
SOUTHWEST REGIONAL POLICY PLAN





Southwest Regional Policy Plan

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Part 1

Southwest Regional Policy Plan



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Southwest Regional Policy Plan

PREFACE

The Southwest Regional Policy Plan (the "Plan") applies to approximately 1871 hectares (4623 acres) of land located within the southwest sector of Calgary. The area is bounded to the north by the Tsuu T'ina Nation lands, to the south by Highway 22x (Spruce Meadows Trail SW), to the west by agricultural lands located within the Municipal District of Foothills and to the east by Sarcee Trail SW and the communities of Evergreen and Bridlewood. The majority of the Plan area is currently undeveloped, and owned by both private landowners and development companies. The Plan area will serve as a major growth corridor in the City, eventually accommodating a projected 78,000 people and up to 7300 jobs.

The Plan preparation process commenced in mid-2005, and involved the formulation of transportation, environmental, land use and market studies; input from landowners and other special interests; and, public information meetings. The result of this process is a plan that will provide a framework for the subsequent preparation of more detailed Area Structure Plans in the Plan area.

The foundation of the Plan is embodied in the following guiding principles:

- **promoting a sustainable development pattern**
- **achieving an efficient transportation network**
- **creating a viable employment base**
- **ensuring a strong level of transit service**
- **developing a hierarchy of commercial centres**
- **providing appropriate regional facilities and amenities**
- **conserving environmentally significant features**
- **introducing suitable municipal utility infrastructure.**

These guiding principals are, in turn, reflected in the concept map and policy statements contained within the balance of the Plan.



1.0 INTRODUCTION

1.1 Purpose of the Plan

The *Southwest Regional Policy Plan* (the "Plan") has three main purposes. Firstly, the Plan reaffirms the City's broad land use pattern for the Plan area, as conveyed within the Municipal Development Plan (The Calgary Plan) by accommodating predominantly residential development in the area. Secondly, the Plan establishes a process that addresses the sequencing of Area Structure Plan (ASP) preparation within the area to ensure urban growth proceeds logically and efficiently. Finally, the Plan identifies the key land use, transportation and environmental components that need to be dealt with in a coordinated manner as detailed planning proceeds through the ASP preparation process.

1.2 Composition of the Plan

In order to accomplish this purpose, the Plan contains the following:

- a broad strategy that is intended to achieve co-ordination between transportation capacity and development intensity;
- a future vision and goals that describe the urban form that the area will take while creating a benchmark to measure the success of the Plan over time;
- a land use concept map and a series of policy statements to guide and direct the subsequent timing and content of ASP's prepared for the area.

1.3 Authority of the Plan

The Plan has been approved through a resolution of Council rather than by bylaw and represents a non-statutory planning document. Part 1 comprises the approved Plan. Part 2, which does not form part of the approved Plan, contains supporting information that is useful in understanding the Plan.

While the Plan has no legal status, it is intended that, in practice, subsequent Area Structure Plans prepared within the Plan area will be consistent with the Plan.

1.4 Timeframe of the Plan

The Plan is future-oriented and depicts a broad land use and transportation pattern for the area. In this regard, no specific timeframe is applied to the Plan.

1.5 Interpretation of the Plan

1.5.1 Map Interpretation

Unless otherwise specified within the Plan, the boundaries or locations of any symbols or areas shown on a map are approximate only, not absolute, and shall be interpreted as such. They are not intended to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries, such as property lines or road and utility rights-of-way.

1.5.2 Policy Interpretation

The explanatory text accompanying a policy within the Plan is provided for information purposes only to enhance the understanding of the policy. If an inconsistency arises between this text and a policy, the policy will take precedence.

Where "shall" is used in a policy, the policy is considered mandatory. However, where actual quantities or numerical standards are contained within the policy such quantities or standards may be varied, provided that the variance is necessary to address unique circumstances that would otherwise render compliance impractical or impossible, and the general intent of the policy is still achieved.

Where "should" is used in a policy, the intent is that the policy is to be complied with. However, the policy may be varied in a specific situation provided that the variance is necessary to address unique circumstances that will otherwise render compliance impractical or impossible, or to introduce an acceptable alternate means to otherwise achieve the general intent of the policy.

1.6 Amendment to the Plan

In order to make any change to the text or maps within the Plan, an amendment to the Plan will be required to be approved through a resolution of Council. An amendment will require the holding of a non-statutory public hearing together with public notification carried out in accordance with procedures established by Council. Where an amendment to the Plan is requested, the applicant will be required to submit supporting information necessary to evaluate and justify the amendment.

Changes to the text or maps in Part 2, Supporting Information, will not require Council approval. Such changes will be made from time to time as determined necessary to ensure that the text and maps remain accurate.

1.7 Consistency of the Plan

Consistency between the Plan and other policy documents approved by Council, including, but not limited to, the Municipal Development Plan, the Calgary Transportation Plan and the Triple Bottom Line Policy are intended to be maintained. Areas Structure Plans prepared within the Plan area will refine the policies of these other policy documents in a manner determined necessary to create a policy framework to direct decisions on subsequent Outline Plan/Land Use Amendment applications.

1.8 Monitoring of the Plan

The Plan will be monitored over time to ensure that it remains current and relevant. Where determined necessary, the Plan will be updated through the amendment process either generally or in response to a specific issue.

Calgary Planning Commission Recommendation

As directed by Calgary Planning Commission, in its recommendation to Council, the following provision (Section 1.9) has been prepared by the Land Use Planning and Policy Business Unit to address the development of “complete” communities within subsequent ASP’s approved within the Southwest Plan Area. The wording of this section was extracted from the amendment to the Calgary Plan recently approved by Council (2006 September 21).

1.9 Direction of the Plan

In accordance with Policy 2.2.2.2C of the Calgary Plan, Community Plans prepared within the Southwest Plan area should ensure that “...*new communities become more sustainable by:*

- *Achieving a minimum residential density of 7 units per gross residential acre.*
- *Providing livable and complete communities that include a mix of single and multi-unit dwelling types, densities and land uses such as commercial and employment.*
- *Ensuring a more compact urban form that efficiently utilizes land and infrastructure.*
- *Creating areas of higher residential density to take advantage of transit and reduce reliance on the private automobile.*
- *Designing pedestrian, cyclist and transit-oriented communities that reduce reliance on the private automobile.*

- *Providing attractive public spaces and commercial areas that encourage walking and a vibrant community life."*

Area Structure Plans shall contain policy statements that are directed toward achieving the above principles, in particular, the minimum density requirements for new communities.

Area Structure Plans will also be required to achieve the following Sustainability Principles as approved by Council:

- Principle 1: Create a range of housing opportunities and choices
- Principle 2: Create walkable environments
- Principle 3: Foster distinctive, attractive communities with a strong sense of place
- Principle 4: Provide a variety of transportation options
- Principle 5: Preserve open space, agricultural land, natural beauty, and critical environmental areas
- Principle 6: Mix land uses
- Principle 7: Strategically direct and manage redevelopment opportunities within existing areas
- Principle 8: Support compact development
- Principle 9: Connect people, goods and services locally, regionally and globally.
- 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.
- Principle 11: Utilize green infrastructure and buildings

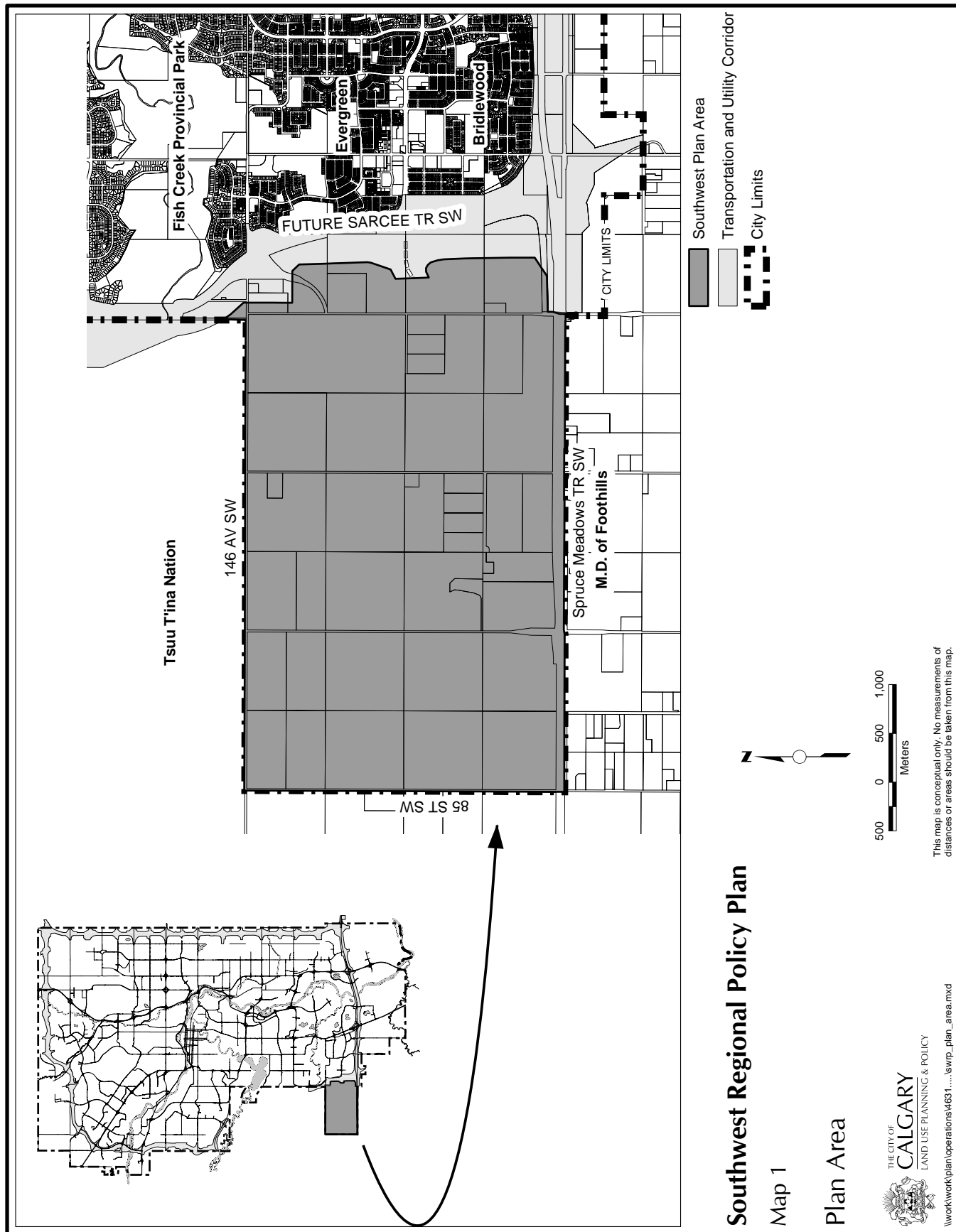
2.0 PLAN AREA

2.1 Application of the Plan

The Plan applies to those lands shown on the Plan Area map (Map 1). The Plan area is bounded to the north by the Tsuu T'ina Nation lands, to the south by Highway 22x (Spruce Meadows Way SW) to the east by Sarcee Trail SW located within the Transportation and Utility Corridor and to the west by The City's corporate boundary and lands located within the Municipal District of Foothills.

2.2 Ownership Pattern

While there are a number of landowners in the Plan area, there is currently no majority owner. Many of the parcels are large in size and consist of the original unsubdivided quarter sections; in other cases, the quarter sections have been previously subdivided into smaller agricultural or residential lots.



3.0 STRATEGY

3.1 Overview

The Plan area comprises approximately 1871 hectares (4623 acres) of land, and will accommodate a projected population of over 78,000 people at full build out. Access/egress to the area will be achieved by means of two interchanges on Sarcee Trail SW to the east (at 146 Avenue SW and 162 Avenue SW) and two interchanges at Highway 22x to the south (at 53 Street SW and 69 Street SW) with a third potential interchange at 84 Street SW. No future access through the Tsuu T'ina Nation lands to the north is anticipated, and any future access to the lands further to the west within the Municipal District of Foothills will be contingent upon the City's long term growth plans and Provincial annexation decisions.

The size of the Plan area in relation to the limited number of access/egress points available on Sarcee Trail SW and Highway 22x results in some road network capacity constraints, particularly involving the ramps serving Sarcee Trail SW. The solution to these constraints, coupled with the broader sustainable development objectives of the City, is based upon several key principles described below.

3.2 Principles

(1) Development Intensity

The first principle of the Plan is to ensure that development occurs in a concentrated form at density levels consistent with established policy. The density approach will be as follows:

- the highest densities will be required within identified employment centres and transit nodes;
- the communities on the east side of the Plan area will be developed at densities consistent with City policy;
- the communities on the west side of the Plan area may have lower densities that still continue to achieve land efficiency objectives.

(2) Network Efficiency

A second principal of the Plan is to ensure that the road network operates in an efficient manner. While this approach requires that the network not exceed acceptable volume to capacity ratio, it is recognized that the intersections on Sarcee Trail SW may on occasion exceed this ratio during the peak hour. This situation is considered to be acceptable for two main reasons:

- there is a latent demand for interchange capacity on Sarcee Trail SW generated by the Evergreen and Bridlewood communities to the extent that any available interchange capacity will be used by these communities; as such, there remains little advantage to be gained by reducing densities in the Plan area to increase the capacity on Sarcee Trail SW;
- there is suitable capacity on the interchanges on 22x on the south side of the Plan area, such that residential trips can be diverted from Sarcee Trail to these southerly intersections.

(3) Transit Service

A third principle of the Plan is to provide for a high level of transit service in the area through Bus Rapid Transit (BRT) and feeder bus routes within the communities (with the potential for introducing Light Rail Transit in the future). The transit system will have two main purposes:

- providing fast, convenient travel choices for transit trips outside the Plan Area; and
- providing fast, convenient travel choices for transit trips within the Plan Area.

(4) Employment Concentration

A fourth principle of the Plan is to provide for employment opportunities in the Plan area through the provision of concentrated employment centres. These centres have a number of benefits as follows:

- the employment centres create local jobs that allow residents to work in close proximity to their homes;
- the employment centres encourage counter traffic flows from elsewhere in the city during the peak hour period, that, in turn, result in a more efficient transportation network city-wide;
- the employment centres promote the use of public transit in preference to private vehicles through Transit Oriented Design principles.

(5) Commercial Hierarchy

A fifth principle of the Plan is to provide for a suitable level of retail and service commercial development to serve the needs of residents. The commercial hierarchy will consist of the following:

- core commercial centres, which are walkable and transit oriented and serve as a mixed use, centrally located and multi-functional shopping, living and working focus for the surrounding community;
- gateway commercial centres, which are accessible by all modes of travel, are located on the edge of communities and provide predominantly commercial goods and services to both local and regional markets.

(6) Regional Facilities

A sixth principle of the Plan is to provide for a range of regional facilities in the area considered essential to meet the recreational, educational and social needs of residents. The regional facilities will include:

- a high school, a regional recreational centre, a library and a regional athletic park;
- a fire station, an emergency medical service facility and an operations work place centre.

(7) Environmental Conservation

A seventh principle of the Plan is to provide for the conservation of environmentally significant features within the area, which may include ravines, wetlands and major tree stands. The measures to achieve conservation include:

- dedication of the features as environmental or municipal reserve through the subdivision process;
- acquisition or protection of the feature through purchase, incentives or mandatory controls;
- exploring other mechanisms to protect environmentally significant areas such as Conservation Easement Agreements.

(8) Utility Infrastructure

A final principle of the Plan is to provide municipal utility infrastructure to the area necessary to meet the needs of development. This infrastructure would include:

- sewer trunk lines;
- water feeder mains; and
- stormwater management facilities.

4.0 VISION

4.1 Vision of the Southwest Plan Area

The Southwest Planning Area, in the year 2040, has reached full development and comprises six vibrant and successful communities with 78,000 residents.

Sarcee Trail SW, a north/south expressway, and Highway 22X border these communities on the south and east sides providing strong connections to the city centre, and the other major business sectors. 162 Avenue SW extends through the area, forming a strong east/west axis that integrates the six communities.

The two communities on the east side each have a substantial population base, and represent fully-functioning communities with a complete complement of schools, parks, commercial centres and community-related facilities. In contrast, the remaining four communities on the west side are smaller in size and operate in an interdependent manner through the sharing of community, educational and recreational facilities.

The southwest planning area is serviced by bus rapid transit (BRT) that extends along 162 Avenue SW providing efficient and direct connections to the LRT further to the east. BRT and other transit service provides a viable alternative to the private automobile for internal and external community trips.

Located along the BRT line are two major employment centres. These centres function as mixed use office, business, retail, and higher density residential areas that provide living, shopping and employment opportunities for residents, serve as an activity focus for the communities and allow residents to live close to work.

