wetland Conservation Plan.



10.5 Environmentally Significant Areas

10.5.1 Purpose

Environmentally Significant Areas (ESAs) are shown in Map 8, which are defined by one or more of the following criteria:

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- quality of biotic community;
- ecological function;
- distinctive and/or unusual landform; and/or
- uniqueness of habitat or ecosystem component.

ESAs are predominantly identified by Priddis Slough, Radio Tower Creek and Pine Creek, and their associated habitats, including native grasslands, shrublands and forested areas. These areas are identified as natural areas and drainage courses having crucial roles in improving water quality and quantity, flood attenuation, reducing soil erosion, providing diverse habitats for native flora and fauna, moderating climate conditions, contributing to an aesthetic urban design, and providing educational and recreational opportunities.

10.5.2 Protection of Environmentally Significant Areas

1. Identifying Environmentally Significant Areas

Areas identified as ESAs are not automatically acquired and/or protected from development, unless they qualify as Environmental Reserve as defined in the MGA. ESAs are subject to review and decision-making at the Outline Plan/Land Use Amendment Stage. The protection of ESAs can occur through one or a combination of the following means:

- a. dedication of land as ER or Municipal Reserve;
- b. purchase;
- c. implementation of development controls; and/or
- d. subdivision restrictions.

2. ESA Priority

Priority ESAs for protection will be Priddis Slough, Radio Tower Creek, Pine Creek and adjacent lands, including Aspen Poplar and willow stands, and native grasslands/shrublands.

3. Design Innovation

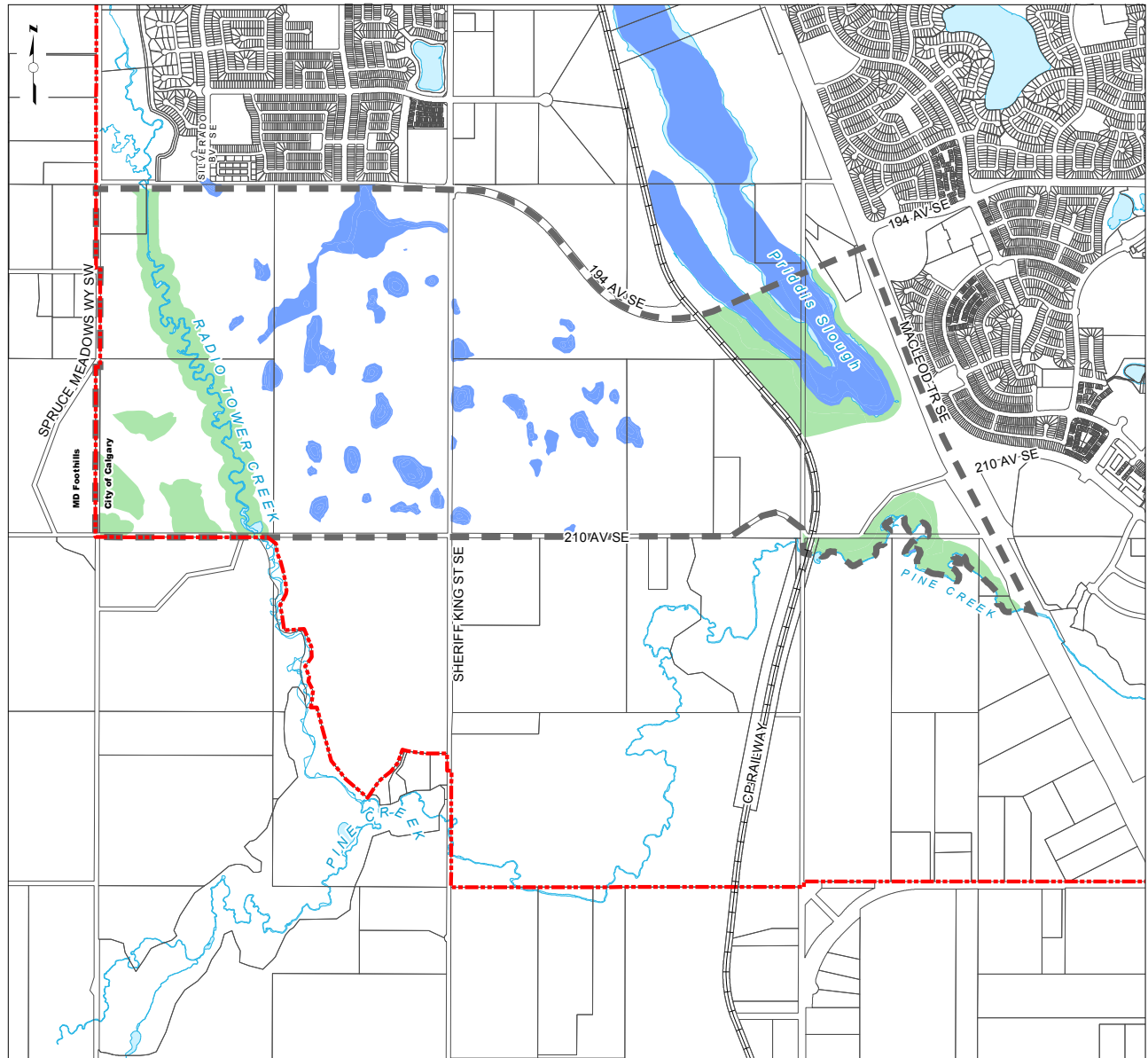
Mitigation and creative design solutions for proposed road crossings and other forms of development potentially impacting these areas should be explored to ensure sustainability for the long term.

4. Biophysical Impact Assessment (BIA)

More detailed biophysical impact assessments may be required by the proponents of any Outline Plan/Land Use Amendment applications for development that could impact these areas.

Map 8: Environmentally Significant Areas

APPROVED: 10P2014
AMENDED: 59P2017



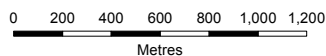
West Macleod Area Structure Plan

Environmentally Significant Areas

Legend

- Study Area Boundary
- City Limits

- Environmentally Significant Areas
(Refer to Appendix F for further detail)
- Wetland Class 3 - 5



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

NOTE:

Shown are the results from field surveys from 2012, 2013 and 2017. Data requirements and standards vary from year to year so there may be differences in the way data is displayed for the different years. Map shows which lands may be of value for conservation. More analysis is required at the time of submission to determine Environmentally Significant Areas and Wetland boundaries, their classification and extent of the Environmental Reserve area (undevelopable in accordance with the Municipal Government Act)

11.0 TRANSPORTATION AND MOBILITY POLICIES

11.1 Regional Road Network

11.1.1 Purpose

The purpose of these policies is to provide for a functional, safe and efficient regional road network. The general alignment of the regional roads is shown on the Land Use Concept (Map 4) and Transportation Map (Map 9).

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11.1.2 Regional Road Network Policies

1. Regional Road Network Design

- a. The regional road rights-of-way, and the related interchange areas, should be generally located as shown on Maps 4 and 9.
- b. The final alignment and right-of-way requirements of all regional roads and their related interchanges and intersections should be determined through a Functional Study or Design Analysis.
- c. Prior to completion of the Functional Study or Design Analysis, land use or subdivision approval on lands adjacent to a regional road should be withheld where such approval would compromise the final alignment of this roadway.
- d. Prior to Tentative Plan approval, sound attenuation requirements adjacent to all “Major” and higher-standard roads shall be addressed.
- e. The standards of Sheriff King Street, south of 210 Avenue, shown on Maps 4 and 9 are preliminary only and shall be refined at the Outline Plan/Land Use Approval process without requiring an amendment to Maps 4 and 9.

2. Emergency Access

- a. As required, emergency access to the developing portion of the community shall be identified at the Outline Plan/Land Use Amendment stage and maintained in a satisfactory manner.
- b. At-grade crossings should be discouraged over CPR tracks.

3. Interchange Function and Design

- a. Based upon the approved transportation planning studies, the interchange at Macleod Trail SE and 210 Avenue SE shall function as a fully directional interchange, and the interchange at Macleod Trail SE and 194 Avenue SE shall function as a half interchange with access to and from the north only at Macleod Trail SE.
- b. Notwithstanding (a), the feasibility of shifting the Macleod Trail SE and 210 Avenue SE interchange alignment should be reviewed between The City and the Province, and in consultation with the impacted landowners.
- c. In conjunction with the detailed design of the interchange at Macleod Trail SE and 210 Avenue SE, the access to adjacent properties shall be reviewed in consultation with the impacted landowners.
- d. As part of the Regional Plan exercise, Transportation Planning committed to review alternative functional designs for the Macleod Trail SE - 210 Avenue SE interchange and the Macleod Trail S - 194 Avenue SE interchange provided by consultants representing area stakeholders. Should The City initiate a formal revision to the functional design for the Macleod Trail SE - 194 Avenue SE interchange, The City will undertake consultation with adjacent landowners including those adjacent to the Macleod Trail SE - 210 Avenue SE interchange, in accordance with The City of Calgary’s engage! policy for stakeholder engagement.
- e. Road connections identified into lands within the Municipal District of Foothills (MD) shall not be constructed until such time as lands in the MD to the south of the Plan boundary are annexed into The City of Calgary.
- f. Development proposals that require emergency access through the MD shall be evaluated in consultation with the MD.

Bylaw 59P2017

11.2 Internal Road Network

11.2.1 Purpose

The purpose of these policies is to provide for an internal road network within the community that accommodates vehicular and non-motorized traffic in a safe, efficient and balanced manner. The policies and design guidelines aim to balance the need for motor vehicle movement and parking with the need for using streets to create a sense of community.

11.2.2 Internal Road Network Policies

1. Collector Street/Major Street Network (Map 9)

- a. Expressways, Major Roads, and Collector Roads comprising the internal road network within the Plan Area shall be generally shown as identified on Maps 4 and 9.
- b. Road standards should allow neighbourhoods to be linked together with many routes of travel being available for various modes of transportation. Compliance to the Complete Streets Policy and Guide will assist in this objective.
- c. Tree planting should be undertaken in the boulevards and medians of public streets in accordance with City policy.
- d. The incorporation of green infrastructure is encouraged at the design stage.
- e. Roundabouts should be considered as the preferred form of traffic control along the major roadways, unless shown through an analysis that it is not appropriate.
- f. The standards of the internal road network shown on Maps 4 and 9 are preliminary only and shall be refined at the Outline Plan/Land Use Approval process without requiring an amendment to Maps 4 and 9.
- g. The exact road pattern, including detailed design and classification, surrounding the Priddis Slough, will be determined at the Outline Plan/Land Use Amendment stage to the satisfaction of the Development Authority.

2. Local Road Network

- a. The local road network is not shown on Maps 4 or 9, but shall be defined in the context of an Outline Plan/Land Use Amendment application.

- b. The layout of the local road network should:
 - i. provide direct connections and multiple route choices to origin/destination points and connectivity between parts of the community for all modes of transportation;
 - ii. provide road connections that converge toward the neighbourhood nodes, and the transit station planning area;
 - iii. allow for efficient and direct transit routes; and
 - iv. be bicycle friendly, where possible.
- c. The latest applicable road standards and policies, such as but not limited to the Design Guidelines for Subdivision Servicing, Complete Streets Policy and Residential Streets Design Policy, shall govern.
- d. An internal road network comprised of interconnected streets creating multiple routing options for pedestrians, cyclists and motorists should be provided within and around the Neighbourhood Nodes, the Mixed Use Community Node, and the Transit Station Planning Area.
- e. The Residential Area of Interest should be designed to provide interconnected streets creating multiple routing options for pedestrians and motorists.
- f. The road network in the southwest corner of the community (Spruce Meadows Way SW and 210 Avenue SE) deviates from the City limits to follow the topography of the area. The MD of Foothills and The City of Calgary shall work co-operatively with local landowners to resolve issues around construction, servicing, maintenance, etc.
- g. The Approving Authority may allow for a road right-of-way to cross EOS if all relevant legislation and City policies existing at the time of development have been complied with and ecological and recreational connectivity is maintained to the satisfaction of the Approving Authority.
- h. Roundabouts should be considered as the preferred form of traffic control at the intersection of collector roadways within the community unless shown through analysis as not appropriate.

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3. Internal Road Design

Long stretches of collector roads should be aligned to include curves, roundabouts, shorter rather than longer block faces or other traffic calming mechanisms.

4. Community Road Network Concept Plan

In conjunction with an Outline Plan/Land Use Amendment application, a Community Road Network Concept should be submitted showing the alignment of the major/collector road network for the balance of the community that is not included within the application or a previously approved Outline Plan/Land Use Amendment application.

11.3 Creek Crossings

Creeks are significant natural features and are important community amenities within the West Macleod ASP. As such, any potential road/utility crossing shall account for water quality of the creeks, and their importance to both the local ecology and future recreational uses.

- a. Potential road/utility crossings of creeks are shown conceptually on Map 4 and 9.
- b. Creek crossings are subject to the *Environmental Reserve Setback Guidelines* (2007), the *Calgary Wetland Conservation Plan*, and all other applicable guidelines.
- c. Any proposed creek crossing shall demonstrate how
 - i. the impact on Environmentally Significant Areas will be minimized as much as possible, both during construction and in final design;
 - ii. best practices for wildlife crossings (if applicable) is incorporated into the design; and
 - iii. recreational crossings are provided.
- d. Parks and Transportation and Urban Development shall collaborate during the crossing design process to ensure transportation, utilities, water quality, recreational and ecological concerns are addressed.
- e. The Environmental Open Space Study Area policies of this Plan, respectively, apply to all creek areas.
- f. Outline Plan/Land Use Amendment applications made to develop the area on the east side of Pine Creek, west of CPR tracks and north of City limits must adhere to the following access conditions:
 - i. The latest applicable access standards and policies, such as but not limited to the Design Guidelines for Subdivision Servicing and Fire Department Access Standards, shall govern.
 - ii. Applications requiring two accesses may be accommodated by one public access and a second public or emergency access as determined by the applicable standards. In the case of an emergency access, protecting for possible future public road right-of-way is required.

- iii. For the purposes of quantifying the dwelling unit count, it is the cumulative unit count east of Pine Creek, west of CPR tracks and north of City limits that triggers the above requirements.
- iv. Accesses shall be designed and located to the satisfaction of Transportation, the Calgary Fire Department, and the Approving Authority.
- v. Secondary access does not have to be across Pine Creek if other options are available and acceptable to the appropriate authorities. **Bylaw 59P2017**

11.4 Pedestrian and Bicycle Circulation

11.4.1 Purpose

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

11.4.2 Pedestrian and Bicycle Circulation Policies

1. Regional Pathways

- a. The regional pathway should:
 - i. generally be aligned as shown on Maps 4 and 5;
 - ii. not be adjacent to front driveways;
 - iii. not be in conflict with commercial driveways/aisles;
 - iv. not be located at the rear of commercial developments; and
 - v. aim to be located within or integrated with a park or natural feature.
- b. Where the regional pathway cannot be located within or integrated with a park or natural feature, it may locate within a road right-of-way in the form of a pathway constructed in place of a sidewalk with appropriate landscaping.

2. Local Pathways, Sidewalks, and Walkways

- a. The alignment of local pathways, sidewalks and walkways should be determined at the Outline Plan/Land Use Amendment stage.
- b. The local pathway, sidewalk and walkway system should be designed to:
 - i. achieve short, convenient, and direct nonmotorized connections to activity nodes and transit stops;
 - ii. promote walking and cycling throughout residential areas;
 - iii. provide convenient and practical access to transit stops;
 - iv. link origin/destination points within the community; and
 - v. connect to the regional pathway system.

3. On-Street Bicycle Routes

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 (2008) and the *City of Calgary Pathway and Bikeway Plan (2000)*.

11.5 Transit Service

11.5.1 Purpose

The purpose of these policies is to provide for direct, convenient and efficient transit service within the Plan area. The community will be served by LRT service, and feeder and express bus transit routes that will extend throughout the Plan area. Transit service areas, stops and routes will be identified at the Outline Plan/Land Use Amendment stage.

11.5.2 Transit Service Policies

1. Transit Service Areas

- a. Transit service area requirements should be achieved through the provision of:
 - i. direct, convenient roadway connections and transit stops; and
 - ii. sidewalks and walkways that are located to facilitate direct pedestrian access to transit stops.

2. Bus Transit Stops

- a. Bus Transit stops should be located to:
 - i. serve higher density residential development and activity nodes (such as Neighbourhood Nodes, schools, the Community Centre, public facilities, the Mixed Use Community Node, and the Transit Station Planning Area);
 - ii. provide direct, convenient transit service; and
 - iii. be provided within a five-minute walk (400m) of all homes to encourage transit ridership.
- b. Bus transit stops should be equipped with suitable amenities such as benches, shelters and other amenities where deemed appropriate.

3. Transit Routes

- a. The design of the road network should provide for efficient transit routes within the community.
- b. The transit routes are conceptually identified on Map 9, but will be further refined at the Outline Plan/Land Use Amendment stage.

4. Transit Coverage Plan

A Transit Coverage Plan should be provided at the Outline Plan/Land Use Amendment stage in accordance with the guidelines provided in Appendix A.7.

11.6 Transportation Demand Management (TDM)

11.6.1 Purpose

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

11.6.2 TDM Policies

Developers are strongly encouraged to develop Transportation Demand Management 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 motor vehicles for commuting by employees and residents;
- c. reduce the peak-period demands on the transportation system; and
- d. reduce the need for existing rates of on-site employee parking.

