

## SOUTHEAST 68 STREET INDUSTRIAL AREA STRUCTURE PLAN











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SOUTHEAST 68 STREET INDUSTRIAL AREA STRUCTURE PLAN

## **EXECUTIVE SUMMARY**

The Southeast 68th Street Industrial Area Structure Plan (ASP) revises the remaining greenfield areas of the existing Southeast Industrial ASP document. These industrial greenfield areas are adjacent to 68th Street S.E. and comprise the bulk of remaining industrial lands in the south east quadrant of Calgary, located west of the Stoney Trail.

This ASP provides direction for the remaining greenfield areas identified as "Future Industrial areas" within the existing Southeast Industrial ASP (1996) document. The existing Southeast Industrial ASP document will continue to provide policy direction for the existing built up areas west of 68th Street until work on a new Area Redevelopment Plan for that area is completed.

These lands are important for the ongoing economic development of Calgary. Industrial development in south east Calgary is integral to the continued rise of Calgary as an important oil and gas, engineering and design and manufacturing centre. Warehouse and distribution activities have also grown over time and will continue to grow throughout the area and around the Canadian Pacific (CP) intermodal rail facilities. Integral to the area is the planning for park development abutting Forest Lawn Creek which incorporates major wetland areas and native grassland.

The area vision is for sensitive industrial development that incorporates the best in green building technology and site design.

## Vision For The Plan Area

- The ASP area will be developed as an important industrial and business area that generates employment, accommodates a wide range of industrial uses, and provides a wide range of goods and services.
- The ASP area is strategically located within the major southeast industrial area, and will provide

growth opportunities for new and existing industrial businesses.

- The ASP area also lies west of the Shepard Industrial ASP area and should provide contiguous industrial development between existing industrial areas to the west and new industrial and energy developments within the Shepard area.
- The ASP area also lies adjacent to the Stoney Trail, a component of the larger provincial highway system, and a part of the North American CANAMEX corridor. This corridor links manufacturing industries in the U.S. and Mexico with major energy production in northern Alberta. The ASP area should provide for those businesses desiring visibility and access along this corridor in addition to proximity to an array of industrial suppliers in the southeast quadrant.
- Industrial uses will be encouraged to provide green infrastructure, green building technologies and innovative land development wherever possible. Eco-industrial design synergies will be encouraged throughout the ASP area.
- Pedestrian sidewalks, walkways and pathways and bicycle connections should be located strategically throughout the area. These pathways should link major regional parks and greenway infrastructure and provide alternate commuting routes for employees and for recreational access. The pedestrian and cycling system should be strategically connected to the regional park system which includes pathways along the Western Headworks Canal, Forest Lawn Creek and Ralph Klein Legacy Park.
- Wetlands should be conserved and enhanced and should provide passive recreational opportunities for employees and the public. Preservation and enhancement of Forest Lawn Creek should help protect water quality and quantity in the Bow River watershed, provide a key landmark for the ASP area and provide a major link in the Citywide and regional park and pathway system.

- Innovative storm water management approaches should protect the Bow River Watershed, including source control methods, bio-swales, re-use of rain water for irrigation and other Low Impact Development measures.
- The jobs density in the area is expected to be typical of lighter intensity industrial development, or approximately 20 jobs /hectare on average. At build out, the Southeast 68 Street Industrial ASP area is therefore expected to accommodate approximately 13,500-15,000 jobs.

## **Triple Bottom Line & Sustainability**

The City of Calgary Triple Bottom Line Policy and Sustainability Principles for Land Use and Mobility (Appendix H) approved by City Council, are incorporated into the vision for the ASP area and are refined further by the following goal statements.

# Triple Bottom Line Goals for the Area

#### SOCIAL GOALS

The ASP should help to promote a high quality of life and active living by directing development to achieve the following goals over the life of the plan:

#### **The Working Environment**

To provide a desirable working environment through the provision of amenities, recreational facilities, open space, transit service, pathway system and services for employees.

#### **Pedestrian and Bicycle Circulation**

To provide employee commuting and recreational walking and cycling pathways throughout the ASP area.

#### **Recreational Areas and Public Amenities**

To provide a range of active and passive recreational and natural features within the ASP area for use by employees within the Plan area and by all Calgarians.

#### **ENVIRONMENTAL GOALS**

The ASP will value and protect the environment by directing development to meet the following goals:

#### **Forest Lawn Creek**

To conserve and enhance Forest Lawn Creek as an important landmark feature of the ASP area and provide important recreational amenities for the public and area employees.

#### **Green Design**

To accommodate and promote innovative approaches to environmental site layout, servicing, building design and orientation, and the appropriate use of energy saving technology.

#### **Resource and Energy Conservation**

To encourage energy conservation and resource recycling throughout the area.

#### **Environmental Protection**

To protect environmentally significant wetlands and habitats.

To provide for the conservation and enhancement of natural areas and significant habitats.

#### **Pedestrian and Bicycle Circulation**

To provide walking and cycling routes as a viable alternative to private automobile use.

#### **Public Transit**

To provide for efficient public transit service that reduces private automobile use.

#### **ECONOMIC GOALS**

The ASP should help to encourage a wide range of industrial and business development that contributes to Calgary's long-term prosperity by directing development to achieve the following goals:

#### **Industrial Development**

To provide for successful cost effective serviced

industrial development that continues to fuel Calgary's economic growth.

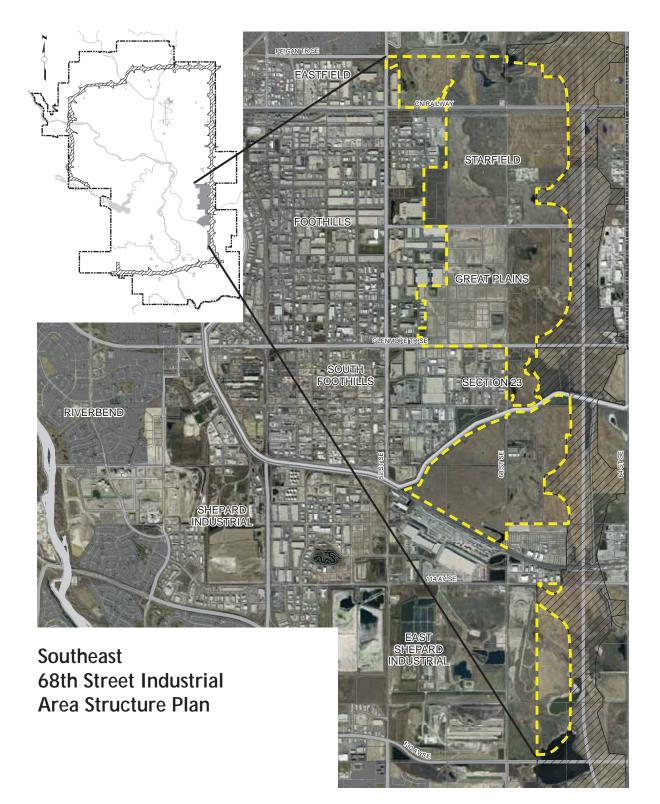
#### **Road Network**

To provide for a safe and efficient internal and regional road system.

#### **Utility Services**

To provide for water, sanitary sewer and stormwater services and other infrastructure required to meet the needs of the area.

## Map 1 Plan Location



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

## 1.0 SCOPE OF THE AREA STRUCTURE PLAN

### 1.1 Preface

The Southeast 68 Street Industrial Area Structure Plan (the "ASP") comprises approximately 1,084 hectares (2,679 acres) of land and is located south of Peigan Trail S.E. to 130 Avenue S.E., and east of 52nd Street S.E. to the Provincial Transportation and Utility Corridor (TUC) also known as the Stoney Trail.

The area is predominantly comprised of undeveloped industrial land (greenfield), currently used for agricultural purposes.

The Southeast 68 Street Industrial ASP supersedes the existing Southeast Industrial ASP (1996) for the subject lands. The Southeast 68 Street Industrial ASP provides an updated vision for area development, land use, natural features conservation, and infrastructure provision. The Plan also aligns with the intent of broader policy documents recently approved by Council, including, but not limited to, the Calgary Municipal Development Plan and the Calgary Transportation Plan. The ASP also provides necessary comprehensive planning for this area which is located between the fully developed southeast industrial lands west of 52 Street SE and the newly annexed lands now governed by land use policy under the Shepard Industrial ASP.

The ASP provides for sensitive and sustainable industrial development of the last remaining area of largely unsubdivided greenfield industrial land in southeast Calgary, located inside the Calgary TUC.

## 1.2 Strategic Policies

The ASP process anticipates that over time The City of Calgary will continue to institute and incorporate policy directions to guide future growth. In preparing this ASP, a wide range of existing Council approved plans and policies were reviewed and incorporated, including, but not limited to the following: the *Municipal Development Plan (MDP)*, the Calgary Transportation Plan (CTP), Triple Bottom Line Policy, Sustainability Principles for Land Use and Mobility, Wetland Conservation Plan, Bicycle Policy, and Transit Friendly Design Guidelines.

## 1.3 Growth Rationale

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

- To update the policies and vision of the existing Southeast Industrial ASP (1996) based on the recently approved Calgary Municiopal Developmet Plan (MDP) and Calgary Transportation Plan (CTP).
- To provide updated policy to guide the review of Outline Plan/ Land Use and Development Permit applications, and to better reflect the current Land Use Bylaw (1P2007).
- The southeast industrial land supply is a largely undeveloped industrial area (greenfield) and forms the last contiguous extent of industrial land in the southeast quadrant of the City. The southeast industrial area has long been the industrial heart of Calgary both in the number of employees and range of uses. Uses in this area include manufacturing, distribution, warehousing, office and outdoor storage.
- The area abuts the CANAMEX corridor which provides a vital transport link from Canada to the United States and Mexico via Highway 2.
- This ASP should help ensure a sufficient supply of planned industrial land is available for a wide range of business and industrial uses, and to support a healthy, competitive industrial land market.

• This ASP should ensure future industrial development proceeds cohesively and compatibly with both the existing development within the Southeast quadrant and extending to the *Shepard Industrial ASP* area to the east.

## 2.0 INTRODUCTION

### 2.1 Purpose of the Area Structure Plan

The purpose of an Area Structure Plan (ASP) is twofold. First, it implements The City's broader planning objectives as contained in city-wide strategic planning documents (e.g., the *Municipal Development Plan, Calgary Transportation Plan*) by promoting logical, efficient and sustainable development. Second, the plan guides and directs land use, subdivision and development decisions. The plan, therefore, promotes orderly, efficient and compatible patterns of urban growth.

An ASP prescribes a broad framework for future development. This framework consists of long term goals, design concepts, policy statements and actions. The framework should provide clear direction on a variety of land use issues for both the public and private sector while allowing for creativity and innovation in responding to ever changing market demands.

## 2.2 Authority of the ASP

The ASP has been adopted by City Council bylaw in accordance with the *Municipal Government Act* section 633. This section states:

- 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.

## 2.3 Timeframe of the ASP

The ASP addresses how the area is to be developed over an extended period of time through a series of public and private initiatives. Complete build-out of the plan area is thus highly dependent on many factors: some unforseen, others known but beyond the reach of a plan to control. As a result, no specific development timeframe is outlined in this plan.

## 2.4 Interpretation of the ASP

#### 2.4.1 Map Interpretation

Unless otherwise specified, the boundaries or locations of any symbols or areas shown on a map are approximate only.

#### 2.4.2 Photographs

Photographs provided in this ASP they are provided for illustrative purposes only and do not limit the built form or specify the urban design.

### 2.4.3 Policy Interpretation

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

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

In some policies the word "should" is explicitly used to further clarify the directional nature of the statement. Policies that use "should" are applied in all situations, unless it can be clearly demonstrated to the satisfaction of The City of Calgary that the policy is not reasonable, practical or feasible in a given situation. Proposed alternatives must be to the satisfaction of The City of Calgary with regards to design and performance standards.

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 ASP.

#### 2.4.4 Guidelines and Appendices Interpretation

The Appendices contain guidelines that 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 may be varied or expanded upon as deemed appropriate.

Where the guidelines and Appendices 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.

## 2.5 Amendment of the ASP

Unless otherwise specified within the ASP, any amendment to the text or maps within the ASP requires a Public Hearing of Council in accordance with the *Municipal Government Act*.

Where an amendment to the ASP is requested, the applicant shall submit the supporting information necessary to evaluate the amendment.

Appendices are not subject to the ASP amendment process.

## 2.6 Consistency of the ASP

Consistency between the ASP and other Council approved policy documents, should be achieved in practice.

## 2.7 Monitoring the ASP

The policies within the ASP should be monitored over time in relation to development to ensure they remain current and relevant. Where determined necessary, the policies should be updated through the ASP amendment process.

## 2.8 Environmental Constraints

Area Structure Plans are long-term planning documents. As such, they promote a vision and put in place policies and guidelines that work toward achieving that vision. Policies and guidelines in an Area Structure Plan 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 ASP area. In that regard, no representation is made herein that any particular site is suitable for a particular use as site conditions or constraints, including environmental contamination, should be assessed on a case by case basis as part of an application for land use, subdivision, or Development Permit approval.

## 3.0 PLANNING AREA

### 3.1 Plan Area Map

The ASP includes all lands identified on Map 1: Plan Location. The ASP area is approximately 1,084 hectares (2,678 acres) in size and is located in the southeast quadrant of the City on lands west of the Transportation and Utility Corridor (TUC). The ASP area is bounded by Peigan Trail to the north, 130th Avenue SE to the south, 52nd Street SE to the west and the TUC, containing Stoney Trail, to the east.

The boundary of the ASP area as shown on Map 1: Plan Location, is subject to interpretation where it coincides with future road alignments or other features that may be adjusted through subsequent studies.

### 3.2 Context of the ASP

The ASP area is located within the current existing Southeast Industrial Area Structure Plan policy area. The Southeast 68 Street Industrial ASP will replace the current industrial ASP policy within the identified area. Existing Land Use/Outline Plan and other land use approvals in place at the time of approval of this ASP take precedence over this ASP. Map 12 (Appendix J) illustrates current land use designations.

The Southeast 68 Street Industrial ASP only applies to the area identified on Map 1. All other remaining areas within the Southeast Industrial ASP will continue to be governed by the policies of the existing Southeast Industrial ASP.

The ASP area is identified as an industrial employment area in the Municipal Development Plan and abuts municipal infrastructure (landfill), residual industrial areas, the TUC, and other general industrial lands.

## 4.0 ENVIRONMENTAL SUSTAINABILITY

## 4.1 Purpose

These policies encourage sensitive industrial development, integrated with Forest Lawn Creek and encourage eco-industrial business park development where appropriate. Throughout the area, the application of best practices for water conservation, resource and energy conservation should be encouraged. The following policies should be applied at the Outline Plan / Land Use Amendment and/or Development Permit stage, where appropriate.

## 4.2 Policies

#### 1. Water Conservation

- Water conservation solutions, such as storm water retention, recharge and re-use of wastewater effluent (gray water), are strongly encouraged.
- b. Developers and builders are encouraged to install water saving fixtures.
- c. Appropriate site design including the use of rain gardens, water catchments, bioswales and pervious pavement in parking areas is encouraged to help minimize run-off in wetland areas and increase groundwater infiltration and re-charge.
- d. The use of a passive rainwater collection system for non-potable water use is encouraged.

#### 2. Resource and Energy Conservation

- a. Builders and owners are encouraged to design, locate and construct buildings in order to reduce energy consumption and resource use.
- b. LEED certification, or other similar accreditation programs (eg. Build Green), of industrial and other building designs

is encouraged. Practices that improve LEED scores includes: optimizing solar insolation, maximizing the use of natural light and ventilation; xeriscaping; re-use of recycled materials in building construction; and building green roofs.

c. The use of energy efficient street light fixtures that minimize light pollution and provide sufficient illumination for traffic safety and security is encouraged.



#### 3. Bird Protection

The design of infrastructure and buildings in the Plan, should incorporate bird protection measures including, but not limited to, roadways, bridges, buildings and overhead powerlines.

## 5.0 LAND USE CONSTRAINTS

## 5.1 Constraints Map

Land use constraints in the ASP area have been identified on Map 2: Constraints, including a 240 kV Power Line, Canada Pacific (CP) Railway, CN Railway, the Western Headworks Canal, wetlands, and municipal waste storage facilities (East Calgary and Shepard landfill sites). Some of the constraints are also considered as opportunities for various purposes, such as wetlands providing recreational opportunities, and the CP and CN Railway lines providing opportunities for rail-related developments. Railway constraints policies are addressed under Section 7.3: Railways.

## 5.2 Western Headworks Canal

#### 5.2.1 Purpose

These policies protect the water quality of the Western Headworks Canal (WHC) and minimize impacts from adjacent development.

### 5.2.2 Policies

#### 1. Setback

- Setbacks from the WHC and landscaping requirements should comply with regulations of the City of Calgary Land Use Bylaw 1P2007.
- Wherever possible and practical, development adjacent to the WHC should provide pedestrian connections to the regional pathways along the Canal.

#### 2. Identification of Setback

In conjunction with an Outline Plan/Land Use Amendment application, plans and information should be submitted that:

- a. delineate the applicable Western Headworks Canal setbacks, and
- provide a site plan or landscape plan to illustrate the proposed landscape design within that setback area.