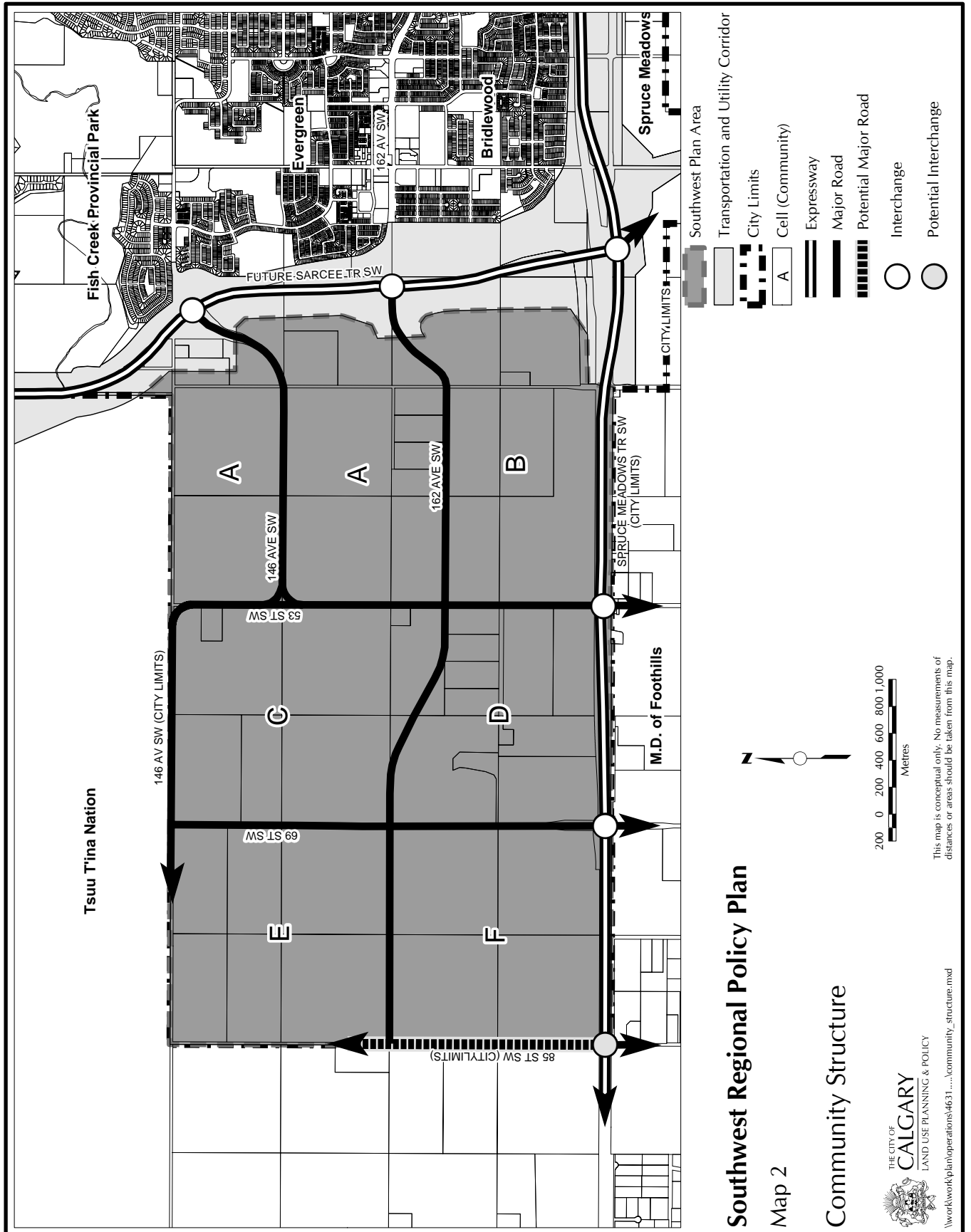
The communities also contain a full complement of commercial centres, including gateway shopping centres along Highway 22X, and several sector shopping centres interspersed within the area. These commercial centres provide goods and services for the residents, and reduce the need to travel long distances to outside areas of the city for regional and local shopping.

Natural open space is an amenity in the southwest area. The area contains a number of healthy and functional wetlands and tree stands, and sensitive interface treatments have been developed to integrate them into the urban fabric and protect them from human impacts. These features create positive aesthetic and recreational opportunities for residents, augment the more formalized active parkspace, and add to the attractiveness of the area.

Essential regional services, as well as major educational and recreational facilities are interspersed throughout the southwest area. The facilities include a high school, a library, a regional recreational centre and a regional athletic park. The regional services comprise a combined firehall and emergency medical service centre.

Getting around within the southwest area is made easy and convenient by the road network, local transit service and the pedestrian system. Connections to important destinations in the area such as the employment and commercial centres are efficient and direct. And, the extensive regional pathway system encourages walking and cycling.

Overall, the southwest area offers residents a range of choices to live, learn, work and play. A variety of travel options makes the southwest an easy place to walk and use transit. People are better able to meet their needs closest to home and this, in turn, creates a strong sense of identity and contributes to a vital and healthy community.



4.2 Goals

- **Residential Communities**

To provide for well-defined and complete residential communities.

- **Employment Opportunities**

To provide for viable and successful employment centres.

- **Commercial Development**

To provide for a broad variety of commercial centres to serve the shopping needs of the residents.

- **Environment Conservation**

To provide for the protection and sustainability of natural wetlands and other natural areas.

- **Network Efficiency**

To provide for a safe, efficient and functional arterial road network to serve the area.

- **Transit Service**

To provide for integrated and efficient transit service to meet the needs of residents.

- **Regional Facilities**

To provide regional facilities to meet the educational, recreational, emergency, and maintenance needs of the area.

- **Utility Services**

To provide for sewer, water and stormwater to meet the utility servicing needs of the area.

5.0 STRUCTURE

5.1 Community Definition

The Plan area is comprised of six communities (A, B, C, D, E and F) as shown on the Community Structure Map (Map 2). Each of the communities are defined by the arterial road network (expressways and majors) and will serve as a separate but interdependent planning area. The size of each of the communities is provided in the table below, and the population and function of each community is addressed in more detail in Part 2, Supporting Information.

COMMUNITIES	
Communities	Area
A	376 hectares (929 acres)
B	211 hectares (521 acres)
C	234 hectares (578 acres)
D	166 hectares (410 acres)
E	251 hectares (620 acres)
F	193 hectares (477 acres)
The figures contained in this table can be refined at the Outline Plan/Land Use Amendment stage without requiring an amendment to this Plan.	

5.2 Community Function

In examining the size and population of each of the communities in the Plan area, two main conclusions can be reached:

- assuming that a community requires in the order of 15,000 residents and an area of about 388 hectares (960 acres) to remain viable in terms of the provision of educational, recreational, local commercial, community and other facilities and amenities, except for Community A, the communities are relatively small in size.
- given their small size and population base, it is anticipated that the communities will need to function in an interdependent manner in terms of the provision of community-related facilities, services and amenities.

5.3 Community Relationship

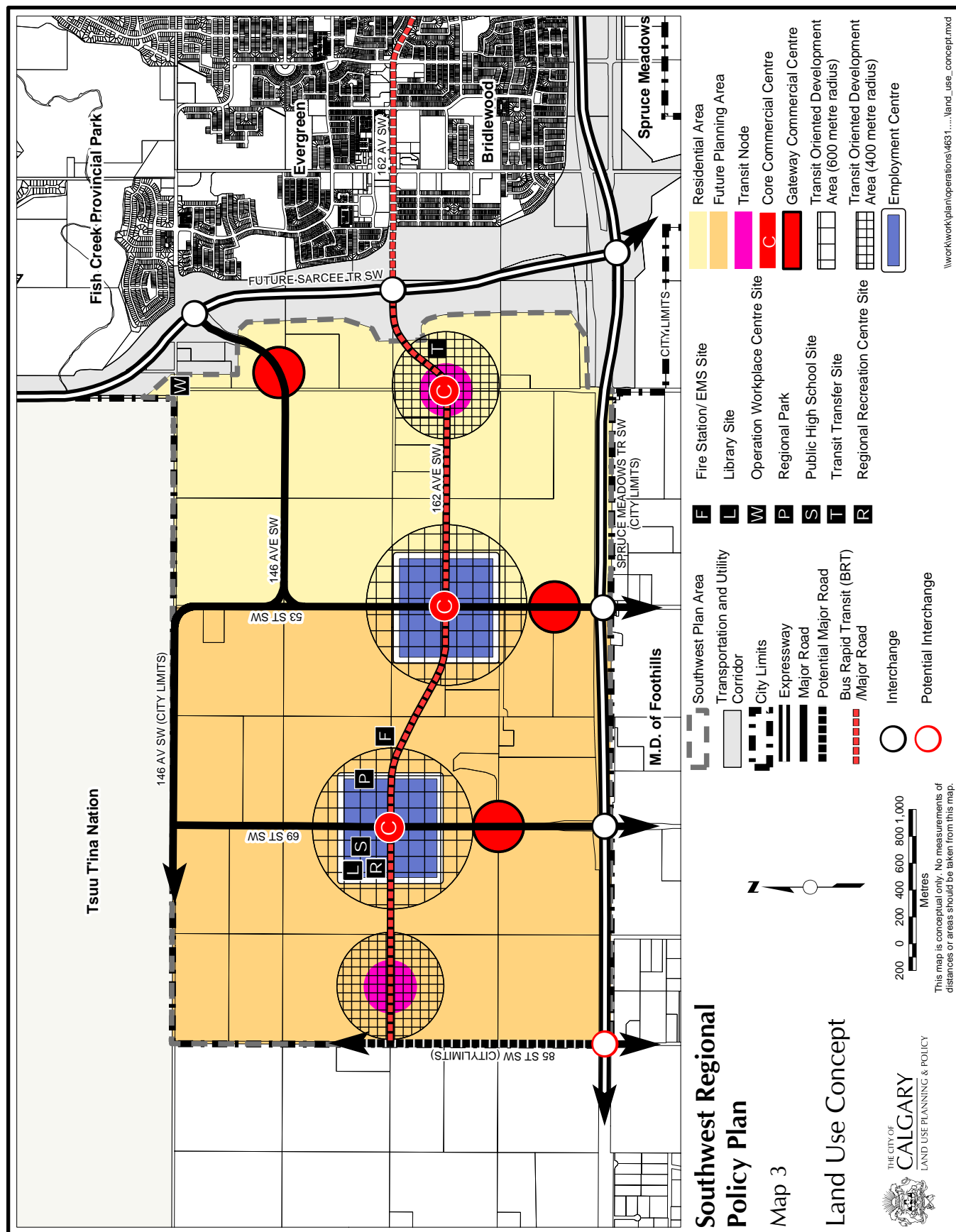
In recognition of the separate but interdependent nature of the communities, the following relationships have been established:

- Communities A and B will operate as separate but related communities that will share a common community centre and commercial core that is centrally located to both communities along 162 Avenue SW.
- Communities C and D, and E and F, respectively, will operate as separate but related communities that will share a common community centre and commercial core that is centrally located to both communities along 162 Avenue SW.

5.4 Community Integration

In order to integrate the various communities in a cohesive manner and to strengthen their interdependence, the following measures will be introduced:

- 162 Avenue SW will be designed as a central spine road that accommodates vehicle, transit and pedestrian traffic, with the barrier effect of this road to be minimized through tree planting and landscaping, defined pedestrian crossings, entrance features and other improvements along the road;
- major employment, transit oriented development, higher density residential and core commercial centres, will be centrally located along 162 Avenue SW, in order to serve as a focal point for the communities, and provide convenient services and amenities;
- rapid transit service will be routed along 162 Avenue SW through the central portion of the area, with transit stops provided at key locations; and
- improvements will be introduced to 146 Avenue SW to reduce its barrier effect on Community A, and accommodate inter-community pedestrian and vehicle trips across this road.



- Bus Rapid Transit will be routed along a designated bus way with transit priority measures introduced to provide quick and convenient transit access both within and to east of the Plan area, as well as convenient access to locations within the balance of communities in the area.

5.5 Community Identity

In order to reinforce the separate identity of the Communities, the following community and street naming approach should apply:

- each community should incorporate a distinct community name and related street names.
- major streets, such as 162 Avenue SW and 146 Avenue SW, should incorporate a common street name (e.g. Providence) that reflects an overall regional identity within the Southwest Planning Area and correspondingly transcends any individual community name.

6.0 CONCEPT

6.1 Land Use Concept Map

The land use pattern for the Plan area is shown on the Land Use Concept Map (Map 3). This concept consists of a series of areas and symbols that define a broad future land use pattern and road network for the Plan area. Section 7.0 of the Plan contains policies that apply to the areas and symbols shown on the Land Use Concept Map.

6.2 Amending the Map

It is intended that as part of the preparation for each ASP, the location of the various areas and symbols shown on the Land Use Concept Map will be re-evaluated. The re-evaluation process may, in turn, result in revisions to the map in order to ensure that the map and a subsequent ASP remain consistent.

7.0 POLICIES

7.1 Land Use Areas

7.1.1 Overview

The Plan area is divided into two land use areas as shown on the Land Use Concept Map: the Residential Area; and, the Future Planning Area. The Residential Area comprises Communities A and B. This area will accommodate predominantly residential uses at conventional densities. The timing of preparation of an ASP for this area will be determined by Council in accordance with the requirements of section 8.0.

The Future Planning Area comprises communities C, D, E and F. These communities will also contain predominantly residential development. Based upon the transportation analysis, the road network capacity can support a base density of 17.3 units per gross developable hectare (7 units per gross developable acre) assuming a high level of transit service and a strong employment base. Prior to commencing an Area Structure Plan for this area, the Administration should reaffirm that the transportation capacity, density level, employment base and transit service assumptions are still valid. Where this occurs, the timing of preparation of an ASP will be subject to the policies of Section 8.0. Conversely, where the Administration determines that the above assumptions may no longer be valid, a comprehensive reevaluation of these assumptions should occur, and the Regional Policy Plan amended by Council as appropriate.

7.1.2 Policies

(1) Residential Area

- (a) The predominant use of land within the Residential Area shall be residential uses.
- (b) Recreational, institutional, local commercial and similar, and accessory uses may be allowed within the Residential Area where determined to be compatible and appropriate.
- (c) The density of the Residential Area should be consistent with the density requirements as contained in the Municipal Development Plan.
- (d) The timing of preparation of an ASP within the Residential Area shall be subject to an evaluation in accordance with section 8.1.2 (3).

(2) Future Planning Area

- (a) The predominant use of land within the Future Planning Area shall be residential uses.
- (b) Recreational, institutional, local commercial and similar and accessory uses may be allowed within the Future Planning Area where determined to be compatible and appropriate.
- (c) The minimum density requirements for Communities 'C', 'D', 'E' and 'F' within the Future Planning Area should be in the order of 17.3 units per hectare (7 units per acre) with the density to be distributed so that:
 - (i) higher densities are oriented toward Highway 22x within Communities D and F;
 - (ii) lower densities are oriented toward the Tsuu T'ina Nation lands within Communities C and E;
 - (iii) the highest densities are located within the employment centres and transit nodes along 162 Avenue SW.
- (d) Notwithstanding (a) to (c), prior to or in conjunction with the decision to commence an Area Structure Plan within the Future Planning Area, the Administration should make a determination that the transportation network, residential density, employment level and transit service assumptions for the area are still considered to be valid, and
 - (i) if these assumptions are still considered to be valid, proceed with the preparation of the ASP on that basis, or
 - (ii) if these assumptions are no longer determined to be valid, reevaluate the assumptions as part of the ASP preparation process, and prepare amendments to the Regional Policy Plan for the approval of Council as determined necessary.

7.2 Road Network

7.2.1 Overview

The Land Use Concept Map identifies the Regional Roads and the Internal Major Roads within the Plan area.

The Regional Roads include Highway 22x (Spruce Meadows Trail SW) and Sarcee Trail SW. These two roads represent expressways aligned along the south and east side of the Plan area. No Regional Roads will be located on the north side of the Plan area adjacent to the Tsuu T'ina Nation lands.

The Internal Major Roads include 146 Avenue SW and 162 Avenue SW, major roads that extend east/west through the Plan area; and, 53 Street SW, 69 Street SW and 84 Street SW, major roads that are aligned north/south through the Plan area. 162 Avenue SW has a designated bus way in the median to accommodate Bus Rapid Transit (BRT) initially and potentially Light Rail Transit (LRT) in the future.

7.2.2 Policies

(1) Alignment of Road Network

The Regional Road Network and the Internal Major Road Network should be aligned generally as shown on the Land Use Concept Map.

(2) Design of Regional Road Network

The Regional Road Network should be designed to

- (i) accommodate efficient and safe traffic flows,
- (ii) provide for appropriate transit service,
- (iii) create a logical community structure,
- (iv) avoid, where possible, lands of higher environmental significance,
- (v) recognize existing parcel boundaries and other physical constraints, and
- (vi) provide for appropriate truck route connections.

(3) Interchange Capacity

An interchange on Sarcee Trail SW may, in specific circumstances, be allowed to exceed acceptable volume over capacity (VOC) ratios

(i) in recognition that

- (A) these interchanges will tend to exceed acceptable ratios regardless, due to the latent traffic demand generated by the Evergreen/Bridlewood communities to the east,
- (B) there is excess capacity available to accommodate traffic generation from the Plan area at the interchanges on Highway 22x to the south,
- (C) the impacts of the additional traffic congestion are off-set by the benefits derived from increasing the density in the Plan area, and

(ii) provided that

- (A) capacity improvements at the connections to Highway 22x (Spruce Meadows Trail SW) are implemented as determined necessary, and
- (B) Bus Rapid Transit service is introduced as part of the initial development of the Plan area, and maintained over time as development proceeds.

(4) 85 Street SW

The alignment of 85 Street along the west perimeter of the Plan area and the timing of development of this road or a related interchange on Highway 22X/85 Street SW should be contingent upon further transportation analysis as development within the Plan area proceeds or the annexation of lands to the west occurs.

(5) 146 Avenue SW

The alignment of 146 Avenue west of 53 Street should be reviewed at the time of preparation of an ASP for communities C and D to determine if any new factors have emerged to justify a shift of this alignment from the north boundary of the Plan.

(6) 162 Avenue SW

162 Avenue should be designed as a central landscaped spine road characterized by such landscaping, pedestrian, transit and other amenities as determined appropriate to reinforce the unique function of this road as a significant corridor within the Plan area.