11.7 Heavy Rail

11.7.1 Purpose

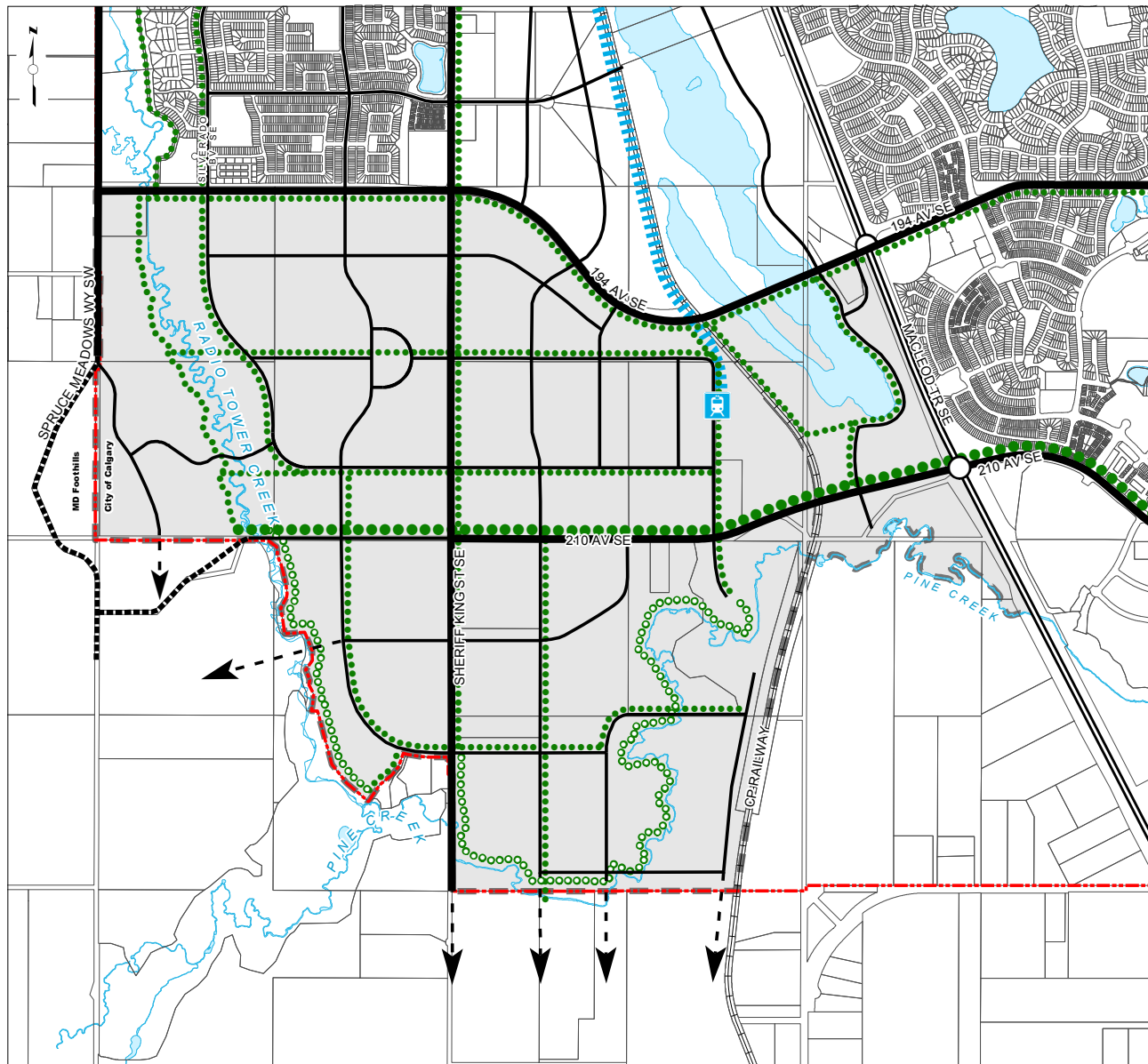
Canadian Pacific Railway (CPR) tracks runs north to south, bisecting the easterly portion of the Plan Area, directly west of the Priddis Slough and along the southeasterly boundary of the Plan Area, as shown on Map 9. This railway corridor is an active line. The future extension of the Light Rail Transit (LRT) should follow a similar alignment bisecting the Plan Area.

The purpose of these policies is to mitigate various safety, noise and vibration impacts associated with development in proximity to railway operations and minimize the conflict between rail and adjacent land uses.

11.7.2 Heavy Rail Policies

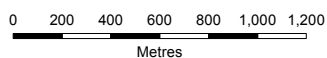
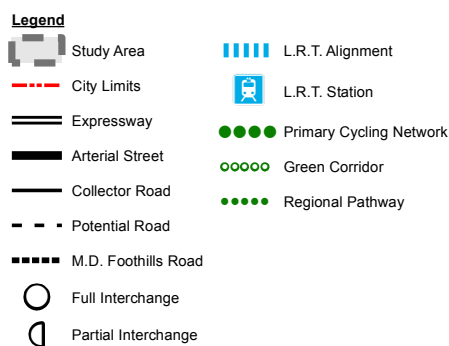
1. All development shall conform to all requirements of the City, due to the proximity to the freight railway corridor, at the time of development permit application.
2. The building face of residential development shall be setback at a minimum of 30 metres from the property line of any freight railway corridor.
3. Noise and Vibration studies shall be provided to support residential and sensitive uses adjacent to freight railway corridor at the time of Development Permit review.
4. Development shall include appropriate fencing along the freight railway right of way property line.

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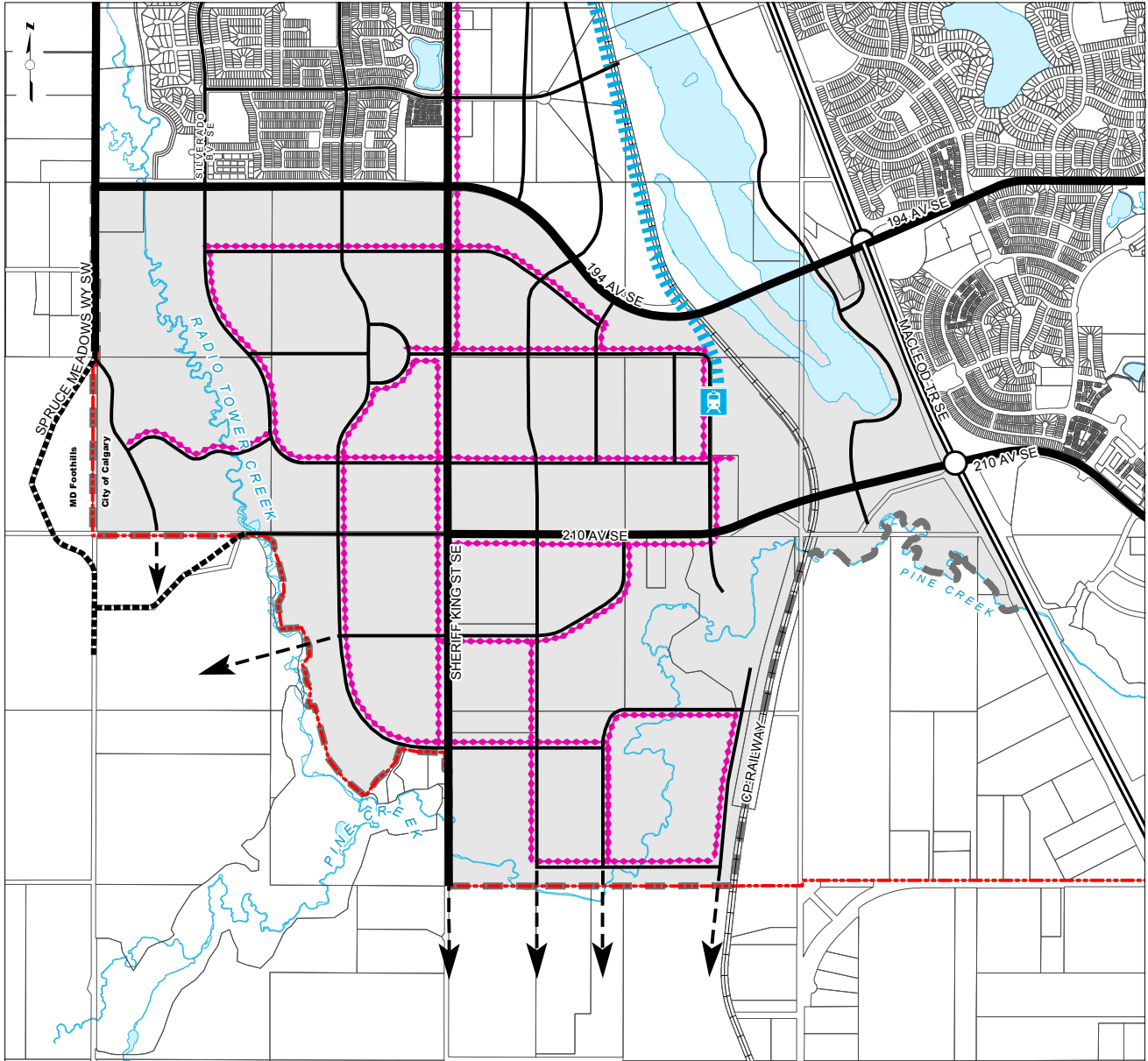


West Macleod Area Structure Plan

Transportation

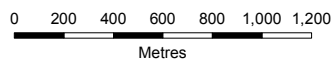
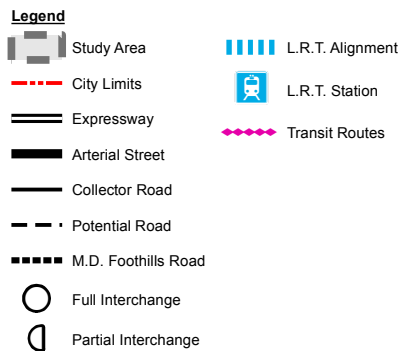


This map is conceptual only. No measurements of distances or areas should be taken from this map.



West Macleod Area Structure Plan

Transit



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

12.0 UTILITY SERVICING POLICIES

12.1 Utility Infrastructure

12.1.1 Purpose

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

12.1.2 Utility Infrastructure Policies

1. Municipal Utilities

- a. Urban development within the Plan Area shall be serviced with municipal water, sanitary sewer and a stormwater system.
- b. The alignment and capacity of water distribution mains and feeder mains, sanitary sewer mains and trunks and stormwater mains and trunks should be in accordance with City standards, based upon utility servicing studies and analysis.
- c. Utility rights-of-way and easements shall be provided to accommodate municipal utilities as determined necessary.
- d. Utility rights-of-way and easements, public utility lots and road rights-of-way may be required to be pre-dedicated or registered across undeveloped land as determined necessary to facilitate orderly and sequential urban development.

2. Shallow Utilities

- a. Urban development within the Plan Area shall be serviced with shallow utilities (i.e., gas, cable, electricity and telephone).
- b. The location of all shallow utilities and the provision of rights-of-way and easements and related line assignments should be addressed to the mutual satisfaction of The City, the landowner and the utility companies.
- c. Utility rights-of-way and easements shall be provided to accommodate shallow utilities as determined necessary.

3. Utility Alignments

- a. 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.

- b. Prior to Outline Plan/Land Use approval, a developer shall submit studies and information determined necessary to identify the location and alignment requirements for utilities within the development.
- c. A developer may be required to provide, or enter into an agreement to provide when required, the utility rights-of-way or easements necessary to accommodate the extension of municipal utilities through or adjacent to a site in advance of or concurrent with development in order to allow for the servicing of a site.
- d. Subject to agreed upon cost recovery mechanism, a developer may be required to finance, or enter into an agreement to finance when required, the costs associated with the extension of municipal utilities through or adjacent to a site in advance of development in order to allow for the servicing of a site.
- e. 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.
- f. The impact to EOS shall be minimized.

12.2 Water Servicing

12.2.1 Purpose

The purpose of these policies is to provide for a suitable water supply system designed to service the urban development requirements throughout the Plan area.

12.2.2 Water Servicing Policies

1. Design of Water Distribution System

The water distribution system for the Plan area shall be designed to adequately and efficiently serve the ultimate development of the area.

2. Review of Water Distribution System

- a. The proposed interim distribution system 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.
- b. Based on the analysis, The City will establish a maximum lot service capacity within the Outline Plan area.
- c. Once the service capacity lot threshold has been reached, further analysis may be required in conjunction with additional Tentative Plan approvals.
- d. As of 2009, the water distribution system that services the Plan area is limited. Therefore, Water Resources shall identify any off-site distribution mains and/or transmission feeder mains that may be required to be installed within an Outline Plan area.

3. Financing

A developer may enter into a Funding and Financing Agreement with The City for the design and construction of the water feeder mains and pump station.

12.2.3 Pressure Zone Information

1. Glenmore Pressure Zone

The lands between Macleod Trail SE and Sheriff King Street S are within the Glenmore Pressure Zone and will be serviced by the 210 Avenue SE feeder main and connections to the existing feeder main along Macleod Trail SE.

The lands immediately west of Macleod Trail require the South Feeder main Loop to be complete. This loop has been built and includes a feeder main south along

Macleod Trail, east along 210 Avenue SE, across the river and connecting to the Cranston Feeder main on the east side of the river.

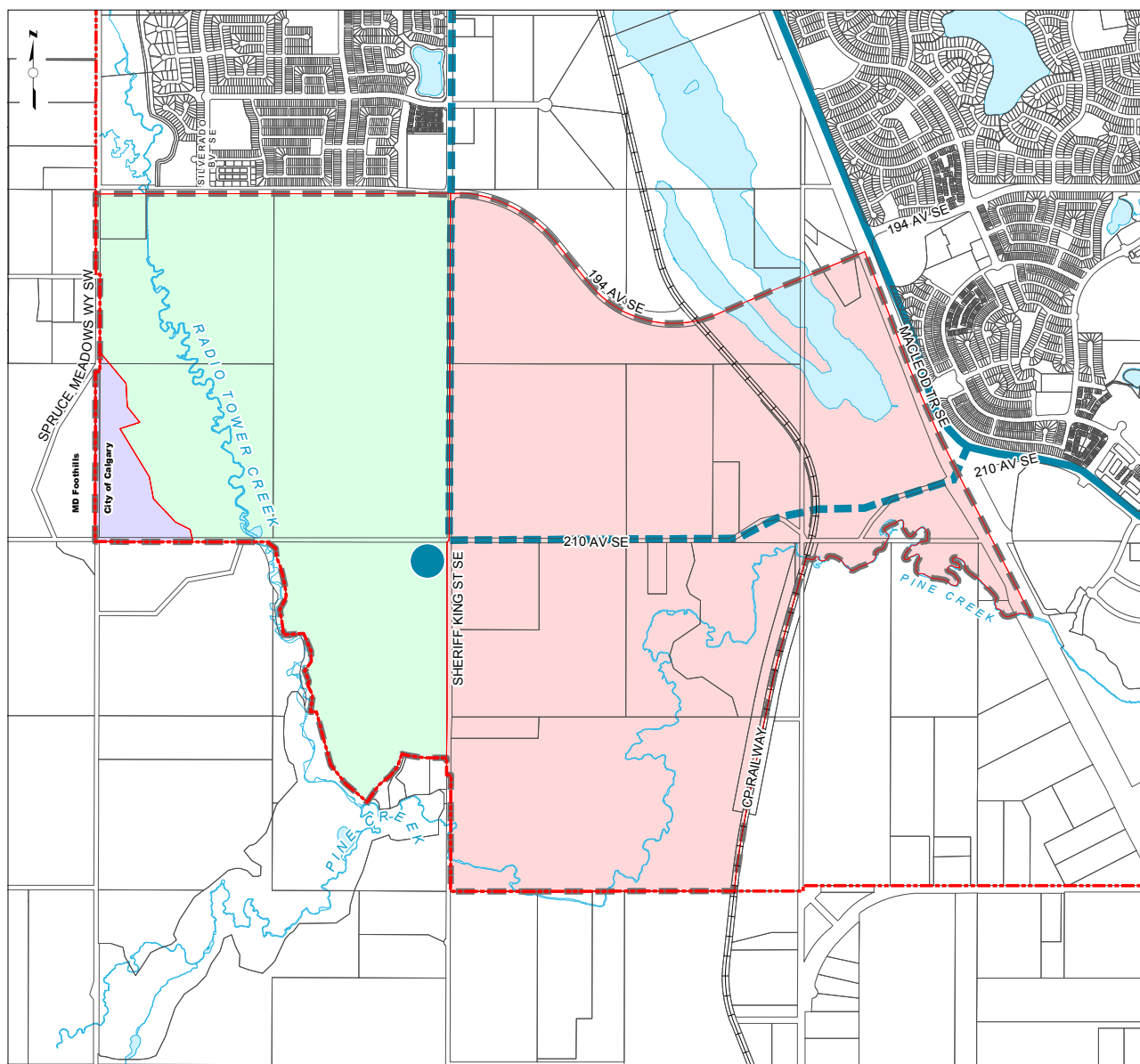
2. Lower Sarcee Pressure Zone

The lands located west of Sheriff King Street S, and approximately below the 1108 metre contour interval are within the Lower Sarcee Pressure Zone. The exact western boundary of the Lower Sarcee Pressure Zone will be established at the Outline Plan/Land Use Amendment stage. These lands will be serviced by a feeder main extension from 162 Avenue SW and James McKeivitt Rd SW, south across Highway 22X, south along the west side of Silverado and through the Plan area to 210 Avenue SE and Sheriff King Street S. Another feeder main extension along 210 Avenue SE, from the existing feeder main along Macleod Trail, and a pump station at 210 Avenue SE and Sheriff King Street S will be required. The pump station requires a 0.2 hectare (0.5 acre) site as generally identified on Servicing Map 11.

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3. Westview Pressure Zone

The lands higher than the 1108 metre contour interval are within the Westview Pressure Zone; however, there is no opportunity to connect to the existing Westview Pressure Zone north of Highway 22X. There are approximately 16 hectares (40 acres) of land within this zone. The zone would require a pump station that will not be financed by The City due to its significant cost relative to the area. Should a developer decide to finance the pump station it would be required to meet The City's design standards for a closed Pressure Zone.



West Macleod Area Structure Plan

Water Services

Legend

- | | | |
|---------------------|---------------------|----------------------|
| Study Area Boundary | Existing Feedermain | Water Pressure Zones |
| City Limits | Proposed Feedermain | |
| | Future Pump Station | |
| | | Glenmore |
| | | Lower Sarcree |
| | | Westview |

0 200 400 600 800 1,000 1,200
Metres

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

12.3 Sanitary Servicing

12.3.1 Purpose

The purpose of these policies is to provide for a suitable sanitary sewer trunk system designed to serve the urban development requirements throughout the Plan Area as identified on Map 12.

12.3.2 Sanitary Servicing Policies

1. The sanitary sewer system for the Plan Area shall be designed to adequately and efficiently serve the ultimate development of the area.
2. To service the full build-out of the Plan Area, local collection pipes and a locally-sized sanitary lift station and forcemain shall be required.

At the Outline Plan/Land Use Amendment review stage, a Sanitary Servicing Study may be required to demonstrate that the subject site can be serviced in accordance with the overall design of the sanitary sewer system for the area.

3. The Plan Area will be serviced by the future West Pine Creek Sanitary Trunk, with the sanitary catchments and trunk alignment identified on Map 12.

Prior to, or in conjunction with, an Outline Plan / Land Use amendment application, the required capital financing and timing for the funding of the sanitary trunk line shall be in place, subject to the requirements identified in Section 12.1.