#### 3. Stormwater

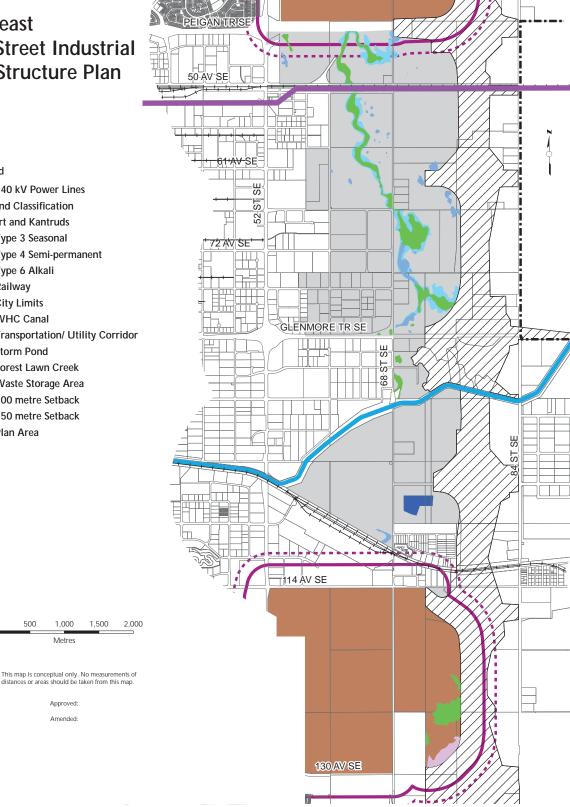
Development adjacent to the WHC should include provisions to ensure that stormwater that would normally run-off to the Canal is contained on site or in an offsite storm pond. Stormwater run-off from future developments to the Canal is not allowed by Alberta Environment.

#### Map 2 **Constraints**

## **Southeast 68th Street Industrial** Area Structure Plan

Legend 240 kV Power Lines Wetland Classification Stewart and Kantruds Type 3 Seasonal Type 4 Semi-permanent Type 6 Alkali +---- Railway --- City Limits WHC Canal Transportation/ Utility Corridor Storm Pond Forest Lawn Creek Waste Storage Area 300 metre Setback 450 metre Setback Plan Area

500



## 5.3 High Voltage Transmission Lines

#### 5.3.1 Purpose

These policies ensure that High Voltage Transmission Line infrastructure are considered as part of the Outline Plan/Land Use Amendment, or Development Permit application, or at other detailed planning stages. The ASP area is currently bisected by an east/west 240kV transmission line within approximately 10 metre wide rights-of-way located along 50th Avenue SE. This transmission line is operated by Altalink, and is illustrated on Map 2: Constraints.

The responsibility for final land acquisition to implement any additional transmission lines lies with the operator. The high voltage transmission provider is required to obtain permission from the Province for any development and is required to consult the public prior to finalizing their submission. Where land abuts existing or proposed rights-of-way, land owners are encouraged to discuss their proposals with the transmission provider.

#### 5.3.2 Policies

- a. Where lands abut the proposed expansion of the 240kV transmission line network, the location of the required easements should be addressed at the Outline Plan/Land Use Amendment application stage in consultation with the transmission provider.
- b. Transmission lines on Map 2: Constraints are shown conceptually, adjustments to these should not require amendments to this ASP.



## 5.4 Existing Municipal Sanitary Landfill Sites

### 5.4.1 Purpose

The purpose of this area is to provide for the protection of the municipally operated East Calgary and Shepard landfill sites and to prohibit encroachment of incompatible uses. The Subdivision and Development Regulation prohibits certain uses (residential, food-establishments, schools and hospitals) from locating within a prescribed setback distance from the landfill site. At the Outline Plan/Land Use approval stage, the setback boundary should be defined and appropriate land use restrictions applied to the affected lands in order to achieve compliance with the provisions of the Regulation.

### 5.4.2 Policies

- a. Delineation of Landfill Setback Boundary
  - As part of an Outline Plan/Land Use application, the boundary of the setback from the East Calgary and Shepard municipal landfill sites shall be precisely defined as required by the Subdivision and Development Regulation.
  - ii. In order to achieve an optimal land use pattern, prior to Outline Plan/ Land Use approval on adjacent lands, the working area of the landfill and associated setback areas shall be comprehensively determined.
- b. Variance of Landfill Setback

Where a variance to the Subdivision and Development Regulation is requested by a developer in order to allow a use which is restricted from locating within the setback area, the variance shall undergo a comprehensive review by the City Administration and shall not be supported unless it can be demonstrated that

- i. the long term operation and viability of the landfill area should not be potentially or actually constrained by the proposed use, and
- ii. adverse public health or safety impacts on the proposed use due to the sites proximity to the landfill should not result.

## 5.5 Forest Lawn Creek

Forest Lawn Creek runs south from Peigan Trail S.E. to the Stoney Trail just north of the WHC canal. This water feature and related wetlands is a constituent part of the Shepard Constructed Wetlands project and the regional pathway system. These waterways, wetland features and related natural areas that qualify as Environmental Reserve may be dedicated as Environmental Reserve at the time of subdivision. Lands that are not acquired as Environmental Reserve may be acquired through voluntary dedication, conservation easement, gift or other means applicable throughout the related Special Study Area.

## 5.6 Historical Resources Overview

A Historical Resources Overview (HRO) has been undertaken for the ASP area, and has been reviewed by Alberta Culture and Community Spirit, Historic Resource Management. Historic sites may exist in the ASP area. Therefore, a Historical Resources



Impact Assessment (HRIA) is required at the Outline Plan/Land Use Amendment application stage for lands within the ASP area.

## 6.0 LAND USE CONCEPT

## 6.1 Land Use Concept Map

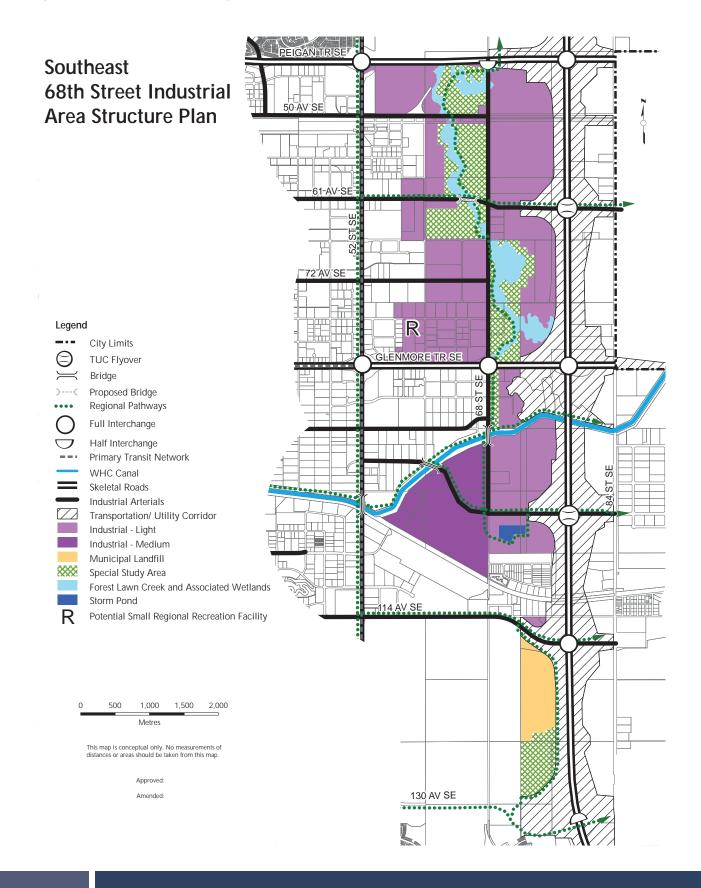
The land use concept for the ASP is shown on Map 3: Land Use Concept. This concept consists of a series of areas and symbols that define a future land use pattern for the ASP area.

Section 7.0: Land Use Areas contains policies that apply to specific land use areas and symbols. The policies identify general categories of land uses allowed within the areas and apply development criteria to these uses.

The jobs density in the area is expected to be typical of lighter intensity industrial development, or approximately 20 jobs/hectare. At build out, the Southeast 68 Street Industrial ASP area is therefore expected to accommodate approximately between 13,500 and 15,000 jobs, depending on the extent of development within the Special Study Area.

The recently approved *Municipal Development Plan* (MDP) has both population and job targets that vary by type of region across the City. However, there are no job targets for standard industrial areas such as the Southeast 68 Street Industrial ASP area. The jobs density used in this report (i.e., 10 to 20 jobs/ hectare) can be considered a slightly below average employment density for general light industrial areas.

#### Map 3 Land Use Concept



## 7.0 LAND USE AREAS

This section provides policies for specific land use areas and symbols. An Outline Plan/Land Use Amendment application submitted for a site should comply with the policies of the land use area or symbol in which the site is located. Appendix D: Recommended Land Use Districts provides recommended land use districts of Land Use Bylaw 1P2007 for each land use area or symbol for reference.

An Outline Plan/Land Use Amendment application should be evaluated in accordance with Section 15: Growth Management Policies, and should refer to Appendix E: Evaluation Guidelines for Outline Plan/ Land Use Amendment Applications. For site and building design criteria at the Development Permit stage or under specific circumstances at the Land Use Amendment stage please refer to Appendix B: Site and Building Design Guidelines.

## 7.1 Industrial - Light Area

#### 7.1.1 Purpose

The purpose of this area is to provide a wide variety of general industrial uses within the context of a fully-serviced industrial park. A range of serviced industrial, service commercial, local commercial, office, institutional, recreational, public and other compatible land uses may be considered appropriate.

### 7.1.2 Policies

#### 1. Composition of the Industrial - Light Area

- a. Subject to the policies of this Plan,
  - a range of industrial and business uses are considered appropriate and compatible in the Industrial Area. This range of uses includes general industrial and business uses,

office, local commercial, service commercial, recreational, public and institutional uses, in accordance with Policy 7.1.2 (2), and

- uses that are considered similar and/or accessory to those listed above may also be considered where determined to be compatible and appropriate by the Approving Authority.
- b. The general categories of uses identified under Policy 7.1.2 (1) (a) above and their locations should be refined through the land use districts applied within the Industrial Area.
- c. Developments adjacent to entranceway roads, regional pathways and residential areas, should comply with Section 10: Interface Policies and should refer to the more specific design guidelines contained within Appendix A: Interface Design Guidelines.

#### 2. Development within Industrial Area

- a. General industrial and business uses within the Industrial Area
  - i. should be the predominant use of land, and
  - ii. higher intensity office employmentrelated uses should be located adjacent to major transit routes, arterials and/or open space amenities.
- b. Office uses
  - i. Stand alone office uses may be considered appropriate.
  - Stand alone office uses should be generally located as part of a comprehensive Outline Plan/ Land Use Amendment application

process. Where individual proposals are considered, the following location criteria should be considered but may not be limited to:

- A. stand alone office uses should not be located in areas that are more appropriate for general industrial uses e.g. areas internal to the Industrial area,
- B. stand alone office uses should be located adjacent to entranceway roads, arterials, transit routes, and/or open space amenities, and
- C. stand alone office uses should be located in close proximity to services and amenities (restaurants, entertainment, parks, recreational facilities, etc.).
- c. Local commercial uses within the Industrial Area should:
  - i. generally be located at the intersection of two roads, and/or along transit routes in order to create a node of activity, and
  - ii. regional or large-scale retail commercial uses should not be located within the Industrial Area.
- d. Service commercial uses within the Industrial Area:
  - i. should be located on a site with efficient access and visibility lying adjacent or in close proximity to an entranceway road, and
  - ii. should not be located at locations that are more appropriate for general industrial uses such as areas internal to the ASP area.
- e. Facilities
  - i. The following City of Calgary facilities are considered appropriate in the Industrial Area:

- A. a Fire/EMS Station,
- B. Public spaces, parks and recreation facilities that provide access to nature, cultural events and social gathering areas, and support art, fitness, leisure, and sport activities that respond to the needs and interests of the service region, and
- C. other City of Calgary facilities as deemed appropriate by the Approving Authority.
- Details of the location and size of the above facilities should refer to Appendix F: Facility Criteria. These criteria should be further refined through Outline Plan/Land Use Amendment application process.

#### 3. Application for Commercial Use within Industrial Area

- a. In conjunction with an Outline Plan/ Land Use Amendment, application for local commercial or service commercial uses within the Industrial Area should include the submittal of a concept plan, a transportation impact analysis and other supporting information as deemed necessary by the Approving Authority.
- Details of concept plan review, and transportation review are contained in Appendix D: Evaluation Guidelines for Outline Plan/Land Use Amendment Application.
- c. Where the commercial use is applied at a small scale (under 1.6 hectares in parcel area), complies with Policy 7.1.2. (2) (c) and (d), and does not have significant impact on adjacent uses, no amendment to Map 3: Land Use Concept is required.

## 7.2 Industrial - Medium Area

#### 7.2.1 Purpose

The purpose of this area is to provide opportunities for medium industrial uses within the context of a fullyserviced Industrial park.



#### 7.2.2 Policies

#### 1. Composition of Industrial Area

- a. Subject to the policies of this Plan,
  - General industrial and a limited range of medium industrial uses are considered appropriate and compatible in the Industrial Medium Area in accordance with Policy 7.1.2 (2), and
  - uses that are considered similar and/or accessory to those listed above may also be considered where determined to be compatible and appropriate by the Approving Authority.
- b. The general categories of uses identified under Policy 7.1.2 (1) (a) above and their locations should be refined through the land use districts applied within the Industrial Area.
- c. Developments adjacent to entranceway roads, the existing Municipal Reserve site, regional pathways and residential areas, should comply with Section 10: Interface

Policies and should refer to the more specific design guidelines contained within Appendix A: Interface Design Guidelines.

#### 2. Analysis of Impacts

- a. Impacts of a proposed development should be comprehensively analyzed at the Outline Plan/Land Use Amendment stage.
- An analysis of impacts should be undertaken to the satisfaction of the Approving Authority, and may include, but is not limited to, the submittal of the following studies
  - i. noise study;
  - ii. odour study;
  - iii. dusty study;
  - iv. traffic study;
  - v. interface study;
  - vi. airborne emissions study;
  - vii. other studies as determined appropriate by the Approving Authority.
- c. Proposed mitigation measures should be comprehensively analyzed at the Outline Plan/Land Use Amendment application stage to the satisfaction of the Approving Authority.
- d. Notwithstanding the above, (a), required studies may be submitted by the applicant at the Development Permit stage at the discretion of the Approving Authority.

## 7.3 Railway

### 7.3.1 Purpose

The ASP area is bounded by the CN (Canadian National) rail line to the north (50th Avenue SE) and bisected by the CP (Canadian Pacific) rail line just north of 113th Avenue SE.

The purpose of these policies is to address appropriate land use and interface treatment between development and the CN and CP Railway properties.



### 7.3.2 Policies

#### 1. Development adjacent to Rail Line

- a. Rail-related land use and development to effectively utilize the existing and future rail line and spur line infrastructure are encouraged in areas adjacent to the rail line.
- Sensitive land uses, including but not limited to child care services and food establishments, are discouraged where proposed to be located adjacent to rail right-of-way.
- c. Any proposed alterations to the existing drainage pattern affecting Railway property should receive prior consent from the Railway operator.

d. Appropriate mitigating measures for proposed development adjacent to railway right-of-way may include berms and/or setbacks to the satisfaction of the Approval Authority.

## 7.4 Municipal Landfill

### 7.4.1 Purpose

Specific land use regulation is required to ensure sufficient land is available for municipal landfill operations. Regulations defining setbacks from municipal landfill sites is required to ensure safe and efficient operation of municipal landfills and to ensure that adjacent landuses are compatible with potential impacts of landfill operations. More detailed information related to required development setback requirements is provided in Appendix A: Interface Design Guidelines.

## 7.4.2 Policies

Development adjacent to municipal landfill sites must adhere to the provisions of the Provincial *Subdivision and Development Regulation* and the *Waste Management Regulation* current at the time of development.

All development shall comply with governing Provincial Legislation including the setback requirements of the *Alberta Subdivision and Development Regulation.* 

## 7.5 Special Study Area

## 7.5.1 Purpose

The purpose of the Special 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 Special Study Area applies to the Forest Lawn Creek and associated habitats.

#### 7.5.2 Policies

#### 1. Composition of the Special Study Area

- a. Subject to the policies of the Plan:
  - i. the Special Study Area applies to those areas as identified on Map 3;
  - supportive upland grassland habitat within the Special Study Area should be conserved where possible;
  - iii. recreational amenities such as pathways, observation areas, regional pathways, nature trails and boardwalks should be allowed within the Special Study Area where there is no demonstrated detrimental impact on the existing Environmentally Significant Areas; and,
  - iv. stormwater management facilities such as forebays, bioswales, drainage control mechanisms, and pipe and pumping systems should be allowed within the Special Study Area where determined to be necessary or appropriate. The release of treated stormwater into existing water bodies 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.
  - v. The design and function of amenities within and surrounding the Special Study Area should support or provide educational and interpretive opportunities, where appropriate.
  - vi. The general categories of uses identified under subsection (1)(a) above should be refined through the Land Use Districts applied within the Special Study Area.

#### 2. Protection of lands within the Special Study Area

- a. Where lands within the Special Study Area are determined to qualify as Environmental Reserve (ER) in accordance with the *Municipal Government Act*, these lands are to be dedicated as ER in their natural state through the Subdivision Approval Process.
- Any lands within the Special Study Area that are not acquired through the subdivision process as ER should be acquired or protected 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)(a) above, where lands within the Special Study Area are not dedicated, acquired or otherwise protected, the lands should be considered to be developable and the policies of the adjacent policy area should apply to these lands without requiring an amendment to Map 3.
- d. Notwithstanding Policy 7.5.2 (2)(a) 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 1P2007.