(7) Internal Road Network

In conjunction with the preparation of an Area Structure Plan, a Transportation Impact Analysis should be prepared to address the development of the internal road network within a community.

(8) Preconstruction of 53 Street SW

53 Street SW may be required to be constructed to Highway 22x during the initial stages of development in Communities A and B in order to provide an alternative access to the south for these communities and augment the access to 146 Avenue SW and 162 Avenue SW.

(9) Transit Supportive Internal Road Network

- (a) In order to facilitate and improve transit feeder service, an internal loop road network should be provided within a community that achieves route efficiency and meets transit walkway distance requirements.
- (b) The internal loop roads should contain well-defined neighbourhood nodes at key transit stops comprised of higher density housing and other amenities that encourage and support transit use.

7.3 Transit Service

7.3.1 Overview

A Bus Rapid Transit (BRT) line will be located along 162 Avenue SW as shown on the Land Use Concept Map which is intended to take the form of an exclusive right-of-way aligned within the centre of the road. Other components of the transit system include intercommunity transit bus routes, cross-town routes connecting the plan area to other destinations in the city, and transit-supportive land uses.

7.3.2 Policies

(1) Bus Rapid Transit Service

- (a) The BRT line should be aligned along 162 Avenue SW as shown on the Land Use Concept Map.
- (b) A dedicated road right-of-way should be provided along 162 Avenue SW to accommodate the BRT line.

(2) Transit Service Planning

- (a) The transit system for the Plan area will compromise a hierarchy of transit routes serving different functions including
 - (i) Bus Rapid Transit
 - (ii) crosstown bus routes connecting to major destinations within the city,
 - (iii) feeder bus routes that enable in-community travel and efficient access to the south LRT line.
- (b) An internal loop road network should be provided within each community that achieves transit bus route efficiency and meets transit bus stop walking distance requirements.

(3) Transit Facilities

- (a) Transit facilities including transfer points and park-in-ride lots should be provided in accordance with the approved policies addressing these matters.
- (b) Opportunities for joint use or shared parking should be allowed between privately-owned developments and BRT stops and parking lots in order to minimize the amount of land devoted to parking with Transit Oriented Development (TOD) areas.

(4) Pedestrian Connections

Direct, efficient and well-designed pedestrian connections between transit stops, particularly BRT stops, and adjacent land areas should be provided.

(5) Transit Oriented Development

- (a) Development adjacent to transit stops should be subject to the requirements of the Transit Friendly Design Guidelines.
- (b) Development within Transit Oriented Development areas along 162 Avenue SW as shown on the Land Use Concept Map should be subject to the requirements of the TOD Guidelines.

(6) Transit Priority

- (a) Transit Signal Priority (TSP) measures should be introduced by The City at intersections along the BRT line.
- (b) Designated transit bus lanes should be provided by The City along the access/egress ramps at the Sarcee Trail/162 Avenue SW and the Sarcee Trail/146 Avenue SW interchanges.

7.4 Employment Centres

7.4.1 Purpose

The Land Use Concept Map identifies two Employment Centres within the Plan area. These Employment Centres are intended to serve as transit-oriented, mixed use, and higher density nodes comprised of business, residential, retail, recreational and public uses. The Employment Centres will create local and regional job opportunities and are integral to the operation of the transportation network. Each of the Employment Centres will need to contain an adequate amount of land to accommodate employment and business development.

7.4.2 Policies

(1) Location of Employment Centres

The Employment Centres should be generally located as shown on the Land Use Concept Map.

(2) Comprehensive Planning of Employment Centres

- (a) An employment centre should allocate suitable lands for business, office or other employment related uses.
- (b) An ASP should contain
 - (i) policies to achieve the comprehensive planning of an employment centre and
 - (ii) guidelines addressing the design of an employment centre, and
 - (iii) standards that address the form and density of development within an employment centre.

7.5 Commercial Centres

7.5.1 Overview

The Land Use Concept Map identifies two types of Commercial Centres within the Plan area:

- Core Commercial Centres
- Gateway Commercial Centres

Core Commercial Centers represent centrally-located, pedestrian-oriented and mixed use developments that are intended to serve as a shopping, living and working focus for one or more communities.

Gateway Commercial Centres represent, larger-scale, peripherally-located and vehicle-dominant developments that are intended to provide retail goods and services to local and regional markets.

7.5.2 Policies

(1) Location of Commercial Centres

Commercial centres shall be generally located as shown on the Land Use Concept Map.

(2) Function of Commercial Centres

A core commercial centre and gateway commercial centre should be developed in a manner that reflects its function, scale, composition and design.

7.6 Regional Facilities

7.6.1 Overview

The Land Use Concept Map identifies the following Regional Facility sites within the Plan area:

- Fire Station site
- Emergency Medical Services site
- High School site
- Library site
- Recreation Centre site
- Regional Park site
- Operations Workplace Centre site
- Transit Transfer Area site
- Cemetery site

These various Regional Facility sites should be located to optimally serve their catchment areas, recognizing that there is flexibility to adjust their location through the ASP preparation process.

7.6.2 Policies

(1) Location of Regional Facility Sites

The Regional Facility sites should be generally located as shown on the Land Use Concept Map.

(2) Size of Regional Facility Sites

The size of the Regional Facility sites required in the Plan area should be as shown in the following table.

Regional Facility Sites Southwest Planning Area	
Site	Size
Fire Station	2.0 hectares (5.0 acres)
Emergency Medical Services	0.12 hectares (0.3 acres) in conjunction with the Fire Station
Operation Workplace Centre	8.0 hectares (20.0 acres)
Transit Transfer Area	2.4 hectares (6.0 acres)
Library	0.4 hectares (2.0 acres) in conjunction with a Regional Recreation Centre
Regional Recreation Centre	4.0 hectares (10.0 acres)
Senior High School (Public)	9.0 hectares (23.0 acres)
Regional Park	8.0 hectares (20.0 acres)
Cemetery	40.0 hectares (100 acres)
<u>Note</u> 1. The size of all sites is considered to be approximate only and may be revised at the more detailed planning level. 2. The Cemetery site is not shown on the Land Use Concept Map, and its location and feasibility will be subject to further analysis.	

7.7 Environmental Significant Features

7.7.1 Overview

Environmentally significant features within the Plan area may include wetlands, ravines and major tree stands. These features are shown on Map E in Part 2, Background Information.

The environmentally significant features will be subject to further analysis at the ASP and Outline Plan/Land Use Amendment stage. Subject to this analysis, these environmentally significant features will be dedicated as reserve land or otherwise acquired or protected using development controls and/or other incentives. In the case of wetlands these features will be subject to the provisions of the City of Calgary Wetland Conservation Plan (2004).

7.7.2 Policies

(1) Conservation of Environmentally Significant Features

- (a) The approach applied to conserving environmentally significant areas within the Plan area will be further refined through the ASP preparation process and at the Outline Plan/Land Use Amendment application stage.
- (b) Further to (a), the protection of wetlands will be subject to the requirements of the Wetland Conservation plan.

7.8 Municipal Utilities

7.8.1 Overview

The purpose of these policies is to provide direction in the formulation of policies for municipal utility services within the Plan area at the Area Structure Plan preparation stage. The policies are intended to provide for the efficient delivery of sewer, water and stormwater services necessary to support urban development.

(1) Stormwater Management

- (a) A Master Drainage Plan for the Plan area should be submitted at the ASP preparation stage. The Master Stormwater Drainage Plan should address the stormwater engineering solutions to be introduced to ensure the sustainability of natural wetlands that are to be conserved.

(2) Water Works

A waterworks analysis for the Plan area may be required for the Plan area at the ASP preparation stage.

(3) Sanitary Sewers

A sanitary sewer analysis for the Plan area may be required for the Plan area at the ASP preparation stage.

8.0 STAGING

8.1 Timing of Area Structure Plan Preparation

8.1.1 Overview

Each of the future planning areas shown on the Planning Areas Map (Map 2) will be the subject of more detailed planning in the form of an Area Structure Plan (ASP) prepared in accordance with the requirements of the *Municipal Government Act*. Until such time as an ASP is approved for a future planning area, approval of a Land Use Amendment application, Outline Plan application, Subdivision application or Development Permit application submitted within the planning area will be considered premature. Exceptions to this may be made for low-intensity or temporary uses that will not compromise future urban growth. The timing of preparation of an ASP will be determined by Council following a comprehensive evaluation. This approach is intended to ensure that community development proceeds logically and efficiently within the Southwest Planning Area.

8.1.2 Policies

(1) Context of Plan Preparation

- (a) Each of the communities, as shown on the Community Structure Map, shall be subject to the preparation of an Area Structure Plan (ASP).
- (b) An ASP may apply to one or more communities.

(2) Planning Approvals Prior to Plan Preparation

- (a) Until such time as an ASP has been approved for a community, approval of a Land Use Amendment application, Outline Plan application, Subdivision application or Development Permit application shall not be granted on lands within the future planning areas on the basis that the approval will be premature.
- (b) Notwithstanding subsection (2)(a), a site specific Land Use, Subdivision or Development Permit application to facilitate an adjustment to ownership boundaries, accommodate an agricultural related use or a temporary or permanent non-agricultural use, may be allowed prior to the approval of an ASP where it is determined that the proposal would not in anyway compromise future planning or urban growth within the area.

(3) Decision on Plan Preparation

- (a) The timing of commencement preparation of an ASP shall be determined by Council in accordance with established criteria, which include, but are not limited to:
 - (i) the available planned land supply in the southwest sector of the City,
 - (ii) the ability to efficiently and economically serve the area with utility services,
 - (iii) the available and pending off-site transportation network capacity needed to serve the area,
 - (iv) any strategic planning factors that influence the timing of land development, and
 - (v) the need to ensure the existence of a competitive development environment.
- (b) In the case of the Future Planning Area, as shown on the Land Use Concept Map, the timing of preparation of an ASP within this area shall be subject to a comprehensive evaluation in accordance with (a) above and the policies of section 7.1.2 (2).

9.0 DEFINITIONS

Bus Rapid Transit (BRT) means a limited stop bus service, similar to Light Rail Transit (LRT or the CTrain) that allows for a higher capacity level of bus service without the large capital investment of LRT and has a distinctive image that helps to attract passengers due to its overall frequent and convenient service.

Core Commercial Centre means a commercial centre that is located central to a community, or several interrelated communities, and is intended to serve as a multi-functional, community-oriented retail, employment and recreational focus for the area characterized by

- (a) a pedestrian oriented, walkable and compact design that is integrated with and integral to the Centre,
- (b) multi-dwelling residential development that supports the Centre,
- (c) well defined pedestrian connections that link the Centre to the balance of the community,
- (d) recreational amenities that enhance the social environment of the Centre,
- (e) public buildings and facilities that reinforce that function of the Centre,
- (f) served by public transit
- (g) office uses that strengthen the employment base of the Centre,
- (h) smaller format retail uses that complement the role of the Centre, and
- (i) larger format uses only where such uses do not compromise the planned function of the Centre.

Dedicated Busway means a two-laned roadway designed exclusively for transit (i.e. BRT, feeder busses, crosstown busses) or emergency vehicles that is characterized by

- (a) Transit Signal Priority (TSP) measures that give priority to transit and emergency vehicles at intersections,
- (b) enhanced passenger waiting areas at bus stops, and
- (c) higher intensity, transit supportive land use patterns focused on the main transit stops.

Density means the number of dwelling units within a defined ownership or planning area and is usually expressed as units per net developable hectare or units per gross developable hectare.

Employment Centre means a comprehensively planned, mixed-use development that is anchored by a strong employment base, consisting of offices and other business with a high job floorspace ratio, and includes

- (a) a pedestrian-oriented road network that promotes walking and transit use,
- (b) a concentration of high density residential development,
- (c) retail and service commercial uses,
- (d) efficient and accessible rapid transit service,
- (e) amenities that enhance and promote social interaction and recreational pursuits, and
- (f) public facilities that complement the function of the centre.

Environmentally Significant Area means a natural area, which, because of its function, features or characteristics, is significant from an environmental perspective.

Gateway Commercial Centre means a sector or regional-scale centre that is located on the periphery of the community, complements and does not compromise, compete or detract from the function of a Core Commercial Centre, and is characterized by

- (a) a vehicle oriented design that provides convenient connections, access and parking for a wide trade area, while providing for pedestrian orientation within a Centre,
- (b) an emphasis on larger format retail uses within the centre that serve a regional market, and
- (c) a function focuses primarily on retail development within the Centre as opposed to residential, institutional and recreational uses.

Gross Developable Area means the total area of a specific parcel that is being subdivided and includes public roads, creditable reserve land and public utility lots, but excludes land purchase areas for interchanges or other municipal projects, commercial sites exceeding 4.0 hectares in size, environmental reserve land, and any other land normally excluded from the gross developable area calculation at the subdivision approval stage.

Major Roads means roads bordering or within a community that accommodate regional and local traffic flows and bus transit service and include 146 Avenue SW, 162 Avenue SW, 53 Street SW, 69 Street SW and 85 Street SW.

Municipal Utility means a piped sewer, water and stormwater utility that is owned and operated by The City.

Net Developable Area means the total area of a specific parcel that is being developed.

Regional Facility means a recreational, institutional, educational or cultural use that is public or quasi-public in nature and provides a service to the surrounding residential area.

Regional Roads means freeway and expressway bordering and intersecting the Plan area that accommodate through traffic flows and includes Highway 22x (Spruce Meadows Way SW) and Sarcee Trail SW.



SUPPORTING INFORMATION



Part 2

Southwest Regional Policy Plan



Southwest Regional Policy Plan

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1.0 PLAN AREA

1.1 Location

The Southwest Regional Policy Plan (the “Plan”) area is located in the southwest sector of the city and comprises approximately 1,871 hectares (4,623 ac.) of land (Map A). The Plan area is bounded to the north by 146th Avenue SW, to the west by 85th Street SW, to the east by the proposed Sarcee Trail Extension and to the south by Spruce Meadows Trail SW (Highway 22X). The lands within the Plan area comprise all or part of Sections 25, 26, 27, 34, 35 and 36 in Township 22, Range 2, West of the Fifth Meridian as well as part of Sections 30 and 31 in Township 22, Range 1, West of the Fifth Meridian.

1.2 Historical Context

In 1989, the Plan area was annexed to the City from the Municipal District of Foothills with the primary land use being agriculture at the time of annexation.

1.3 Existing Uses

The Plan area is predominantly unsubdivided, comprising the original quarter sections. The area is designated as Urban Reserve (UR) under Land Use Bylaw 2P80, and the majority of the land is either used for agricultural purposes or is undeveloped.

1.4 Tsuu T’ina Nation

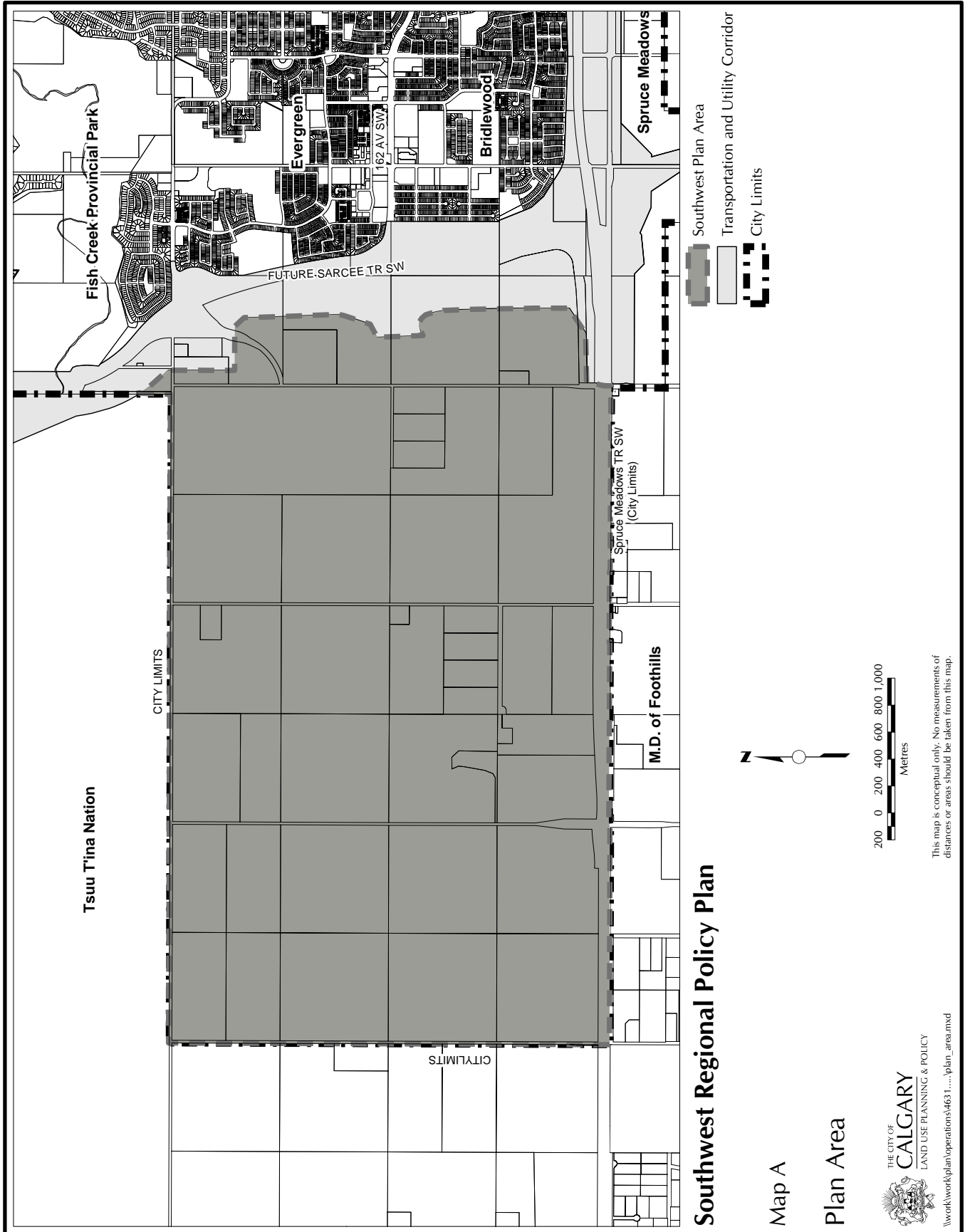
Tsuu T’ina Nation is the major land owner directly north of the Plan area.