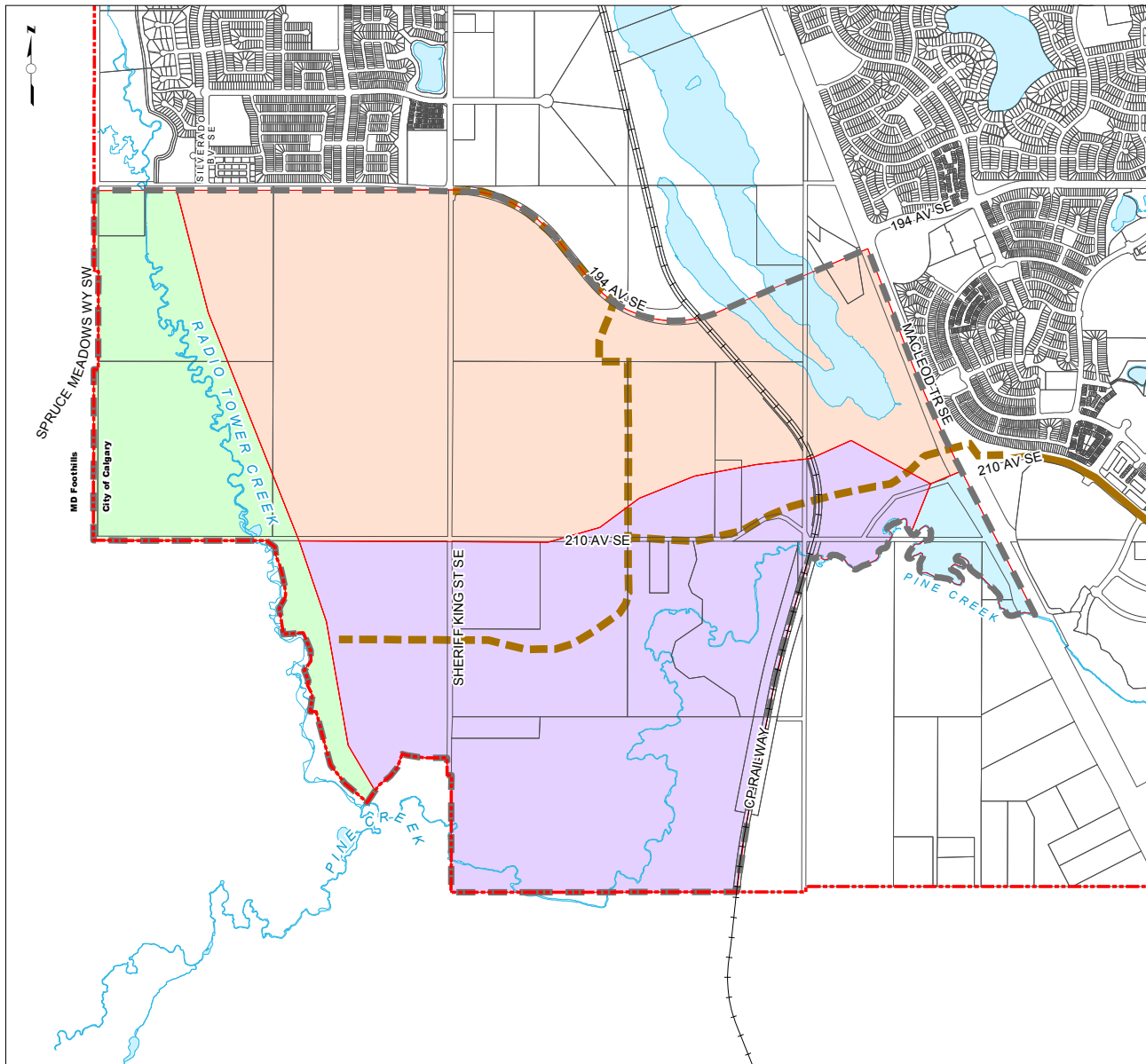
4. Any proposed land use or transportation network changes to this Plan may require re-evaluation and modification of sanitary infrastructure by Water Resources.
5. The location of proposed utility rights-of-way shall be identified at the Outline Plan/Land Use Amendment stage.
6. Utility alignment should minimize impact to Open Space.

Prior to, or in conjunction with, an Outline Plan / Land Use amendment application, the required capital financing and timing for the funding of the sanitary trunk line shall be in place, subject to the requirements identified in Section 12.1.

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Map 12: Sanitary Services

APPROVED: 10P2014
AMENDED: 59P2017



West Macleod Area Structure Plan

Sanitary Services

Legend

- Study Area Boundary
- - - City Limits
- Existing Sanitary Trunk
- Proposed Sanitary Trunk
- Sanitary Catchment Areas

0 200 400 600 800 1,000 1,200
Metres

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

12.4 Stormwater Management

12.4.1 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 within the Plan area.

The Plan area is within the Pine Creek Drainage Basin. Stormwater from the development will drain into required stormwater facilities located within the Plan area. The majority of these facilities will discharge to the Priddis Slough for release into Pine Creek. The remainder of the stormwater facilities will discharge to Radio Tower Creek which ultimately discharges to Pine Creek.

Two master drainage plans were prepared for the Plan Area. Staged master drainage plans will be required to follow the Pine Creek Drainage Study in addition to these Master Drainage Plans. The West Macleod Master Drainage Plan (Stantec 2010) and the South Regional Policy Plan Master Drainage Plan (UMA/ AECOM 2006) identify how the stormwater drainage within the Plan Area is to be serviced.

12.4.2 Stormwater Management Policies

1. Stormwater Detention (Dry) Ponds on Reserve Land

- a. A stormwater detention (dry) pond shall be located on a public utility lot wherever possible.
- b. Notwithstanding subsection (1)(a), stormwater ponds located on reserve lands shall be subject to the requirements of the **Municipal Government Act**.
- c. 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 at the discretion of the Approving Authority.

2. Design of Stormwater Management System

- a. The stormwater management system for the Plan shall be designed to adequately and efficiently serve the ultimate development of the area.
- b. The number of ponds and specific locations of such ponds will be confirmed at Outline Plan/ Land Use Amendment stage.

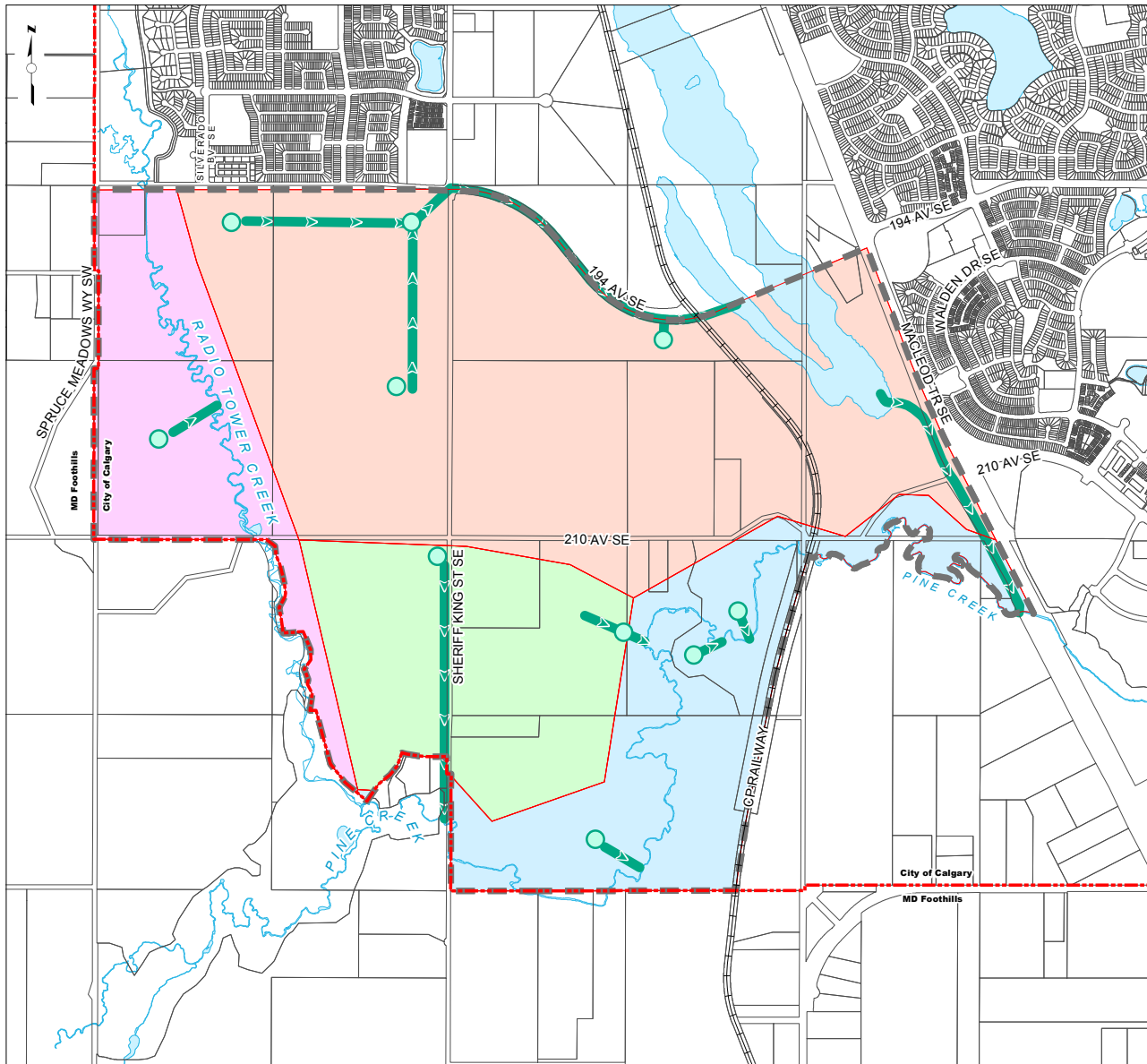
- c. As part of an Outline Plan/Land Use Amendment application, a developer shall submit a Staged Master Drainage Plan consistent with the Master Drainage Plan as approved by The City and the Province to demonstrate that the site can be serviced in accordance with the overall design of the stormwater management system for the area. The Staged Master Drainage Plan will also be required to comply with any new stormwater management policies that have been approved.
- d. Alternate and more cost-effective alignments may be considered at the Outline Plan / Land Use amendment stage that may require amendments to the West Macleod Stormwater Master Drainage Plan (Stantec 2010) or for the lands south of 210 Ave SE, the South Regional Policy Plan Master Drainage Plan (UMA/ AECOM 2006).

Amendments to Master Drainage Plans significant enough to alter drainage philosophy or land use may require an amendment to the Storm Services Map 13. Any revisions to Master Drainage Plans should be done in conjunction with the Staged Master Drainage Plan and should consider all impacted storm catchments (including areas beyond the ASP boundaries, for which drainage system modifications are required, to sustain stream courses, wetlands or other hydrologic features and functions), and may not require an ASP amendment, dependant on the extent of changes and at the discretion of the Approving Authority.

- e. The stormwater management system for the Plan Area shall align with the release rates and runoff volume control targets set in the "The Pine Creek Drainage Study" by AMEC (2007), the Memo on "Pine Creek Drainage Study Recommendations: Alternatives to the 20 mm Source Volume Capture Criteria" (2009), and other relevant and applicable City of Calgary policies.
- f. Low-Impact Development solutions in accordance with the Pine Creek Drainage Study and other relevant and applicable City of Calgary policies are encouraged for Outline Plan and Development Permit application, such as:
 - i. natural water balance modelling (using natural water storage and drainage solutions such as rain gardens, bioswales, bioretention areas, reduces flow and run-

Map 13: Storm Services

APPROVED: 10P2014
AMENDED: 59P2017



West Macleod Area Structure Plan

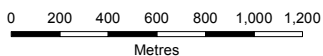
Storm Services

Legend

- Study Area Boundary
- City Limits
- Storm Management Pond (conceptual location)
- Storm Pipe

Storm Catchment Areas

- 3318
- 3464
- 3506
- 3509



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

off rates, pervious surfaces and absorbent landscaping, etc.);

- ii. Green Roofs (rooftop gardens, vegetated roof surfaces and walls); and
- iii. stormwater source control best management practices.

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3. 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. naturalized methods, such as wetlands, to mitigate the effects of stormwater runoff into watercourses as opposed to hard engineering measures; and
 - iii. stormwater measures that reduce impermeable surface runoff and correspondingly increase the permeable area such as permeable pavement, rain gardens, etc.
- b. Where appropriate, the stormwater management system should be designed to:
 - i. operate on a gravity basis and utilize the existing wetlands in an environmentally compatible manner; and
 - ii. introduce mitigation measures to address the potential impact of water quality on existing wetlands and waterways including Pine Creek and the Bow River.

4. River Flood Risk Areas

Portions of the Plan Area lie within mapped flood risk areas and are subject to controls in The City’s Land Use Bylaw, the Provincial Water Act, slope stability policies, riparian setback policies and other federal or provincial regulations. This regulatory and policy framework, aims to ensure planning processes yield development that will minimize accrual of incremental safety, property and environmental risk under flood conditions while protecting the riparian functions, water quality and aesthetics of the shoreline interface of Pine Creek.

Though no Floodway/Floodplain mapping has yet been provincially or municipally designated for Pine Creek,

planning will be guided to conform to the intents of Part 3, Division 3 of the Land Use Bylaw. Mapping developed in Alberta Environment and Sustainable Resource Development’s 2013 report titled Pine Creek Flood Hazard Mapping study will be considered.

Policy deliberations following widespread flooding through Southern Alberta in 2013 may prompt consideration of changes to the regulation of flood risk areas. The potential for emerging changes to impact planning for the Plan Areas should be recognized.

The Land Use Bylaw controls for floodway, flood protection building offsets, structural and hydraulic flood-proofing requirements, material storage restrictions and grading/filling controls apply to flood risk areas.

In general, no structures or topographic modification of the floodway are permitted. Modifications to the floodway could impact local water levels already designated and regulated to adjacent development. Design of utilities, transportation and other infrastructure features must address flood conditions. Any designs for path/promenade, landscaping, plantings or other features in floodway areas must address regulatory elements in Water Act, Fisheries Act, and Navigable Waters Act (or other relevant statutes) from the earliest conceptual stages.

Portions of the Plan area form the valley walls of the Pine Creek and are steeply sloping. Stability of these slopes may have an impact on the creek and riparian areas. Any development shall conform to The City’s Slope Adaptive Management Guidelines. Any development impacts on surface and groundwater that could affect slope stability shall be addressed.

5. Financing

A developer may enter into a Funding and Financing Agreement with The City for the design and construction of a storm trunk and outfall.

6. Outline Plan/Land Use Amendment

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 comprising a natural wetland and drainage course, public utility easements or equivalent legal instruments should 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.

12.5 Environmental Sustainability

12.5.1 Purpose

The purpose of these policies is to promote environmental sustainability through urban design, recycling, water conservation, resource conservation and energy conservation.

12.5.2 Environmental Sustainability Policies

1. Street Trees

- a. Street trees within boulevards should be provided according to The City of Calgary's Complete Streets Guide.

2. Water Conservation

Encourage water conservation measures such as:

- a. the use of rain gardens, open ditches or swales, and pervious driveways and parking areas in order to maximize infiltration of stormwater and minimize runoff into environmentally critical areas;
- b. water efficient open space, parks, and other landscaped areas, including the use of drought-tolerant vegetation for landscaping and xeriscaping strategies; and
- c. matching water quality to water use by incorporating rainwater collection systems on site and architectural design for the use of rainwater for irrigation and other uses, in accordance with applicable codes at the time of application.

3. Resource Conservation

Resource-saving design and building techniques, such as green building standards (e.g., LEED or Built Green Alberta Standards), solar orientation, xeriscaping, and ecological landscaping that supplements efficient heating and cooling systems should be considered in site planning, building design, and construction.

4. Energy Conservation

In consultation with Calgary Roads, developers should be encouraged to use street light fixtures that are energy efficient, minimize light pollution and are aesthetically pleasing.

12.6 Lighting

1. Dark Skies

- a. Due to the proximity to two astrophysical observatories, a nocturnal preserve, and the Pine Creek wildlife corridor, all City of Calgary infrastructure should apply dark sky principles to mitigate light pollution, including the following considerations:
 - i. Because of proximity to local observatories, a luminaire Backlight, Uplight, Glare (BUG) value with a U (uplight) value of 0 should be used. Values for B (backlight) and G (glare) should be minimized.
 - ii. Post-top lighting, column lighting, in-pavement lighting, and specialty lighting should not be used due to glare, backlight and other light pollution concerns.
 - iii. Time of day restrictions should be considered, particularly for large-format facilities and sites.
- b. All other sites within the amendment area should give consideration to the dark sky principles listed above when selecting appropriate lighting standards and fixtures in order to mitigate light pollution.

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13.0 GROWTH MANAGEMENT POLICIES

13.1 Staging of Urban Growth

13.1.1 Purpose

The purpose of these policies is to ensure that development within the Plan area proceeds in an efficient and economical manner through the Outline Plan/Land Use Amendment process and complies with the established staging requirements of Council.

All required infrastructure and a financing plan shall be in place prior to approval of Outline Plan/Land Use Amendment applications.

13.1.2 Staging of Urban Growth Policies

1. Timing of Service Extension

The provision of municipal services to the Plan area:

- i. shall be comprehensively evaluated to demonstrate that urban growth proceeds in a logical, feasible, and economic efficient manner;
- ii. shall be subject to The City's city-wide capital budgeting priorities and approval process;
- iii. may be financed by a developer subject to Policy; and
- iv. are subject to the requirements of the MGA.

2. Timing of Development

- a. Outline Plan/Land Use Amendment applications shall demonstrate that the required level of services will be provided, including but not limited to:
 - i. transportation network capacity;
 - ii. water service capacity;
 - iii. sanitary service capacity;
 - iv. stormwater service capacity;
 - v. phasing plan for development within the application area; and
 - vi. emergency service.
- b. Prior to the commencement of development resulting from the first application for Outline Plan/Land Use Amendment within the Plan area, the following shall be provided:

- i. Construction of 194 Avenue SE to a major road or the provision of a satisfactory alternative;
- ii. Deep utilities; and
- iii. Construction of, and the commencement of fire protection and response services delivered from an Emergency Response Station in a location that will provide appropriate coverage to the community.

3. Evaluation of Outline Plan/Land Use Amendment application

- a. An Outline Plan/Land Use Amendment application must include a capital cost analysis and resolve outstanding municipal infrastructure financing issues and requirements for the proposed application.
- b. In evaluating an Outline Plan/Land Use Amendment application the following factors shall be considered:
 - i. identification of required on-site and downstream servicing infrastructure improvements and resolution of public and private financing responsibilities for these improvements, and
 - ii. identification of required on-site and downstream transportation infrastructure improvements, and resolution of public and private financial responsibilities for these improvements.

4. Staging of Development

As part of the approval of an Outline Plan/Land Use Amendment application, a method of coordinating the rate of development with the capacity of the publicly financed core infrastructure should be implemented as appropriate through the Outline Plan/Land Use Amendment process.