#### 3. Interface with Special Study Area

- Where lands abut the Special Study Area and Forest Lawn Creek Park, development should proceed in a sensitive manner to protect the environmentally significant areas such that:
  - runoff is diverted, unless the runoff is identified as necessary to supplement wetland habitat within a detailed drainage strategy provided

at the Outline Plan/Land Use Amendment stage;

- ii. recreational uses are controlled in appropriate locations and access is restricted in areas containing sensitive habitat; and,
- an aesthetically appealing visual transition is provided between the Special Study Area/Forest Lawn Creek Park and adjacent development.
- Development adjacent to the Special Study Area should meet the Interface Development Guidelines as identified in Appendix A.

## 7.6 Small Regional Recreation Facility

### 7.6.1 Purpose

A small regional recreation facility could be provided within the ASP area at a location yet to be determined, to serve the active and passive recreational needs of the employees within the plan area and regional residents. The recreation facility functions as a regional gathering place for residents from southeast Calgary and neighbouring employees and should be accessible by personal vehicle, transit, bicycle and pedestrian traffic. The facility should be integrated with the design and development of Forest Lawn Creek Legacy Park and the Conservation Study area.

## 7.6.2 Policies

#### 1. Composition of the Small Regional Recreation Facility

The recreation facility site should consist of municipal reserve and be suitably sized and configured to accommodate one or more of the following uses that respond to the needs and interests of the service region: public spaces, parks and recreation facilities that provide access to nature, cultural events and social gathering areas, or support arts, fitness, leisure, and sport activities and any other uses within the site that are deemed appropriate.

#### 2. Size of the Small Regional Recreation Facility

The facility site should be approximately 5 hectares (12.3 acres) in size. The size and location of the site should be confirmed at the outline plan stage.

#### 3. Location of the Small Regional Recreation Facility

- a. The Small Regional Recreation Facility should be:
  - i. adjacent to a major collector or arterial road;
  - ii. accessible by several modes of transportation; and,
  - iii. accessible to the regional pathway system.

#### 4. Site Design of the Small Regional Recreation Facility

- a. The Facility should:
  - i. entrances and active edges that front the street;
  - ii. be architecturally designed so that the building signifies its importance and enhances its role as an area landmark;
  - iii. provide for compatible interface treatment with adjacent land uses and development;
  - iv. have visually appealing site design and landscaping treatment;
  - v. be suitably integrated with adjacent institutional and industrial uses;
  - vi. have connections to sidewalks and regional pathways;

- vii. be multi-purpose in design in order to respond to diverse needs, interests, levels of ability, skill and changing community lifestyle needs over time; and,
- viii. integrate works of public art.
- Direct and efficient road networks, regional pathways, sidewalks, and pedestrian and cyclist connections should converge on the Recreation Facility.
- c. The exact location of the Facility should be refined and determined through the Outline Plan/Land Use Amendment application stage.
- d. Parking within the Facility site should:
  - i. be self contained, and buffered from surrounding industrial truck traffic; and,
  - be screened from the street by the building facade or appropriate landscaping.

## 7.7 Forest Lawn Creek and Associated Wetlands

#### 7.7.1 Purpose

Forest Lawn Creek is a central feature of the Legacy Parks System and also the regional Shepard Constructed Wetlands. It serves as a linear park feature as well as a component of the storm water management system, Forest Lawn Creek should be maintained in its natural state while receiving treated storm water to help ensure the viability of the the creek and wetland features.

#### 7.7.2 Policies

The boundaries, setbacks and land use designation of Forest Lawn Creek should be finalized at the Land Use/Outline Plan stage of development.



## 7.8 Employment Forecast

The recently approved Municipal Development Plan (MDP) has both population and job targets that vary by type of region across the City. However, there are no job targets for standard industrial areas such as the Southeast 68 Street Industrial ASP area. The jobs density used in this report (i.e., 10 to 20 jobs/hectare) can be considered an average employment density for general light industrial uses that would be found in existing industrial development.

Also, since the Special Study Area should be available for park expansion, on an opportunity basis, industrial development total jobs for the area are forecast to range from a low of 13,500 (if the entire conservation study area is preserved as park) to a high of 15,000 (if the entire conservation study area is developed).

Land Use Category	Area	Jobs/Ha	Total
Industrial Light	603	20	12,060
Industrial Medium	128	12	1,540
Landfill Expansion	46		
Forest Lawn Creek	73		
Wetland Areas	44		
Special Study Area	162	10	1,620
Small Regional Facility	5		50
MR deferred	19		
TOTAL	1,084		15,270

## 8.0 INTERFACE POLICIES

## 8.1 Purpose

These policies provide for a compatible interface between development and lands immediately adjacent to:

- Entranceway roads including the Stoney Trail, Glenmore Trail SE and Peigan Trail SE;
- The Special Study Area and Forest Lawn Creek Park;
- Existing Municipal Reserve (MR) sites;
- Regional pathways, where feasible; and
- Any other interface areas as determined appropriate by the Approving Authority.

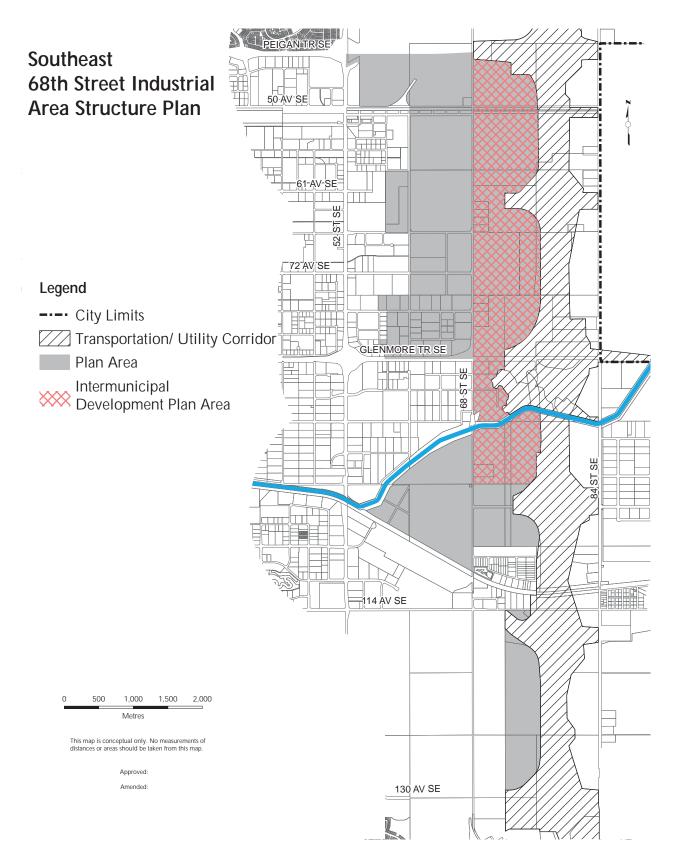
The policies are general in nature and have been refined through the more specific design guidelines contained within Appendix A: Interface Design Guidelines.

### 8.2 Policies

#### 1. Compatible Interface and Coordinated Design

- Any development within an interface area should present a visually attractive image to the public by co-ordinating the elements of site design and building architecture in a suitable and appropriate manner, and should provide for a compatible and appropriate interface treatment.
- Any development within an interface area should refer to the more specific design guidelines contained within Appendix A: Interface Design Guidelines.





## 9.0 INTERMUNICIPAL COORDINATION

#### 9.1 Purpose

The Intermunicipal Development Plan (IDP), approved by the Councils of Rocky View County and The City of Calgary, identifies areas of mutual interest within both municipalities and establishes policies and processes for dealing with issues that may arise. The Southeast 68 Street Industrial ASP area falls within the IDP boundary.

#### 9.2 Policies

#### 1. Intermunicipal Review and Consultation

a. All policies of the IDP plan area related to circulation and resolution of intermunicipal issues shall apply.

## **10.0 RESERVE POLICIES**

Reserve allocation and analysis with an Outline Plan/ Land Use Amendment application should also refer to the Reserve Analysis Guidelines contained within Appendix E: Evaluation Guidelines for Outline Plan/ Land Use Amendment Application.

## 10.1 Creditable Reserve

#### 10.1.1 Purpose

These policies provide a basis for making decisions on the dedication of Municipal Reserve (MR) land within the ASP area. MR owing on a parcel of land should be addressed at the time of subdivision of the parcel in accordance with the provisions of the *Municipal Government Act*.

### 10.1.2 Policies

#### 1. Creditable Reserve Dedication

- a. Subject to Policy 1.b. below, MR owing on a parcel of land should be provided as money-in-lieu of reserve land at the time of subdivision in the entire amount owing on the parcel.
- As an alternative to the provision of money-in-lieu of land, MR owing on a parcel of land may be dedicated in full or in part as reserve land to provide parks and/or community facilities that are determined to be important:
  - i. to serve regional needs,
  - ii. to accommodate an innovative and necessary public/ private park concept which provides amenities for the local workforce,
  - iii. to accommodate an important regional pathway system, and/or

- iv. to enhance the protection and viability of a natural wetland, natural feature or environmentally significant area.
- c. Provision and allocation of MR should be determined at the time of subdivision application, at the discretion of the Approving Authority and the Director of Parks.

#### 2. Natural Parks

- a. Where MR is owing on a parcel of land adjacent to Class 3 to 5 wetlands, that reserve should be dedicated as land in order to contribute to the protection of the wetland and for the purpose of providing passive recreational opportunities as determined necessary by the Approving Authority and the Director of Parks.
- b. Where the ownership pattern allows for the transfer of MR from a parcel that does not lie adjacent to Class 3 to 5 wetlands, to a parcel that does, the transfer and dedication of reserve land may be required through the subdivision process where it would contribute to the natural open space system in the ASP area.

#### 3. Municipal Reserve Analysis

Prior to approval of an Outline Plan/Land Use Amendment application, a developer should submit a reserve analysis identifying the amount of MR:

- i. owing on the lands that are the subject of the application, and
- ii. to be dedicated as land, paid as money-in-lieu of land or deferred by caveat pending future subdivision.

#### 4. Voluntary Municipal Reserve Dedication

MR 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 Approving Authority.

#### 5. Deferral of Municipal Reserve

In accordance with the *Municipal Government Act*, the Approving Authority may register a deferred reserve caveat on a parcel of land owing MR in order to defer a decision on reserve pending the future subdivision of the parcel, provided that the parcel retains its potential for further subdivision.



# 11.0 WETLAND AND ENVIRONMENTAL RESERVE POLICIES

# 11.1 Wetland Decisions

## 11.1.1 Purpose

These policies provide a framework for wetland conservation through the Outline Plan/Land Use Amendment application process. Map 5: Natural Areas illustrates wetlands in the ASP area, including Stewart-Kantrud Class 3 and higher wetlands, which are considered to be of higher environmental significance under the City of Calgary's *Wetland Conservation Plan.* The analysis of a wetland can produce several outcomes, including:

- the confirmation of the wetland boundaries and classification of such areas,
- preservation of the wetland in a natural state with some engineering measures introduced to ensure its long term sustainability, where required,
- 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* should also be addressed.

# 11.1.2 Policies

#### 1. Retention or Development of Wetlands

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

- ii. method of acquisition,
- iii. mitigation and/or restoration 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 need to be resolved at this stage of the planning approval process.
- b. Where a wetland is to be removed, the Outline Plan/Land Use Amendment application should address:
  - i. rationale for this decision, and
  - ii. land or monetary compensation to be provided by the developer.

# 11.2 Wetland Acquisition

## 11.2.1 Purpose

These policies provide for the protection of wetlands and their related upland and native grasslands, where determined practical and appropriate. Wetlands illustrate environmentally significant areas that should be subject to further analysis at the Outline Plan/ Land Use Amendment application stage. Protection should typically occur through the dedication of ER in accordance with the provisions of the *Municipal Government Act.* Where dedication of ER is not possible, other methods of acquiring or protecting wetlands and their related upland and native grasslands should be investigated. The policies also address the potential to allow development of certain wetlands within the ASP area in accordance with the "no net loss" policies of The City of Calgary Wetland Conservation Plan that addresses compensation for significant wetlands that are filled to accommodate development.

## 11.2.2 Policies

#### 1. Environmental Reserve Dedication

- a. Lands identified as ER under the *Municipal Government Act*, should be dedicated as ER through the subdivision process.
- b. Wetlands qualifying as ER should be protected in accordance with the policies of the *Wetland Conservation Plan*.

#### 2. Environmental Reserve Setback

A site-specific variable setback width should 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 should be applied according to stream order:
  - 1st order: 6 m setback
  - 2nd order: 30m setback
  - 3rd order: 50m setback
  - 4th order: 50m setback
- b. In accordance with the City of Calgary Environmental Reserve Setback Guidelines, a base 30m setback from Stewart-Kantrud Class 3 or higher wetlands considered to be ER should be applied. Additional set-backs may be required based on the set-back modifiers stated in the current Development Guidelines and Standard Specifications for Landscape Construction.

#### 3. Alternative Acquisition of Environmentally Significant Areas

Environmentally Significant Areas (ESAs) are defined in the Open Space Plan, Appendix C.2 by one or more of the following criteria:

- quality of biotic community
- ecological function
- distinctive and/or unusual landform
- uniqueness of habitat or ecosystem component
- a. Where determined practical and feasible, lands within the Special 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 acquired and protected through alternative means as determined appropriate by Council or an Approving Authority. The protection of ESAs can occur through:
  - 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. dedication of the lands as Environmental Reserve or Municipal Reserve
  - registration of a conservation easement on title as per the provisions of the Environmental Protection and Enhancement Act,
  - iv. purchase of the lands,
  - v. application of development controls to achieve mandatory protection of the lands,
  - vi. introduction of development incentives to encourage voluntary conservation of the lands, or
  - vii. subdivision restrictions.

- Development controls and incentives introduced under Policy 11.2.2 (2)(a)(v) and (vi) 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. Environmentally Significant Areas (ESAs) are subject to review and decision-making at the Outline Plan/Land Use Amendment Stage and:
  - Forest Lawn Creek and adjacent lands, including Aspen Poplar and willow stands, and native prairie grasslands/shrublands are priority ESAs for protection,
  - 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, and
  - More detailed biophysical impact assessments may be necessary by the proponents of any Outline Plan/ Land Use Amendment applications for development that could impact these areas.

#### 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 with the land owner through the subdivision process subject to a site specific evaluation of the proposal by the Approving Authority.

#### 5. Compensation for Wetlands

Where wetlands or their related upland may 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 lesser 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 provincial approvals, 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.

#### 6. Development of Wetlands

Notwithstanding policy 11.2.2 (1) and (2), where 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 should be considered to be suitable for urban development under the policies of this ASP.

# **11.3 Wetland Protection**

## 11.3.1 Purpose

These policies provide for the retention of wetlands within the ASP area in a sustainable state. The policies address the conservation, engineering and integration of wetlands within the ASP area. These policies are intended to augment and clarify the provisions of The City of Calgary's *Wetland Conservation Plan* insofar as the existing wetlands within the ASP area are concerned. As such, the *Wetland Conservation Plan* continues to apply and should also be referred to on wetland conservation matters.

## 11.3.2 Polices

#### 1. Retention of Wetlands and Streams

Wetlands that are dedicated as ER, or otherwise acquired or protected, should be retained in a natural state (the state at the time of acquisition) except for:

- 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
- 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, should:
  - i. not allow drainage flows from public roads to enter this wetland, and
  - avoid nontreated drainage flows from private lands being directed toward this wetland except for approved (sheet flow) drainage from portions of the interfacing lots, or other approved methods.
- c. Guidelines for a site Grading Plan is contained within Appendix E: Evaluation Guidelines for Outline Plan/Land Use Amendment Applications.

#### 3. Engineering of Wetlands

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

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

#### 4. Integration of Wetlands

 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 plants species and building setbacks to:

## Map 5 Natural Features

Southeast 68th Street Industrial Area Structure Plan



### Legend



0	500	1,000	1,500	2,000
Metres				

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

Approved:

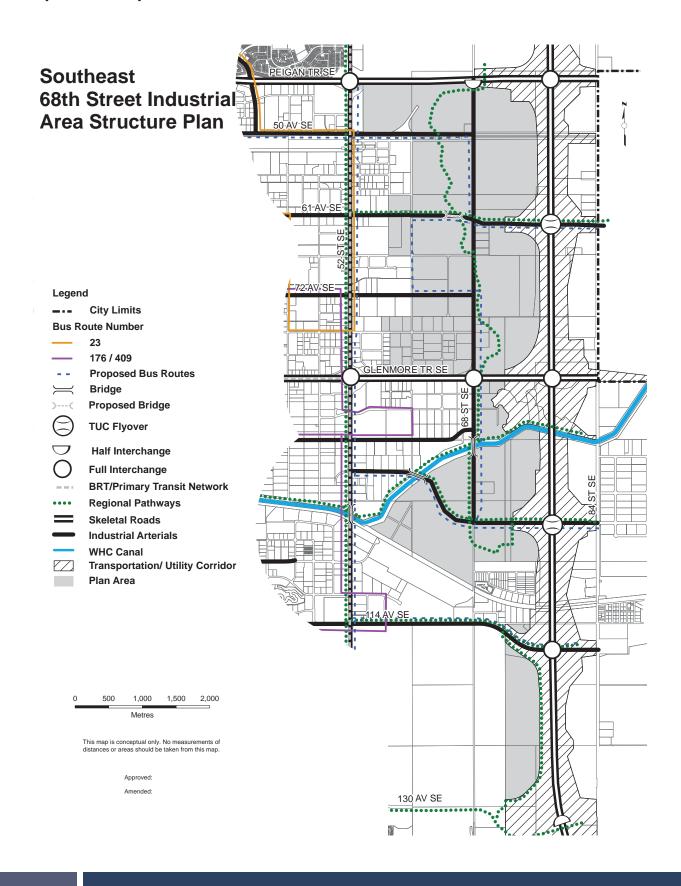
Amended:

- i. create a compatible interface with the lands, and
- ii. retain the natural function of the lands.
- 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. Natural buffers, adjoining a wetland dedicated as ER, 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 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 should be determined at the Outline Plan/Land Use Amendment application stage and subject to the applicable policies, guidelines and standards in effect to address wetland restoration.