1.5 Historical Resources

A Historical Resources Overview (HRO) was undertaken for the Plan area and included fieldwork, air photo analysis and study of background data including geological, topographical, soils, historical land titles and general physiographic and relevant cultural history.

Based on this analysis, the HRO recommends that all quarter sections in the study area undergo Historical Resources Impact Assessments (HRIAs), as the nature of the terrain in each quarter lends itself to the occurrence of prehistoric sites. In addition, early historic activities and sites are also possible due to early settlement of the Plan area in the 1890s.

The HRO has been reviewed by the Heritage Resource Management Branch, Province of Alberta. A Historical Resource Impact Assessment is typically submitted at the Outline Plan/Land Use Amendment stage, in conjunction with a detailed development application; however the HRIA can be requested earlier if required by the Heritage Resource Management Branch. Only those physiographic features exhibiting archaeological potential need to be examined to satisfy the Historical Resource Impact Assessment standard practices.



2.0 POLICY FRAMEWORK

2.1 Municipal Development Plan (The Calgary Plan)

The Calgary Plan sets out a direction and strategy to guide future growth and development within The City of Calgary. It provides a broad framework that facilitates the coordination of more detailed plans and policies, as well as programs and capital investments designed to meet many of the obligations of local government. The Calgary Plan is the cornerstone of Calgary's long term sustainable growth strategy.

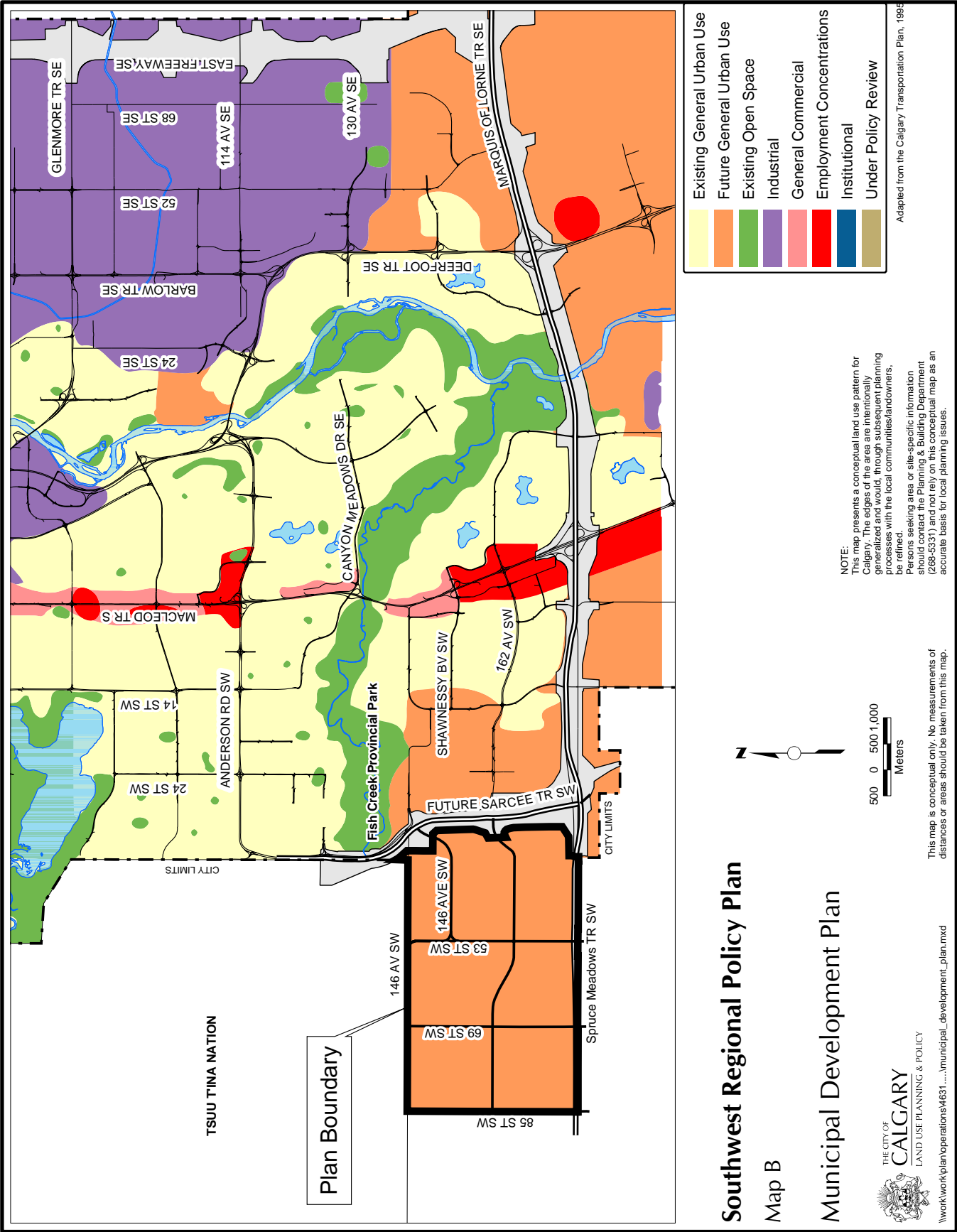
The Municipal Development Plan identifies the Plan Area as "Future General Urban Use (Predominantly Residential)" (Map B) and accordingly states that "a more precise indication of intended land use will be developed over time through the preparation of more detailed plans such as growth area management plans, area structure plans, community plans, area redevelopment plans, etc."

2.2 Triple Bottom Line

The Triple Bottom Line (TBL) is an approach to decision making that considers economic, social and environmental issues in a comprehensive and integrated manner. The TBL is a departure from making decisions based solely on the financial bottom-line; it reflects a greater awareness of the impacts of our decisions on the environment, society, and the external economy, and how those impacts are related. As such, the goals of this Plan have been formulated to reflect the TBL.

2.3 Sustainable Suburbs Study

The goal of the Sustainable Suburbs Study is to create communities capable of being sustained fiscally, socially and environmentally, far into the future. The Study promotes creating a quality public realm that makes communities attractive, responsive and liveable for people of all ages and lifestyles, while providing viable options to vehicular travel, particularly for the journey to work.



2.4 Transit Oriented Development Policy Guidelines

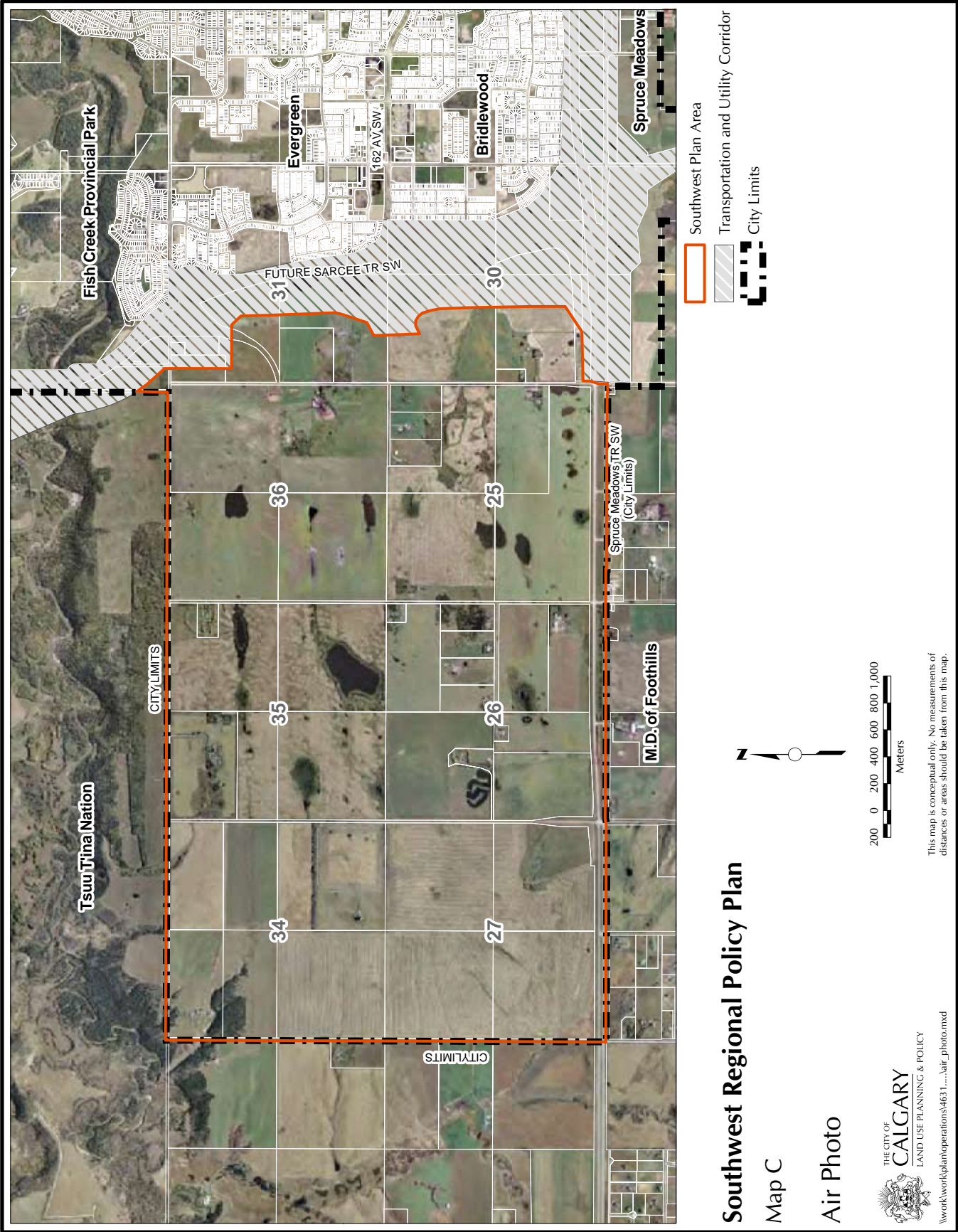
The Transit Oriented Development Policy Guidelines provide direction for the development of areas typically within a 600 metre range of a BRT/LRT or future BRT/LRT Station site. This type of development promotes a higher density, walkable, mixed use environment within the station area to optimize the use of existing infrastructure and create mobility options for residents.

2.5 Calgary Wetland Conservation Plan

Calgary's thousands of wetlands provide critical habitat for a wide variety of wildlife and are an important part of our watersheds, storing runoff and improving water quality. The Calgary Wetland Conservation Plan sets out guidelines and procedures to allow for the conservation of wetlands.

2.6 Intermunicipal Development Plan

The entire Plan area, with the exception of Section 31 in Township 22, Range 1, West of the Fifth Meridian, is located within the jointly adopted Intermunicipal Development Plan (IDP) between the City of Calgary and the Municipal District of Foothills. The M.D. of Foothills / City of Calgary Intermunicipal Plan provides a policy framework that guides future land use decisions within these boundaries.



3.0 LAND FORM AND NATURAL AREAS

3.1 Topography

The Plan area is characterized by gently rolling topography with a number of Environmentally Significant Areas scattered throughout. The perimeter portions of the Plan area are found on gently undulating to gently rolling morainal topography sloping down to the west, north and east. Lands in the central portion are somewhat elevated. Sloped areas are located along the eastern and northern portions of the Plan area (Map C).

The northern and western portions of the Plan area contribute to the Fish Creek watershed. Drainage from the remainder of the Plan area is directed both naturally and via infrastructure to Pine Creek.

3.2 Soils

Antler soils occupy approximately 90% of the Plan area (MacMillan 1987). These soils are deep, well drained Orthic Black Chernozems and Dark Grey Chernozems. The Antler soils are formed on a fine loamy to fine silty till, contain approximately 5 to 10 percent coarse fragments at depth, are strongly calcareous, and are of mixed Continental and Cordilleran origin.

Small patches of soils from the DeWinton series are embedded within the Antler soils matrix. These soils are distributed over the central portion of the Plan area. The DeWinton Soil group is a depressional soil formed on recent slough deposits overlying fine, loamy till materials or bedrock. The textures of these soils are variable, contain few stones, and are strongly calcareous through their depths. DeWinton soils are poorly drained and weakly developed. They are classified as Rego Humic Gleysol soils (carbonate phase).

Minor occurrences of soils from the Lloyd Lake series occur in the southwest corner of the Plan area. These soils are characterized by a high content of silt sized materials and generally low sand content. They are strongly calcareous, rarely contain any coarse fragments, and are weakly bedded to massive.

There are also minor occurrences of soil from the Strathcona series in the northeast corner of the Plan area. These soils are thin, black and rapidly drained Orthic Black Chernozems.

3.3 Surficial Geology

Ground moraine, hummocky moraine, and till slopes are the dominant features in the Natural Subregion.

4.0 ENVIRONMENTALLY SIGNIFICANT AREAS

4.1 Evaluation of Environmentally Significant Areas

An Environmentally Significant Area (ESA) is defined as a natural area, which because of its features or characteristics, is significant to the City from an environmental perspective and has the potential to remain viable within an urban environment¹.

The significance of a natural area is determined by a combination of the following criteria:

- Quality of biotic habitat;
- Level of importance to the healthy maintenance of the human system;
- Level of importance to the healthy maintenance of the natural system;
- Presence of distinctive an/or unusual landform; and
- Limited representation within the area or city.

4.2 Identification of Environmentally Significant Areas (ESA)

A preliminary ESA assessment² was conducted to identify the natural features within the Plan area, as shown on Map D. A total of 30 areas/features have the potential to qualify as environmentally sensitive/significant areas. Map E identifies those natural features to be subject to further analysis and policies at the ASP preparation stage.

4.2.1 Plant Communities

The Plan area is dominated by agricultural land including mixed cropland and pasture. Other plant communities within the Plan area include Aspen forest, permanent wetlands, semi-permanent wetlands, tall shrubland, White Spruce forest, low shrubland, lowland grassland, Balsam Poplar forest, native grassland, and alkaline wetlands.

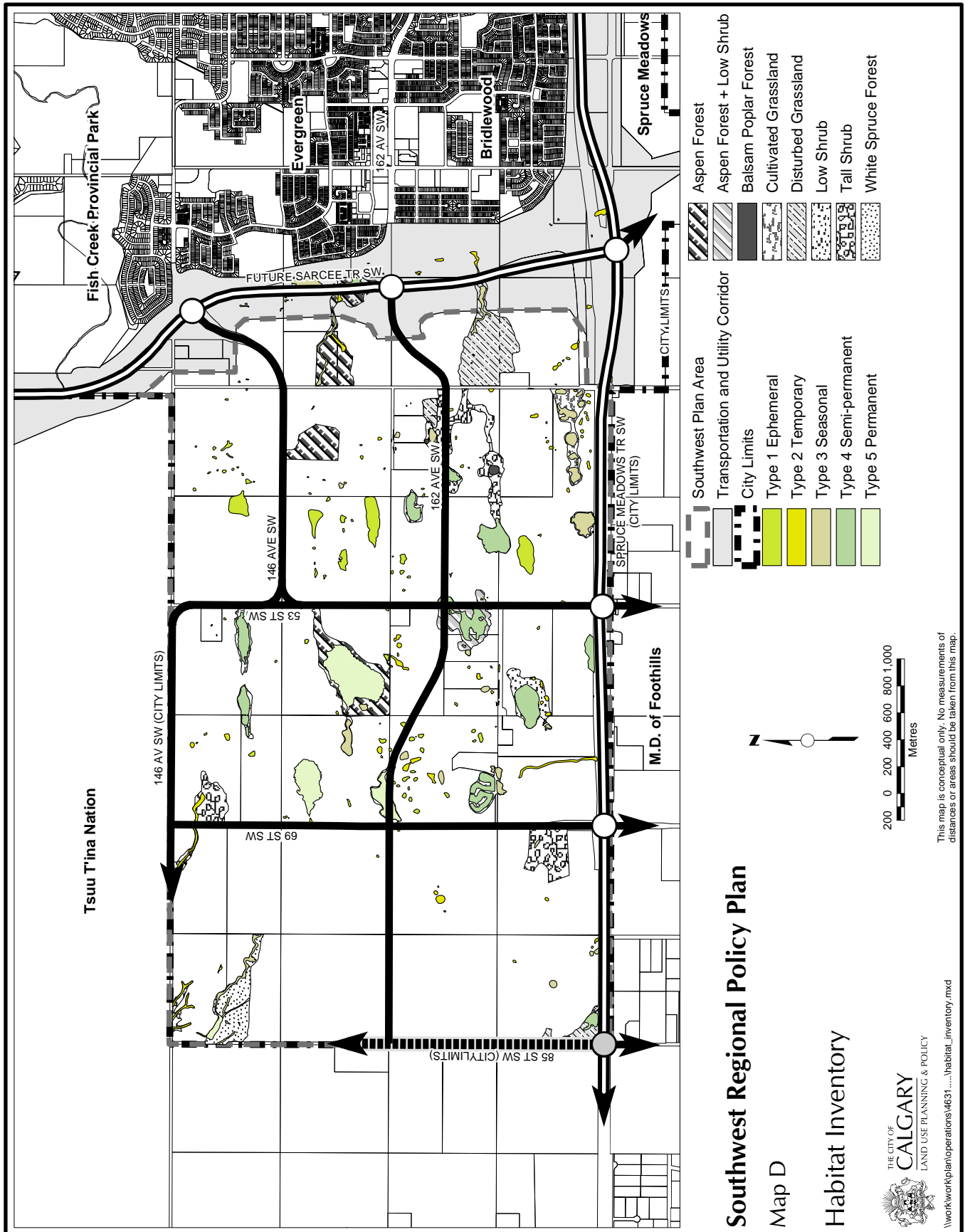
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- 1 City of Calgary. "Parks & Recreation Technical Report: Protecting Calgary's Environmentally Significant Areas Revised Draft", 1997, Pg. 3.
 - 2 Urusus Ecosystem Management Ltd. "Environmentally Sensitive Areas / Natural Inventory Report: Providence / SW Regional Policy Plan Area." 2004.