13.2 Servicing of Urban Growth

13.2.1 Purpose

The purpose of these policies is to ensure that the major infrastructure improvements required to serve development within the Plan area are identified prior to approval of an Outline Plan/Land Use Amendment application. This includes both on-site and off-site transportation and utility infrastructure improvements and facilities. This information is to form part of the decision-making process on an Outline Plan/Land Use Amendment application.

13.2.2 Servicing of Urban Growth Policies

1. Identification of Infrastructure Improvements and Facilities

As part of an Outline Plan/Land Use Amendment application, a developer should submit information for the subject site identifying:

- i. the major on-site and off-site transportation and utility infrastructure improvements and facilities necessary to serve the subject site;
- ii. provincial, municipal and developer financial obligations for these transportation and utility infrastructure improvements and facilities;
- iii. the projected phasing (rate) of growth;
- iv. the required timing of construction or development thresholds for the provincially and municipally financed transportation and utility infrastructure improvements and facilities, relative to projected land absorption rates; and
- v. as determined appropriate, the timing of any downstream transportation and utility infrastructure improvements and facilities required as it relates to the subject site.

2. Public Infrastructure Improvements in Relation to Budgeting Priorities

As part of the growth management analysis, the Administration's Growth Management Committee shall address the city-wide budgeting priorities of The City in relation to any major municipally financed on-site or off-site transportation and utility infrastructure improvements and facilities necessary to serve the subject site.

3. Report to Council

The report to Council accompanying a Land Use Amendment application should address the proposal in the context of the policies of Section 13.2.2 (1) and (2).

13.3 Financing of Urban Growth

13.3.1 Purpose

The purpose of these policies is to address the financing of development as determined through the Land Use Amendment process in relation to the financing of transportation and utility infrastructure improvements or facilities necessary to serve such growth. In most cases, The City and the developer will be required to finance the necessary infrastructure improvements and facilities.

13.3.2 Financing of Urban Growth Policies

1. Financing of Development

Subject to policy 13.4.2(2) (Land Use Approval Options) or as agreed to between The City and the developer, any expenditure for studies, improvements or facilities proposed within the Plan area shall be funded in accordance with the standard practice for land development in effect at the time the improvements or facilities are being considered.

2. Financing by The City

- a. Any public expenditure for improvements, facilities or municipal programs proposed within the Plan area that are to be funded by The City shall be:
 - i. subject to The City's capital budgeting priorities and approval process; and
 - ii. evaluated in relation to the needs of other communities and city-wide spending priorities.

3. Financing by Developer

- a. As and when subdivision and development proceeds on a parcel of land, and in accordance with the Standard Development Agreement in place at the time, a developer shall pay the specified share of the costs of infrastructure and facilities required to service the site.
- b. Where a developer finances the cost of extending infrastructure that would normally be financed by an adjacent developer, cost-recovery requirements shall apply to the benefiting adjacent developer in accordance with the Standard Development Agreement.

- c. Where a developer finances the cost of extending infrastructure that would normally be financed by The City, The City may at its discretion, subject to Policy 13.3.2 (2), enter into a Construction and Financing Agreement with the developer that details the facilities to be constructed and the method and timing of cost-recovery to the developer.
- d. Each developer shall pay the applicable acreage assessments.

13.4 Coordination of Urban Growth

13.4.1 Purpose

The purpose of these policies is to provide for the coordination between land use approval decisions and the budgeting for publicly financed transportation and utility infrastructure improvements and facilities necessary to service growth within the community.

13.4.2 Coordination of Urban Growth Policies

1. Land Use Amendment and Budgeting Process

The Land Use Amendment and the budgeting process for municipally financed transportation and utility infrastructure improvements and facilities shall be coordinated in a manner satisfactory to Council.

2. Land Use Approval Options

Prior to Land Use approval, where major on-site or off-site transportation and utility infrastructure improvements and facilities are required to be financed by The City to serve the proposed development:

- i. a commitment from The City to undertake the financing of the transportation and utility infrastructure improvements and facilities shall be received; or
- ii. the matter shall be addressed in some other manner that is satisfactory to Council, including but not restricted to:
 - A. entering into an Off site Levy Bylaw with the developer that addresses funding requirements for infrastructure improvements and facilities;
 - B. granting Land Use Approval to enable development to proceed while continuing to monitor the situation in relation to budgeting priorities;
 - C. granting Land Use Approval to enable development to proceed and realigning budgeting priorities accordingly; or

- D. withholding Land Use Approval or placing limitations on subdivision or development until such time as the funding for the required infrastructure improvements and facilities is resolved.

13.5 Review of Urban Growth

13.5.1 Purpose

The purpose of these policies is to provide a process for evaluating Outline Plan/Land Use Amendment application conformity with the growth management policies contained in Section 13.0: Growth Management of the Plan.

13.5.2 Review of Urban Growth Policies

1. Resolution of Growth Management Issues

Prior to submission of an Outline Plan/Land Use Amendment application, the developer is encouraged to meet with the Administration to review the proposal with respect to its conformity and provide preliminary analysis of the Outline Plan/Land Use Amendment in terms of its conformity with the growth management policies contained in Section 13.0: Growth Management Policies of the Plan.

2. Council Appointed Body

Where determined necessary by the Administration, a pending or outstanding Outline Plan/Land Use Amendment application that presents staging or other growth management issues relative to the timing and delivery of necessary municipal capital projects (infrastructure, servicing, or facilities) will be referred by the Administration to the Infrastructure Coordinating Committee or other Council appointed body for a recommendation.

14.0 IMPLEMENTATION POLICIES

14.1 Approval Process

14.1.1 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.

14.1.2 Approval Process Policies

1. Land Use Approval

- a. 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.
- b. Each submitted Outline Plan/Land Use Amendment application shall not have a build out timeline in excess of 10 years. Analysis shall be submitted in conjunction with the application demonstrating compliance with the above requirement to the satisfaction of the Approving Authority.
- c. An Outline Plan/Land Use Amendment application shall not be approved until all associated infrastructure and servicing costs associated have been addressed, in accordance with the Growth Management Policies of Section 13.
- d. The land use designations in effect at the time of approval of the Plan shall:
 - i. continue to apply in accordance with the provisions of the **Municipal Government Act**; and
 - ii. remain in effect until it is determined appropriate to redesignate the lands to appropriate land use districts in accordance with the policies of the Plan.

2. Outline Plan Approval

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

3. Transitional Development

Transitional and temporary uses allowed under the land use bylaw that do not compromise the ultimate urban development of the site, such

as temporary storage, may be allowed where determined to be compatible and appropriate by the Approving Authority.

4. Subdivision Conditions and Land Use Controls

In order to implement the policies and maps of the Plan, land use controls may be applied to a site by Council through the Direct Control District provisions of the **Municipal Government Act** and implemented through the Subdivision Approval or Development Permit Approval processes.

5. Comprehensive Studies

- a. Prior to Outline Plan/Land Use approval, a developer may be required to submit supporting information above the normal application requirements in order to assist Council and the Calgary Planning Commission in evaluating a proposal in terms of its conformity with the Plan.
- b. When a developer does not provide the required supporting information in a satisfactory manner, the Outline Plan/Land Use Amendment application may not be approved.

14.2 Intermunicipal Coordination

14.2.1 Purpose

The Plan Area is partially located within the 2017 Intermunicipal Development Plan (IDP) area that is in effect between the MD of Foothills and The City of Calgary.

The purpose of these policies is to provide for the circulation and evaluation of development applications within the Plan Area and ensure that the MD and The City work collaboratively to develop coordinated planning for the lands within the IDP boundary.

14.2.2 Intermunicipal Coordination Policies

1. Intermunicipal Referral

All proposed amendments to the Plans, Area Structure Plans, Outline Plans, and applications for Land Use Amendment, Subdivision, Development Permit, including Development Permit renewals, Discretionary Use or Sensitive Use (as outlined in IDP Section 2.5) should be referred to the MD of Foothills for a thirty (30) day circulation period in accordance with current IDP policy.

2. Intermunicipal Consultation

The City will consult with the MD of Foothills on intermunicipal planning matters that may arise from development within the Plan Area to achieve a cooperative and coordinated outcome.

Bylaw 59P2017

14.3 Design Innovation Policy Area

14.3.1 Purpose

The purpose of these policies is to provide a means to address and promote design innovation within the Plan area communities. Implementation of this policy is on a voluntary basis by the development industry.

This policy will include the following steps:

- 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 precedent for other developers;
- Introduction of a special review process for evaluating the innovations to be introduced within the Design Innovation Area and administered by the Approving Authority; and
- Introduction of a monitoring process to assess the success and benefits of the innovation introduced.

14.3.2 Development within Design Innovation Policy Area

1. Promoting Design Innovation

- a. Design innovation should be encouraged within the Plan communities provided that the innovation:
 - i. promotes sustainability or provides other public benefits; and
 - ii. can be developed in a safe and practical manner.
- b. Based on the policies within the Plan, candidates for design innovation within the Plan communities 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 of Calgary policies;
 - v. revised street standards for providing marked on-street bicycle routes (e.g., bike lanes on collector roads);

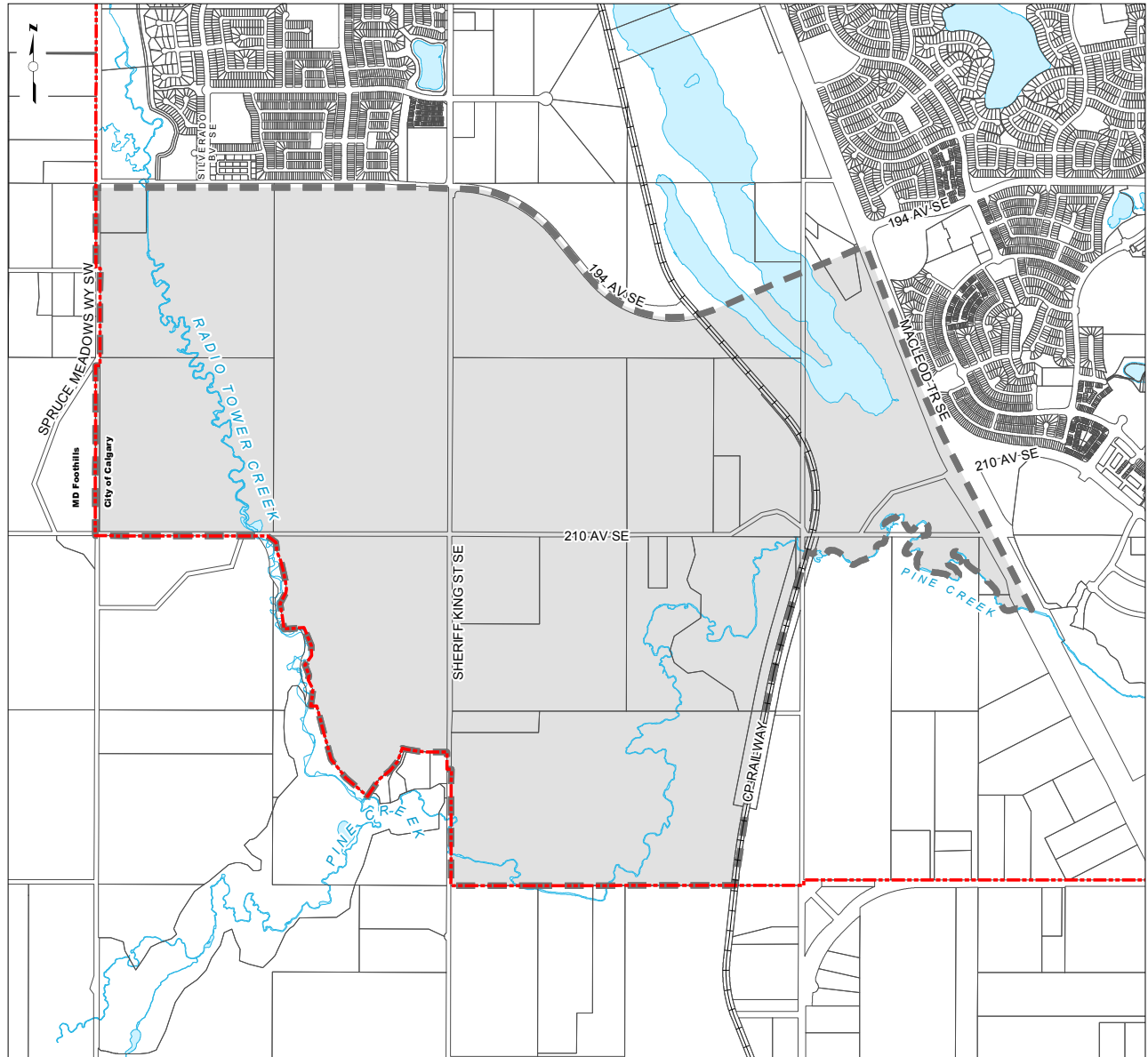
- vi. addressing slope adaptive design;
- vii. energy efficiency measures including district heating, solar energy, etc.; and
- viii. other approaches to the satisfaction of the Approving Authority.

2. Designating a Design Innovation Policy Area

- a. Where innovations involving the introduction of new standards for public improvements (i.e., utilities, parks, streets etc.) or private development are proposed within the community that are determined to provide sustainable development benefits, the developer may request that Council identify by resolution the area that is the subject of the innovation as a Design Innovation Area and be identified on Map 14. **Bylaw 59P2017**
- b. Where a Design Innovation Area is identified:
 - 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 methods for dealing with the maintenance or operational costs of the innovations may be introduced;
 - iii. a process for evaluating innovations proposed by a developer in an efficient and timely manner, that includes a review of the risks and benefits should be created; and
 - iv. timelines for evaluating applications for this policy area should not exceed timelines for conventional applications.

Map 14: Design Innovation Area

APPROVED: 10P2014
AMENDED: 59P2017



West Macleod Area Structure Plan

Design Innovation Area

Legend

-  Study Area
-  Design Innovation Area
-  City Limits

0 200 400 600 800 1,000 1,200
Metres

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

SUPPORTING INFORMATION



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APPENDIX A: PLANNING EVALUATION GUIDELINES

A.1 Overview

The evaluation of Outline Plan/Land Use Amendment applications requires the submission of transportation, servicing, environmental, market and land use studies. These guidelines identify the specific technical studies required to be submitted with an application.

A.2 Concept Plans

A.2.1 Purpose

The purpose of these guidelines is to provide for the submission of Concept Plans at the Outline Plan/Land Use Amendment stage. Concept Plans will be required to demonstrate that a site will be suitable in terms of its size and configuration to accommodate the intended future development or to ensure that a subdivision design will be appropriately integrated with adjacent areas. A concept or shadow plan is provided for information purposes only, has no legal status, and is subject to change.

A.2.2 Guidelines

1. Concept Plans

- a. Prior to Outline Plan/Land Use approval and as determined necessary, a developer may be required to submit a Concept Plan in order 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 review process, the Concept Plan:
 - i. may be shown on the Outline Plan; and
 - ii. should show the proposed:
 - A. land use areas;
 - B. building locations;
 - C. vehicular access/egress routes;
 - D. parking areas;
 - E. public roads;
 - F. transit stops;
 - G. pedestrian connections;
 - H. regional pathways;

- I. bikeways;
- J. utility alignments;
- K. public parks;
- L. stormwater ponds;
- M. slope adaptive areas of interest; and
- N. 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 in a satisfactory manner, the Outline Plan/Land Use Amendment may not be approved.

A.3 Environmental Background Studies

A.3.1 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 necessary to undertake this review. All environmental background studies shall be prepared to the satisfaction of The City of Calgary.

A.3.2 Guidelines

1. Environmental Site Assessment (ESA)

- a. Prior to Outline Plan/Land Use approval, a developer:
 - i. shall submit a current Phase 1 Environmental Site Assessment report for the subject site. The report shall:
 - A. identify actual and potential soil and groundwater contamination; and
 - B. be used to determine if the site is suitable for the intended use, as related to environmental issues.
 - ii. may 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, a developer 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 may 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 developer shall submit a Biophysical Impact Assessment (BIA) report prepared by a qualified professional to evaluate the impact and identify any mitigative measures to be introduced.
- b. Where required, the developer 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 may be required for the subject site, as determined by the Approving Authority.
- b. Where required, the developer shall, to the satisfaction of Alberta Community Development, undertake those protective or mitigative measures identified in the HRIA report for the subject site.

A.4 Density Analysis

A.4.1 Purpose

The purpose of these guidelines is to provide for the submission of appropriate information in order to allow for the evaluation of a proposal in terms of its compliance with the density requirements of the Plan. This information will take the form of a Density Analysis submitted as part of an Outline Plan/Land Use Amendment application that is, in turn, refined and resubmitted at the Subdivision Approval stage.

A.4.2 Guidelines

1. Density Analysis

In conjunction with an Outline Plan/Land Use Amendment application, information shall be submitted identifying:

- i. the maximum and anticipated density of the site; and
- ii. the maximum and anticipated density of residential development within a Neighbourhood Node, Mixed Use Community Node, Special Density Areas and the Transit Station Planning Area located within the site.

2. Density Monitoring

The Density Analysis under subsection A.4.2(1) 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.

A.5 Reserve Analysis

A.5.1 Purpose

The purpose of these guidelines is to provide for the review of the allocation of Creditable and Environmental Reserve (ER) within a community.

A.5.2 Guidelines

1. Creditable Reserve Analysis

Prior to approval of an Outline Plan/Land Use Amendment application, a Reserve Analysis shall be submitted by a developer 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 (ER) 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 facilities;
- 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 the stormwater facility 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.

A.6 Mobility Assessment & Plan

A.6.1 Purpose

The purpose of a Mobility Assessment & Plan (MAP) is to assess the multi-modal transportation influences of new developments. The MAP is intended to be used around higher density transit nodes or transit corridors.

A.6.2 Guidelines

1. Mobility Assessment & Plan (MAP)

- 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 Mobility Assessment & Plan (MAP)

The MAP may 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.

A.7 Transportation Impact Assessment

A.7.1 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.

A.7.2 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 may 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.

A.8 Transit Coverage Plan

A.8.1 Purpose

The purpose of a Transit Coverage Plan is to show the location and extent of transit service and coverage within the community.

A.8.2 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:
 - A. routing of public transit buses;
 - B. location of transit bus stops;
 - C. residential dwellings within and beyond the prescribed transit coverage areas; and
 - D. any enhanced transit facilities to be included into development.
 - ii. demonstrate that the internal road network will accommodate:
 - A. convenient and efficient pedestrian connection to transit service; and
 - B. suitable transit coverage.
- b. In addition to subsection A.8.2(2)(a), the Transit Coverage Plan should contain such other information as determined necessary to evaluate transit service coverage within the community.