# Map 6 Transportation Network



# 12.0 TRANSPORTATION, PATHWAY AND TRANSIT POLICIES

# 12.1 Road Network

# 12.1.1 Purpose

The purpose of these policies is to provide for a transportation network that is safe and efficient for truck movement within and between industrial areas, private vehicles and alternative transportation options. The Road network also recognizes the need to provide emergency protection and response. The road network minimizes impacts on major wetlands and natural features, integrates development within the ASP area and accommodates walking, cycling and public transit.

The road network within the ASP area consists of skeletal roads (Stoney Trail, Glenmore Trail SE, Peigan Trail SE), which provide critical links for traffic to and through the area, and internal roads (arterials, and industrial road classifications) which accommodate local traffic. The general alignment of the skeletal and internal roads is shown on Map 6: Transportation Network.

With the approval of the CTP 2009, the naming of streets has been updated. The new classifications are arterial street and industrial arterial.

Funding for transportation infrastructure should refer to Section 15.0: Growth Management Policies.

# 12.1.2 Policies

#### 1. Transportation and Utility Corridor

 The Stoney Trail is located within the Transportation and Utility Corridor (TUC), classified as a freeway and is under the jurisdiction of the Province of Alberta. Interchanges are planned at Peigan Trail, Glenmore Trail,114 Avenue SE and 130 Avenue SE.

- Flyovers are planned at 61 Avenue SE and 106 Avenue SE, identified on Map 6: Transportation Network.
- c. The TUC and the Stoney Trail alignment as shown both on Map 6: Transportation Network may be subject to refinement by the Province of Alberta.
- d. Any surplus TUC lands should, where possible, be incorporated into the design of the adjacent lands.
- e. No development, including berming, grading or other land disturbance, should be allowed within the TUC without permission being granted by the Province of Alberta.
- f. Proposed pathway routes in the TUC lands require permission from the Province of Alberta.

#### 2. Skeletal Road Network

- a. Skeletal roads within the ASP area include the Stoney Trail, Glenmore Trail SE and Peigan Trail SE.
- b. The regional road rights-of-way should be generally located as shown on Map 6: Transportation Network.
- c. The final alignment and rights-of-way requirements of all roads and their related interchanges and intersections should be determined through a Functional Study, a Mobility Assessment & Plan, or other Transportation Assessment processes deemed appropriate by the Approving Authority.
- d. Prior to completion of the Functional Study, land use or subdivision approval on lands adjacent to a skeletal road should be withheld where such approval would compromise the final alignment of this roadway.

- e. The design and alignment of the skeletal road network shown on Map
  6: Transportation Network may be reevaluated and revised as necessary through the Outline Plan/Land Use Amendment application process.
- f. A Mobility Assessment & Plan, or other Transportation assessment and analysis mechanisms deemed appropriate by the Approving Authority may be required at the Outline Plan/Land Use Amendment and/or Development Permit (application stages). Information required to prepare a Mobility Assessment & Plan is addressed under Section E.4: Transportation Review within Appendix E: Evaluation Guidelines for Outline Plan/ Land Use Amendment Applications.

#### 3. Internal Street Network

- a. The standards and alignment of the internal street network shown on Map
   6: Transportation Network may be re-evaluated and revised as necessary through the Outline Plan/Land Use
   Amendment application process without requiring an amendment to the map.
- b. Internal Streets that are considered to be minor in nature may be approved through the Outline Plan/Land Use Amendment application process without having to be identified on Map 6: Transportation Network. A Mobility Assessment & Plan may also be required at Outline Plan/Land Use Amendment and/or Development Permit (application stages).
- c. The internal street network should provide for:
  - i. convenient industrial truck movement,
  - ii. direct connections to major origin and destination points, wherever possible;
  - ii. safe and efficient traffic flows,

- iii. efficient bus transit routing,
- iv. convenient pedestrian and bicycle routing, and
- v. minimized impacts to wetlands.
- d. 61 Avenue SE, 72 Avenue SE, 90 Avenue SE, 94 Avenue SE, 106 Avenue SE and 114 Avenue SE are classified as Industrial Arterials as part of the internal road network and should be characterised by:
  - i. minimum intersection spacing at 300m is desired,
  - ii. 2.0m sidewalks on both sides of the road (a regional pathway may be implemented in place of a sidewalk on one side),
  - appropriate cycle tracks for off-street cycling or bike lanes for on-street cycling. Off-street cycling through regional pathways or cycle tracks is preferred along arterials in the ASP area,
  - iv. bus transit routes,
  - v. transit facilities, and
  - vi. such other amenities determined appropriate by Transportation Department to reinforce the unique function of these streets and transportation corridors serving the ASP area.
- e. The ultimate design of 61 Avenue SE between 68 Street SE and 57 Street SE should incorporate a bridge to span Forest Lawn Creek and the associated creek area. The design should ensure pedestrian, ecological and hydrological continuity of Forest Lawn Creek and maintain the user experience of the park environment. The height and width of the bridge should be sufficient to allow for pedestrian and wildlife crossings. Bioengineering principles should be used to minimize impact on water quality and habitat features. The bridge should

incorporate the regional pathway for its alignment along 61 Avenue SE.

f. Interim solutions for the design of 61 Avenue SE at 68 Street SE may include either a signalized intersection or roundabout depending on future traffic volumes.

#### 4. Dangerous Goods and Truck Routes

- a. The movement of dangerous goods is controlled by the Transportation of Dangerous Goods Act (Bylaw 13M2004). The dangerous goods routes are part of the truck route system and include Glenmore Trail and Stoney Trail. Peigan Trail is also identified as a potential Dangerous Goods Route.
- b. The City of Calgary has designated certain roads or areas for use by trucks and has also put certain restrictions on trucks. Under the City of Calgary's Truck Route Bylaw (60M90), the Southeast 68 Street Industrial ASP area is currently an unrestricted truck zone.
- c. Glenmore Trail is currently identified as a high load route in the ASP area. Peigan Trail has been identified as a potential high load route in the future. Additional high load routes may be identified in the ASP area in the future.

#### 5. Environmentally Significant Areas and Roads

- The transportation network should be designed or routed to minimize its impact on environmentally significant areas and wetlands.
- b. A Biophysical Impact Assessment may be required to assess the impacts of roadways on environmentally significant areas and identify appropriate measures for mitigation or avoidance where deemed necessary.

#### 6. Emergency Access

As required, emergency access, egress and evacuation routes to the developing portion of the ASP area should be identified at the Outline Plan/Land Use Amendment stage and maintained in a manner satisfactory to the Approving Authority.

# 12.2 Regional Pathway, Pedestrian and Bicycle Circulation System

### 12.2.1 Purpose

The purpose of these policies is to provide for direct and convenient pedestrian and bicycle circulation within the area. The Regional Pathway provides convenient pedestrian and bicycle connections throughout the Plan area for both commuting and recreational use. It should extend throughout the Plan area and provide safe and convenient connections to the recreational/athletic sites, industrial areas and adjacent lands beyond the Plan area. Pedestrian travel should be advanced by regional and local pathways, pedestrian crossings, sidewalks and walkways. Bicycle travel should be comfortable and efficient on an integrated network of regional and local pathways and on-street bicycle routes. The alignment of the system should be determined at the Outline Plan/Land Use Amendment stage.

## 12.2.2 Regional Pathway Policies

#### 1. The regional pathway should

- a. be aligned as conceptually identified on Map 6: Transportation Network;
- be located within or adjacent to a park, transit stop, natural feature, local commercial or other pedestrian destination where practical and appropriate;

- be located to increase the options of walking, cycling and other non-motorized activities throughout employment areas to enable direct and convenient access to surrounding services, facilities, recreational areas, pedestrian and bicycle infrastructure;
- 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 or it may locate within a utility right-of-way;
- e. not be in conflict with front driveways;
- f. not be in conflict with commercial driveways/aisles;
- g. connect to the Forest Lawn Creek regional pathway, the Western Headworks Canal pathway, and the 52 Street SE regional pathway;
- connect to the pedestrian and bicycle infrastructure on road structures across the TUC to provide access to the employment and residential land uses to the east;
- investigate the use of a pathway as a contingency access for emergency services protection and response at the Outline Plan/Land Use approval stage; and,
- j. be designed to a 3.5 metre wide crosssection.
- 2. The Calgary Perimeter Greenway is proposed to follow the Forest Lawn Creek regional pathway alignment through the ASP area. The detailed pathway alignment will be determined at later planning stages through coordination with the Parks Foundation.

# 12.2.3 Pedestrian and Bicycle Circulation Policies

# 1. Local Pathways, Sidewalks, and Walkways should be designed to

- achieve short, convenient, and direct non- motorized connections to activity nodes and transit stops;
- b. advance walking and cycling throughout employment areas;
- c. provide convenient and practical access to transit stops;
- d. link origin/destination points within nodal areas;
- e. connect to the regional pathway system; and
- f. A Mobility Assessment & Plan and/or alternate analysis deemed appropriate by the Approving Authority may be required at the Outline Plan/ Land Use Amendment and/or Development Permit application stages.

#### 2. On-Street Bicycle Routes should be designed to

- a. achieve convenient and direct bicycle connections to activity nodes;
- advance cycling throughout and between employment and recreational areas;
- c. integrate with transit use;
- d. link origin/destination points within the community; and
- e. connect to the city-wide regional pathway and on-street bicycle route system.
- f. A Mobility Assessment & Plan and/or alternate analysis deemed appropriate by the Approving Authority may be required at the Outline Plan/ Land Use Amendment and/or Development Permit application stages.

# 3. On-street bicycle route design treatment options include combinations of

- a. on-street bicycle route signage;
- b. pavement markings such as shared use bicycle stencils and bicycle lanes;
- c. wayfinding signage;
- d. bicycle-activated traffic signals;
- e. intersection treatments such as traffic circles;
- f. bicycle design elements of standard City road cross-sections;
- g. any other appropriate design treatments; and
- A Mobility Assessment & Plan and/or alternate analysis deemed appropriate by the Approving Authority may be required at the Outline Plan/ Land Use Amendment and/or Development Permit application stages.

## 12.2.4 Building and Site Design

- Sites should be situated and designed to provide direct pedestrian and bicycle connections to building entrances from sidewalks, walkways, employee parking areas, regional pathways, bikeways, and transit stops.
- 2. Sites should be designed to minimize conflicts between pedestrian and bicycle circulation from loading areas and truck routes wherever feasible.
- 3. To increase the attractiveness of running, cycling and other active travel for employee commuting or recreation:
  - Developers shall provide secure and short-stay parking as specified in the Land Use Bylaw 1p2007 and
  - b. Developers should provide locker rooms, change rooms and shower facilities on site and/or within buildings.

4. A Mobility Assessment & Plan and/or alternate analysis deemed appropriate by the Approving Authority may be required at the Outline Plan/ Land Use Amendment and/or Development Permit application stages.

# 12.3 Transportation Demand Management

## 12.3.1 Purpose

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

# 12.3.2 Transportation Demand Management Policies

- 1. Developers and employers are should develop Transportation Demand Management (TDM) programs to:
  - a. increase the attractiveness and convenience of employee commuting by public transit, carpooling, cycling, walking, telecommuting and other appropriate methods;
  - b. reduce the use of personal motor vehicles for commuting by employees;
  - c. reduce the peak-period demands on the transportation system; and
  - d. reduce the need for existing rates of onsite employee parking.
- The TDM programs should include initiatives to achieve the requirements outlined in section 12.3.2.1 above. These initiatives could include a universal transit pass or transit subsidies for employees, facilitating ride-matching, promoting carpooling, parking management, and car-sharing.
- 3. The developer and future site managers should provide a written commitment to promote and monitor the TDM program to reduce peak hour site-generated vehicular traffic and report on the TDM program to the Director of Transportation on an annual basis.
- 4. The developer should integrate TDM program infrastructure (e.g. bicycle parking, shower/ locker facilities, carpool parking and pathway/ sidewalk connections) into the development plans at the Development Permit stage.

- 5. Incentives such as reducing the on-site parking requirements are appropriate when components of TDM program and infrastructure have been provided to the satisfaction of the Approving Authority.
- A Mobility Assessment & Plan and/or alternate analysis deemed appropriate by the Approving Authority may be required at the Outline Plan/ Land Use Amendment and/or Development Permit application stages.

# 12.4 Public Transit

# 12.4.1 Purpose

The transit routing and bus service from the 52 Street SE corridor and/or the Douglasglen BRT/ LRT station area to the ASP area should be provided via 114 Avenue SE, and 94 Avenue SE from the west. The proposed transit routes are identified on Map 6: Transportation Network. The transit routes are conceptual, and should be determined with the alignment of local road network at the Outline Plan/ Land Use Amendment stage.

# 12.4.2 Policies

#### 1. Transit Service

- a. Transit service requirements should be achieved through the provision of:
  - i. direct roadway connections that facilitate the efficient operation of transit bus service,
  - sidewalks along both sides of roads that are identified for transit bus service,
  - iii. sidewalks along one side of roads that provide connections to roads with transit bus service, and
  - iv. walkway connections that allow pedestrians to access bus service from areas not directly serviced by transit.

b. Buildings and parking areas should be located and oriented to minimize the walking distance to transit bus zones.

#### 2. Transit Stop Distribution

Transit bus zones should be located to:

- i. minimize walking distances from business development,
- ii. serve higher density commercial and business-related development directly,
- iii. facilitate convenient transit service,
- iv. provide safe waiting locations and access points, and
- v. be provided in accordance with the Transit Friendly Design Guidelines.

#### 3. Transit Routes

The transit routes shall:

- i. be identified at the Outline Plan/Land Use Amendment stage, and
- ii. provide direct service to commercial and higher density business-related development.

#### 4. Transit Shelters

- a. Transit shelters should be located at key transit stops, particularly at those stops serving commercial and higher intensity business-related development.
- b. Transit shelters should be identified at the Outline Plan/Land Use or the Development Permit stage and should be required where ridership exceeds minimum standard volumes.
- c. Transit shelters should be located where:
  - i. weather exposure is evident,
  - ii. higher passenger volumes are expected to be generated,
  - iii. exposure to traffic volumes are expected to be heavy, and

- iv. other environmental effects may trigger the need for shelters.
- d. Bicycle racks should be provided at transit shelters.

#### 5. Transit Impact Analysis

- A Transit Impact Analysis should be provided as part of an Outline Plan/ Land Use Amendment application to the satisfaction of the Approving Authority.
- b. Guidelines for a Transit Impact Analysis are addressed under Section E.10: Transit Review within Appendix E: Evaluation Guidelines for Outline Plan/Land Use Amendment Applications.

# **13.0 SERVICING POLICIES**

The following servicing policies provide for the ultimate planned build out of the Southeast 68 Street Industrial ASP area. At the time of approval of this ASP, funding for all the identified municipal infrastructure has not been included in City Council's capital budget (2009-2011).

# 13.1 Utility Services

# 13.1.1 Purpose

The purpose of these policies is to provide for a suitable level of utility services within the ASP area. New subdivisions and development within the area should require full servicing with municipal utilities (water, sanitary sewer and stormwater) as well as shallow utilities (gas, electrical, telecommunications). Utilities should need to be constructed in sequence as development proceeds, and rights-of-way and easements should need to be acquired to accommodate the extension of utility services through a site. Utility alignments should be identified at the Outline Plan/Land Use Amendment stage. Except for areas with pre-existing approvals, new limited-serviced subdivisions should not be allowed within the ASP area.