4.2.2 Wetlands

Wetlands within the Plan area were identified and classified in accordance with the Calgary Wetland Conservation Plan³. Classifications of the wetlands were based on the Stewart and Kantrud⁴ classification system. Permanent wetlands, semi-permanent wetlands, seasonal wetlands, and alkali wetlands were identified within the Plan area. These wetlands occupy approximately 49 hectares (121 ac.) or 2.8% of the Plan area.

3 City of Calgary, "Wetland Conservation Plan." 2004.

4 Stewart, R.E. and H.A. Kantrud. "Classification of Natural Ponds and Lakes in the Glaciated Prairie Region." 1971.



The permanent and semi-permanent wetlands are generally dominated by Sedge species (*Carex* spp., probably *Carex atherodes*). Other common species include Foxtail Barley (*Hordeum jubatum*), Slough Grass (*Beckmannia syzigachne*), Wild Mint (*Mentha arvensis*), Water Foxtail (*Alopecurus aequalis*), and Marsh Hedge Nettle (*Stachys palustris*). Woody plant materials surrounding these wetlands include Balsam Poplar (*Populus balsamifera*), Trembling Aspen (*Populus tremuloides*), and Willow species (*Salix* spp.).

Numerous seasonal and alkaline wetlands occur within the study area. Some of these wetlands have been tilled or otherwise disturbed and contain a variety of non-native plant species.

4.2.3 Upland Plant Communities

Various upland communities occur within the Plan area. These include the following:

(1) Native Grassland

One small area of Native Grassland is found in the southwest corner of the Plan area, close to Highway 22X. Although some degree of disturbance has occurred, there is a low percentage cover of non-native species. The dominant species include Reedgrass (*Calamagrostis* sp.), Kentucky Bluegrass (*Poa pratensis*), Goldenrod (*Solidago* spp.), and Prairie Sage (*Artemisia ludoviciana*). Other species within this plant community include Snowberry (*Symphoricarpos* spp.), Cinquefoil (*Potentilla* spp.), Canada Thistle (*Cirsium arvense*), Yarrow (*Achillea millefolium*), Pasture Sage (*Artemisia frigida*), Wild Gooseberry (*Ribes oxycanthoides*), and Smooth Brome (*Bromus inermis*). Native grassland occupies approximately 1 hectare (2.5 ac.) or 0.1% of the Plan area.

Native grasslands are commonly found growing in exposed south or south-west facing areas where sun and wind are the prevalent influence. Lack of moisture is the limiting factor in the growth of other species.

(2) Lowland Grassland

Lowland grassland occupies approximately 43 hectares (106 ac.) or 0.2% of the Plan area. This area is characterized by high moisture conditions. Common plant species found within the area include Foxtail Barley (*Hordeum jubatum*), Western Wheatgrass (*Agropyron smithii*), Bluegrass (*Poa* spp.), and Hyssop (*Agastache* spp.).

(3) Tall Shrub

Tall shrub communities occupy 14 hectares (35 ac.) or 0.8% of the Plan area. These areas are characterized by the regeneration of Balsam Poplar (*Populus balsamifera*), Trembling Aspen (*Populus tremuloides*), and species of willow (*Salix* spp.). The average height of this plant community is approximately 3 metres. Understory species include Northern Bedstraw (*Galium boreale*), Prickly Rose (*Rosa acicularis*), Canada Thistle (*Cirsium arvense*), Field Horsetail (*Equisetum arvense*), Star-flowered Solomon's Seal (*Smilacina stellata*), Wild Strawberry (*Fragaria virginiana*), American Vetch (*Vicia americana*), Goldenrod (*Solidago* spp.) and Smooth Brome (*Bromus inermis*).

Their location determined largely by slope, aspect, and soil moisture, texture and drainage, the tall shrub communities tend to be found in the somewhat moist drainage corridors of the Plan area.

(4) Aspen Poplar Forest

The aspen forest occupies approximately 21 hectares (52 ac.) or 1.2% of the Plan area. The trees within the aspen communities have an average height ranging between 5 to 10 metres, with an average diameter at breast height (DBH) of 11 centimetres. Understory species include Canada Thistle (*Cirsium arvense*), Wood Rose (*Rosa woodsii*), Yarrow (*Achillea millefolium*), Dandelion (*Taraxacum officinalis*), Canada Buffaloberry (*Shepherdia canadensis*), Red Osier Dogwood (*Cornus stolonifera*), and Saskatoon (*Amelanchier alnifolia*). Other species present include *Ribes* spp., *Potentilla* spp., *Solidago* spp., and *Aster* spp. The individual areas of aspen forest are small and range in age from approximately 25 to 35 years.

Within the Plan area, aspen forests are generally found to be successful in well drained, moist areas, typically adjacent to wetlands, along drainage coulees or on moist, north facing slopes. These forests are important in promoting the wildlife diversity by offering respite areas for feeding, nesting and cover.

(5) Balsam Poplar Forest

The Balsam Poplar Forest community is dominated by the presence of Balsam Poplar reaching 12 metres in height with an average DBH of 20 centimetres. The understory species include Field Horsetail (*Equisetum arvense*), Star-flowered Solomon's Seal (*Smilacina stellata*), American Vetch (*Vicia americana*), Willow (*Salix* spp.), Dandelion (*Taraxacum officinalis*), Fringed Loosestrife (*Lysimachia ciliata*), Yellow Sweet Clover (*Melilotus officinalis*), and Goldenrod (*Solidago* spp.). The Balsam Poplar Forest occupies approximately 2 hectares (5 ac.) or 0.1% of the Plan area.

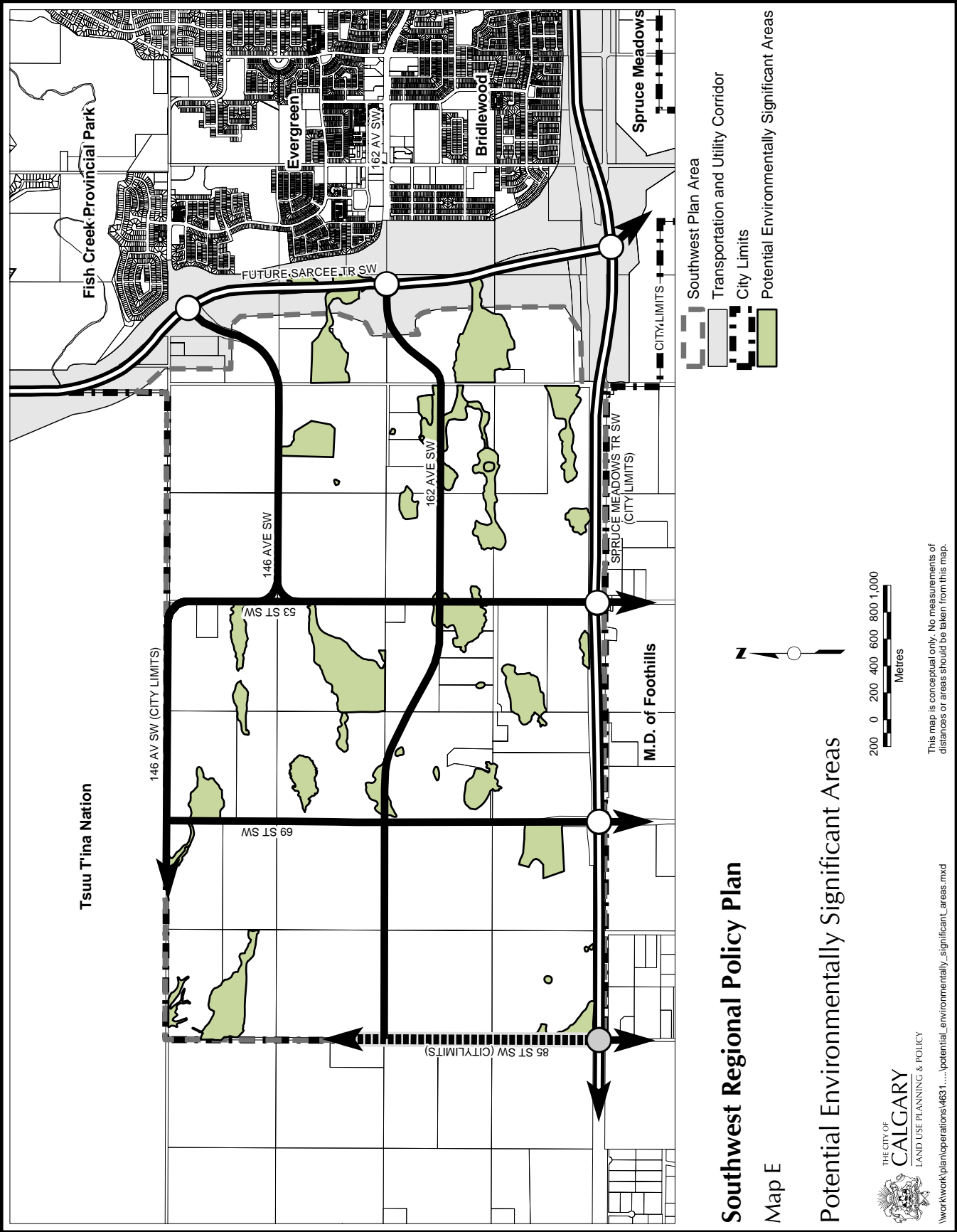
(6) White Spruce Forest

A White Spruce Forest is located in the northwest corner of the Plan area. The average tree height is approximately 13 metres. The White Spruce Forest occupies approximately 9 hectares (22 ac.) or 0.5% of the Plan area.

White spruce is a climax species, tolerant to shade and capable of competing with other undergrowth shrubs in mixed balsam poplar or aspen forests. It is intolerant of the windy conditions of the open plains and frequent flooding in riparian areas. White Spruce forests are typically found in sheltered north and east facing slopes, along river valleys or scattered locations within floodplains.

4.2.4 Wildlife

Wetlands and associated upland areas have the potential to provide habitat for a variety of wildlife species. These areas will be subject to more detailed analysis at the ASP preparation stage. Particular attention should be given to wildlife migration and habitat on adjoining Tsuu T'ina and M.D. of Foothills.



5.0 PROTECTION OF ENVIRONMENTALLY SIGNIFICANT AREAS

5.1 Provincial Legislation

Environmentally Significant Areas (ESA) are not automatically acquired and/or protected from urban development, but rather subject to review and decision-making at the Outline Plan and Land Use Amendment stage. The Municipal Government Act provides for the dedication of Environmental Reserve under specific conditions. Where appropriate, ESA lands may be dedicated as Environmental Reserve or Municipal Reserve, purchased by the City, donated to the City or regulated through development controls and/or subdivision restrictions.

5.2 Municipal Policy

The Calgary Open Space Plan identifies policy for the protection, maintenance and/or reclamation of significant natural habitat and their relevant ecological associations.

The City of Calgary Wetland Conservation Plan contains policies for the protection of natural wetlands, including “no net loss” principles that address compensation for environmentally significant wetlands that are filled to accommodate urban development.

6.0 LAND OWNERSHIP

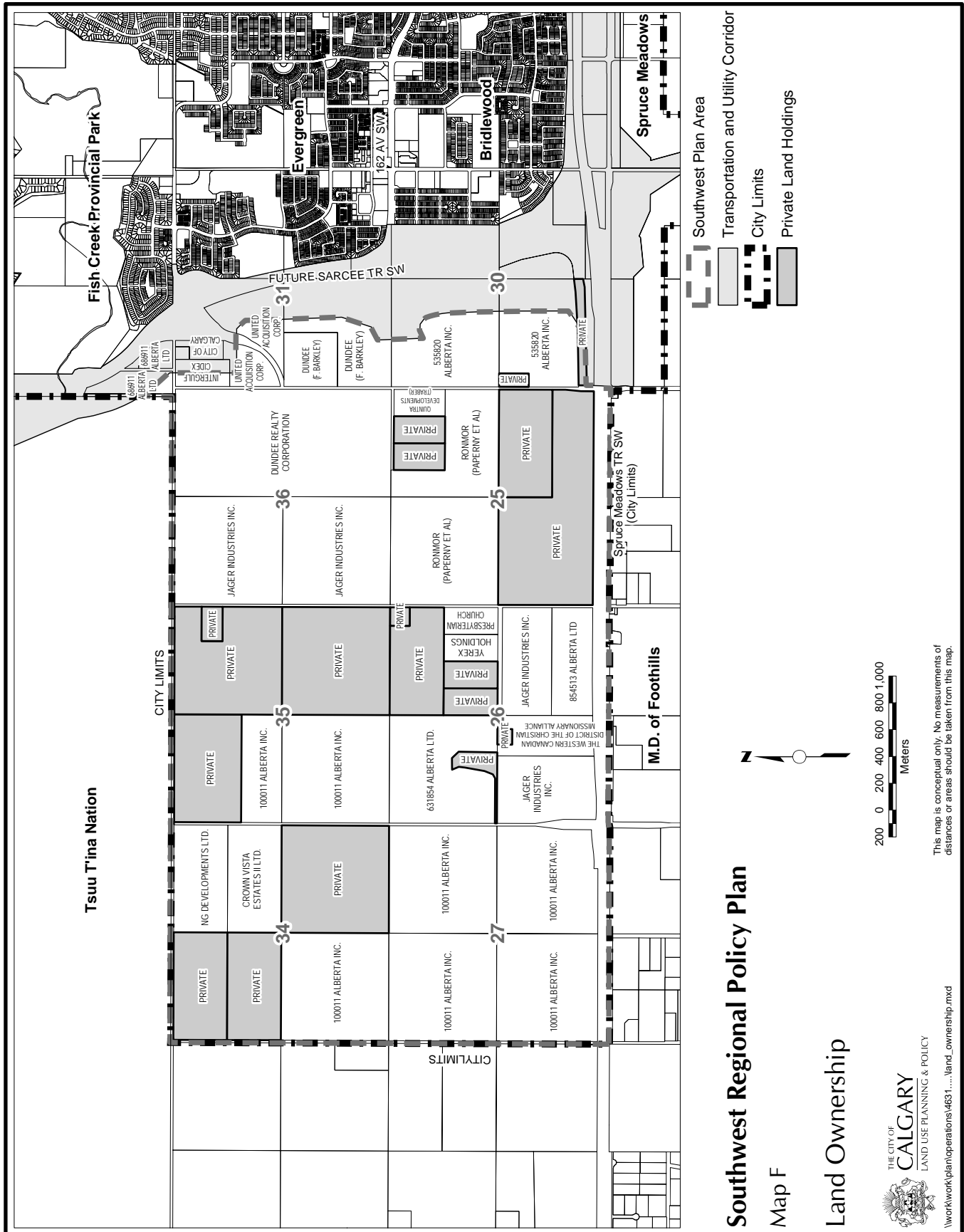
6.1 Ownership Patterns

The land ownership pattern within the Plan area is illustrated on Map F and described within Table 1.

Table 1: Land Ownership by Area

Owner	Area (Ha*)	Area (Ac*)	% of Plan
Private	616.25	1521.30	33.1
Marquis Community Development Inc.	511.88	1265.84	27.4
Jager Industries Inc.	194.61	481.14	10.4
Dundee Developments	194.20	480.00	10.4
Ronmor Developers Inc.	105.20	260.00	5.6
631854 Alberta Ltd.	59.68	147.60	3.2
Crown Vista Estates Ltd.	32.20	79.47	1.7
Ng Developments	32.20	79.47	1.7
United Communities – Devcon Development Inc.	29.79	73.59	1.6
854513 Alberta Ltd.	24.60	60.79	1.3
Western Canadian District of the Christian Missionary Alliance	20.01	49.44	1.1
686911 Alberta Ltd.	13.33	32.98	0.7
Intergulf Cidex Development Corporation	8.14	20.13	0.4
Trusted Board of the Presbyterian Church in Canada	8.11	20.03	0.4
Yerex Holdings	8.10	20.01	0.4
Quintra Developments (O'hara Investments)	7.67	18.95	0.4
City of Calgary	4.02	9.94	0.2
Dskoman Inc.	0.98	2.42	0.05
TOTAL	1,870.97	4,623.10	100

Note: *areas are approximate only



7.0 TRANSPORTATION NETWORK

7.1 Regional Road Network

The Plan area is largely defined by the Provincial Transportation and Utility Corridor (TUC) to the east and Spruce Meadows Trail SW to the south. The overall road network and associated interchanges have been designed to accommodate the anticipated traffic volumes within the Plan area, based on projected population and employment numbers. The internal major road network divides the Plan area into communities and/or neighbourhoods. The regional road network is illustrated on Map G.