A.9 Retail Market Analysis

A.9.1 Purpose

The purpose of these guidelines is to establish criteria and a review process for evaluating a Commercial Centre from a market perspective. This will involve the submission of a Market Demand and Market Impact Analysis in conjunction with a Land Use Amendment application for a commercial centre. This analysis would only be required where the scale and composition of the commercial proposal significantly departs from the purpose and policies outlined for the Mixed Use Community Node (Section 5.6).

A.9.2 Guidelines

1. Submission of Market Demand and Impact Analysis

Where determined appropriate and necessary due to its scale or composition, a commercial centre may be required to be analyzed in terms of its market demand and market impact on the existing and planned retail hierarchy in the area.

2. Review of Market Demand and Impact Analysis

Where a Market Demand Analysis or a Market Impact Analysis is submitted it may 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 developer.

A.9.3 Guidelines

1. Local Commercial Policy: New Communities in Calgary

The Local Commercial Policy: New Communities in Calgary will need to be reviewed in association with all new studies completed. Deferral away from its findings must be provided with appropriate justification and analysis.

A.10 Utility Servicing Background Studies

A.10.1 Purpose

The purpose of these guidelines is to provide for the submission of municipal servicing studies and analysis considered necessary to evaluate a proposal.

A.10.2 Guidelines

1. Water Distribution System

In conjunction with an Outline Plan/Land Use Amendment application, a Water Distribution Analysis will 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 with the West Macleod ASP 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 stormwater management system for the area.

A.11 Infrastructure Improvements Budgeting Analysis

A.11.1 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 approval.

A.11.2 Guidelines

1. Infrastructure Improvement Analysis

- a. As part of an Outline Plan/Land Use Amendment application, a developer 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 financing 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 developer financed transportation and utility infrastructure improvements and facilities; and
 - v. as determined appropriate, the timing of any downstream transportation and utility infrastructure improvements and facilities.

2. Public Infrastructure Improvements in relation to Capital Budget

The Administration shall identify the budgeting priorities of The City in relation to any major provincially or municipally-financed transportation or utility infrastructure improvements and facilities necessary to serve the subject site identified under subsection (1).

3. Report to Council

The report to Council accompanying a Land Use Amendment application should address the proposal in the context of subsections 13.2.2(1) and (2).

APPENDIX B: COST OF DEVELOPMENT

B.1 Overview

The purpose of the Capital Cost information is to provide an approximation of the magnitude of the investments. It is recognized that acreage assessments will offset some of the costs incurred by development of lands within the Plan area.

The figures contained in this table can be refined at the Outline Plan/Land Use Amendment stage without requiring an amendment to this Plan.

The costs for infrastructure include those inside and outside the Plan area that are required to service the Plan area.

Table 2 : Core Infrastructure Costs

Required Infrastructure	Included in 10-year Capital Plan	Proposed in 3-year Capital Budget	Estimated Capital Cost
Facilities			
Emergency Response Station	Yes	Yes	\$17 M ²
Transportation			
194 Ave Interchange	No	No	\$45 M ¹
Utility Servicing			
Water	No	No	\$50 M ²
Sanitary	No	No	\$35 M ² (This cost represents getting services to the Pine Creek Plant, which also services Silverado and East Silverado)
Storm	No	No	\$9 M ²
Total			\$156,000,000

Notes:

1. 2008 dollars
2. 2014 dollars

Table 2a : Complete Community Infrastructure Costs

Required Infrastructure	Included in 10-year Capital Plan	Proposed in 3-year Capital Budget	Estimated Capital Cost
Facilities			
Library	No	No	\$8 M ^{*1}
Small Regional Recreation Facility and Tier 1 Athletic Park	Yes ^{***}	No	\$33 M ^{*2}
Emergency Response Station	Yes	Yes	\$17 M ²
Transportation			
194 Ave Interchange	No	No	\$45 M ¹
210 Ave Interchange	No	No	\$60 M ¹
Transit			
LRT Extension from Somerset LRT Station to 212 Avenue for LRT line, Stations and Park and Rides (includes proposed Silverado Station costs).	No	No	\$200 M ¹ (\$50 M for West Macleod ASP communities)
LRT Vehicles for 212 Avenue SE Station	No	No	\$56 M ¹ (\$16 M for West Macleod ASP communities)
Utility Servicing			
Water	No	No	\$50 M ²
Sanitary	No	No	\$35 M ² (This cost represents getting services from Pine Creek Plant, which will also service the communities of Legacy, Walden and Silverado)
Storm	No	No	\$9 M ²
Total			\$513,000,000

* Construction costs only. Land costs not included. Library costs will decrease if co-located with recreation facility.

**The Calgary Fire Department is researching emergency response facility configurations that will best serve communities within and surrounding the West Macleod ASP area.

*** Unfunded in 10 year Capital Budget.

Notes:

1. 2008 dollars
2. 2014 dollars

APPENDIX C: COMMUNITY DESIGN GUIDELINES

C.1 Overview

The Sustainable Suburbs Study identifies a number of unique elements based upon new urbanism planning principles that need to be addressed in the design of the Plan. In order to evaluate these elements, a series of concept plans will need to be submitted in conjunction with an Outline Plan/Land Use Amendment application. These concept plans are as follows:

- Neighbourhood Concept Plan
- Mixed Use Community Node Concept Plan
- Pedestrian and Bicycle Circulation Plan
- Transit Station Planning Area Concept Plan
- Joint Use Site Guidelines
- Park Concept Plan
- Road Network 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. As such, these guidelines will 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, trade offs, and innovation will occur.

C.2 Neighbourhood Concept Plan

C.2.1 Purpose

The purpose of a Neighbourhood Concept Plan is to identify the edge conditions of a neighbourhood and address the design and density of the Neighbourhood Node or Mixed Use Community Node.

C.2.2 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 Section 3.0: Community Concept and Section 5.3: Neighbourhood Node, and any other relevant policies within the Plan;
 - ii. provide information addressing the design and density of the Neighbourhood Node;
 - iii. include a Neighbourhood Name and Street Name application for the neighbourhood; and
 - iv. contain such other information as determined necessary by the Approving Authority to evaluate the compliance of the proposal with the policies of the Plan.

C.3 Mixed Use Community Node Concept Plan

C.3.1 Purpose

The purpose of the Mixed Use Community Node Concept Plan is to provide details of the design of the Mixed Use Community Node. The Mixed Use Community Node concept plan shall demonstrate that the land use pattern, transit system, pedestrian system, internal road network, servicing plan, public facilities, open space, design concepts and other matters are developed in a coordinated and well integrated manner throughout the entire node area. A review of the Southwest Community 'A' and Employment Centre Mixed Use ASP will need to be undertaken as the northern half of the Mixed Use Community Node along 194 Avenue SE may or may not have been developed at the time of application.

C.3.2 Guidelines

1. Mixed Use Community Node Concept Plan Submission

In conjunction with an Outline Plan/Land Use Amendment application, a Mixed Use Community Node Concept Plan encompassing the entire commercial centre, as defined on the Land Use Concept Map (Map 4), should be submitted.

2. Mixed Use Community Node Concept Plan Requirements

A Mixed Use Community Node Concept Plan should:

- a. Demonstrate compliance with:
 - i. Section 3: Community Concept;
 - ii. Section 5.6: Mixed Use Community Node; and
 - iii. Appendix D: Development Design Guidelines and Appendix E: Environmental Design Guidelines.
- b. Include information addressing the urban design and retail density of the Mixed Use Community Node; and
- c. Contain such other information as determined necessary by the Approving Authority to evaluate the compliance of the proposal within the policies of the Plan.

C.4 Pedestrian and Bicycle Circulation Plan

C.4.1 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 nodes, the Mixed Use Community Node, the community centre and other key destinations for residents.

C.4.2 Guidelines

1. Pedestrian and Bicycle Circulation Plan Submission

In conjunction with an Outline Plan/Land Use Amendment application, a Pedestrian and Bicycle Circulation Plan should be submitted.

2. Pedestrian and Bicycle Circulation Plan Requirements

- a. The Pedestrian and Bicycle Circulation Plan should:
 - i. demonstrate compliance with the policies of Section 11.4. Pedestrian and Bicycle Circulation, of the Plan;
 - ii. identify the pedestrian and bicycle destinations such as schools, shopping, parks, pathways, etc. as well as:
 - A. pedestrian destinations (e.g., parks, LRT Stations, recreational facilities, public amenities, etc.) within a one (1) kilometre radius of the community;
 - B. bicycle destinations (e.g., parks, LRT Stations, recreational facilities, public amenities, etc.) within a three (3) kilometre radius of the community;
 - C. other notable pedestrian destinations (e.g., parks, LRT Stations, recreational facilities, public amenities, etc.) outside the 1 kilometre radius of the community; and
 - D. (e.g., parks, LRT Stations, recreational facilities, public amenities, etc.) outside the three (3) kilometre radius of the community.
 - iii. 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;
- iv. show the location of pedestrian routes to the LRT Station;
- 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 (such as high volume roads, natural areas, man-made lakes, etc.);
- vii. address how the barriers for pedestrian and bicycle connectivity as identified in subsection C.4.2(2)(a)(vi) 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.

C.5 Transit Station Planning Area Concept Plan

C.5.1 Purpose

The purpose of the Transit Station Planning Area Concept Plan is to provide for the comprehensive planning and analysis of this area at the Outline Plan/Land Use Amendment stage.

C.5.2 Guidelines

1. Transit Station Planning Area Concept Plan

- a. In conjunction with an Outline Plan/Land Use Amendment application, a Transit Station Planning Area Concept Plan should be submitted.
- b. Where an Outline Plan/Land Use Amendment application comprises a portion of the Transit Station Planning Area, the entire area within the relevant land use category as identified on Map 5: Transit Station Planning Area (Gateway Planning Area, High Density/Mixed Use Area, Medium Density/Mixed Use Area or Main Street Retail Area) should be included within the Concept Plan.

2. 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 a density analysis for the area;
- c. Contain any other such information as determined necessary to evaluate the compliance of the proposal with the policies of the plan;
- d. Demonstrate compliance with the requirements of:
 - i. Section 3.0: Community Concept;
 - ii. Section 5.8: Transit Station Planning Area;
 - iii. Section 5.9: Gateway Planning Area;
 - iv. Section 5.10: High Density/Mixed Use Area;
 - v. Section 5.11: Medium Density/Mixed Use Area;
 - vi. Section 5.12: Main Street Retail Area; and
 - vii. Appendix D: Development Design Guidelines and Appendix E: Environmental Design Guidelines.

C.6 Joint Use Site Guidelines

C.6.1 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 Maps 4 and 14.

C.6.2 Joint Use Site

The Joint Use Site requirements for the Plan are identified in Table 3 and shown on the Map 15: Joint Use Sites. Table 3 is provided for reference purposes. The exact type of school, school board jurisdiction and size of the Joint Use Site will be determined at the Outline Plan/Land Use Amendment stage. Where a JUS is split between multiple landowners, the amount of land allocated to the JUS by each landowner will be determined at the Outline Plan/Land Use Amendment stage. As such, if an inconsistency between Table 3 and an Outline Plan/Land Use Amendment approval by Calgary Planning Commission and Council should arise, an amendment to Table 3 will not be necessary.

Resolution

The number of Joint Use Sites, as indicated in Table 3 and on Map 15 may 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 will be necessary.

Resolution

Once reserves are assessed at the Outline Plan/ Land Use amendment stage, it may be necessary to reduce the size of a Joint Use Site as little or no reserve is available for other community open space uses, including but not limited to, neighbourhood/ sub-neighbourhood parks and lands not provided as Environmental Reserve but considered significant as to enhance the overall community's green footprint. This should be determined on a one-on-one basis with the Subdivision Authority and JUCC.

Table 3: Joint Use Site Requirements

JOINT USE SITE REQUIREMENTS			
SITE NO. (SEE MAP 15)	SCHOOL TYPE	SCHOOL BOARD	SITE SIZE
1.	Elementary / Junior High School	Separate School Board	4.9 hectares (12 acres)
2.	Elementary School (CBE) / Middle School (CBE)	Calgary Board of Education	7.3 hectares (18 acres)
3.	Elementary School	Calgary Board of Education	4.0 hectares (10 acres)
4.	Middle School	Calgary Board of Education	4.9 hectares (12 acres)
5.	Elementary (CBE), Elementary/Junior High School (Separate)	Calgary Board of Education, Separate School Board	7.3 hectares (18 acres)
TOTAL			28.4 hectares (70 acres)

Resolution

C.7 Road Network Plan

C.7.1 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.

C.7.2 Guidelines

1. Road Network Plan Submission

In conjunction with an Outline Plan/Land Use Amendment application, a Road Network Plan should be submitted.

2. Road Network Plan Requirements

The Road Network Plan should:

- i. demonstrate compliance with the policies of Section 11: Transportation and Mobility, 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.

C.8 Park Concept Plan

C.8.1 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.

C.8.2 Guidelines

1. Park Concept Plan Submission

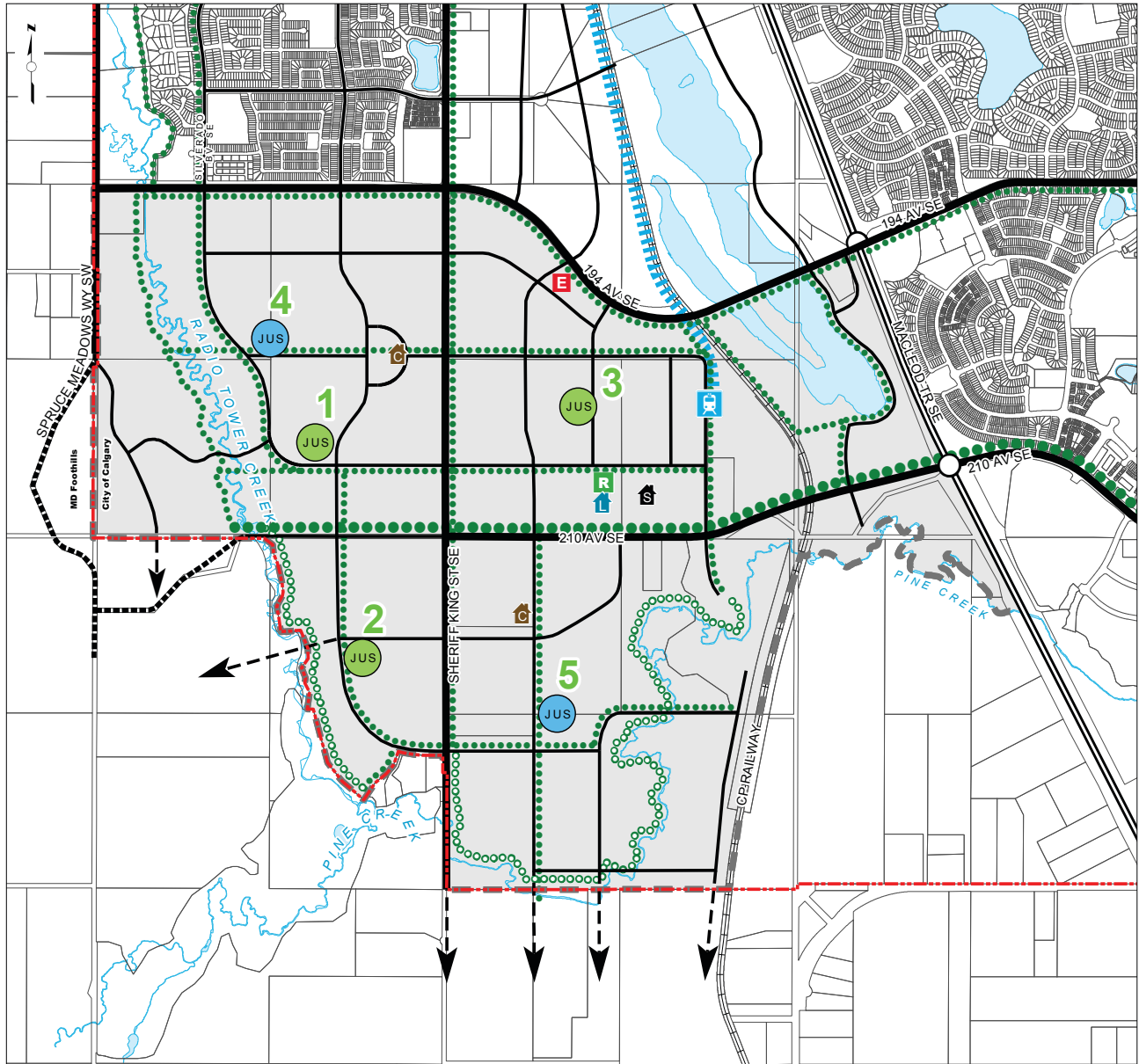
In conjunction with an Outline Plan/Land Use Amendment application, a Park Concept Plan should be submitted.

2. Park Concept Plan Requirements

The Park Concept Plan should:

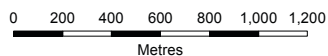
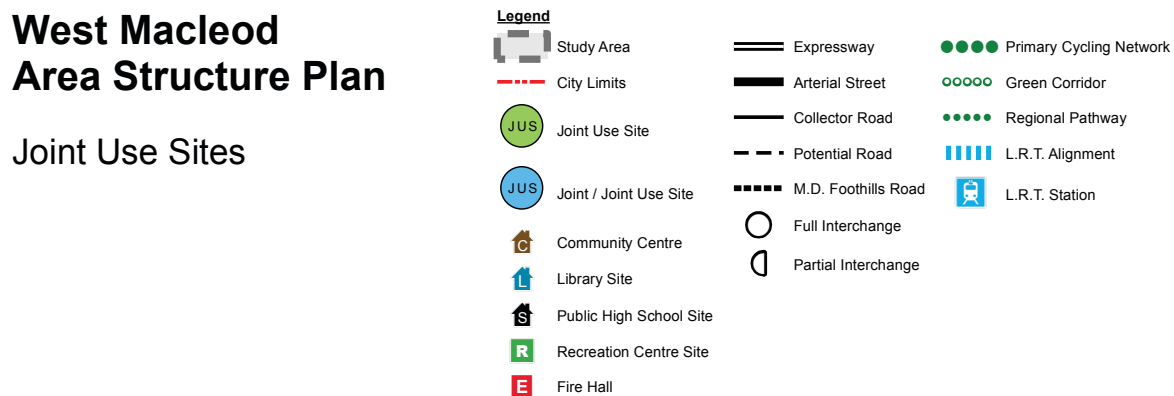
- i. demonstrate compliance with the policies of Section 9.0: Reserve Policies, and any other relevant policies of the Plan;
- ii. show all planned parks for the application area;
- iii. illustrate all pedestrian and cyclist connections between planned parks;
- iv. illustrate and describe all planned landscaping and uses of park areas;
- v. identify and describe all park features, equipment and structures; and
- vi. contain any other such information as determined necessary to evaluate the compliance of the proposal with the policies of the Plan.