# 13.1.2 Policies

#### 1. Municipal Utilities

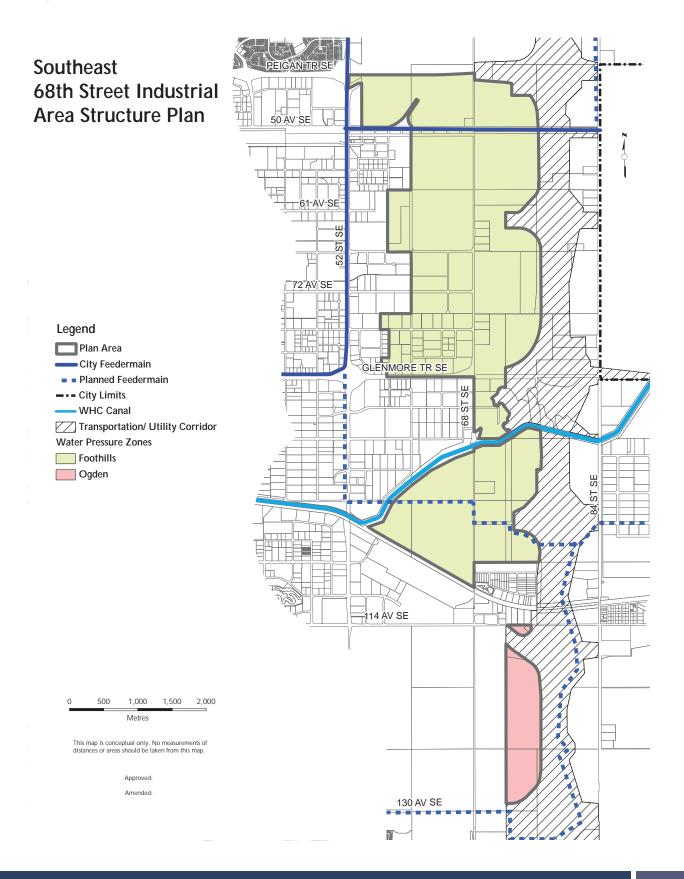
- a. Development within the ASP area should be serviced with municipal water, sanitary sewer and stormwater system.
- b. The alignment and capacity of water distribution and feeder mains, sanitary sewer trunks and mains and storm sewer trunks and mains should be to the satisfaction of The City.

c. Utility rights-of-way and easements should be required to accommodate municipal utilities within a site as determined necessary.

#### 2. Utility Alignments

- a. Prior to Outline Plan/Land Use approval, a developer should submit studies and information determined necessary to identify the location and alignment requirements for municipal utilities within a site.
- Where it is determined that utilities are required to be aligned across the Western Headworks Canal or a wetland, the utilities should be, wherever possible, located within a road right-of-way.
- c. A developer may be required to provide, or enter into an agreement to provide utility rights-of-way or easements necessary to accommodate the extension of municipal utilities in advance of development to allow for the servicing of an adjacent site.
- d. Amendment of the ASP
  - Utilities shown on Map 7: Water Services, Map 8: Sanitary Services, Map 9: Storm Services and Map 10: Shallow Utilities are conceptual. Utility alignments should be refined through Outline Plan/Land Use Amendment application process without the amendment of the ASP.
  - Where an adjustment of utilities is considered to be significant, an ASP amendment may be required as determined necessary by the Approving Authority.

## Map 7 Water Services



# 13.2 Water Distribution

### 13.2.1 Purpose

The purpose of these policies is to provide for a suitably designed water supply system to serve development within the ASP area. The area encompasses two water pressure zones: The Foothills Pressure Zone and the Ogden Pressure Zone. The general alignment of feedermains required to service the SE 68 Street Industrial ASP is shown on Map 7.

The area north of the Western Headworks Canal is entirely within the Foothills Pressure Zone. As shown on Map 7, there are existing feedermains on 52 Street SE and 50 Avenue SE. Future development within the area can be serviced by pressure reduced connections to these feedermains or by extending existing distribution mains.

The area south of the Western Headworks Canal and north of CP railway is also within the Foothills Pressure Zone. This area can be serviced by a proposed feeder main extending from the existing feedermain at 52 Street SE and Glenmore Trail SE. Another option is to upgrade future distribution mains on 68 Street SE or 114 Avenue SE.

The small Area located immediately south of 114 Avenue SE is within the Ogden Pressure Zone and can be serviced by extension of existing distribution mains.

## 13.2.2 Policies

#### 1. Design of Water Distribution System

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

#### 2. Location of the Water Distribution System

The water distribution system should be aligned to minimize its impact on natural features.

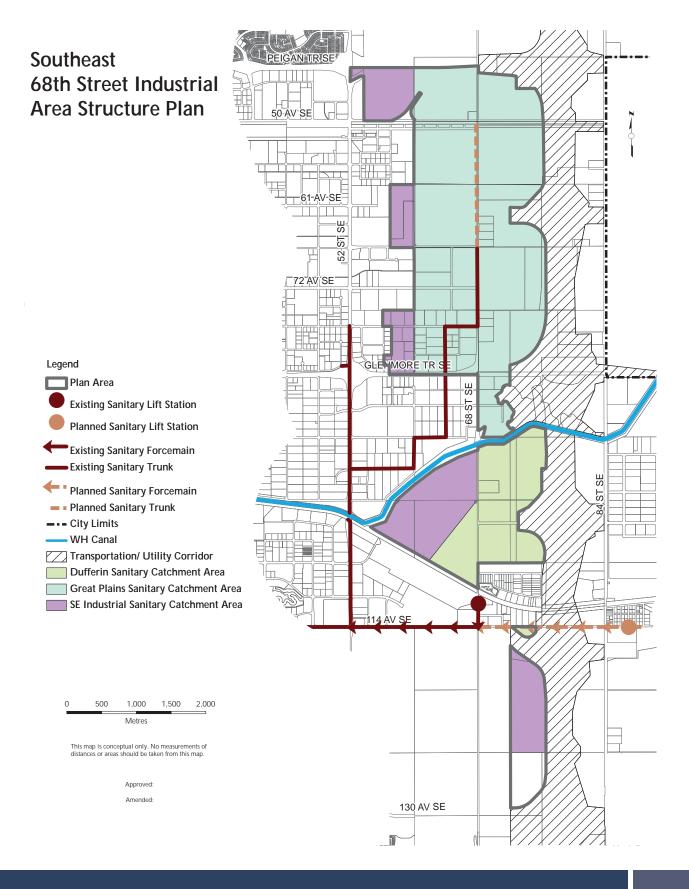
#### 3. Review of Water Distribution System

- The proposed interim distribution system for the Outline Plan area should 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 should 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 should identify any offsite distribution mains and/ or transmission feedermains that may be required to be installed to service the Outline Plan area.

#### 4. Financing

A developer may be required to enter into a Construction and Financing Agreement with The City for the design and construction of the water feedermain.

### Map 8 Sanitary Services



# 13.3 Sanitary Sewer System

# 13.3.1 Purpose

These policies provide a suitably designed sanitary sewer system to service the ASP area. The ASP area includes three catchment areas (See Map 8: Sanitary Services). Future development in the ASP area should be serviced by extensions to the existing and/ or proposed sanitary sewer trunks as required.

The area north of Western Headworks Canal can be serviced by tying into the existing or future extension of the Great Plains Trunk along 68 Street SE. Lift Stations constructed/funded by developers may be needed due to site constraints. Twinning of the trunk along 68 Street SE may be required in the future as development continues within the North portion of the East Regional Context Study as well as the Town of Chestermere.

The lands between the Western Headworks Canal and Canadian Pacific railway, and generally located west of 68 Street SE, should tie in to the existing sanitary sewer trunk on 52 Street SE or other option to the satisfaction of the Approving Authority. A siphon crossing of the CP railway may be required.

The remainder of the lands east of 68 Street SE between the Western Headworks Canal and CP railway are within the catchment for the Dufferin Lift Station which ties in to the Sanitary trunk at 52 Street SE and 114 Avenue SE. The small area south of 114 Avenue SE can also be serviced by the Dufferin Lift Station. Due to the interim storm servicing solution for these lands, as described in the *Regional Sanitary and Storm Interim Servicing Study for Southeast Industrial* (D.A. Watt Consulting Group Ltd., May 25, 2000), development of this area should not exceed the capacity of the Dufferin Lift Station until the future 114 Avenue SE storm trunk is constructed.

The existing sanitary trunk that extends from 52 Street SE and 114 Avenue SE to the Fish Creek wastewater treatment plant should require upgrading as growth continues.

## 13.3.2 Policies

#### 1. Design of Sanitary Sewage System

The sanitary sewage system for the planning area should be designed to adequately and efficiently serve the ultimate development of the area.

#### 2. Analysis of Sanitary Sewer System

As part of an Outline Plan/Land Use Amendment application, a developer should submit a Sanitary Sewer Servicing Study to demonstrate that the subject land can be serviced in accordance with the overall design of the sanitary sewer system for the area.

#### 3. Financing

A developer may be required to enter into a Construction and Financing Agreement with The City of Calgary for the design and construction of the sanitary trunk.

# 13.4 Stormwater Management

## 13.4.1 Purpose

Three main catchment areas service the Plan area as shown on Map 9. The overall stormwater release rate for the stormwater management system is 2.5 L/s/ha. The largest catchment area, located south of Peigan Trail SE and north of the Western Headworks Canal, is within the Forest Lawn Creek catchment area. Under the Forest Lawn Creek Master Drainage Plan Draft (AECOM, 2010), this area would drain to a series of future stormwater ponds then discharge to Forest Lawn Creek at controlled release rates. The minor system could be a mix of a conventional piped system and open ditches due to the limited grades. Currently Forest Lawn Creek is incapable of handling the 1:100 year flows. The entire channel needs to be upgraded to accept the new design flows. Drainage from Forest Lawn Creek reaches the Shepard Diversion Channel through the Shepard Underdrain located in NE24-23-29W4M (within TUC) which eventually discharges to the Bow River via the existing Shepard Ditch.



City of Calgary, Green Infrastructure in Calgary's Mobility Corridors (GICMC), page 26.

The second stormwater catchment area is for lands south of the Western Headworks Canal north of 114 Avenue SE, as well as the small area south of 114 Avenue SE. This area requires several stormwater ponds which discharge to the future 114 Avenue SE storm trunk. This trunk will discharge into the Shepard Diversion Channel upstream of the Shepard Wetland. There is an interim solution for stormwater management currently in place for this catchment. Stormwater from development in the surrounding area is being stored in several ponds and is pumped into the sanitary trunk at 52 Street SE. Development is limited until the 114 Avenue SE storm trunk is fully constructed.

The last catchment area includes the future Shepard Landfill site, south of 114 Avenue SE and west of 84 Street SE. This area requires several treatment wetlands which will discharge to a future trunk along 84 Street SE that ties into the existing trunk along 130 Avenue SE.

Due to the adjacency of ASP catchment areas to the Calgary Transportation/Utility Corridor (TUC), according to the comments from Alberta Infrastructure and Alberta Transportation dated April 8, 2010, it is preferred that stormwater from development in the Plan areas be directed away from the TUC and handled by stormwater management facilities. In lieu of redirection of the surface runoff, flows into the TUC should be restricted to the release rate of 2.5 L/s/ha.

### 13.4.2 Policies

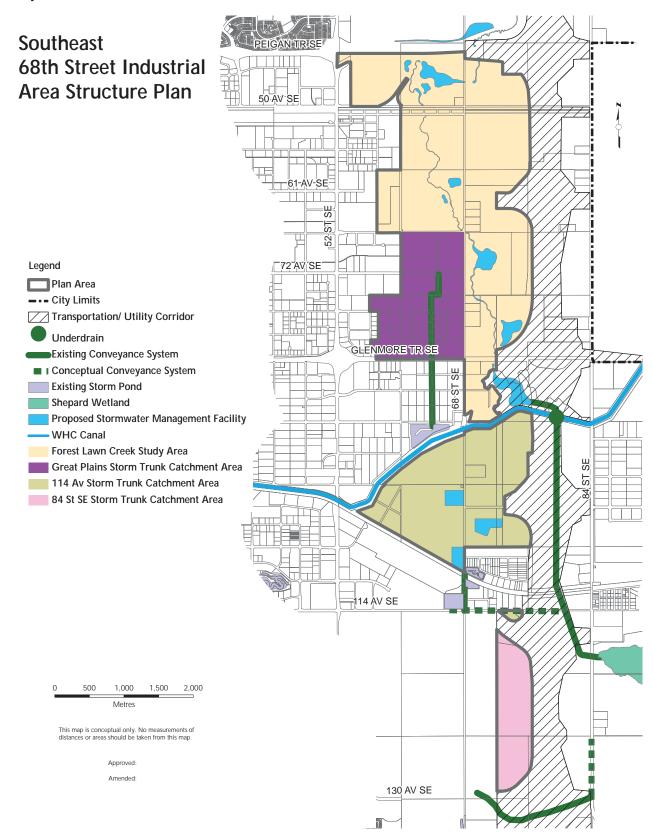
#### 1. Design of Stormwater Management System

- The stormwater management system for the ASP shall be designed to adequately and efficiently serve the ultimate development of the area.
- b. As part of an Outline Plan/Land Use Amendment application, a developer shall submit a Staged Master Drainage Plan consistent 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.
- c. The stormwater management system for the ASP area should comply with both The City of Calgary Stormwater Management Strategy and Bow Basin Watershed Management Plan.

#### 2. Best Management Practices for Staged Master Drainage Plans

- 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:
  - 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:

### Map 9 Storm Water Services



- i. operate on a gravity basis and utilize the existing wetlands in an environmentally compatible manner; and
- introduce mitigation measures to address the potential impact of water quality on existing wetlands and waterways including the Bow River.

#### 3. Financing

A developer may be required to enter into a Construction and Financing Agreement with The City for the design and construction of a storm trunk.

#### 4. Location

The stormwater management system should be aligned to minimize its impact on natural features.

# 13.5 Shallow Utilities

#### 13.5.1 Purpose

These policies ensure that adequate shallow utility infrastructure is provided to serve urban development throughout the ASP area. Shallow utilities should be constructed prior to, or in conjunction with development. Rights-of-way and easements are required to accommodate the extension of utility services through the ASP area. Utility alignments should be identified at the Outline Plan stage and confirmed prior to or during the Tentative Plan/Construction Drawing Approval stage. Map 10: Shallow Utilities illustrates the general layout of feeder mains within the ASP area.

## 13.5.2 Service Providers

#### 1. Telephone / Cable Service

Various corporations are expected to provide telephone/ cable service within the ASP area. Map 10: Shallow Utilities shows the existing TELUS Feeder Routes.

#### 2. Natural Gas

Various corporations are expected to provide natural gas within the ASP area. Map 10: Shallow Utilities shows the Atco Gas feedermain within the ASP area.

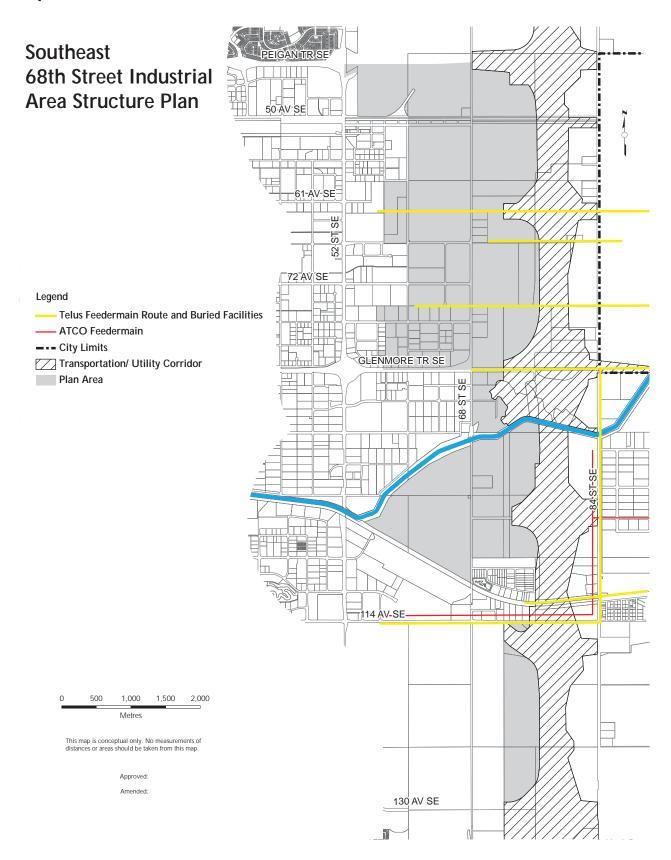
#### 3. Electrical Service

Various corporations are expected to provide electrical utilities to the ASP area.

### 13.5.3 Policies

- 1. Urban development within the ASP area should be serviced with shallow utilities (i.e., gas, cable, electricity, and telephone).
- 2. The location of all shallow utilities and the provision of rights-of-way and easements and related line assignments should be addressed to the mutual satisfaction of The City, the landowner and the utility companies.
- 3. Utility rights-of-way and easements should be provided to accommodate shallow utilities as determined necessary.
- The location of required easements and exact alignment of utilities should be determined at the Outline Plan/Land Use Amendment and subdivision stage.
- Prior to Outline Plan/Land Use approval, a developer should submit studies and information determined necessary to identify the location and alignment requirements for utilities within the development.
- 6. Utility feeder mains on Map 10: Shallow Utilities are shown conceptually, additions or adjustments to these should not require amendments to this ASP.
- 7. Utilities to be located within or across the TUC require permission from the Province of Alberta.

# Map 10 Shallow Utilites



# **13.6 Protective Services**

No new stations for police, fire or emergency services are required within the study area.

- Police services should be provided from District 6 and District 8 service area offices.
- 2. Fire protection and emergency services should be provided from station #25 Foothills, by station #39 Douglas Glen (by 2012) and by the future Belvedere Industrial station.

# 14.0 DESIGN INNOVATION

# 14.1 Purpose

These policies provide a means to address and promote design innovation focused on creating eco-industrial development within the ASP area. Design innovation, while necessary to achieve sustainable development, necessitates the application of new standards that may introduce new rewards and risks for The City of Calgary, require comprehensive review by the Administration, and set potential precedent for The City of Calgary, other municipalities and other developers.

Eco-Industrial development is encouraged by the Municipal Development Plan. The Southeast Industrial area surrounding Forest Lawn Creek can be a suitable area for more sustainable, water and energy conserving industrial practices. To address this situation a new approach is needed, which includes 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 areas and developers in the city.