7.1.1 Spruce Meadows Trail SW

Spruce Meadows Trail SW (Highway 22X) defines the southern boundary of the Plan area and is classified as an Expressway/Freeway. The Plan area can be accessed from Spruce Meadows Trail SW via future interchanges at 53 Street SW, 69 Street SW and 85 Street SW.

7.1.2 Sarcee Trail Extension

The future Sarcee Trail Extension defines the eastern boundary of the Plan area and is classified as a Freeway. The Plan area can be accessed from Sarcee Trail Extension via future interchanges at both 146 Avenue SW and 162 Avenue SW.

7.1.3 146 Avenue SW

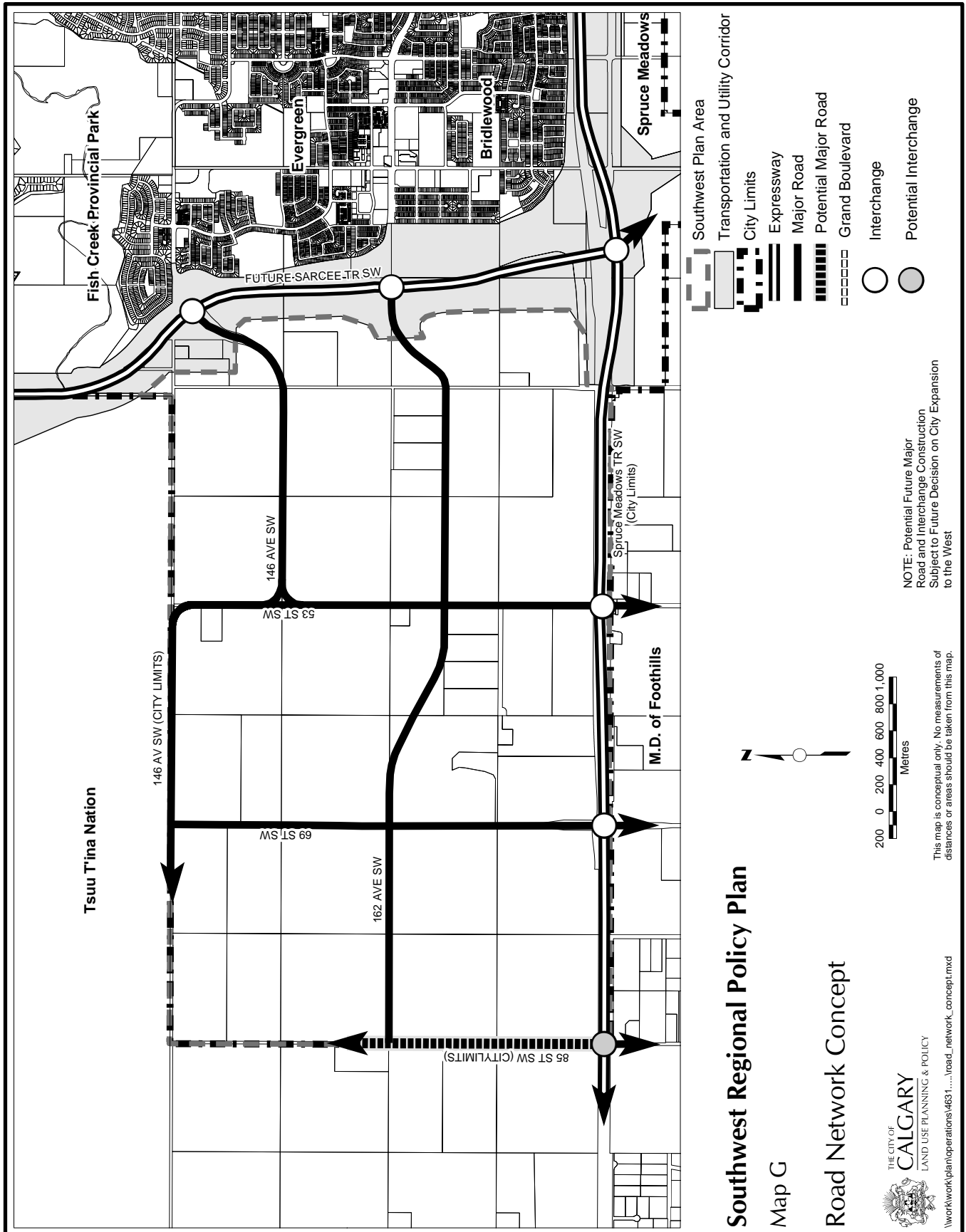
The future 146 Avenue SW is classified as a Major road and crosses the Plan area east-west.

7.1.4 162 Avenue SW

The future 162 Avenue SW is classified as a Major road and crosses the plan area east-west. A Bus Rapid Transit (BRT) line will operate within a dedicated right-of-way within 162 Avenue SW. Future development of this road into a Light Rail Transit (LRT) corridor may occur, in the future.

7.1.5 53 Street SW

The future 53 Street SW is classified as a Major road and crosses the Plan area north-south.



7.1.6 69 Street SW

The future 69 Street SW is classified as a Major road and crosses the Plan area north-south.

7.7.8 85 Street SW

Provision for a future 85 Street SW was considered as part of the overall road network and will be classified as a Major road. The road network also provides for an interchange at 85 Street SW and Spruce Meadows Trail SW, should it be warranted in the future.

7.2 Subarea Transportation Model

The transportation modeling was based on a future population of 1.5 million, with full development south of Fish Creek and 114 Avenue SE, including the Plan area. The transportation model included the Sarcee Trail Extension from Glenmore Trail SW to Spruce Meadows Trail SW and Spruce Meadows Trail SW from Sarcee Trail Extension to 69 Street SW as expressways.

The internal road network model included the major roadways previously described as 146 Avenue SW, 162 Avenue SW, 53 Street SW, 69 Street SW and 85 Street SW.

8.0 CELLS

8.1 Area

The Plan area is comprised of six residential cells. These cells are defined by the regional road network and the Transportation and Utility Corridor, as identified on Map H. The area of each cell is shown in the following table:

Table 2: Area of Cells

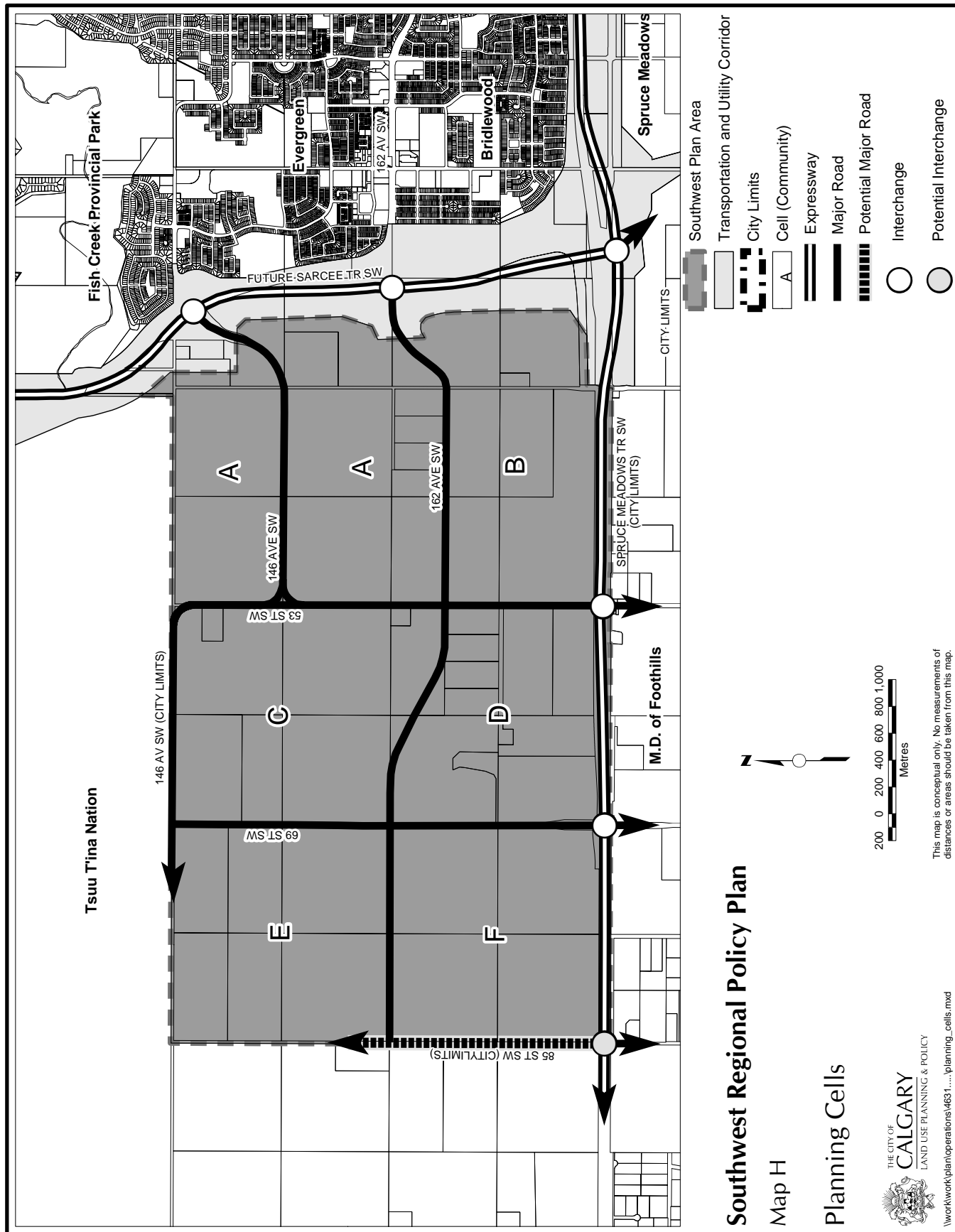
Cells	Area Hectares ^{1,2,3} (acres)
A ⁴	376 (930)
B ⁴	211 (520)
C	234 (579)
D	166 (410)
E	251 (621)
F	193 (476)
TOTAL	1,431 (3,536)
<p>Notes:</p> <ol style="list-style-type: none"> 1. The figures in this table are projections only and subject to refinement at Outline Plan/Land Use Amendment stage. 2. The area calculations for each cell excludes potential ER, TUC requirements, commercial retail areas and employment centres. 3. Areas are approximate only. 4. Developable areas of cells A & B may be adjusted upon confirmation of Alberta Transportation land requirements associated with the Sarcee Trail Extension and the Transportation and Utility Corridor (TUC). 	

8.2 Population and Dwelling Unit Projections

The projected population and the number of dwelling units for the Plan area are shown in Table 3.

Table 3: Projected Population and Dwelling Unit Yield Ranges^{1, 5}

Cell	Projected Population @ 7 upa ² (Projected Dwelling Unit Yield Range) ³	Projected Population @ 8 upa ² (Projected Dwelling Unit Yield Range) ⁴
A	-	22,320 (7,440)
B	-	12,480 (4,160)
C	12,159 (4,053)	-
D	8,610 (2,870)	-
E	13,041 (4,347)	-
F	9,996 (3,332)	-
Total	78,606 (26,202)	
Notes: 1. The area calculations for each cell area excludes potential ER, TUC requirements, commercial retail areas and employment centres. 2. Based on an occupancy of 3.0 persons per dwelling for developing suburban communities (Land Use Planning & Policy 2005). 3. The density applied to communities C, D, E and F is 7 units per gross developable acre. 4. The density applied to communities A and B is 8 units per gross developable acre. 5. The projected population / dwelling units for communities A and B will need to be revised upon confirmation from Alberta Transportation and Infrastructure of the land requirements associated with the Sarcee Trail Extension and the Transportation and Utility Corridor (TUC).		



8.3 Density

The potential densities that were derived for the Plan area through the transportation model are shown in Table 4: Density Parameters. These densities will need to be reevaluated in conjunction with the preparation of an ASP for a community within the Plan area.

Table 4: Density Parameters

Component	Density ¹
Cell A and B	Maximum 19.8 units per gross developable hectare (8 units per gross developable acre)
Cell C, D, E, and F	Maximum 17.3 units per gross developable hectare (7 units per gross developable acre)
Employment Centre ²	Minimum of 1960 dwelling units (17.3 units per gross developable hectares) within a 600m radius from BRT stops within the node.
Transit Node ³	Minimum of 870 dwelling units (17.3 units per gross developable hectare) located within a 400m radius from the BRT stops within the node.
Notes: 1. Represents the densities applied through transportation modeling for the Plan area. Density requirements for all cells exclude density applied to the employment centres and transit nodes. 2. Employment centres require a minimum of 38.4 gross developable hectares be allocated for residential development. 3. Transit Nodes require a minimum of 32.4 gross developable hectares be allocated for residential development.	

9.0 EMPLOYMENT CENTRES

Table 5: Employment Centre Components

Component	Gross Area (ha)
Commercial	40.47 ha (100 ac.)
Employment	28.33 ha (70 ac.)
High Density Residential	40.47 ha (100 ac.)
BRT and Associated Uses	4.04 ha (10 ac.)
Total	113.31 ha (280 ac.)
<u>Notes:</u> (a) Area calculations are for each Employment Centre. (b) Area calculations are based on a 600 metre radius. (c) Actual areas for each precinct and configuration of the Employment Centre components will be determined at the Outline Plan / Land Use Amendment stage.	

9.1 Employment Centre Locations

The Employment Centres are centralized hub locations that bring together a number of important local and regional components to serve Plan area residents. Two Employment Centres will provide office and commercial employment opportunities and higher density residential in the Plan area. The first Employment Centre will be located within the first Area Structure Plan, with the second in the residual area. In conjunction with future BRT and/or LRT Park 'n' Ride and public facilities, the Employment Centres will function as community gathering locations that incorporate pedestrian and transit oriented development along with retail and higher density development.

The first Employment Centre area will be located along 162 Avenue SW at 53 Street SW (Map I). This Employment Centre will comprise higher density residential, institutional / recreational development, a core commercial centre and a transit hub site.

The second Employment Centre will be located along 162 Avenue SW at 69 Street SW. It will comprise higher density residential, office / business uses, gateway commercial, and institutional / recreational development including a Regional Recreational Centre, Library, High School, and a transit node.

More detailed design and composition of these Employment Centres will be developed through the ASP preparation process, with a strong focus on the integration of uses within the Employment Centres, and design of the public realm and pedestrian environments.

9.2 Employment Centre Components

9.2.1 Commercial Core Centre

Commercial uses will require approximately 40 hectares (100 ac.) of land in each Employment Centre and will provide commercial and retail employment opportunities. The commercial centres will be centrally-located, pedestrian-oriented mixed use developments that serve as a shopping and living focus for the surrounding communities.

9.2.2 Office / Business Development

Within each Employment Centre, employment uses will encompass approximately 28 hectares (70 ac.) in a pedestrian friendly mixed-use core.

9.2.3 Higher Density Residential Development

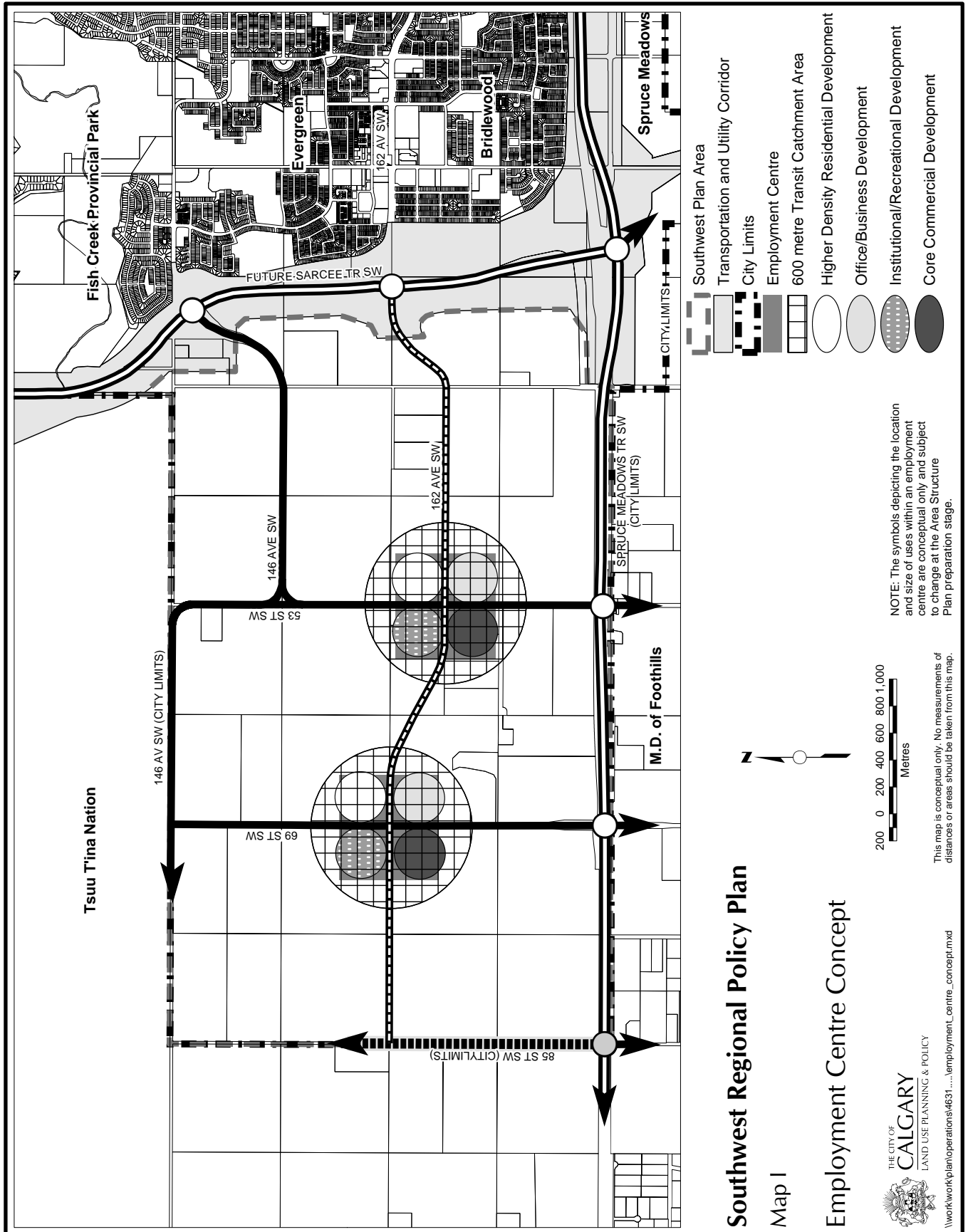
Multi-family residential development will be provided within the Employment Centre to maximize transit efficiencies, facilitate pedestrian access to the BRT stops and increase activity and vitality within the Centre.