Map 15: Joint Use Sites



West Macleod Area Structure Plan

Joint Use Sites



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

APPENDIX D: DEVELOPMENT DESIGN GUIDELINES

D.1 Purpose

The purpose of these design guidelines is to provide direction for development to ensure the vision and objectives of the Plan are met. The guidelines are not mandatory and are intended to be applied in a flexible manner and may be varied or revised as determined appropriate. In an effort to achieve the optimal design solution, it is anticipated that negotiation and innovation will occur in relation to the guidelines.

Photographs of development are provided as graphic examples of the guidelines.

D.2 General Guidelines

The following general guidelines apply to all areas and development within the Plan.

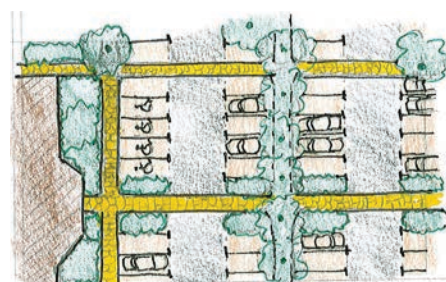
1. Built Form

- a. Development should be designed:
 - i. to ensure that active frontages are oriented towards the street.
 - ii. for individuality and identity with architectural character that provides visual interest and avoids monotonous massing (e.g., by using high quality building materials, architectural detailing, varying roof pitches, stepping down development on grades etc.).
 - iii. with consideration given to solar orientation for building and private amenity space.
- b. Public art should be incorporated within congregation areas or areas of higher pedestrian traffic.



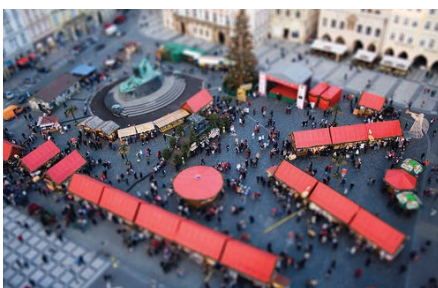
2. Streetscape and Site Design

- c. Alternative and varying street standards are encouraged to enhance urban design, walkability and bicycle access.
- d. Parking areas should be located underground or integrated within the footprint of the building wherever possible. Where surface parking is unavoidable, this should be limited and located to the rear of buildings, with soft landscaping and pervious/permeable surfacing provided to reduce the visual and environmental impact.
- e. Consideration should be given to pedestrian movement and access in the design of parking areas, drive aisles and vehicular access.
- f. The height of an exposed retaining wall or other wall located within a front yard/space or at the boundary of the lot should not exceed one (1.2) metres unless it can be demonstrated that there will be no visual impact on, or surveillance implications for pedestrians.
- g. Where possible, streets should frame view corridors and vistas to a park, natural areas or community features.
- h. A suitably designed and visually appealing public realm should be achieved through urban design elements such as public plazas, public art, attractive and useable street furniture, pedestrian oriented lighting, etc.



3. Open Space

- a. High quality public open space that features both passive and active recreation should be incorporated within the design.
- b. A community's open space system should be designed and/or branded to convey unique themes through the appropriate use of park naming, signage, way-finding, planting, landscaping and other measures.
- c. Access to open space should be maximized by locating it on local or collector roads and / or adjacent to active building edges with an emphasis placed on the design of entranceways. Where applicable, the access points should be located close to transit, incorporating appropriate street furniture at the transit waiting areas.
- d. Seating areas should be provided within open space at high pedestrian traffic areas and away from heavy vehicular traffic to act as a landmark feature and encourage gathering.

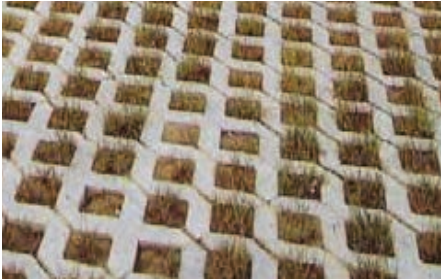


- e. Open spaces and public plazas should be designed to allow for alternative uses (e.g., markets and festivals etc.) through such methods as the installation of electric plug-in power points and public washrooms etc.
- f. Rear yards fronting onto open spaces should be minimized.
- g. Sites should be designed with safety in mind and consideration given to the principles of CPTED. In particular, the following factors should be considered in the evaluation of Outline Plan, Subdivision and Development Permit applications:
 - i. clear sight lines along and views across public pathways, streets and public open spaces;
 - ii. opportunities for natural surveillance of lanes, sidewalks, streets and other public spaces (e.g., by designing development to overlook these spaces;) and
 - iii. provision of adequate security lighting of pedestrian and cycling routes, car parking areas and other public spaces.
- h. Weather protection should be incorporated into streetscape design at places where people congregate or wait (e.g., public transit stops, node gathering areas, public plazas, etc.). This can be achieved through the following:
 - i. street layout design considering solar orientation for buildings and amenity space;
 - ii. providing shade and/or protection from wind, rain and snow through the use of plant screens, canopies, recessed doorways, shelters and street trees;
 - iii. maximizing sun exposure for waiting areas by careful location of seating, planting, building elements and limiting the height of adjacent buildings; and
 - iv. avoiding wind tunnels in development design.

4. Landscaping

- a. Development should integrate existing natural features (e.g., habitat and topography) and required open space into the overall design. This may be used to create community amenities and provide physical separators and buffers from adjacent development (e.g., landscaping such as mounds or berms can be incorporated into open space design to accommodate year round use and a wide range of structured and unstructured activities).
- b. Additional soft landscaping and setback should be provided in order to buffer pedestrians from vehicular traffic and improve the appearance of the street.
- c. Where boundary definition is required or is desirable, this should be provided in the form of natural screening such as hedging or fencing with quality finishing.
- d. Street trees should be required on both sides of the street throughout the Plan area.
- e. Permeable paving systems, permeable landscaping and other alternatives to hard surface landscaping, should be utilized (e.g., integrated into driveways and parking surfaces, in order to reduce stormwater runoff).
- f. Where lighting is required, this should be designed to be pedestrian scale, low maintenance and low-energy.





5. Connectivity

- g. Consideration should be given to reducing block lengths, minimizing single access cells, providing sidewalks, walkways and pathways and encouraging the continuity of streets amongst neighbourhoods to facilitate access, increase connectivity and support safe pedestrian, bicycle and vehicular movement in all neighbourhoods
- h. Culs-de-sac should be avoided. Where they are deemed necessary, an attractive and safe pedestrian and bicycle connection shall be provided through to an adjoining street.
- i. Accessible and visible pedestrian and bicycle connections shall be provided throughout the Plan area, including multiple routing options, ensuring connectivity within the Plan and integration with the neighbouring communities and regional pathways.
- j. Development should adhere to the City of Calgary Access Design Guidelines incorporating such features as curb cuts at crosswalks and intersections to accommodate movement for the physically impaired, audible aids at signalized intersections for the visually impaired and an urban Braille system along sidewalks and pathways for the visually impaired, etc.



D.3 Specific Guidelines

In addition to the General Guidelines outlined in Section D.2, the following Design Guidelines relate to specific areas identified on Maps 4 and 5.

D.3.1 Residential Area

The Residential Area should be designed in accordance with Appendix D.2: General Guidelines and the specific guidelines outlined below.

D.3.1.1 All Residential

1. Built Form

- a. Rear lanes should be provided wherever possible to prevent non-active garage frontage from dominating the streetscape and to minimize driveway curb cuts etc. Where garage entries are located at the front elevation, they should be integrated within the structure of the house, set back from the main doorway and incorporate architectural detailing, textures, windows or other design solutions in order to reduce the dominant appearance of the garage and provide for a more pedestrian friendly streetscape.

2. Streetscape, Connections and Site Design

- a. Consideration should be given to the design and landscaping of front yards/space to ensure an appropriate edge is created to the street or access area and that a clear distinction between the public, semi-private and private realms is established.

D.3.1.2 Multi-Residential

1. Built Form

- a. Ground floor dwelling units fronting onto a public street should have the appearance of individual dwelling units and should have front door access to the street.
- b. Private amenity space for ground floor dwelling units may be located in front yards provided the issues of privacy, security, natural light and access are addressed to the satisfaction of the Approving Authority.
- c. New developments should be designed to provide a height transition to lower scale developments and public spaces to minimize the impacts of taller buildings (e.g. visual impact, shadowing, wind tunneling effect etc).

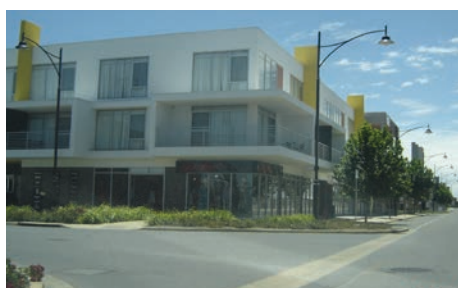


From this:



To this:





D.3.2 Mixed Use Development (Residential above ground level retail and/or office)

These guidelines should also apply to the Mixed Use Community Node Area where a mixed use development is proposed.

Mixed Use Development should be designed in accordance with Appendix D2: General Guidelines and the specific guidelines outlined below.

1. Built Form

- a. Mixed use development should have retail, commercial and/or office at grade and residential uses, office uses and/or employment uses located above grade.
- b. Where located on dual frontages, front and side building façades should:
 - i. front onto and be oriented towards the street;
 - ii. incorporate transparent glass frontages that help animate the street by allowing activity within to be seen from the street;
 - iii. feature narrow retail frontage and/or frequent street entrances to help create a strong visual rhythm;
 - iv. incorporate detailed and varied architectural features, colours and materials that help to animate the street and create a visually interesting street interface; and
 - v. provide break out spaces for selling, displays or patios to create a dynamic pedestrian environment.
- c. Side and rear building elevations should use building materials of a similar standard to front façades and incorporate architectural features, glazing and windows to prevent non-active elevations.
- d. Development at fourth storey and above should be setback to reduce the visibility of the upper storeys from the street.
- e. Loading bays for commercial uses shall be located and designed so that they do not interfere with pedestrian movement or the exterior design character of buildings.

2. Streetscape, Connections and Site Design

- a. Public open spaces and plazas should be provided at highly visible locations, edges and/or corners and should be designed to encourage pedestrian activity such as walking, cycling, sitting, window shopping and bicycle storage. These areas should provide protection from the elements (e.g., wind, rain, snow, sun).
- b. The layout of mixed use areas should contribute to the creation of a high quality, visually interesting pedestrian environment through building design, signage, façade treatment, landscaping and the provision of pedestrian amenities including street furniture, lighting and public art.



D.3.3 Residential Area of Interest

Within the Residential Area of Interest the priority is to retain and enhance the existing natural features and topography and, where appropriate, retain those components of the natural environment that will allow its sustainability following development.

Development within the Residential Area of Interest should be designed in accordance with Appendix D.2: General Guidelines, Appendix D.3.1 Residential Area Design Guidelines and the Slope Adaptive Development Policy and Guidelines & Conservation Planning and Design Guidelines document.

D.3.4 Corridor Planning Area

The Corridor Planning Area should be designed in accordance with Appendix D.2: General Guidelines and also Appendix D.3.1.2: Multi-Residential Development Guidelines in addition to the specific guidelines outlined below.

1. Built Form

- a. High fencing or walling (greater than 1.2m) shall not be permitted along Sheriff King Street S.
- b. Visually attractive screening measures such as hedgerows, trees etc should be provided for residential dwelling units fronting onto Sheriff King Street S.

From this:



to this:



2. Streetscape, Connections and Site Design

- a. Residential development within the Corridor Planning Area should front onto and be oriented towards Sheriff King Street S and shall conform with section 5.7 of this Plan.

D.3.5 Transit Station Planning Area

The Transit Station Planning Area should be designed in accordance with Appendix D.2: General Guidelines and the specific guidelines outlined below.

1. Streetscape, Connections and Site Design

- a. New developments should be designed to provide a height transition from high density development around the LRT Station to lower scale development and public spaces located in the residential area to the west in order to minimize the impacts of taller buildings (e.g., visual impact, shadowing, wind tunnelling effect etc.).

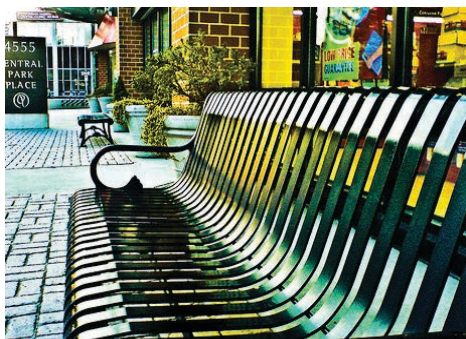


D.3.5.1 Mixed Use Areas

The High Density/Mixed Use and Medium Density/Mixed Use Residential Areas should be designed in accordance with Appendix D.2: General Guidelines, Appendix D.3.1.2: Multi-Residential Development Guidelines and also Appendix D.3.2: Mixed Use Development Guidelines in addition to the specific guidelines outlined below.

1. Built Form

- a. Mid and high rise structures should be broken up at the building base (defined as the first 3 storeys above street level) through canopies, store front windows, step-backs etc. to avoid a monolithic look and to provide a pedestrian oriented street/building edge.
- b. High rise buildings with multiple frontages and located on corner sites should provide entrances on both adjoining streets.
- c. Landmark buildings, (i.e., buildings of significance to the community (e.g., LRT Station, Community Centre, Recreations Centre, Library etc.) should incorporate distinctive rooflines or architectural features to emphasize their status and the hierarchy of a place and to create an interesting skyline or convey the particular activity represented.
- d. The High Density/Mixed Use Area should be designed to integrate with and be architecturally compatible with the Main Street Retail Area.
- e. No stand alone commercial or office uses should be developed in one building; they should be provided as mixed use development



containing a residential component above street oriented retail or office uses.

D.3.5.4 Main Street Retail Area

Mixed Use Development should be the predominant built form in the Main Street Retail Area and should be designed in accordance with Appendix D.3.2: Mixed Use Development Guidelines in addition to the specific guidelines below.

1. Built Form

- a. The Main Street Retail Area design should set the stage for a theme or character and for a pedestrian-first realm. The design should address a street/building interface which creates an active edge character, landscaping, street surface and street furniture design.
- b. Building design along the Main Street Retail Area should reflect the change from commercial to residential through the use of balconies, different roof lines and other architectural detailing.



2. Streetscape, Connections and Site Design

- a. The provision of open space and public plazas and the use of unique architectural features at corners, highly visible locations or important intersections is encouraged in order to provide a landmark feature and to vitalize the intersection. These spaces should be designed to encourage pedestrian activity such as walking, cycling, sitting, window shopping and include bicycle storage.
- b. Development on corner sites should create commercial exposure on both frontages. Where secondary street façades are not directly used for commercial sales, the façade should have a high level of architectural detail to prevent non-active elevations.
- c. Visible flanking walls which face the Main Street Retail Area or adjoining streets should be provided with public art or architecture treatment that reduces the massing and enhances the aesthetic value to the pedestrian.
- d. Continuous weather protection is encouraged along the Main Street Retail Area. Canopies should be incorporated to provide shelter and to offer signage opportunities that, when designed, integrate with the character of the area.



- e. The use of courtyards to provide a semi-public space along pedestrian oriented block frontages is encouraged.

D.3.6 Gateway Planning Area (Initial Development)

D.3.6.1 Macleod Trail Entranceway

1. Built Form

- a. Where buildings do not front onto Macleod Trail, side and rear façades should incorporate detailed and varied architectural features, colours and materials, similar in design to the front façade. Buildings along Macleod Trail are required to provide a visually interesting gateway to Calgary.
- b. In order to minimise the impact upon visual amenity and provide a visually interesting gateway to the City, the following should be provided adjacent to Macleod Trail:
 - i. landscaped and appropriately screened and buffered surface parking areas; and
 - ii. articulated façades using visually attractive design elements.
- c. No storage areas shall be allowed adjacent to Macleod Trail.
- d. Loading bays shall not be visible from Macleod Trail. Where loading bays are proposed on the building face adjacent to Macleod Trail, loading bays and vehicles within them shall be fully enclosed within the building structure or screened from the view of vehicles on Macleod Trail and the exterior of the building designed in accordance with Appendix D.3.6.1(1)(a).

D.3.6.2 Commercial Development

1. Built Form

- a. Building form and design should be used to overcome site constraints (e.g., plot shape and size restrictions) and to achieve the Plan design policies and guidelines (e.g., through the use of multi-storey and multi-use commercial buildings that contain more than one tenant).
- b. Buildings should be located with the front façade and main entrance oriented to the street.
- c. Side and rear façades should use building materials of a similar standard to front façades

- and incorporate architectural features and windows to prevent non-active elevations.
- d. Commercial building design that increases density while remaining sensitive to the surrounding land uses is encouraged.(e.g., two (2), three (3) and four (4) storey design and multi-user buildings with integrated parking and an emphasis on good quality public realm and landscaping).
- e. Rooftop and side yard mechanical and utility infrastructure and machinery shall be screened by methods such as landscaping, vegetative screens or well designed fencing/walling.
- f. Parking should be integrated within the building or contained within the central part of the site to maximize the building frontage that faces the street.
- road (e.g., by using an alternative coloured asphalt or an alternative surface material).
- e. Buildings facing a Conservation Study Area should incorporate articulated façades, exterior material variation and compatible use of colours to provide an enhanced interface.

2. Streetscape, Connections and Site Design

- a. Connections to local and regional pathways and transit service shall be convenient and directly accessible to pedestrians and cyclists both within and adjacent to the area.
- b. Service and loading should not be on the main street frontage but accommodated from a rear or side lane.

D.3.7 Conservation Study Area

Interface Guidelines

- a. Grading should follow the natural slope of the landform where possible and is to be compliant with the best practice guidelines contained within the *Slope Adaptive Development Guidelines Policy & Conservation Planning and Design Policy document*.
- b. Development sites that are located adjacent to a Conservation Study Area should be designed so that a public street or pedestrian pathway is located between the Conservation Study Area and the lot(s) or building site(s) where possible.
- c. Pedestrian connections should be provided from adjacent development to a Conservation Study Area.
- d. Where a single loaded road runs between a Conservation Study Area and an adjacent developable parcel, pedestrian street crossings should be provided. Where possible, street crossings should be located at intersections and should comprise of a surface treatment that can be clearly delineated from that of the

APPENDIX E: ENVIRONMENTAL DESIGN GUIDELINES



E.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, Plan-It Calgary and Council's adoption of the Melbourne Principles.

The Environmental Design Guidelines address specific topics for the application of environmental sustainability considerations within the Plan. 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 will be supported 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.