Specific initiatives that could be pursued to encourage the development of eco-industrial/ business parks include:

- Water flows designed to conserve resources and on-site stormwater management that cascades water through uses at different quality levels;
- Businesses that utilize clean production methods;
- Businesses that have reduced energy needs and consumption;
- Maximum energy efficiency through facility design or rehabilitation, co-generation, energy cascading and other means; and
- Best environmental practices in materials selection and building technology. These include recycling and reuse of materials and consideration of life cycle environmental implications of materials and technologies.

# 14.2 Policies

#### 1. Promoting Design Innovation

- a. Design innovation should be encouraged within the ASP area provided that the innovation:
  - i. promotes sustainability or provides other public benefits, and
  - ii. can be developed in a safe, costeffective and practical manner.
- b. Based on the policies within the ASP, candidates for design innovation within the ASP area include, but are not limited to:
  - i. revised street standards that provide tree-lined streets, accommodate walking and cycling, and facilitate Low Impact Development,
  - ii. best management practices for stormwater control,
  - iii. creditable reserve dedication to augment the protection of natural features, and
  - iv. new policies addressing appropriate land uses under specific circumstances.
- c. Where an Outline Plan/Land Use Amendment application is proposing sustainable development innovations, the following components may be required by the Approving Authority:
  - i. Design Development Guidelines,
  - ii. Cross-sections of the proposed new street standard, and
  - iii. other information as determined necessary by the Approving Authority

#### 2. Designating a "Design Innovation 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 ASP area that are determined to provide sustainable development benefits, the developer and/ or the Approving Authority may designate the area that is the subject of the innovation as a "Design Innovation Area".
- 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,
  - a process for evaluating innovations proposed by a developer in an efficient and timely manner, that includes a review of the risks and benefits to The City should be provided, and
  - iv. the "Design Innovation Area" should be identified on Map 11: Design Innovation Area through the ASP amendment process.
- Where a "Design Innovation Area" is indicated, Administration should provide a report to Calgary Planning Commission (CPC) describing impacts on costs of implementation, processing times and approvals.

#### 3. Design Innovation Area

At the time of the approval of this ASP, a Design Innovation Area has been identified on Map 11: Design Innovation Area to encourage sustainable development innovations. Policies under Section 14.2 (1) and (2) should be applied within this area.

#### 4. Additional Sustainable Development Design Principles

In order to achieve more sustainable and environmentally friendly industrial development the following provides an overview of design innovations to be encouraged throughout the ASP, which includes, but is not limited to:

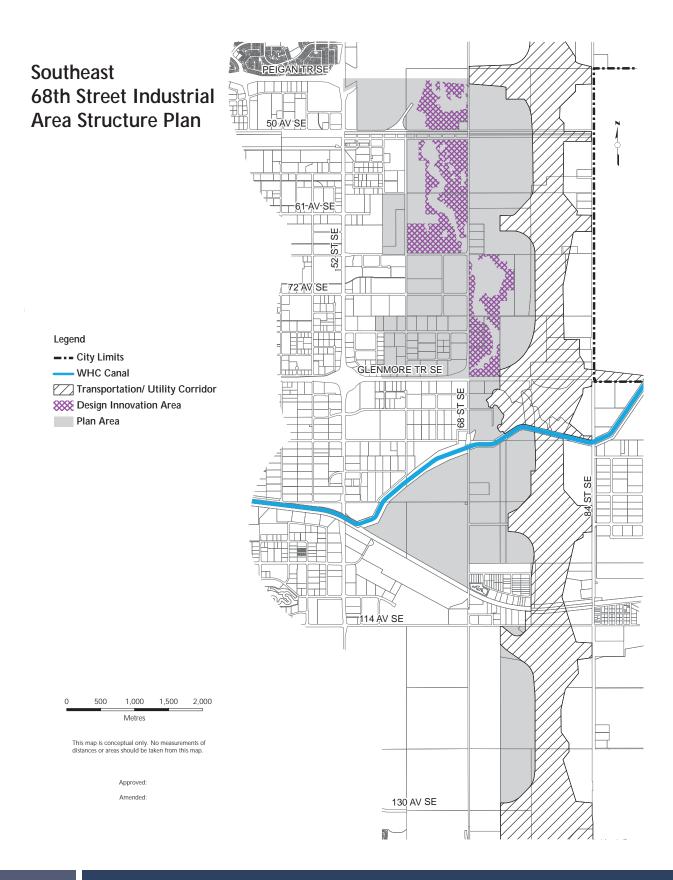
- a. Use of renewable and recyclable materials such as:
  - Building materials with recycled content,
  - Building materials with higher proportions of locally available content,



City of Calgary, GICMC, page 34.

- Wood materials from sustainable forest management areas,
- Protect and preserve the natural environment by minimizing,
- disruption of the site during site preparation and construction phases,
- the amount of off-site storm water runoff in the site design, and
- stripping of top soils and grasses during the site preparation and construction phases.

# Map 11 Design Innovation Area



SOUTHEAST 68 STREET INDUSTRIAL AREA STRUCTURE PLAN

- c. Integrate the Building and infrastructure Design into the natural and human environments by landscaping the site with native plants along with retention of local ponds and wetlands.
- d. Promoting Energy Efficiency and Recycling by:
  - Investigating, as development proceeds, the feasibility for industrial district energy systems,
  - Investigating alternative energy production potential of the site wind, solar, and/or geothermal,

- Encouraging energy reuse and sharing through the integration of industrial processes and outputs (i.e., excess steam production available as energy input for other industrial processes, waste heat recovery etc.), and
- Attempting to provide industrial space heating and lighting requirements from renewable sources wind, solar and/or geothermal).



# **15.0 GROWTH MANAGEMENT POLICIES**

# 15.1 Staging of Growth

# 15.1.1 Purpose

These policies ensure that urban growth within the ASP area proceeds in an efficient and economical manner through the Outline Plan/Land Use Amendment application process.

An Outline Plan/Land Use Amendment application needs to comprise a logical development and servicing area. The ASP area is currently not serviced by municipal water, sanitary sewer and stormwater utilities, and the extension of municipal services to the ASP area is currently not included in The City's 2009-2011 capital budget. Therefore, the funding of infrastructure costs require resolution prior to approval of an application. Where servicing or transportation capacity constraints arise due to the timing of municipal infrastructure construction, development may need to be staged in response to these constraints.

Capital costs of core infrastructure and facilities to service the ASP area are identified in Appendix G: Southeast 68th Street Area Industrial ASP Cost of Growth.

# 15.1.2 Policies

#### 1. Timing of Service Extension

The provision of municipal services to the ASP area:

- a. should be comprehensively evaluated to demonstrate that urban growth proceeds in a logical, feasible, and economic efficient manner,
- should be subject to The City's capital budgeting priorities and approval process, and
- c. may be financed by a developer as per Policy 15.3.2 (3) (c).

#### 2. Timing of Development

Development should demonstrate that the required level of services be provided, including but not limited to:

- a. transportation network capacity,
- b. water service capacity,
- c. sanitary service capacity,
- d. stormwater service capacity, and
- e. phasing plan for development within the application area.

#### 3. Evaluation of Outline Plan/Land Use Amendment application

 An Outline Plan/Land Use Amendment application should include a capital cost analysis (defined under Section 17.1: General Definitions) and resolve, prior to approval of the applications, all outstanding municipal infrastructure financing issues and requirements for the proposed application area.



- In evaluating an Outline Plan/Land Use Amendment application in regard to Policy 15.1.2 (2), the following factors should be considered:
  - i. identification of required onsite 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, a method of co-ordinating the rate of development with the capacity of the publicly financed core infrastructure (defined under Section 17.1: General Definitions) should be implemented as appropriate through the Outline Plan/Land Use Amendment application process.

# 15.2 Servicing of Growth

### 15.2.1 Purpose

These policies ensure that core infrastructure improvements required to service development within the ASP area are identified prior to approval of an Outline Plan/Land Use Amendment application. This includes both on-site and off-site infrastructure improvements and facilities. This information is required as part of the decision-making process on an Outline Plan/Land Use Amendment application.

### 15.2.2 Policies

#### 1. Identification of Core Infrastructure

- As part of an Outline Plan/Land Use Amendment application, a developer should submit information identifying the following:
  - major on-site and off-site infrastructure improvements and facilities necessary to serve the subject lands,
  - ii. Provincial, municipal and developer financial obligations for these infrastructure improvements and facilities,
  - iii. the projected phasing (rate) of growth,
  - iv. the timing of construction or development thresholds for provincially and municipally financed infrastructure improvements and facilities, relative to projected land absorption rates, and
  - v. as determined appropriate, the timing of any downstream infrastructure improvements and facilities required as it relates to the subject lands.

#### 2. Public Infrastructure Improvements in Relation to Budgeting Priorities

As part of the growth management analysis, Administration should address the budgeting priorities of The City in relation to municipally financed on-site or off-site core infrastructure improvements and facilities necessary to serve the subject site.

#### **Report to Council**

The report to Council accompanying an Outline Plan/Land Use Amendment application should address the proposal in the context of the Policies contained within 15.1.2 and 15.2.2.

# 15.3 Financing of Growth

### 15.3.1 Purpose

The purpose of these policies is to address the timing (rate) of urban growth through the Outline Plan/ Land Use Amendment application process relative to the financing of infrastructure improvements and other facilities necessary to serve such growth. Infrastructure improvements may be funded by both The City and the developer. A developer's requirement to finance infrastructure improvements would typically be addressed through the Standard Development Agreement or through any other agreement as determined by the Approving Authority. The City's infrastructure and facilities financing is ultimately subject to, and approved through, the municipal budgeting process of The City of Calgary.

### 15.3.2 Policies

#### 1. Financing of Development

Subject to Policy 15.4.2 (1):Co-ordination Options, or as agreed to between The City and the developer, any expenditure for studies, facilities or improvements proposed within the ASP should be funded to the satisfaction of the Approving Authority.

#### 2. Financing by The City

- Any expenditure funded by The City for improvements, facilities or municipal programs proposed within this ASP should be:
  - i. subject to The City's capital budgeting priorities and approval process, and
  - ii. evaluated in relation to the needs of other areas and city-wide spending priorities.

#### 3. Financing by Developer

- a. In accordance with the Standard Development Agreement in place at the time, the landowner should pay required development cost charges.
- Where a developer finances the cost of extending infrastructure that would normally be financed by an adjacent developer, cost-recovery requirements should apply to the benefiting 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, subject to policy 15.3.2 (2), enter into a servicing and financing agreement with the developer that details the facilities to be constructed and the method and timing of cost-recovery.
- d. The decision to enter into the financing agreement identified in Policy 15.3.2 (3)
  (c) above, should be determined by City Council.
- e. A developer may be required to enter into a Construction and Financing Agreement with The City for the design and construction of a storm or sanitary trunk or water feedermain.

# 15.4 Co-ordination of Growth

#### 15.4.1 Purpose

These policies provide for co-ordination between the Land Use Amendment approval process and the budgeting process. The policies identify the basic options that Council may exercise where co-ordination issues arise. These options would typically need to be exercised at the Outline Plan/ Land Use Amendment application stage.

### 15.4.2 Policies

#### 1. Co-ordination Options

Prior to an Outline Plan/Land Use Amendment approval to serve a proposed development, where major on-site or off-site infrastructure improvements and facilities are required to be financed by The City of Calgary or the Province of Alberta to serve the proposed development the following should apply:

- a commitment from The City of Calgary or the Province to undertake the financing of the infrastructure improvements and facilities, or
- b. the matter may be addressed in some other manner satisfactory to Council, including but not restricted to:
  - imposing an off-site levy bylaw or other mechanisms as considered appropriate by the Approving Authority to fund off-site improvements,
  - ii. granting Land Use approval to enable development to proceed and realigning budgetary priorities accordingly,
  - iii. granting Land Use approval to enable development to proceed and continuing to monitor the staging of development in relation to budgeting priorities, or
  - iv. withholding Land Use approval or otherwise placing limitations on subdivision or development until such time as the funding for the required infrastructure improvements is resolved.

# 15.5 Decisions on Growth

### 15.5.1 Purpose

These policies are to address fundamental infrastructure financing issues early on in the process, recognizing that such issues may significantly affect a decision on an Outline Plan/ Land Use Amendment application, and provide a decision-making process to resolve growth management issues in advance of an Outline Plan/ Land Use Amendment application proceeding to the Calgary Planning Commission or Council. The process should involve identifying major issues at the pre-application stage of the Outline Plan/Land Use Amendment application and where appropriate, referring these issues to the Directors Integrated Growth Committee and, if necessary, Calgary Planning Commission and Council for a decision.

# 15.5.2 Policies

#### 1. Resolution of Growth Management Issues

- Prior to submission of an Outline Plan/ Land Use Amendment application, a developer should:
  - meet with Administration to review the proposal with respect to its conformity with the Growth Management policies contained in Section 15.0 of the ASP, and
  - ii. provide preliminary analysis of the Outline Plan/Land Use Amendment application in terms of its conformity with the Growth Management policies contained in Section 15.0 of the ASP.
- b. Developers are encouraged and given the opportunity to address and resolve those issues at the Pre-Application stage of the Outline Plan/Land Use Amendment application, recognizing that such issues may be fundamental to the support and approval of an application.

#### 2. Council Appointed Body

Where determined necessary by 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) should be referred by the Administration to the Directors Integrated Growth Committee (DIGC) or other Council appointed body for a recommendation.

# **16.0 IMPLEMENTATION POLICIES**

# 16.1 Approval Process

### 16.1.1 Purpose

These policies provide for the implementation of this ASP. The principle means of implementation should occur through the Outline Plan/Land Use Amendment process.

## 16.1.2 Policies

#### 1. Land Use Approval

- a. The timing, direction and extent of urban growth within the ASP area should be determined primarily through the Outline Plan/Land Use Amendment process that establishes the land use pattern for a site and enables urban level subdivision and development of the land to proceed.
- Until it is determined appropriate by Council for urban level subdivision and development to proceed, lands should be retained within a "holding district", such as the Special Purpose- Future Urban Development (S-FUD) District.
- c. The land use designations in effect at the time of approval of the Southeast 68 Street Industrial Area Structure Plan:
  - i. shall continue to apply in accordance with the provisions of the *Municipal Government Act*, and
  - ii. remain in effect until it is deemed necessary to redesignate the lands to land use districts in accordance with the policies of the ASP.

#### 2. Outline Plan Approval

Except in unique circumstances, or where the future subdivision of a site is intended, Land Use approval under Policy 16.1.2 (1) above

should not be given unless an Outline Plan for the site is first approved by Calgary Planning Commission.

#### 3. Transitional Uses

- a. A transitional use may be allowed on a site provided that the use does not compromise future subdivision or development of the site.
- b. A transitional use may include, but is not limited to:
  - i. an extensive agricultural use,
  - ii. a crop-based intensive agricultural use, and
  - iii. a resource extraction use.

#### 4. Fire Protection

Proposed development within the ASP area should be reviewed by the City of Calgary Fire Department and the Approving Authority to ensure appropriate Fire Protection measures are incorporated.

# 16.2 Supporting Information

### 16.2.1 Purpose

The purpose of these policies is to require the submission of supporting information by a developer in order to assist the Approving Authorities and Council in evaluating a proposal in terms of its conformity with this ASP. While the implementation of this ASP should be achieved through a variety of planning initiatives (subdivision plan, development permits, road closures, development agreements, etc.), the principle means of implementation should occur through the Outline Plan/Land Use Amendment approval process. As such, comprehensive land use, servicing and transportation studies and analysis should be requested in conjunction with the Outline Plan/Land Use Amendment application.

### 16.2.2 Policies

#### 1. Comprehensive Studies

Prior to Outline Plan/Land Use approval, supporting information, above the normal application requirements, may be required as determined by the Approving Authority to be submitted in order to assist Council and Calgary Planning Commission in evaluating a proposal in terms of its conformity with this ASP.

# 16.3 Previous Planning Approvals

#### 16.3.1 Purpose

These policies recognize land use and development permit decisions that have previously occurred within the ASP area.

### 16.3.2 Policies

#### 1. Existing Development

- a. An approved use that existed on a site at the time of adoption of this ASP:
  - shall be considered to be in compliance with the policies of this Plan, and
  - may be allowed to undergo improvements or compatible, minor expansion subject to a specific evaluation of the proposal.
- b. Uses allowed by the City of Calgary Land Use Bylaw 1P2007 under the Special Purpose- Future Urban Development (S-FUD) District, or any other district in effect at the time of approval of this ASP, shall be considered to be in compliance with the policies with this ASP.

c. Temporary uses that do not compromise the ultimate land use pattern identified for a site may be allowed where appropriate by the Approving Authority.

## 16.4 Previous Planning Approvals

#### 16.4.1 Purpose

These policies recognize land use and development permit decisions that have previously occurred within the ASP area.

#### 16.4.2 Policies

#### 1. Existing Development

- a. An approved use that existed on a site at the time of adoption of this ASP:
  - should be considered to be in compliance with the policies of this Plan, and
  - may be allowed to undergo improvements or compatible, minor expansion subject to a specific evaluation of the proposal.
- b. Uses allowed by the City of Calgary Land Use Bylaw 1P2007 under the Special Purpose- Future Urban Development (S-FUD) District, or any other district in effect at the time of approval of this ASP, should be considered to be in compliance with the policies with this ASP.
- c. Temporary uses that do not compromise the ultimate land use pattern identified for a site may be allowed where appropriate by the Approving Authority.