Within each Employment Centre, residential development will require approximately 40 hectares (100 ac.) of land and will have a population of approximately 3,500 to 5,000 people. Portions of the residential area may be permitted to occur outside of the specific Employment Centre area, but should be located within walking distance to the BRT stops and the retail/commercial area. Additionally, residential units on the upper floors of the retail/commercial area are encouraged in order to further enhance the level of pedestrian activity and '24-7' use within the Centres.

9.2.4 Additional Uses

Additional uses may be allowed within the Employment Centres and may include small and medium format Core Commercial and institutional uses. Such additional uses shall demonstrate that they are complementary, compatible and do not detract from the function of the Employment Centres.

The more detailed design and composition of the Employment Centres will be developed through the ASP preparation process and submittal of a Concept Plan for the Comprehensive Planning Area at the Outline Plan/Land Use Amendment stage.



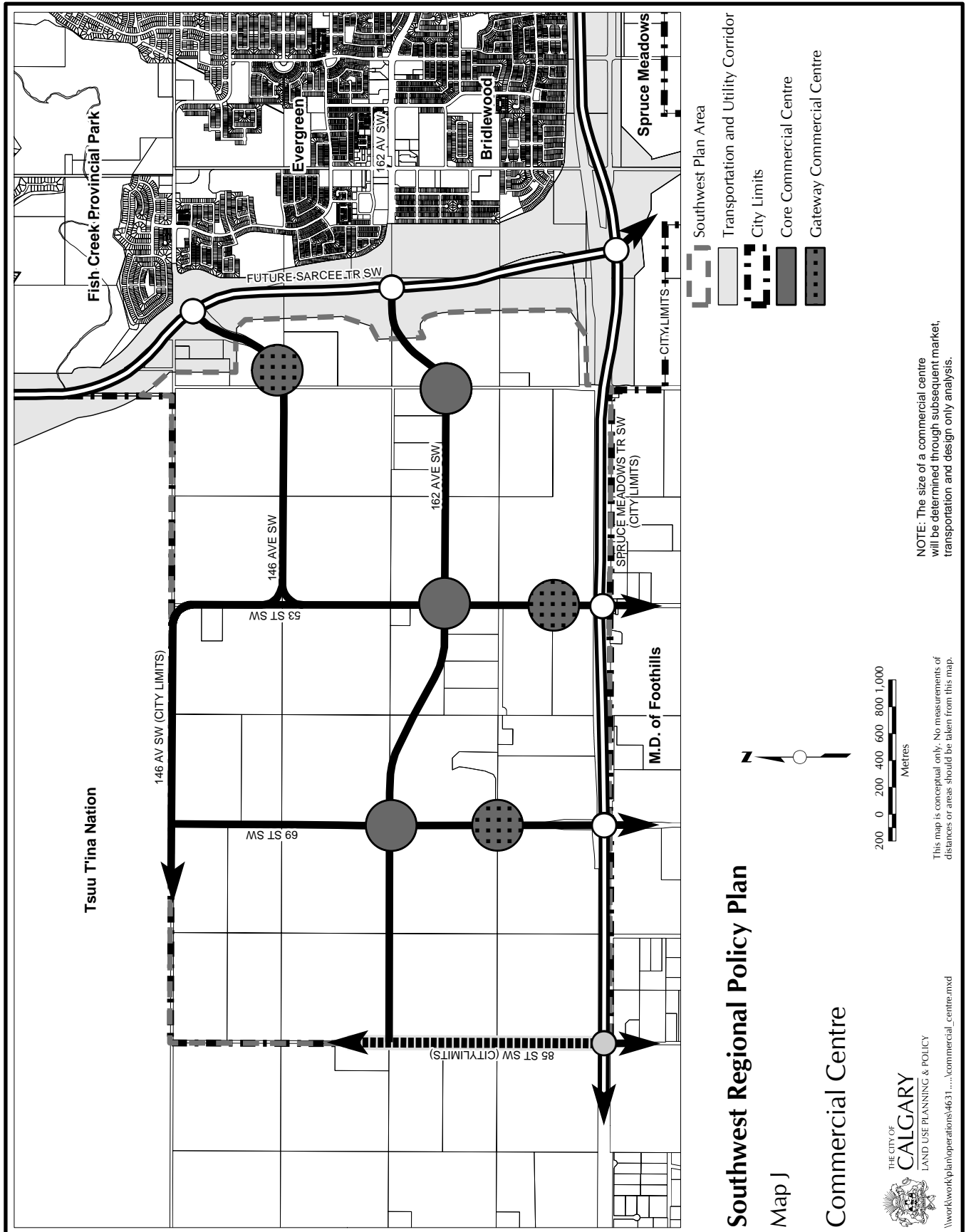
10.0 COMMERCIAL DEVELOPMENT

10.1 Commercial Land Requirements

The projected range of retail floorspace and net developable commercial land required within the Plan area is identified within the following table:

Table 6: Projected Range of Retail Floorspace and Net Developable Commercial Land

Demand	Gross Floor Area	Net Developable Land ³
Optimal Demand ¹	176,500 m ² (1.9 million ft ²)	78 ha. (192 ac.)
Base Demand ²	149,801 m ² (1,612,500 ft ²)	65 ha. (160 ac.)
<p>Note:</p> <ol style="list-style-type: none"> 1. Retail Demand Projection provided by Hudema Consulting Group Limited, SW Regional Policy Plan Area, October, 2004. This projection is based upon a market share analysis, and for the purpose of formulating policy, the retail floor space and commercial land projection is considered to be the maximum or optimal amount required for the Southwest Regional Policy Plan Area. This figure will be reviewed in further detail, and will be revised as required. 2. Retail Demand Projection provided by Land Use Planning & Policy, City of Calgary, June, 2005. This projection is based upon a per capita share analysis and for the purpose of formulating policy it is considered to represent the minimum or base amount of retail floor space or commercial land required within the Southwest Regional Policy Plan Area. The projection is derived assuming a population of 75,000 (at a density of 7 units per acre) and an average of 21.5 square feet of retail floorspace/person. 3. The conversion of retail floor space to net developable land assumes a floor area ratio on a commercial site of 0.25. 		



10.2 Commercial Development Principles

The approach to be taken in formulating commercial policies within an Area Structure Plan are embodied within the following principles:

- (1) The Southwest Regional Policy Plan area should contain a comprehensively planned retail hierarchy to complement and support the function of the Plan area.
- (2) The amount of commercial development may be reviewed and amended at the ASP preparation stage, and/or Outline Plan/Land Use Amendment application stage.
- (3) The viability of Core Commercial uses and overall the Employment Centre is a priority, and their viability should be retained and not compromised by Gateway Commercial Centres. Policies to reinforce this principle should be incorporated into the ASP policies and Outline Plan/Land Use Amendment conditions.
- (4) The location of future commercial centres, excluding local commercial centres, should be identified symbolically on a concept map within the ASP, and the minimum size required for that centre identified through policy statements in the specific ASP.
- (5) The Commercial Development Map (Map I) should be updated as necessary to reflect decisions on the location of commercial centres made through the ASP process.

10.3 Analysis

A proposed Gateway Commercial Centre and/or Core Commercial use should submit the following analysis:

- (a) Market Demand Analysis – to identify the need for a commercial centre to serve the subject area of The City of Calgary.
- (b) Market Impact Analysis – to identify the appropriate timing and phasing of the commercial centre in relation to the trade area (population) being served.
- (c) Transportation (Demand) Modelling Analysis – to ensure that the ultimate transportation network can provide mobility to accommodate the ultimate planned land use pattern (e.g. commercial centre and surrounding land uses).
- (d) Transportation Staging Analysis – to identify the staging of major downstream infrastructure improvements required in relation to the phasing of commercial development.

- (e) Transportation Impact Analysis – to identify the access and localized road network improvements required to serve the site.
- (f) Financial Analysis – to identify those transportation infrastructure improvements that are directly related to the commercial centre (not the background traffic), the timing of the infrastructure improvements, the responsibility (City or developer) and the financing mechanism required to ensure they are constructed in concert with commercial development.
- (g) Servicing Analysis – to identify the method of servicing the commercial development with sewer, stormwater and water utilities.
- (h) Design Analysis – to identify any unique design requirements that need to be applied to the commercial centre through the land use controls.

10.4 Adjudication

In the case where commercial centres compete for limited market demand or transportation capacity, this competition may be adjudicated by the Approving Authority or Council in the following ways, depending on the circumstances:

- (a) Submission Timing – preference may be given to the first completed application submitted or the first application to resolve its outstanding issues.
- (b) Strategic Planning – preference may be given to a commercial application for strategic planning reasons where the commercial centre demonstrates advantages in terms of jurisdictional competition or trade area served.
- (c) Controlled Staging – preference may be given in an equitable but staged manner in which each commercial centre is allowed to develop on a stage basis with each stage evaluated before another stage is approved.

11.0 PUBLIC TRANSIT

11.1 Bus Rapid Transit / Light Rail Transit

Bus Rapid Transit (BRT) and/or Light Rail Transit (LRT) will serve the Plan area and will be located along a dedicated busway within 162 Avenue SW. It will provide the Plan area with connections to both the South LRT and Southeast LRT lines. BRT stops with enhanced passenger waiting areas will be located along the busway at street intersections and transit nodes.

At the Area Structure Plan stage, the specific BRT alignment and station locations should be further refined to allow for the dedication of the rights-of-way and land required for the stations at the Outline Plan/Land Use Amendment Stage.

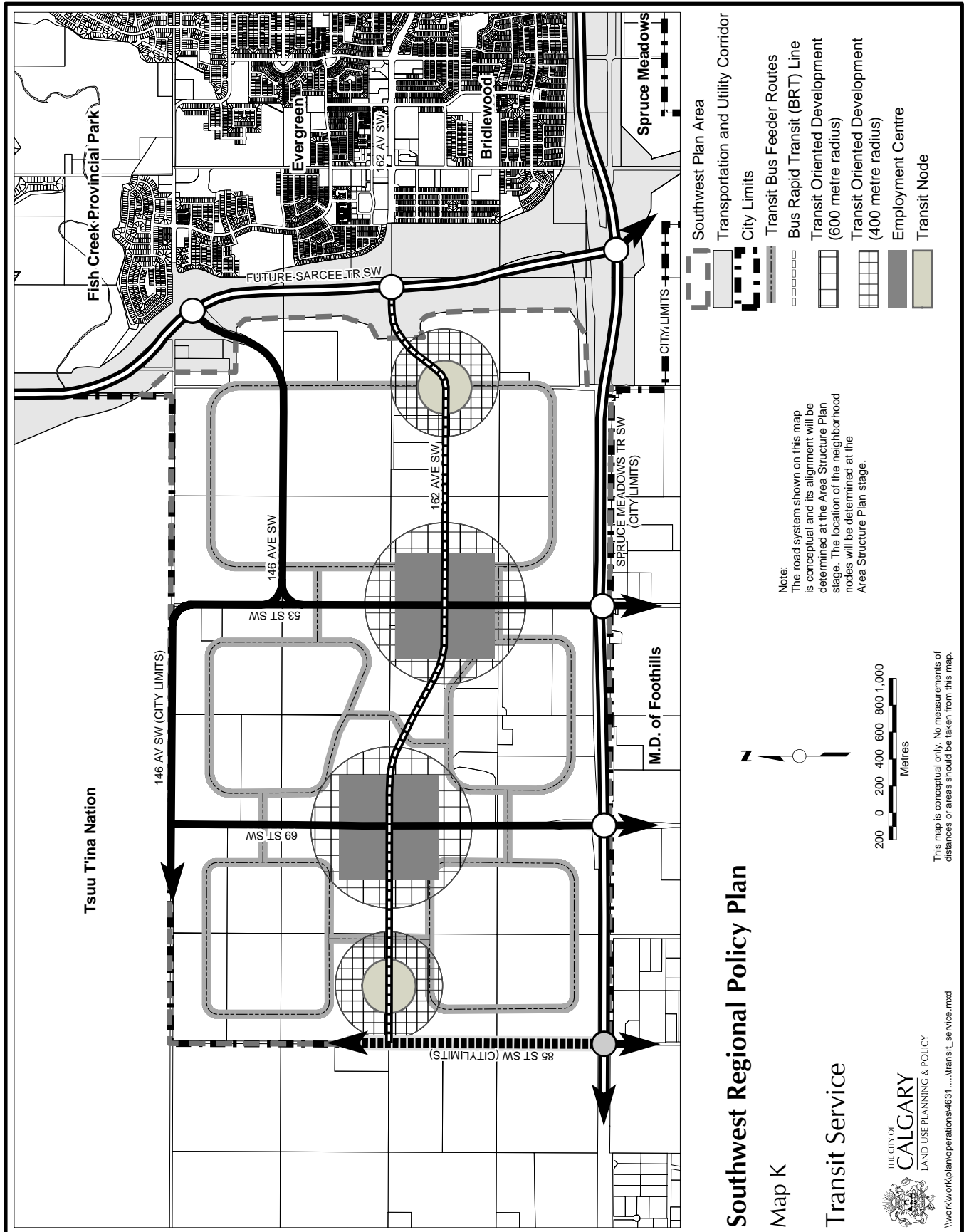
11.2 Local Feeder Bus / Cross Town Bus Route

A local feeder bus will provide service from the communities to the South LRT line and will run along the dedicated busway within 162 Avenue SW. A crosstown bus service will provide connections from the Plan area to destinations throughout the City to offer residents efficient choices for external travel.

11.3 Transit Nodes

There will be two transit nodes located within the Plan area along 162 Avenue SW. One transit node will be located along 162 Avenue SW, east of 53 Street SW; the other along 162 Avenue SW, west of 69 Street SW. Each node will have a radius of approximately 400 metres and will encompass approximately 50 hectares (124 ac.) of land. Development within each node will incorporate the Transit Oriented Development Design Guidelines.

Each transit node comprises transit facilities, retail uses and residential units for a population of 2000 to 2500 people. Transit oriented development will also occur within the two Employment Centres, as identified in Section 8.2.



12.0 REGIONAL AND COMMUNITY SERVICE SITES

The Plan includes a number of regional public facilities and infrastructure components that will be centrally located to serve the Plan area residents. These facilities include a public high school, public library, recreational facility, an emergency services site (Fire, EMS), an operational workplace centre, and a reservoir, as identified on Map L. Some of these facilities will be located between the two Employment Centres, creating a centrally located mixed use corridor and a pedestrian and transit oriented hub. The detailed locational criteria and other considerations for these public facilities will be developed during the ASP preparation process.