E.2 Green Infrastructure

E.2.1 Purpose

The following guidelines provide an inventory of applicable Green Infrastructure initiatives for development within the Plan area.

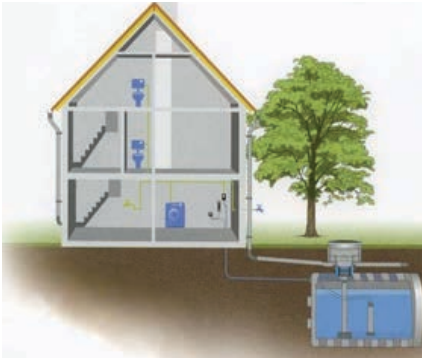
E.2.2 Guidelines

- Incorporate, develop and manage species rich habitat through the preparation of Habitat Management Plans for the open space and landscaping associated with the application.
- 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.
- Use Low Impact Development (LID) Solutions throughout the site, including, but not limited to:
 - 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) in order 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 Stormwater Site Implementation Plan (SSIP) (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.





E.3 Water

E.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.

E.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 6 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 grey-water recycling for collection, storage and reuse for internal building functions requiring non-potable water (e.g., toilet and urinal flushing with water mainback-up to ensure no loss of operation at times of rainwater or greywater shortage).
 - ii. Providing rain barrels or other technology that captures and re-uses rain water 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, car 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 in order to assist with stormwater management.

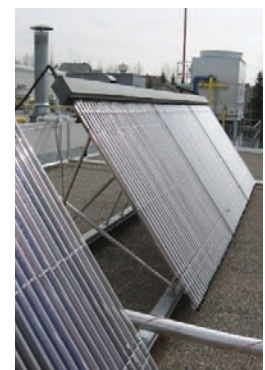
E.4 Energy

E.4.1 Purpose

The following guidelines provide an inventory of applicable Energy Reduction initiatives for development within the Plan area.

E.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 street design patterns, lot orientation, building orientation and internal layout, particularly in order 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. Building orientation should also address the roof space available for the efficient use of photovoltaic and solar thermal panels.
 - ii. 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.
 - iii. 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.
- b. Maximise 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 5,000m² floor area should complete an analysis on the technical and economic feasibility of employing a district energy and CHP scheme.

- c. 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 in order 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.

E.5 Waste Reduction

E.5.2 Purpose

Development within the Plan area should consider implementing the waste reduction measures outlined in the guidelines below.

E.5.3 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 monthly reporting on waste generation and progress).
- b. Provide the space and facilities to encourage the recycling 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 in order 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).

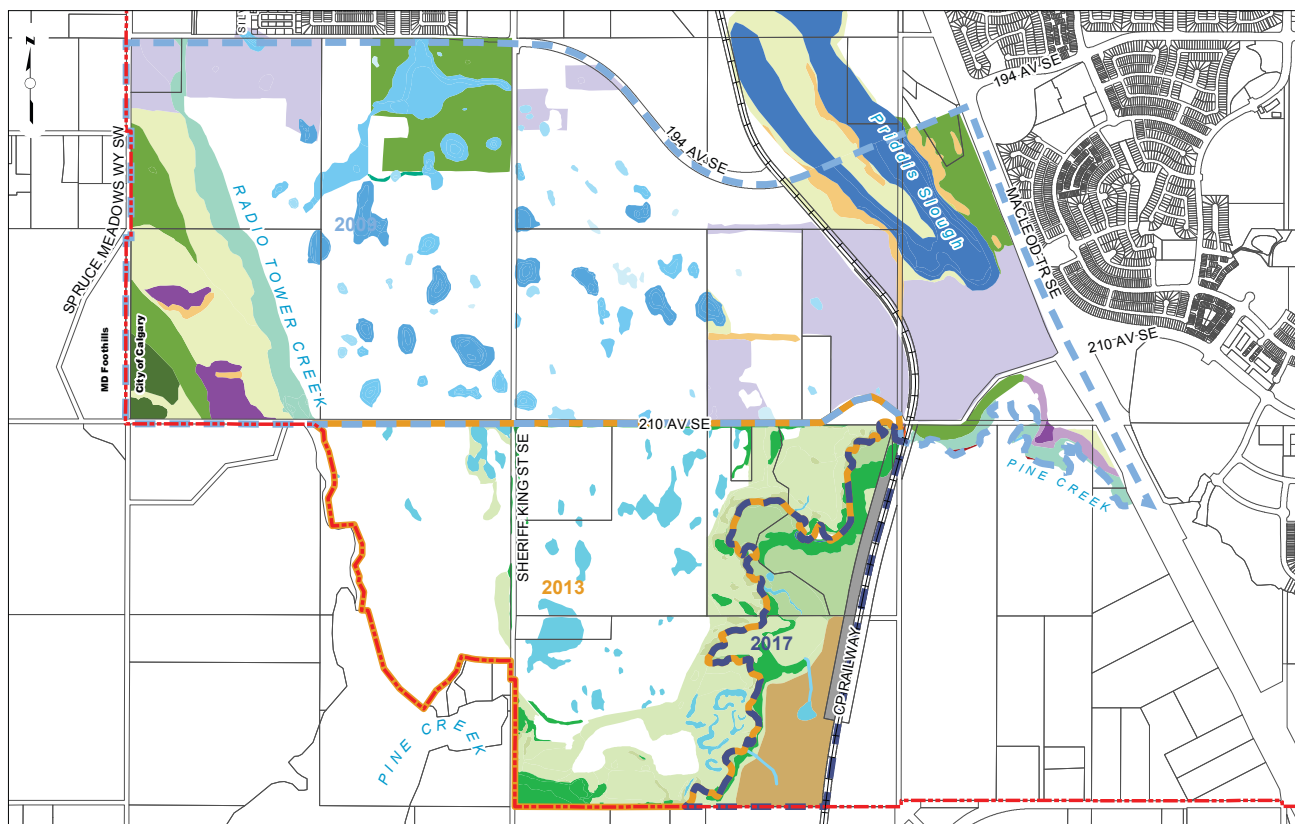
APPENDIX F: BIOPHYSICAL BACKGROUND INFORMATION

1. Several biophysical inventories were completed in support of this Plan (see Maps 16 for the study areas for each):
2. The West Macleod Area Structure Plan: Biophysical Inventory Update was completed in 2009 by Jacques Whitford AXYS Ltd.
3. Additional biophysical data was collected in 2013 by Stantec Consulting Ltd., but no formal report was completed.
4. The West Macleod Area Structure Plan Amendment Area: Ecological Inventory was completed in 2017 by Stantec Consulting Ltd.

Map 16 provides an inventory of Vegetation Cover and Wetland Classifications in the West Macleod Area Structure Plan. This map is intended to be read in association with Map 6 and Map 8.

Resolution

Map 16: Vegetation Cover and Wetland Classification



West Macleod Area Structure Plan

Vegetation Cover and Wetland Classification

0 200 400 600 800 1,000 1,200
Metres

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



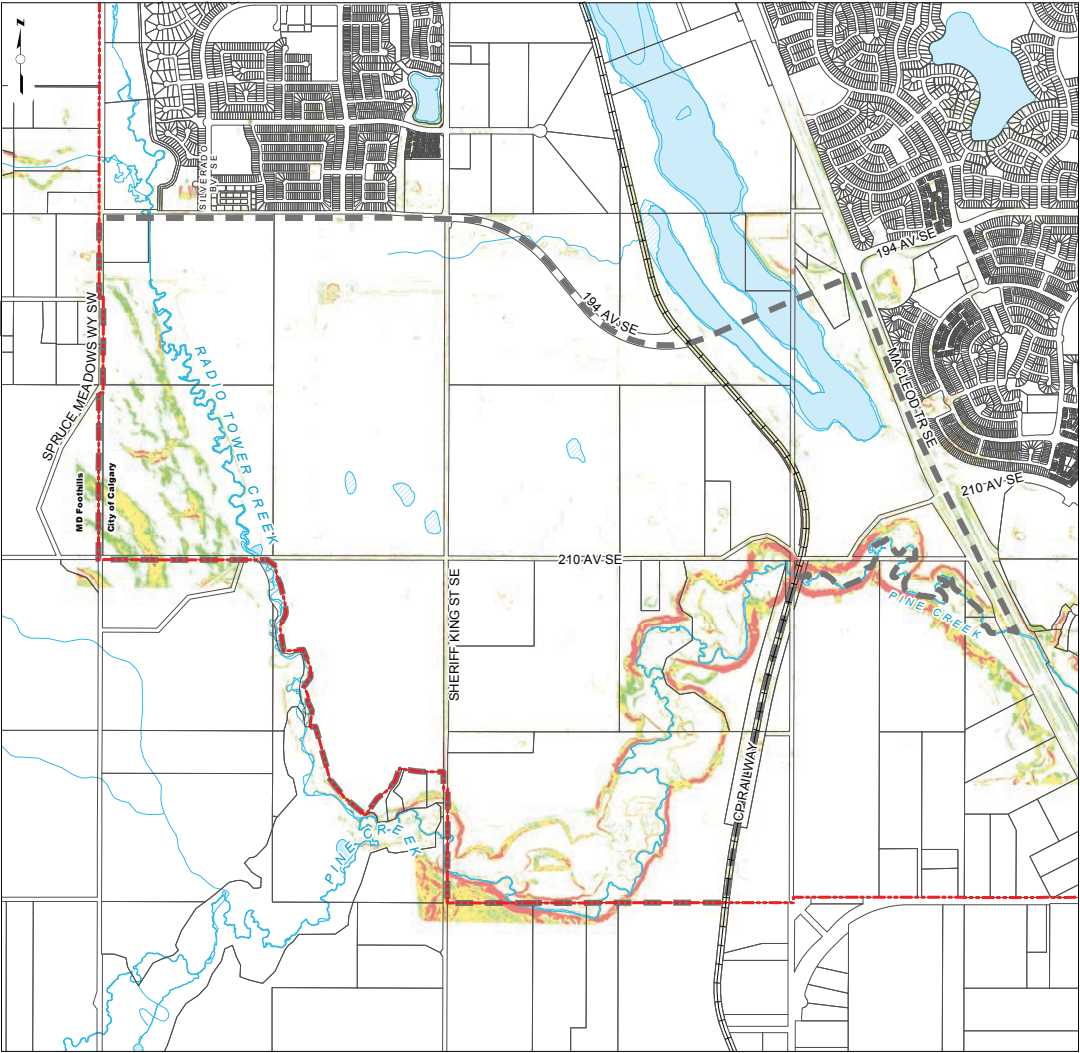
Slopes

Resolution

Map 17 indicates the general areas of slope in the Plan Area. The information shown on this map for the Radio Tower Creek Slopes are to be read in reference to the Residential Area of Interest policies in Section 5.2 and *Council’s Slope Adaptive Development Guidelines Policy* and *Conservation Planning and Design Guidelines*. The exact slopes will be determined at the Outline Plan/Land Use Amendment stage.

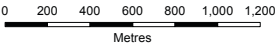
Resolution

Map 17: Slopes



West Macleod
Area Structure Plan

Slopes



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

APPENDIX H: SUSTAINABILITY PRINCIPLES

H.1 Overview

In January 2007, Calgary City Council approved the following Sustainability Principles to provide direction and create a “made-in-Calgary” approach to the broadly recognized Smart Growth principles. These principles have been included in the Plan and create the basis for the vision, goals and policy direction for this Area Structure Plan.

The Sustainability Principles should be considered as a whole and are not to be selectively used as individual statements; individually, they do not provide an integrated, systems-based framework for analysis which is required to achieve sustainability.

H.2 Sustainability Principles

Principle 1: Create a range of housing opportunities and choices

Provide a mix of housing types and ownerships, in the same neighbourhood, to allow residents to live affordably in the same community throughout their lives. A mix of housing creates a more adaptable and resilient community fabric as it is able to respond to demographic changes such as aging populations, empty nesters and smaller households.

Principle 2: Create walkable environments

Create pedestrian-friendly environments with an interconnected street network to ensure walkable access to commercial and public services and amenities. Streets and arterials are designed for walking, cycling, transit access and cars. Neighbourhoods are sufficiently compact with mixed uses to provide sustained transit service.

Principle 3: Foster distinctive, attractive communities with a strong sense of place

Create distinctive, high quality communities designed with architectural and natural elements that reflect local conditions and the values of the residents.

Principle 4: Provide a variety of transportation options

Couple a multi-modal approach to transportation with supportive development patterns to create a variety of transportation options. This includes; increasing the availability of high quality transit service, creating

resiliency and connectivity within the road networks and ensuring connectivity between pedestrian, bike, transit and road facilities.

Principle 5: Preserve open space, agricultural land, natural beauty & critical environmental areas

Maintain and restore ecosystem functions. Respect the natural functions of the landscape, particularly working agricultural land, watersheds and aquatic habitats. Design communities to integrate natural systems with human activities, placing high value on community access to natural systems and parks.

Principle 6: Mix land uses

Mix land use by having homes, businesses, schools and recreational opportunities in closer proximity. This will provide the opportunity for alternatives to driving such as walking and biking while increasing transit viability. This can also enhance the vitality and perceived security of an area by increasing the number of people on the street. Mixed land use is key to achieving more complete communities.

Principle 7: Strategically direct & manage redevelopment opportunities within existing areas

Direct redevelopment towards and within existing areas to create and enhance places in existing communities, while preserving stable areas and valuing existing community context. Strategic intensification makes more efficient use of existing infrastructure and increases transit efficiency.

Principle 8: Support compact development

Compact development supports transit viability and modes of travel other than the automobile. It also allows for the preservation of open space and more efficient use of infrastructure.

Principle 9: Connect people, goods and services locally, regionally and globally

Connectivity of all modes of transportation locally, regionally and globally, ensures a more effective and efficient transportation system for people, goods and services.

Principle 10: Provide transportation services in a safe, effective, affordable and efficient manner that ensures reasonable accessibility to all areas of the city for all citizens

Transportation services and infrastructure should be delivered in a cost-effective and energy efficient manner. The transportation system should provide citizens with safe, barrier-free access to services that supply reasonable access to all areas of the city. Optimally designed and operated transportation systems help to improve the quality of life for citizens, support economic development and protect environmental health.

Principle 11: Utilize green infrastructure and buildings

Utilizing the ecological services provided by the environment will reduce community and environmental impacts as well as private, public, and taxpayer costs of development and infrastructure. Green infrastructure can include energy solutions such as co-generation or renewable energy and water solutions such as stormwater retention and recharge. Green buildings including but not limited to externally certified standards such as LEED (Leading in Energy and Environmental Design), BOMA Go Green for commercial buildings and Built Green TM for residential applications.

APPENDIX I: POLICY FRAMEWORK & REFERENCES


A wide range of City of Calgary plans, policies and guidance documents have been influential in the preparation of the West Macleod 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 reference documents are listed below and their consideration within the preparation of the Plan is summarized within Table 4.

- Access Design Guidelines (Draft), 2002.
- Acquisition of Affordable Housing Lands for Municipal Purposes Policy, 2005.
- Affordable Housing Implementation Plan, 2003.
- Affordable Housing Strategy, 2002.
- Alberta Wetland Policy, 2013.
- Asset Management Strategy, 2003.
- Biophysical Mapping Study for the South Calgary Urban/Rural Fringe, O2 Planning + Design, November 4, 2011.
- Calgary Municipal Development Plan (Calgary Plan), 1998.
- Calgary Municipal Development Plan, 2010 .
- Calgary Parks and Recreation Natural Area Management Plan, 1994.
- Calgary Sister Cities (Selection and Evaluation Processes), 1995.
- Calgary Transportation Plan, 1995.
- Calgary Transportation Plan, 2010.
- Calgary Wetland Conservation Plan, 2004.
- Calgary.... A City of Trees: Parks Urban Forest Strategic Plan, 2007
- City of Calgary Slope Adaptive Development Policy and Guidelines & Conservation Planning and Design Guidelines, 2009.
- Civic Arts Policy, 2004.
- Civic Partnerships, Guide to Policy & Administration, 2002.
- Civic Sport Policy, 2005.
- Community Association Policy Framework, 2003.
- Corporate Accessibility Policy, 2005.
- Corporate Workplace Framework, 2003.
- Council's Sustainability Principles, 2007.
- Crime Prevention Through Environmental Design, www.cpted.net
- Design Guidelines for Subdivision Servicing, 2004.
- Employment Centre Strategy, 1998.
- Engage! Policy, 2003.
- Environmental Development Review Policy, 2006.
- Environmental Policy, 2001.
- Environmental Protection and Enhancement Act, Government of Alberta, 2000.
- Environmental Reserve Setback Guidelines, 2007.

- FCSS Funding Policy for Community Resource Centres, 2004.
- General Planning Criteria for Special Care Facilities in Residential Areas.
- <http://www6.iclei.org/mp/index.html>
- imagineCALGARY, 2006.
- Integrated Risk Management Policy, 2004.
- Local Commercial Policy: New Communities in Calgary Direction Input and Recommendations, 2007.
- Municipal Government Act, Government of Alberta, 2000.
- Open Space Plan, 2002.
- Parks & Recreation Policies and Priorities Manual.
- Parks Urban Forest Strategic Plan, 2007.
- Pathway and Bikeway Plan, 2000.
- Performance Measures Framework, 2005.
- Pine Creek Drainage Study by AMEC, 2007.
- Plan It Calgary: Key Directions for Land Use and Mobility, 2008.
- Policy for Utility Extensions Beyond The City's Boundaries, 1992.
- Public Art Policy, 2004.
- Public Lands Act, Government of Alberta, 2000.
- Rocky View/City of Calgary Intermunicipal Development Plan, 2010.
- South Macleod Trail Regional Policy Plan, 2007.
- South Regional Policy Plan Master Drainage Plan , UMA/AECOM, 2008.
- South Regional Wetland Open Space Study, Ronmor Developers Inc./West Creek Development Inc./IKO-Genstar Joint Venture, 2005.
- Southwest Community 'A' and Employment Centre / Mixed-Use ASP, 2004.
- Stormwater Management Strategy, 2006.
- Suburban Residential Growth 2008-2010, 2009.
- Summary of the Report of the Royal Commission on Aboriginal Peoples, 1999.
- Sustainable Building Policy, 2004.
- Sustainable Development Guidelines for Trees, Shrubs and Ground Cover (Draft), 2009.
- Sustainable Suburbs Study: Creating More Fiscally, Socially and Environmentally Sustainable Communities, 1995.
- The City of Calgary's Environmental Action Plan, 2007.
- Traffic Calming Policy, 2003.
- Transit Friendly Design Guidelines, 1996.
- Transit-Oriented Development Policy Guidelines, 2004.
- Triple Bottom Line Framework, 2006.
- Urban Parks Master Plan, 1994.
- Waste and Recycling Services – Calgary's Journey: Past, Present and Future, 2003.
- Water Efficiency Plan, 2006.
- West Macleod Stormwater Master Drainage Plan, Stantec, 2010.
- Wetlands Conservation Plan, 2003.