## **17.0 INTERPRETATION**

## 17.1 General Definitions

The following general definitions should apply for the purposes of this ASP only. In the event of a conflict between the general definitions in the ASP and a term defined in Land Use Bylaw 1P2007, the latter shall take precedence.

- 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. **Boundary Road** means a major road, expressway or freeway that boarders the Southeast 68 Street Industrial ASP area, including Glenmore Trail SE, Range Road 284, and 84 Street SE between Peigan Trail SE and Glenmore Trail SE.;
- 3. **Calgary Planning Commission** means the Calgary Municipal Planning Commission constituted pursuant to the Municipal Government Act;
- 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;
- 5. **Core Infrastructure** means water utilities, transportation and fire facilities regard to accommodate subdivision and development activity in the ASP area;
- 6. **Council** means the Council of The City of Calgary;
- 7. **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*;

- 8. **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);
- 9. 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 should be dedicated as Environmental Reserve in accordance with the Municipal Government Act, and the adjacent buffer or riparian and upland vegetation should be dedicated as MR,...and all forebays should be dedicated as Public Utility Lots (The City of Calgary Wetland Conservation Plan);
- 10. **Entranceway Road** means a Skeletal Road that provides access and egress to and from the Southeast 68 Street Industrial ASP area, including Peigan Trail SE, Stoney Trail and Glenmore Trail SE;
- 11. **Environmentally Significant Area** means a natural area site that because of its features or characteristics, is significant from an environmental perspective and has the potential to remain viable in an urban environment. A site is typically noted as of significance by meeting one or all of the following criteria: Native Condition; Resource Significance; Habitat Type/ Vegetation Community; Archaeological / Historical Significance; and, Natural System Integration;

- 12. **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;
- 13. **Holding District** means the Special Purpose-Future Urban Development District within the Land Use Bylaw 1P2007, that retains land at a low intensity of development pending redesignation to a land use district that should allow urban subdivision and development to occur;
- 14. **Internal Road** means an industrial major road, standard road, or other type of road that provides internal access to sites within the Southeast 68 Street Industrial ASP area and connections to the regional road network;
- 15. **Net Developable Area** means the site area once undevelopable areas are eliminated;
- 16. **Skeletal Road** means a roadway that promotes the movement of vehicular traffic over longer distances. They typically operate at high speeds and have little direct access and interaction with adjacent land uses. Ideally, they should be spaced approximately three to five kilometres apart to form a grid across the city. Skeletal roads within the ASP include Glenmore Trail, Peigan Trail and Stoney Trail;
- 17. **Shadow 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.

## 17.2 Land Use Definitions

For the purposes of this ASP, the following land use definitions should apply. In the event of a conflict between the land use definitions described in 17.2 of this ASP and the uses defined in the Land Use Bylaw 1P2007, the latter shall take precedence:

- Industrial Light Use means any use as defined as a 'General Industrial - Light' use in the Land Use Bylaw 1p2007;
- Industrial Medium Use means any use as defined as a 'General Industrial - Medium' use in the Land Use Bylaw 1p2007;
- Industrial Heavy Use means any use as defined as a 'General Industrial - Heavy' use in the Land Use Bylaw 1p2007;
- 4. Institutional Use means the use of land, buildings or structures for the purpose of religious, charitable, educational, health, welfare or correctional activities and may include, but is not limited to, places of worship, public or private schools, postsecondary institutions, hospitals, reformatory or correctional facilities, medical clinics, cemeteries, and day-care centres;
- 5. **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;
- 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;
- 7. **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;
- 8. **Recreational Use** means the use of land, buildings or structures for the purpose of active or passive leisure pursuits, 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;

- 9. 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;
- 10. 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;
- 11. 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;
- 12. **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;
- 13. **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 should not, in anyway, compromise the ultimate planned use for the site.

# **SUPPORTING INFORMATION**

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## **APPENDIX A** INTERFACE DESIGN GUIDELINES

## A.1 Application

These Design Guidelines apply to lands immediately adjacent to:

- Entranceway roads including the Stoney Trail, Peigan Trail SE and Glenmore Trail SE;
- Municipal Reserve (MR) sites;
- Regional pathways where feasible; and
- Any other interface areas as determined appropriate by the Approving Authority.

These areas will accommodate development that is highly visible to motorists and the general public. As such, it is necessary to introduce design measures to ensure that the development is visually attractive and creates an appropriate public image. These Guidelines should be reviewed along with Section 8.0: Interface Policies, and should be interpreted and applied in accordance with Appendix C: Design Review & Application of Design Guidelines.

## A.2 Interface Design Guidelines

### A.2.1 Setbacks

- Setbacks from Stoney Trail, an entranceway road, and MR sites should comply with regulations under The City of Calgary Land Use Bylaw 1P2007.
- Outdoor storage of goods or materials should not be located on a front setback area adjacent to an entranceway road, and a setback area adjacent to the residential areas.

### A.2.2 Visual Screening

- 1. Screening should:
  - a. enhance the visual appearance of a site, and
  - b. minimize the visual impact of parking, loading and other outdoor activities.
- 2. All parking, loading areas, outdoor storage areas, service areas (including outdoor sales lots), at-grade mechanical equipment and areas with high levels of truck activity should be suitably screened from an entranceway road, the existing MR site, and the residential areas.
- 3. Screening may comprise of a solid fence, wall, berm or landscaping, or some combination, that limits visibility into a site when viewed from an entranceway road, the existing MR site, or the residential areas.
- 4. Where landscaping or tree planting is used to provide screening, its composition should ensure adequate screening year-round from an entranceway road and the existing residential areas.
- 5. Screening requirements should take into account any topography and elevation differences that exist.

### A.2.3 Exterior Fencing

- 1. Fencing should:
  - a. enhance the interface treatment of a site, and
  - b. define the boundary between public and private lands.
- 2. Fencing should comply with regulations under The City of Calgary Land Use Bylaw 1P2007.

- 3. The fencing on a lot immediately adjacent to an entranceway road, or a service road adjacent to an entranceway road, the existing MR site, and the residential areas should be compatible and appropriate in term of its quality and design.
- 4. Fences and walls should be constructed of durable materials complementary to the exterior building materials.
- 5. Barbed wire should not be allowed in conjunction with any fence.

### A.2.4 Outdoor Storage

- 1. Outdoor storage areas should:
  - a. be appropriately located and screened to minimize their visual impact from public lands and adjacent residential areas, and
  - b. be oriented and designed in a compatible manner to minimize the traffic conflicts between vehicular and pedestrian movements.
- Outside storage of goods or materials, and outdoor display areas should not be located on a front setback area adjacent to an entranceway road, and a setback area adjacent to the residential areas.
- 3. Service and outdoor storage enclosures should be constructed of materials that match and complement building materials.

### A.2.5 Landscaping Treatment

- 1. Wherever possible, landscaping treatment should:
  - a. encourage on-site pedestrian circulation,
  - b. connect to the regional open space system,
  - c. enhance the regional pathways,
  - d. compliment the built form, and
  - e. provide effective year-round screening.
- 2. High quality landscaping treatment is encouraged where immediately adjacent to a regional pathway.

3. Whenever possible, xeriscaping should be encouraged as an alternative to standard landscaping within an industrial site.

### A.2.6 Architecture

- 1. Entranceway Roads
  - a. Building materials adjacent to an entranceway road should:
    - i. be durable and permanent in quality and composition, and
    - ii. require low maintenance.
  - b. Building facades
    - i. front facades should incorporate architectural details that add visual interest and reduce the appearance of the building mass and scale,
    - ii. all façades visible from an entranceway road should be architecturally treated to a similar standard as the front façade, and
    - iii. loading areas, ancillary storage, utility meter, garbage collection and compaction, or other such services should be incorporated into the overall design of the building(s) and landscaping where practical and feasible, so that the visual impacts are screened and minimized.
  - c. Architectural elements under A.2.6 (1)(b) may include but not limited to:
    - i. facade modulation i.e. building intervals that are stepped forward or back),
    - ii. facade enhancement (i.e. vivid colours, distinctive roof forms, innovative architectural features), and
    - iii. facade articulation (i.e. horizontal articulation of buildings greater than 7.0 metres in height to reduce visual massing).

## **APPENDIX B** SITE AND BUILDING DESIGN GUIDELINES

## **B.1** Application

The purpose of the guidelines is to provide for a suitable and compatible site and building design within the ASP area in addition to Appendix A: Interface Design Guidelines. These Guidelines should be interpreted and applied in accordance with Appendix C: Design Review & Application of Design Guidelines.



## **B.2** Guidelines

- 1. Site Design and Building Design
  - a. The design, layout and relationship of a site should be compatible, functional and appropriate, and
  - B. Green building technology including but not limited to energy, and stormwater best management practices should be encouraged within the ASP area in accordance with evolving technologies and practices, and supporting City policies and principles.

#### 2. Landscaping

- In addition to the landscaping requirement applied to the land use district under The City of Calgary Land Use Bylaw 1P2007, a developer is encouraged to provide additional landscaping to reduce the visual impact of hard pavement area and to provide outdoor public amenities,
- Landscaping areas should connect to the open space system in the Southeast 68 Street Industrial ASP area whenever possible,
- c. Landscaping areas should be incorporated with the pedestrian routes and transit stops,





- d. Parking lot landscaping should conform to The City of Calgary Land Use Bylaw 1P2007. Additional landscaping is encouraged to reduce the visual impact of the large parking areas. Parking lot landscaping should be designed to accommodate the most convenient pedestrian connection from the parking lot to the building entrance,
- e. High quality landscaping should be provided for sites adjacent to regional pathways,
- f. Whenever possible, xeriscaping should be encouraged as an alternative to standard landscaping within an industrial site.

#### 3. Pedestrian Connections

- Walking distances from transit stops and other destinations should be minimized where possible, and should be incorporated with landscaping areas,
- a continuous pedestrian route between buildings in commercial areas should be achieved through the use of sidewalks or clearly defined walkways,
- c. pedestrian routes should be separated from truck routes and loading areas.

#### 4. Low Impact Development

Low Impact Development (LID) is an ecologically friendly approach to site development and storm water management that aims to mitigate development impacts to land, water, and air. This approach emphasizes the integration of site design and planning techniques that conserve natural drainage systems and hydrologic functions on a site.

 a. site design and landscaping design is encouraged to incorporate low impact development measures for stormwater management, including, but not limited to:

- i. bio-swale,
- ii. absorbent landscaping,
- iii. bio-retention areas,
- iv. porous pavement,
- v. stormwater reuse, and
- vi. green roofs.
- options for Low Impact Development measures and detailed guidelines are provided under The City of Calgary Stormwater Source Control Practices Handbook.

#### 5. Emergency Response and Societal Safety

- a. Site and building design should support protection of people and their property.
- b. Site and building design should accommodate the provision of effective emergency response time.
- c. Site and building design should consider a broad spectrum of emergency protection and response challenges, including (but not limited to) criminal acts, fires, medical incidents, mass casualty events, rescues and hazardous materials handling.

## **APPENDIX C** DESIGN REVIEW & APPLICATION OF DESIGN GUIDELINES

## C.1 Application

These guidelines are to provide for a process for reviewing the design of development projects located within the ASP area. The design may be reviewed at either the Land Use Amendment stage (in the case of a proposed site specific redesignation) or the Development Permit approval stage. In either case, a developer may be required to provide plans and other supporting information to demonstrate that the layout of the site and the architecture of the buildings are appropriate.

Site and building design should be evaluated in either the context of the design guidelines contained within Appendix A: Interface Design Guidelines and Appendix B: Site and Building Design Guidelines.

Unlike policies, the design guidelines are intended to be flexible, and can be varied or revised as determined appropriate. Alternative design solutions that create a suitable and compatible interface treatment should also be encouraged and considered. Where a modification to a guideline is desired, plans and other supporting information showing the alternative design solution may be required.

## C.2 Design Review

- 1. In conjunction with a Development Permit application, or an Outline Plan/Land Use Amendment application as determined necessary by the Approving Authority, plans and supporting information, including, but not necessarily limited to, landscape plans, crosssections, architectural renderings and building elevations, may be required as determined appropriate by the Approving Authority.
- 2. With each tentative plan and Development Permit application, a site concept plan should be submitted which should identify:

- i. anticipated building use,
- ii. building footprints, orientation and all setback requirements,
- iii. parking areas,
- iv. vehicle access / egress,
- v. internal roads,
- vi. servicing between parcels,
- vii. outside storage,
- viii. open space and any public amenity space,
- iv. landscaping,
- x. pedestrian circulation to / from within the site, and
- xi. any additional information determined necessary by the Approving Authority.
- 3. The required concept plan (in C.2 2) above should be resubmitted and updated, as required by the Approving Authority, with each subsequent Development Permit application.

### C.3 Compliance with Design Guidelines

- Subject to Guideline C.4 and C.5 below, an Outline Plan/Land Use Amendment and Development Permit application should demonstrate how the Design Guidelines are being addressed.
- Compliance to the design guidelines contained within Appendix A: Interface Design Guidelines and Appendix B: Site and Building Design Guidelines should not be interpreted as having an exemption from:

- a. compliance with any other design related policies, standards or requirements applicable to the proposal, and
- b. application of additional design guidelines or standards to the site.

# C.4 Interpretation of Design Guidelines

- As determined appropriate, the design guidelines should be applied by the Approving Authority at the Outline Plan and/or the development approval stage.
- The land use controls or outline plan conditions applied to a site in accordance with Guideline (C.4 1) above need not necessarily contain the exact wording as the design guideline but may be revised as determined necessary provided the general intent of the guideline is achieved.

## C.5 Application of Design Guidelines

- 1. Design Guidelines may be modified where the alternative design proposal:
  - a. represents an equivalent or improved solution, and
  - b. complies with the policies of Section 9.0: Interface Policies.
- 2. Design Guidelines should be approved in a uniform and consistent manner on a series of sites at the Outline Plan/Land Use Amendment application stage as opposed to an individual site, or
- 3. Where C.5 (2) cannot be achieved, modification to the Design Guidelines to accommodate an individual site may be appropriate if the Approving Authority determines it is a compatible and co-ordinated development in relation to adjacent sites.

- 4. Alternative design solutions in the application of the Design Guidelines should not require an amendment to this ASP.
- 5. Should an inconsistency arise between a guideline and Land Use Bylaw regulation, the Land Use Bylaw will take precedence.

## **APPENDIX D** RECOMMENDED LAND USE DISTRICTS

The following table provides recommended land use districts under The City of Calgary Land Use Bylaw 1P2007 for each land use policy area of the ASP. It is intended to provide a reference for applicants to consider appropriate land use districts within the ASP area. A Land Use Amendment application should meet the intention of the ASP and should comply with land use policies, interface policies and any other related policies of the ASP. A land use district that is not listed in the following table may be considered appropriate as determined by the Approving Authority.

Recommended Land Use Districts					
Land Use Policy Area	Recommended Land Use Districts	Could Have	Should Avoid		
Industrial - Light Area	I-G, I-B	General Industrial- Light, land uses (most impacts contained within building envelope).	All Commercial Districts.		
Industrial - Medium Area	I-G	General Industrial- Medium land uses (most impacts contained within the parcel).	All Commercial Districts.		
Municipal Landfill	S-CRI	Municipal infrastructure, landfill uses.	All other Districts.		

Note:

Residential Districts are not considered appropriate in the ASP area.

Recreational, institutional, and public uses may be allowed within the ASP area where determined appropriate and compatible by the Approving Authority.

## **APPENDIX E** EVALUATION GUIDELINES FOR OUTLINE PLAN / LAND USE AMENDMENT APPLICATIONS

## E.1 Overview

The evaluation of an Outline Plan/Land Use Amendment application 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.

## E.2 Concept Plan Review

### E.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 should be required to demonstrate that a site is suitable in terms of its size and configuration to accommodate the intended future development or to ensure that a subdivision design is appropriately integrated with adjacent areas. A concept or shadow plan is provided for information purposes as required by the Approving Authority to assist to evaluate the application.

### E.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 Council or the Calgary Planning Commission in evaluating a proposal in terms of its conformity with the Southeast 68 Street Industrial ASP.
- b. Where a Concept Plan is required either through a policy in this 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,
  - I. utility alignments,
  - J. public parks,
  - K. stormwater ponds, and
  - L. adjacent roads and development.
- c. The above requirements may be relaxed or modified by the Approving Authority as determined necessary in response to a specific proposal.

#### 2. Adjacent Shadow Planning

Prior to Outline Plan/Land Use approval, and as determined necessary, a Shadow Plan for an adjacent future development area within the ASP area may be required showing the relationship of the design for the subject site with the future development area.

## E.3 Reserve Analysis

### E.3.1 Purpose

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

### E.3.2 Guidelines

#### 1. Creditable Reserve Analysis

Prior to approval of an Outline Plan/Land Use Amendment application, a Reserve Analysis should be submitted by a developer identifying:

i. the amount of creditable reserve owing on an ownership basis within the ASP area and the subject site.

#### 2. 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,
- a Biophysical Impact Assessment report prepared by a qualified professional,
- 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,
- 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.

## E.4 Transportation Review

In conjunction with an Outline Plan/Land Use Amendment application, a Mobility Assessment & Plan (MAP) or other transportation assessment and analysis deemed appropriate by the Approving Authority, should be submitted to address the transportation improvements required to serve a proposed development. The MAP or acceptable alternate analysis should address both the local and regional transportation network improvements for all transportation modes required to serve the subject site and the adjacent areas. Transportation Planning-Development Services should be contacted prior to commencing the study to assist in scoping and to provide more information on the content of the MAP or alternate analysis.