Table 4: Strategic Policies



West Macleod ASP Objectives	Municipal Development Plan Objectives Achieved by this Plan
1. Community Foster the development of vibrant, diverse and attractive communities that have access to ample opportunities for recreation, cultural development, education and employment. Complete communities provide a physical and social environment where residents and visitors can live, work and play.	Objectives 2.2: Shaping a More Compact Urban Form Objectives 2.3: Creating Strong Communities Objectives 5.2: Framework for Growth & Change Objectives 5.3: Monitoring and Reporting
2. Safe and Healthy Neighbourhoods Promote safe and healthy neighbourhoods through the delivery of good design, safe public realm and recreational facilities that complement the quality of the built environment.	Objectives 2.3: Creating Strong Communities Objectives 2.4: Urban Design
3. Built Design Improve the quality of new buildings, homes and public realm in terms of design, diversity, character, performance specification, health, sustainability and management in order to create attractive, vibrant, livable complete communities.	Objectives 2.2: Shaping a More Compact Urban Form Objectives 2.3: Creating Strong Communities Objectives 2.4: Urban Design Objectives 2.6: Greening the City
4. City Image Enhance the City of Calgary's image through the city entranceway built form and design features along Macleod Trail to provide visitors with a positive impression when entering the City.	Objectives 2.1: A Prosperous Economy Objectives 2.4: Urban Design
5. Community Diversity Enhance community diversity and sustainability by encouraging affordable home ownership and rental opportunities by providing access to a range of housing opportunities and community facilities in order to enable social integration.	Objectives 2.3: Creating Strong Communities
6. Walkable Communities Develop integrated and well connected, compact communities based on a network of streets (e.g. grid-like) that encourage walking and cycling and are complemented by efficient public transport in order to increase accessibility to schools, retail, services and places to work and play.	Objectives 2.2: Shaping a More Compact Urban Form Objectives 2.4: Urban Design Objectives 2.5: Connecting the City
7. Natural Area Conservation Conserve and enhance the existing wetlands, habitats and gradients in order to ensure a visually appealing and biologically diverse development, where the built form is designed to respect the functions and values of the natural environment.	Objectives 2.3: Creating Strong Communities Objectives 2.6: Greening the City
8. Environmentally Sustainable Design Encourage sustainable design solutions by creating communities where energy and resource use are minimized and building designs incorporate green building methods and alternative energy solutions.	Objectives 2.4: Urban Design Objectives 2.6: Greening the City
9. Economic Viability Provide a wide and diverse range of opportunities for capital investment in the future development of the West Macleod area.	Objectives 2.1: A Prosperous Economy Objectives 2.4: Urban Design Objectives 5.2: Framework for Growth & Change
10. Jobs to Housing Balance Provide for a range of employment opportunities in a mixed-use context focussed around the LRT station. Additionally, encourage mixed uses, home occupation, accessory dwelling units and live-work units around nodes within the Plan area to maximize the opportunities for a positive jobs-to-housing balance.	Objectives 2.3: Creating Strong Communities

City of Calgary Sustainability Principles: Achieved by Plan	Other Plans, Policy & Guidance Achieved by this Plan
Principle 3	City of Calgary MDP (1998), The Calgary Transportation Plan (2005), South Macleod Trail RCS (2007), Triple Bottom Line (2006), Melbourne Principles (2005), Civic Arts Policy (2004), Public Art Policy (2004), Sustainable Suburbs (1995), Access Design Guidelines (2002), Inter-Municipal Development Plan (1998), Community Association Policy
Principle 6	City of Calgary MDP (1998), The Calgary Transportation Plan (2005), South Macleod Trail RCS (2007), Triple Bottom Line (2006), Melbourne Principles (2005), Sustainable Suburbs (1995), CPTED, Civic Sport Policy (2005), Open Space Plan (2002), Parks & Recreation Policies and Priorities Manual, Urban Parks Master Plan (1994)
Principle 6	City of Calgary MDP (1998), The Calgary Transportation Plan (2005), South Macleod Trail RCS (2007), Triple Bottom Line (2006), Melbourne Principles (2005), Design Guidelines for Subdivision Servicing (2004), Environmental Action Plan (2007), Sustainable Building Policy (2004)
Principle 3	City of Calgary MDP (1998), South Macleod Trail RCS (2007), The Calgary Transportation Plan (2005), Triple Bottom Line (2006), Melbourne Principles (2005)
Principle 1	City of Calgary MDP (1998), South Macleod Trail RCS (2007), Triple Bottom Line (2006), Melbourne Principles (2005), Affordable Housing Implementation Plan (2003) & Strategy (2002), Access Design Guidelines (2002), General Planning Criteria for Special Care Facilities
Principle 2 Principle 4	City of Calgary MDP (1998), The Calgary Transportation Plan (2005), South Macleod Trail RCS (2007), Triple Bottom Line (2006), Melbourne Principles (2005), Calgary Transportation Plan (2009), Transit Oriented Development Policy Guidelines (2004), Design Guidelines for Subdivision Servicing (2004), Traffic Calming Policy (2003), Pathway and Bikeway Plan (2000), Transit Friendly Design Guidelines (1996), Parks & Recreation Policies and Priorities Manual (1988), Arts Spaces Strategy, 10 Year Strategic Plan for Sport Facility Development and Enhancement
Principle 2 Principle 4 Principle 8 Principle 9 Principle 10	City of Calgary MDP (1998), South Macleod Trail RCS (2007), Triple Bottom Line (2006), Melbourne Principles (2005), Slope Adaptive & Conservation Planning (2009), Stormwater Management Strategy (2006), Wetland Conservation Plan (2003), Access Design Guidelines (2002),
Principle 5	City of Calgary MDP (1998), Triple Bottom Line (2006), Melbourne Principles (2005), Slope Adaptive & Conservation Planning (2009), Environmental Action Plan (2007), Water Efficiency Plan (2006), Sustainable Building Policy (2004), Waste & Recycling Services (2003), Environmental Development Review Policy (2006), Environmental Policy (2001)
Principle 11	City of Calgary MDP (1998), The Calgary Transportation Plan (2005), South Macleod Trail RCS (2007), Triple Bottom Line (2006), Melbourne Principles (2005), Local Commercial Policy (2007), Employment Centre Strategy (1998)
Principle 11	City of Calgary MDP (1998), The Calgary Transportation Plan (2005), South Macleod Trail RCS (2007), Triple Bottom Line (2006), Melbourne Principles (2005)

APPENDIX J: GLOSSARY

J.1 Abbreviations

ASP:	Area Structure Plan
BIA:	Biophysical Impact Assessment
BOMA:	Building Owners and Managers Association
CEF:	Community Enhancement Fund
CPTED:	Crime Prevention through Environmental Design
DP:	Development Permit
ER:	Environmental Reserve
ESA:	Environmentally Significant Area
HRIA:	Historical Resources Impact Assessment
IDP:	Intermunicipal Development Plan
JUS:	Joint Use Site
JUCC:	Joint Use Coordinating Committee
LEED:	Leading in Energy and Environmental Design
LID:	Low Impact Development
LRT:	Light Rail Transit
MDP:	Municipal Development Plan
MGA:	Municipal Government Act
MR:	Municipal Reserve
EOS:	Environmental Open Space
SSIP:	Stormwater Site Implementation Plan
TBL:	Triple Bottom Line
TIA:	Transportation Impact Assessment
TOD:	Transit Oriented Development
TUC:	Transportation and Utility Corridor

J.2 General Definitions

The following general definitions shall apply:

1. **Approving Authority** means the Subdivision Authority, Development Authority or Subdivision and Development Appeal Board of The City of Calgary, as the context implies.
2. **Calgary Greenway**: A planned linear pathway that will encircle the city and will encompass off-leash dog parks, rest areas, family fitness parks and educational wetlands.
3. **Calgary Planning Commission** means the Calgary Municipal Planning Commission constituted pursuant to the Municipal Planning Commission Bylaw.
4. **Calgary Transportation Plan** means the document that guides the transportation system and its development in Calgary.
5. **Capital Cost Analysis** is a summary of the necessary infrastructure and services to support development in the ASP area relative to the status of that said infrastructure in The City of Calgary's Capital Planning and Capital Budgeting processes.
6. **The City** means The City of Calgary.
7. **Concept Plan** means a Plan submitted at the Outline Plan/Land Use Amendment application stage at the discretion of the Approving Authority, 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. A Shadow Plan may include, but not limited to land use patterns, environmental features, road network and pathway connections.
8. **Core Infrastructure** means water utilities, transportation and facilities regard to accommodate subdivision and development activity in the ASP area.
9. **Council** means the Council of The City of Calgary.
10. **Creditable Reserve Land** means 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***.
11. **Crime Prevention Through Environmental Design** promotes design principles in planned environments that encourage safe behavior and reduce the opportunities for crime to occur.
12. **District Energy** means 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).
13. **Dominant Cover Type** is the vegetation in an area where the vegetative constituent covers more than 60% of the area.
14. **Engineered Stormwater Wetland** means a constructed and/or modified waterbody that fluctuates with water drainage peaks but holds water at all times. The wetland is used to improve stormwater runoff quality through nutrient and sediment removal using vegetation, detention, settlement and other best management practices. The wetland is also used to manage the volume of runoff through storage and restricted pipe outlets. Engineered Stormwater Wetlands have a habitat function with existing or constructed riparian and upland vegetation communities. The boundary of the wetland will be dedicated as Environmental Reserve in accordance with the ***Municipal Government Act***, and the adjacent buffer or riparian and upland vegetation will be

dedicated as MR, and all forebays shall be dedicated as Public Utility Lots (The City of Calgary Wetland Conservation Plan).

15. **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.
16. **Environmentally Significant Area** means a natural area which, because of its features or characteristics, is significant from an environmental perspective in the City, and has the potential to remain viable within an urban context.
17. **Escarpment** is a steep slope formed by the erosive action of water, and normally adjacent to a watercourse.
18. **Grassland** is a dominant cover type including, native, restored and modified grass dominated communities, which are narrow-leaved herbaceous cover that generally grows closer to the soil in height than shrubs or trees.
19. **Gross Developable Area** means the area of a site being subdivided, excluding Environmental Reserve, expressways, freeways and interchange lands, and any lands purchased by The City.
20. **Green Infrastructure** is an interconnected network of natural green and engineered green elements applicable at multiple scales in the ASP. Natural green elements include the conservation and integration of traditional green elements such as trees, wetlands, riparian areas and parks. Engineered green elements include systems and technologies designed to mimic ecological functions or to reduce impacts on ecological systems. Examples include green buildings and greening roadways and bridges.
21. **Gully** is a small channel with steep sides caused by erosion and cut by concentrated but intermittent flow of water usually during and immediately following heavy rains or after ice or snow melt.
22. **Internal Road** means an industrial major road, standard road, or other type of road that provides internal access to sites within the West Macleod ASP area and connections to the regional road network.
23. **Land Use Bylaw 1P2007** establishes procedures to process and decide upon land use and development applications and divides the city into land use districts. It sets out rules that affect how each piece of land in the city may be used and developed.
24. **Leadership in Energy and Environmental Design** is 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.
25. **Local Commercial Policy:** New Communities in Calgary was undertaken by Global Retail Strategies Inc. on behalf of the City of Calgary in 2007 to evaluate a viable local commercial policy/model that can be applied to new residential areas in the city. The document provides policy and guidelines with respect to new neighbourhood commercial development and formulates a concise set of actionable guidelines to assist the commercial planning process.
26. **Low Impact Development** is an approach to land development that uses various land planning and design practices and technologies to simultaneously conserve and protect natural resource systems and reduce infrastructure costs.

27. **Municipal Development Plan** means the plan guiding growth and development within The City of Calgary. 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.
28. **Net Developable Area** means the area of site that is being developed.
29. **The Plan** means the West Macleod Area Structure Plan.
30. **The Province** means the Province of Alberta.
31. **Ravine** is a small stream channel, narrow, steep-sided, and commonly V-shaped in cross-section, and larger than a gully.
32. **Regional Road** means a major road, expressway or freeway that accesses the West Macleod ASP area, including Macleod Trail S, 194 Avenue SE, 210 Avenue SE and Spruce Meadows Way SW.
33. **Shrubs** are a dominant cover type including low and tall shrub dominated communities, which are woody plants that may be multi-stemmed and generally grow to 0.5 to 6m tall.
34. **Trees** are a dominant cover type including deciduous forest, mixed forest, and coniferous forest tree dominated communities, where a tree is a perennial woody plant, typically with a single stem and a more or less defined crown that is capable of growing more than 5 m tall.
35. **Triple Bottom Line** thinking means that Council and staff will consider and address social, economic, environmental and smart growth impacts in all City business. The Triple Bottom Line Policy was adopted by Council on September 12, 2005.

J.3 Land Use Definitions

The following land use definitions shall apply:

1. **Accessory Use** means the use of land, buildings or structures for a purpose that is incidental or subordinate to the principle use of the site.
2. **Affordable Housing** means:

The City of Calgary Council approved definition of affordable housing addresses the housing needs of those households that can qualify for a housing subsidy. They are households who are both low income (defined using 2006 Census terms as being below \$44,000 of combined household income) and who are paying a maximum of 30% of their pre-tax-income on shelter.

Housing affordability addresses the housing needs of those households who do not qualify for subsidy, but can not afford market housing.

3. **Community Recycling Depot** uses accept mixed paper, cardboard, newspaper, magazines, clear or coloured glass food and beverage containers, metal food cans and lids, milk jugs and cartons, plastic bags and plastics # 1-7 for recycling.
4. **Compact Development** means a traditional neighbourhood, where a mix of different types of residential and commercial developments form a tightly knit unit. Residents can walk or bike to more of the places they need to go and municipal services costs are lower due to the close proximity of residences. Compact building design reduces the footprint of new construction, thus preserving green space to absorb and filter rain water, reduce flooding and stormwater drainage needs. Compact building design is necessary to sustain transit ridership at levels necessary to make public transit a viable transportation option.

5. **Employment Related Use** means a use, other than an office, that by its nature is employment intensive and determined to be compatible and appropriate in the context of a higher quality, fully-serviced industrial/business park and may include, but is not limited to, such uses as manufacturing plants, colleges and laboratories.
6. **Local Commercial Use** means the use of land, buildings or structures for the purpose of providing retail goods and services on a limited scale to primarily local employees or patrons in the area and may include, but is not limited to, restaurants, convenience food stores, gas bars, and financial institutions.
7. **Mixed Use Development** means the development of land, a building or a structure with two or more uses such as residential, office and retail.
8. **Office Use** means the use of land, buildings or structures for the purpose of conducting executive, professional, research, administrative or similar affairs of business including ancillary services for office workers, and may include but is not limited to, administrative offices, consultants offices and research offices.
9. **Public Plaza** means a community amenity that serves a variety of users including building tenants and visitors and members of the public. This space type may function as pedestrian site arrival points, homes for public art, settings for recreation and relaxation, and inconspicuous security features for high profile buildings. Plazas are a beneficial feature of any lively streetscape.
10. **Public Use** means 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 public facilities.
11. **Recreational Use** means 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 and may include, but is not limited to, golf courses and driving ranges, ice skating rinks, sport fields, recreational centres, and parks and playgrounds.
12. **Retail Commercial Use** means the use of land, buildings or structures for the purpose of selling retail goods and services to the final consumer, and includes the storage of merchandise on or about the premises in quantities sufficient to supply the establishment, but does not include secondary commercial uses as defined herein, and may include, but is not limited to convenience food stores, supermarkets, restaurants, auto service centres, theatres, and financial institutions.
13. **Secondary Commercial Use** means the use of land, buildings or structures for the purpose of providing retail goods, services or entertainment to the final consumer that by its nature requires extensive indoor or outdoor areas for storage or display or carrying out the activity, entertainment or service and may include, but is not limited to, retail stores, vehicle sales and rentals and gaming establishment.
14. **Service Commercial Use** means 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.
15. **Similar Use** means the use of land, buildings or structures for a purpose that is similar in form or function to a use identified within a land use area shown on the Land Use Concept Map (Map 4) within the Plan but does not meet the definition of that use in all respects.
16. **Stand Alone Commercial Use** means the commercial use is independent from other uses of the site, and the building and structure for the office use is separated from other uses.

17. **Stand Alone Office Use** means the office use is independent from other uses of the site, and the building and structure for the office use is separated from other uses.
18. **Special 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.
19. **Temporary Use** means a use of land that involves low capital investment in buildings or structures, can be readily removed once urban development is imminent, can be regulated through pre-established timelines under the land use controls in effect and will not, in anyway, compromise the ultimate planned use for the site.

J.4 Conversions

The following density calculations provide a conversion between the intensity targets of the Municipal Development Plan, which includes population and jobs, into the equivalent units per acre and units per hectare calculation.















Population & Jobs per Gross Dev Ha*	Units/Acre	Units/Hectare
40	6.0	14.9
45	6.8	16.7
50	7.5	18.6
55	8.3	20.5
60	9.0	22.3
65	9.8	24.2
70	10.5	26.0
75	11.3	27.9

Assumes Occupancy Rate of 2.5 people per unit

* Jobs are assumed to be 7% of total threshold number

APPENDIX K: ACKNOWLEDGEMENTS

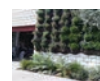
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Herb spiral one month later, anarchitect, http://www.flickr.com/photos/anarchitect/3733506488/	
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Mixed use, mid-rise building -Americana, La Citta Vita, http://www.flickr.com/photos/koshalek/2486039629/	
New Rain Barrel, Maia C, http://www.flickr.com/photos/maiac/3494659955/	
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Place of Employment, summer 2007 (Quarry Park - Adam Joseph Lewis Centre, Oberlin), trixtrixtrixx, <http://www.flickr.com/photos/robotar/528979978/>



Portland Townhomes, La Citta Vita, <http://www.flickr.com/photos/koshalek/2543362880/>



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Smogshoppe, Taviivat, <http://www.flickr.com/photos/taviivat/3537487636/>



Straw Bale House - 11, Cameron, <http://www.flickr.com/photos/bluearc21/5036084/>



They're so tiny, hdc, <http://www.flickr.com/photos/hommedechevre/2234983863/>



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VCEP ROOF, Elaine of Lotus Land <http://www.flickr.com/photos/20778782@N00/3265250961/>



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Where I've Lived in Calgary - Project 365 Day 96, Ronaldok, <http://www.flickr.com/photos/30638967@N03/3386230454/in/set-72157614963267137/>



Xeric Garden, edgeplot, <http://www.flickr.com/photos/edgeplot/63450609/>