## E.5 Development Impact Review

### E.5.1 Purpose

The purpose of these guidelines is to provide for compatible development within the ASP area. The policies establish compatibility criteria that development should achieve and a review process that development should undergo. The review process may require the submission of a development impact statement at either the Outline Plan/Land Use Amendment approval or Development Permit approval stages, and the corresponding imposition of mitigation measures to address any impacts where determined appropriate.

### E.5.2 Guidelines

#### 1. Development Impact

A proposed development should not have a significant adverse impact on an adjacent site.

#### 2. Development Impact Statement

In conjunction with an Outline Plan/Land Use Amendment application or a Development Permit application, Council or an Approving Authority may require a developer to submit a Development Impact Statement to identify and evaluate the impact of the proposal and demonstrate compliance with Guideline E.5.2 (1).

#### 3. Mitigation Measures

Mitigation measures may be required to be introduced as part of the approval of a proposed Outline Plan/Land Use Amendment application, in order to ensure compliance with Guideline E.5.2 (1).

## E.6 Environmental Review

#### E.6.1 Purpose

The purpose of these guidelines is to provide for the evaluation of the impact of an Outline Plan/Land Use Amendment application within the ASP area from an environmental perspective. This evaluation should involve circulation of a proposal to the appropriate external agencies for review and comment; and, the submission of the appropriate environmental, biophysical, archaeological and grading information necessary to undertake this review.

### E.6.2 Guidelines

#### 1. Environmental Site Assessment (ESA)

- a. Prior to an Outline Plan/Land Use approval, a developer should:
  - i. submit a current Phase 1

Environmental Site Assessment for the subject site that identifies any actual or potential soil and groundwater contamination and determines if the site is suitable for the intended use,

- ii. if the Phase 1 ESA identifies any actual or potential site contamination, submit a Phase 2 ESA to determine if there is a requirement for remediation or risk management on the site, and
- iii. if the Phase 2 ESA determines a need for site remediation or risk management, submit a Remedial Action Plan or Risk Management Plan to address the manner and extent that the site should be remediated or managed to render it suitable for the intended use.
- An ESA should be prepared by a qualified professional and may be reviewed by Environmental Development Review, and circulated to the appropriate regulatory agencies for review, as required by the Approving Authority.
- c. Where required by the Approving Authority, a developer should undertake those mitigation measures identified by the ESA report for the subject site.
- d. Prior to an Outline Plan/Land Use approval, a developer should submit an assessment of the environmental impact of any operating or abandoned oil or gas wells that may affect the site.

#### 2. Biophysical Impact Assessment (BIA)

a. Prior to an Outline Plan/Land Use approval, where the proposal may have an impact on natural drainages, such as Forest Lawn Creek, wetlands or another environmentally significant area, the developer should submit a Biophysical Impact Assessment prepared by a qualified consultant to evaluate the impact and identify any mitigation measures to be introduced.  Where required by the Approving Authority, the developer should undertake those mitigation measures for the subject site identified in the Biophysical Impact Assessment.

#### 3. Site Grading Plan

- A Site Grading Plan should not be approved in proximity to a natural wetland until such time as an Outline Plan/Land Use Amendment application for the site has been approved.
- b. Where grading occurs in proximity to a natural wetland:
  - i. detailed information showing the extent and impact of the grading on the wetland should be provided, and
  - ii. the conservation measures to be introduced to address any grading impacts on the wetland.

## E.7 Financial Review

#### E.7.1 Purpose

The purpose of these guidelines is to ensure that major infrastructure improvements required to serve development within the ASP area are identified prior to an Outline Plan/Land Use approval. This infrastructure would include both on-site and offsite roadway and utility improvements. It is intended that the information would form part of the decisionmaking process on an Outline Plan/Land Use proposal.

## E.7.2 Guidelines

#### 1. Infrastructure Improvement Analysis

As part of an Outline Plan/Land Use Amendment application, a developer should identify:

- i. the major on-site transportation and utility infrastructure improvements necessary to serve the subject site,
- ii. the financing obligations for these improvements,
- the anticipated timing of construction of the improvements relative to projected land absorption rates,
- iv. the development thresholds or timing of any provincially or municipally-financed infrastructure improvements, and
- v. as determined appropriate, the timing of any downstream transportation and utility infrastructure improvements.
- 2. Public Infrastructure Improvements in Relation to Budgeting Priorities

The Administration should identify the budgeting priorities of The City and the Province in relation to any major provincially or municipallyfinanced transportation or utility infrastructure improvements necessary to serve the subject site identified under Guideline E.8.2 (1).

#### 3. Report to Council

The report to Council accompanying a Land Use Amendment application should address the proposal in the context of E.7.2. (1) and (2).

## E.8 Servicing Review

#### E.8.1 Purpose

The purpose of these guidelines is to provide for the submission of servicing studies considered necessary to evaluate a proposal. This information would relate to municipal utilities including the water distribution system, the sanitary sewage system and the stormwater management system. The various servicing studies would be required at the Outline Plan/Land Use Amendment stage.

#### E.8.2 Guidelines

#### 1. Water Distribution System

In conjunction with an Outline Plan/Land Use Amendment application, information should be submitted to demonstrate that the subject site development 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 analysis should be submitted to demonstrate that:

- i. the subject site can be serviced in accordance with the overall design of the sanitary sewage system for the area, and
- ii. the sanitary sewage system should be designed to accommodate offsite sanitary drainage as determined appropriate.

#### 3. Stormwater Management System

In conjunction with an Outline Plan/Land Use Amendment application, a Stormwater Management Plan should be submitted to demonstrate the consistency with policies in Section 15.4: Stormwater Management.

## E.9 Transit Review

#### E.9.1 Purpose

The purpose of these guidelines is to provide for a Transit Impact Analysis to coordinate the design of a project with the public transit service for the area. The Transit Impact Analysis should address the transit routing options and coverage in relation to a site, the pedestrian connections to transit stops from the site and any enhanced transit service facilities to be provided. The analysis should be submitted as part of an Outline Plan/Land Use Amendment application.

#### E.9.2 Guidelines

#### 1. Transit Service Coordination

In conjunction with an Outline Plan/Land Use Amendment or Development Permit application, a Transit Impact Analysis should be submitted to evaluate the level of coordination between public transit service and the proposed development.

#### 2. Transit Impact Analysis

A Transit Impact Analysis should address:

- i. proposed and existing public transit routes, and transit stops in relation to the site,
- ii. transit coverage areas and walking distances in relation to parcels or building locations,
- iii. pedestrian connections from the site to transit stops,
- iv. any enhanced transit facilities to be included in the development,
- v. any other matters determined by the Approving Authority necessary to achieve the long term co-ordination with public transit service in the area, and
- vi. transit issues through a Mobility Assessment & Plan (MAP), or other transportation assessment and analysis deemed appropriate by the Approving Authority.

## E.10 Pedestrian and Bicycle Circulation Plan

#### E.10.1 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, recreational facilities, and other key destinations for employees. In this regard, a Pedestrian/Bicycle Routing Plan should be provided as part of an Outline Plan/Land Use Amendment or Development Permit application. This plan should identify both regional and local pedestrian routes in relation to the site as well as the connections to the regional pathway system, transit stops and local service commercial facilities.

### E.10.2 Guidelines

## 1. Pedestrian and Bicycle Circulation Plan Submission

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

#### 2. Pedestrian and Bicycle Circulation Plan Requirements

A Pedestrian/Bicycle Routing Plan should address:

- i. demonstrate compliance with the policies of Section <u>Regional</u> Pathway & Pedestrian and Bicycle Circulation System;
- ii. identify the pedestrian and bicycle destinations such as employment sites, recreational areas and nodal points, as well as:
  - a. pedestrian destinations within a 1 kilometre radius of the community;
  - b. bicycle destinations within a 3 kilometre radius of the community;
  - c. other notable pedestrian destinations outside the
     1 kilometre radius of the community; and
  - d. other notable bicycle destinations outside the 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 relationship of pedestrian and bicycle routes to transit stops;
- 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, waterways, etc);
- vii. address how the barriers for pedestrian and bicycle connectivity as identified in subsection E.10.2.(2) (iv) can be mitigated or overcome;
- viii. address active modes (pedestrian and bicycle) issues through a Mobility Assessment & Plan (MAP), or other transportation assessment and analysis deemed appropriate by the Approving Authority, and
- ix. contain such other information as determined necessary by the Approving Authority to evaluate the compliance of the proposal with the policies of the Plan.

## **APPENDIX F** FACILITY CRITERIA

Small Regional Recreation Facility	Site Details	Comments
Site	5 ha (12.3 ac)	
Typical Facility Types	Public spaces, parks and recreation facilities that provide access to nature, cultural events and social gathering areas and support art, fitness, leisure and sport activities that respond to the needs and interests of the service region.	
Service Level Population	40,000 - 100,000	Potential partnerships within surrounding communities may influence the size, design and available amenities of the centre.
Access	Walking, biking, driving (within a drive time of approximately 15 minutes), or public transit.	
Road Network/ Access	Highly Important	Local - Connector
Connectivity	Highly Important	Connections to the regional pathway system, and transit, to provide access to non-vehicular users are very important.

## **APPENDIX G** SUSTAINABILITY PRINCIPLES

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.

### **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.

This principle is not addressed by the ASP as the entire ASP area is located within The City's industrial growth corridor.

#### 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 1.0: Executive Summary: Vision, Principles and Goals
- b. Section 7.0: Land Use Areas
- c. Section 8.0: Interface Policies

- d. Section 12.0: Transportation, Pathway and Transit Policies
- e. Appendix A: Interface Design Guidelines
- f. Appendix B: Site and Building Design Guidelines

## 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 1.0: Executive Summary: Vision, Principles and Goals
- b. Section 7.0: Land Use Areas
- c. Section 8.0: Interface Policies
- d. Section 11.0: Wetland and Environmental Reserve Policies
- e. Appendix A: Interface Design Guidelines
- f. Appendix B: Site and Building Design Guidelines

## 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 1.0: Executive Summary: Vision, Principles and Goals
- b. Section 7.0: Land Use Areas
- c. Section 12.0: Transportation, Pathway and Transit Policies
- d. Appendix A: Interface Design Guidelines
- e. Appendix B: Site and Building Design Guidelines

# Principle 5: Preserve open space, agricultural land, natural beauty and 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 1.0: Executive Summary: Vision, Principles and Goals
- b. Section 11.0: Wetland and Environmental Reserve Policies

#### Principle 6: Mix land uses

Mix land use by having homes, businesses, schools and recreational opportunities in closer proximity. This should 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 1.0: Executive Summary: Vision, Principles and Goals
- b. Section 7.0: Land Use Areas

# Principle 7: Strategically direct and 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.

This principle is not addressed by the ASP as the entire ASP area is located within The City's greenfield industrial growth corridor.

#### 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 7.0: Land Use Areas
- b. Section 12.2: Pedestrian and Bicycle Circulation
- c. Appendix B: Site and Building Design Guidelines

## 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 1.0: Executive Summary: Vision, Principles and Goals
- b. Section 7.0: Land Use Areas
- c. Section 12.0: Transportation, Pathway and Transit Policies

#### 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 1.0: Executive Summary: Vision, Principles and Goals
- b. Section 12.0: Transportation, Pathway and Transit Policies

## Principle 11: Utilize green infrastructure and buildings

Utilizing the ecological services provided by the environment should 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.

This principle is specifically addressed by the following sections of this ASP:

- a. Section 1.0: Executive Summary
- b. Section 4.0: Environmental Sustainability
- c. Section 13.4: Stormwater Management
- d. Appendix B: Site and Building Design Guidelines

#### Principle 12: Emergency Services Safe Community Design (adapted from CPS2008-94)

The planning of sustainable, smart communities should incorporate "emergency services safe" community principles, which promote and maintain safe and healthy behaviours, support effective emergency response and offer protection to people and their property.

## **APPENDIX H** COSTING ESTIMATES

The attached costing estimates are for City of Calgary costs only. All costs are estimates based on 2009 dollars, and are subject to change. Core costs are non-discretionary costs for basic community infrastructure. Complete community costs include services required to enhance the areas quality of life and livability.

Department	Description	Tracked in 10-year Capital Plan	Proposed in 3 year Capital Budget	Estimated Capital Cost (2009)
Transit	BRT/Buses	Yes	No	\$17 million
Roads	Peigan Trail		No	\$75 million
	61st Avenue		No	\$13 million
	Glenmore Tr	Yes (\$14 million)	Yes (\$14 million)	\$94 million
	106th Avenue		No	\$25 million
TOTAL ROADS*			\$14 million	\$224 million
Storm			Yes (partial)	\$8.2 million
Water		Yes		\$7.0 million
Sanitary		No		\$3.3 million
TOTAL		\$14 million	\$14 million	\$242.5 million

#### **CORE INFRASTRUCTURE**

NOTES:

Roads costs reflect total capital costs. Proportional ASP area share of roads costs would be approximately \$80 - 90 million.

Peigan Trail

- Ultimate 6 lane road from 52nd Street to TUC

- Interchange at Peigan Trail/68th Street

61st Avenue

- Twin flyover to 4 lanes

- Bridge connection over Forest Lawn Creek

Glenmore Trail

- Ultimate 6 lane road from 52nd Street to TUC

- Interchange at Glenmore Trail/68th Street

106th Avenue

- 4 lane flyover at East Freeway

Storm

- The storm cost included in Appendix H reflects the estimated cost for the 114 Avenue SE Storm Trunk, the Shepard Underdrain, and the 84 Street SE Storm Trunk.

#### COMPLETE COMMUNITY COSTS

Department	Description	Tracked in 10-year Capital Plan	Proposed in 3 year Capital Budget	Estimated Capital Cost (2009)
Parks	Forest Lawn Creek Regional Pathway	No \$1 million	n/a	n/a
Recreation	Small Regional Facility (5 ha) Location yet to be determined (alternative sites may be found with the broader Southeast Industrial ASP area.)	\$10 million (MSI funding 2017)	No	\$35 million
TOTAL		\$ 11 million	\$0	\$ 35 million

## **APPENDIX I** PROPOSED LAND PRIORITIES - LEGACY PARKS PROGRAM

## I.1 Forest Lawn Creek

Forest Lawn Creek was identified as an Environmentally Significant Area through the Natural Areas Management Plan Inventory in 1994. The creek is now fed primarily by the outflow of the wet pond at Elliston Park. In 2003, the Open Space Plan identified this area as an opportunity to provide a regional linear park north/south along the east side of Calgary. Ultimately, this project offers the opportunity to connect Elliston Park (17th Ave SE) at the north to the future Shepard Wetland Regional Park (114th Ave SE), a distance of almost 100 blocks.

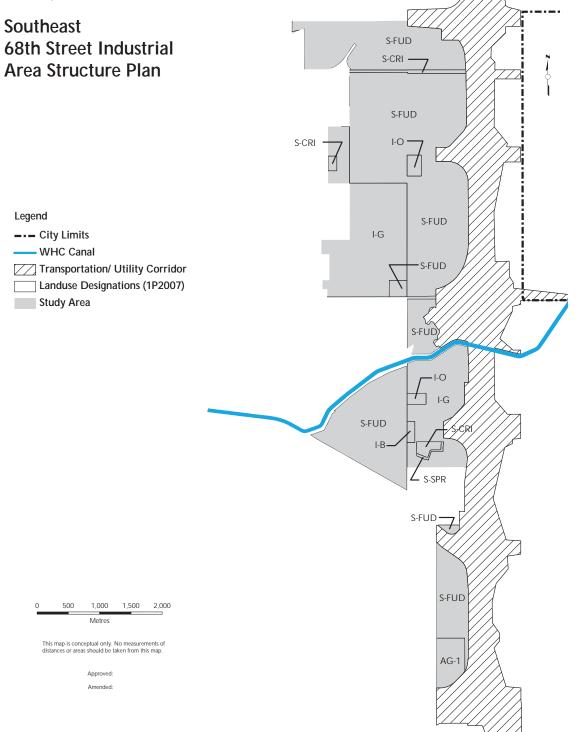
Forest Lawn Creek has had significant disturbance over the years. It was cut in half by the construction of the Western Headworks (WH) Canal and now discharges into the canal rather than flowing south to the Shepard area. Even so, the creek flows through a diverse mix of riparian shrub communities and noteworthy extents of native prairie. Wetlands associated with the creek attract large numbers of waterfowl during the spring and fall migrations. Parts of the creek have extensive wet sedge meadows, an unusual feature in Calgary.

Land acquisition for this new regional park would have at its core the ER dedication of the Creek supported from the Wetland Policy. Additional MR from the imminent industrial development and finally, outright purchase of significant and strategic parcels – i.e., the native prairie remnant and sufficient land to ensure adequate vegetated buffers and specific recreational needs, is recommended. This offers an opportunity to demonstrate excellence in execution of one of the first significant multi-department projects based on the newly approved Wetlands Policy. To date, discussions on this potential regional park have included Solid Waste Services, Wastewater, Corporate Properties and Parks. The time is right to put this park land assembly in place prior to industrial sales and development. Compensation to Corporate Properties would be made for transferred parcels that had development potential.

## **APPENDIX J**

#### Map 12 Current Land Use Designations

(as of May 30, 2010)



## **APPENDIX K**

### Map 13 Land Ownership