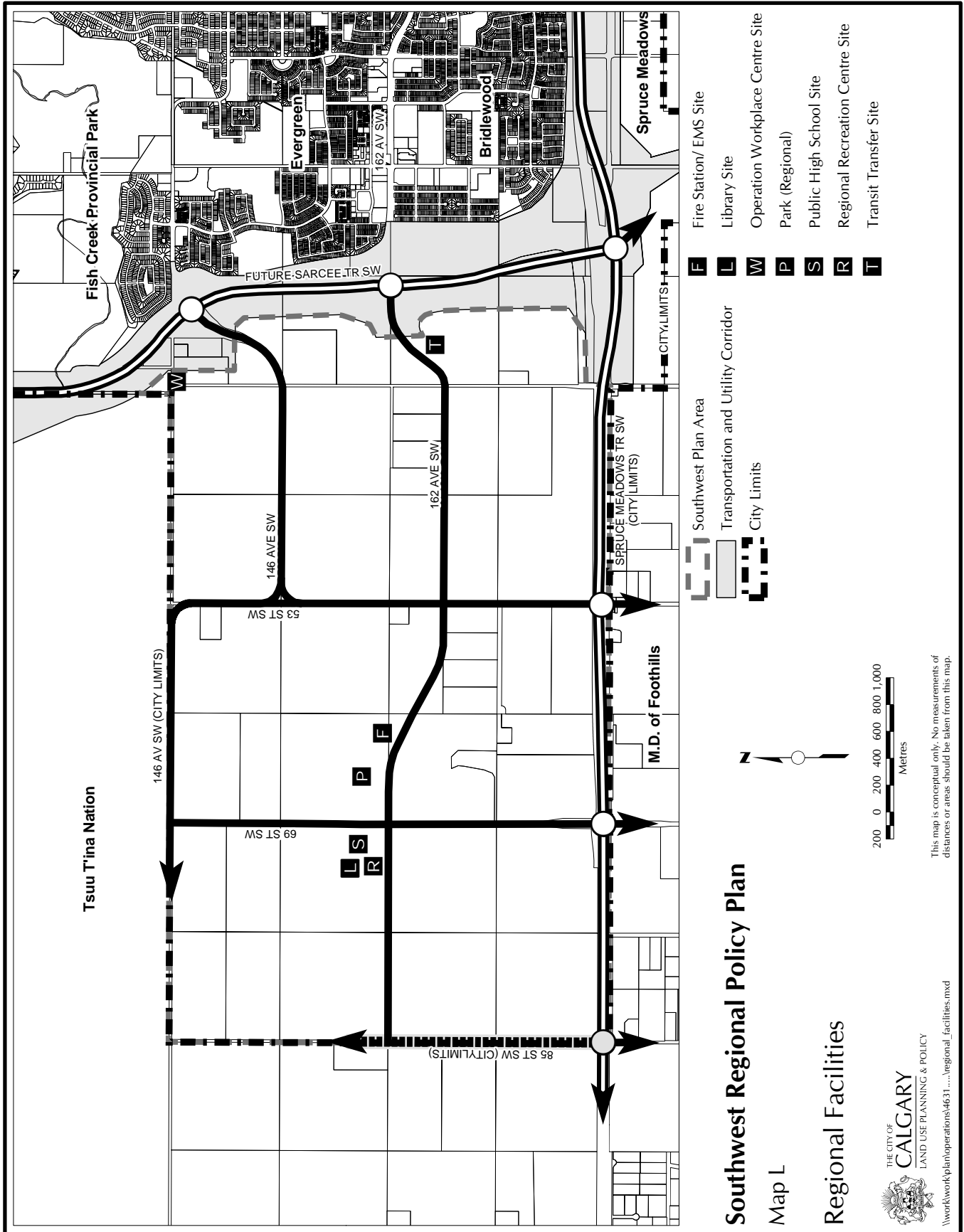
12.1 Fire Station Site

Currently, fire protection is provided to the Plan area from Fire Station Number 6, located in Bridlewood at 2375 162 Avenue SW.

Typically, fire stations are located to ensure maximum response times of 5 to 7 minutes. The fire station site will be located generally as shown on the Land Use Concept Map. The specific location of this site will be refined through the ASP preparation process. The fire station site will require approximately 2 hectares (5 ac.) of land and is planned as part of a dual service facility for Fire and EMS. Table 7 outlines some of the site selection criteria for a Fire Station / Multi-service Facility.

Table 7: Fire Station Facility Information

Criteria	Single Use Facility	Multi-service Facility	Comments
Site	Minimum size – 0.4 ha. (1 ac.)	Minimum size – 2 ha. (5 ac.)	Requires a 1,300 sq.m. (total) building for single use, or 4,645 sq.m. (total) for multi-service facility.
Response Time	5 to 7 minutes	5 to 7 minutes	Quickest response time to all areas within service area.
Access	Critically Important	Critically Important	Location should be close to, or have direct access to, major roadways; preferably a corner lot.



12.2 Emergency Medical Services (EMS) Site

An Emergency Medical Services (EMS) facility is planned as part of a dual service facility with the Fire Department. The EMS facility will be located generally as shown on the Land Use Concept Map. The specific location of this site will be addressed in further detail through the ASP preparation process. Some of the site criteria for an EMS site are outlined in Table 8.

Table 8: EMS Facility Information

Criteria	Details	Comments
Site	278 sq. m. (3,000 sq. ft.) building and parking bays on a 0.1 ha. (0.3 ac.) site.	Can be housed as a separate facility but typically is in partnership with planned dual service facilities.
Service Area	8 minutes	Based on the areas that can be reached within 8 minutes. This depends on the road types and network that surround each station.

12.3 Library Service Sites

The Calgary Public Library is responsible for planning and delivering a comprehensive program of library services that are responsive to community needs and readily accessible to all residents. The planning model for new libraries is based on population and distance from existing facilities. The target is for all city residents to live within an average travel distance of 3.5 kilometres from a public library, with a minimum population base of 40,000 people in the projected service area. The Calgary Public Library requires a site for a community sized library in the Plan area, within an Employment Centre. The Library will seek partnerships in a shared use facility such as a recreation centre. The approximate timing of a library facility is within the 2020 to 2025 timeframe and funding will need to be aligned with that of other potential partners. The library will require approximately 2 hectares of land and its specific location will be addressed in further detail through the ASP preparation process. Some of the site criteria for a public library facility are included in Table 9.

Table 9: Library Facility Information

Criteria	Details	Comments
Site	1,400 to 1,850 sq. m. (15,000 - 20,000 sq. ft.) building envelope for a community library.	Requires a convenient and highly visible location adjacent to a major community focal point and public transit.
Catchment Distance	3.5 km. for a community library.	Long range planning for community and regional area libraries consider population and the distance to existing libraries.
Population Threshold	40,000 to 60,000 for a community library.	
Access	Highly important, including transit and pedestrian access.	Functional traffic pattern for convenient vehicular access. 30 to 60 parking stalls required, potential opportunities to share stalls with other users.

12.4 Operational Workplace Centre

An operational workplace centre will be located in the northeast portion of the Plan area, as identified on the Land Use Concept map. The operational workplace centre will require a site of approximately 10 to 12 hectares (25 to 30 ac.). It will facilitate such services as the maintenance of roads, parks, as well as fleet, water resources and water services, and will provide additional employment opportunities within the Plan area.

12.5 Recreation Centre

The City has identified the need for a recreation centre within the Plan area, to be located within an Employment Centre as shown on the Land Use Concept map. The primary catchment area for the recreation centre will be the residents of the Plan area, but it will also be available for use by surrounding communities and members of the general public. Although typical community based recreation centres include amenities such as aquatic facilities, gymnasia and community facility space, the specific amenities of the centre will be determined through a needs and preference survey of residents.

The recreation centre will function as a key community component of the Employment Centre. As a result, The City will pursue partnerships with other community service providers in order to develop a shared-use facility that meets the diverse health, leisure, educational and social needs and interests of the residential area. The facility will be located to ensure pedestrian access to transit, and the location of the facility parking area should not compromise the pedestrian orientation of the Employment Centre. The specific location of the recreation centre site will be addressed in further detail through the ASP preparation process. Some of the site criteria for a community recreation centre are included in Table 10.

Table 10: Recreation Centre Facility Information

Criteria	Details	Comments
Site	3 - 4 ha. (8 - 10 ac.)	Located within the Employment Centre
Service Level Population	40,000 – 80,000 for a Level 2 community recreation centre	Potential partnerships within surrounding communities may influence the size, design and available amenities of the centre.
Access	10 – 30 minutes via walking, biking or public transit	In order to support access by a range of travel modes, facilities should be located on major transit routes and must connect geographic hubs and other recreation and community facilities by natural and hard surface pathways, including the regional pathway system.

12.6 REGIONAL PARK

Regional recreation parks are intended to provide general recreation space within the city and to meet a number of regional recreational needs. The City has identified the need for a regional park within the Plan area, to be located in proximity to the western Employment Centre, as identified on the Land Use Concept map. The park will be approximately 8 ha. (20 ac.), with the specific location of the regional athletic park site to be addressed in further detail through the ASP preparation process. Table 11 outlines the major site criteria for a regional park.

Table 11: Regional Park Site Information

Criteria	Details	Comments
Site	8 ha. (20 ac.)	Will be located within, or in close proximity to, an Employment Centre.
Access	Highly Important	Collector or arterial road access
Connectivity	Highly Important	Connections to the regional pathway system, and transit, to provide access to non-vehicular users are very important.

12.7 High School Site

The Calgary Board of Education (CBE) has indicated that they require one (1) senior high school site within the Plan area, requiring approximately 9 ha. (23 ac.) of land. The site is to be located within the Employment Centre, as identified on the Land Use Concept map. The specific location of the high school site will be addressed in further detail through the ASP preparation process, with the site sized and designed to meet the needs of the Calgary Board of Education. The high school site should be located in close proximity to transit service, have excellent pedestrian connectivity, and be well integrated with the rest of the Employment Centre area. The Calgary Catholic School District (CCSD) has indicated that they do not require a senior high school site within the Plan area. Table 12 outlines the major site criteria for the high school.

Table 12: Senior High School Site Information

Criteria	Calgary Board of Education
Population Base	25,000 to 50,000
Students per School	1,500
Employee Base	n/a
Site Size (Acres)	9 ha. (23 ac.)
Synergies	No single model exists, although it is preferable to locate adjacent to, or develop in partnership with, a recreation centre, library, skating rink, swimming pool, retail, LRT/ Transit facility, and/or community hall.

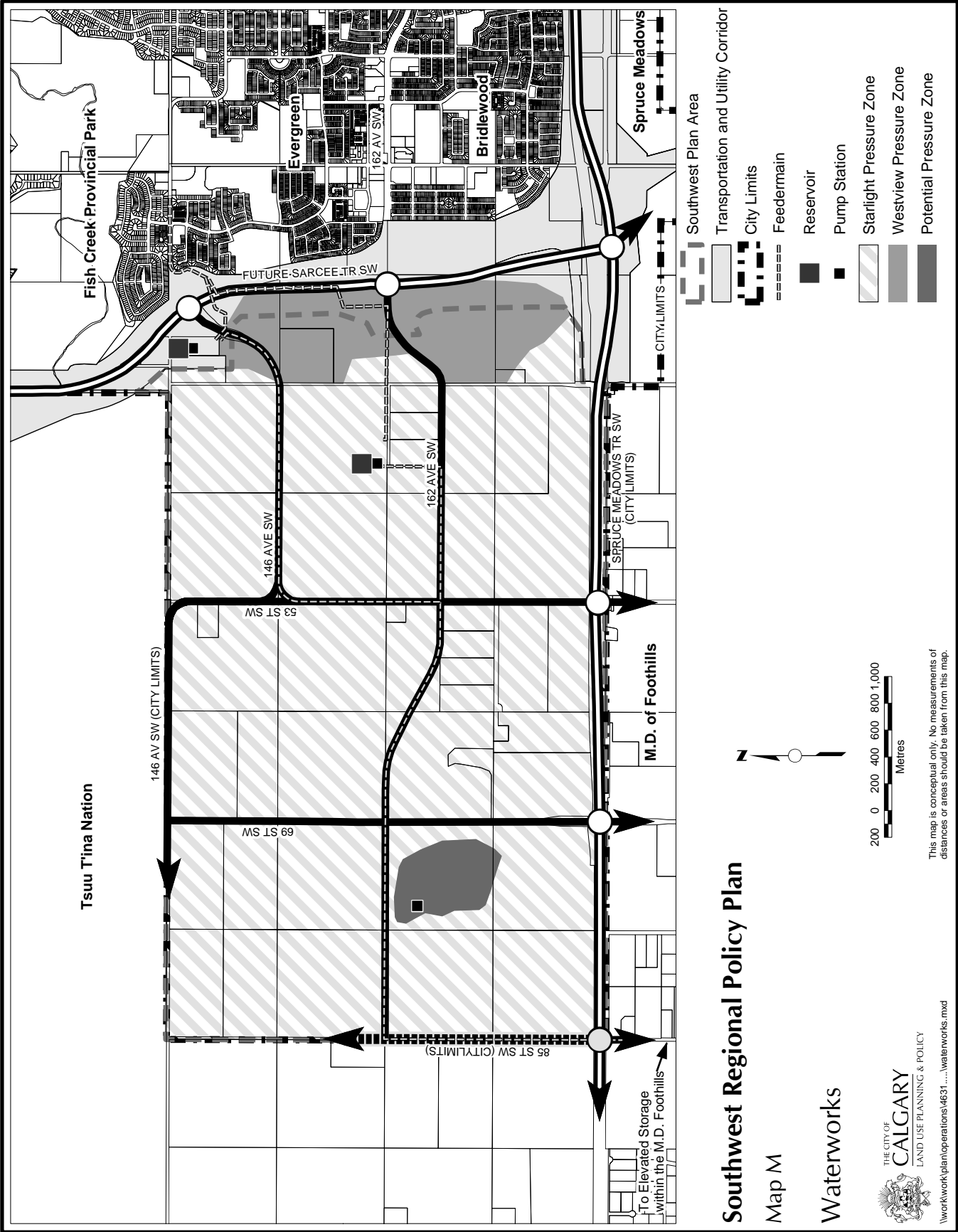
13.0 UTILITY SERVICES

13.1 Water Supply

The Plan area falls within the Westview pressure zone and the Starlight pressure zone. The Westview pressure zone supplies customers between the geodetic elevations of 1108 metres and 1146 metres, extending to the west to approximately the 37 Street SW road allowance. The proposed full reservoir free water surface for this zone is located at 1176 metres, as identified on Map M, and will require approximately 0.4 ha (1 ac.) of land.

The Starlight pressure zone will supply customers between the geodetic elevations of 1146 metres and 1186 metres. This zone will ultimately float on the Starlight reservoir to be located within the Municipal District of Foothills, immediately to the south of the western edge of the Plan area. The proposed full reservoir free water surface for this zone is 1216 metres. Initial phases of development within this zone will be served by direct pumping from proposed pump stations at the existing Lower Sarcee reservoir site (located south of 146 Avenue SW and east of 37 Street SW) and at the proposed Westview reservoir site (located west of the 37 Street road allowance). Note that the pump station to be located at the Lower Sarcee reservoir will be a dual station that will supply both the Starlight and Westview pressure zones. After both of these pump stations have been constructed, and development proceeds west of 53rd Street SW, the requirement for the Starlight reservoir and its linking feedermain will be triggered.

Providing acceptable pressure to high elevations above 1180 metres (southwest of 162 Avenue SW and 69 Street SW), will trigger the need for a local booster station that will pump directly to a small portion of this cell.



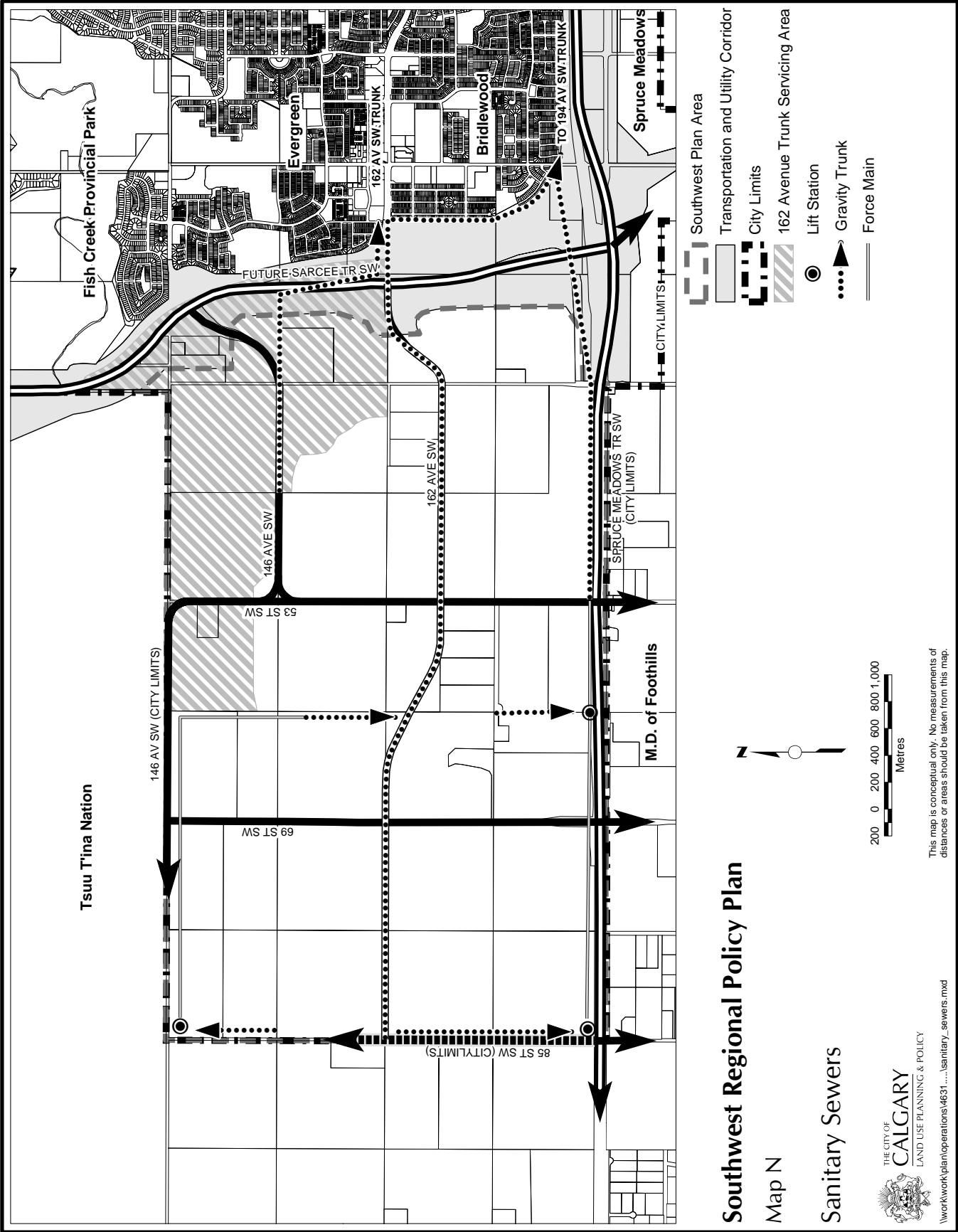
13.2 Sanitary Sewers

Sanitary servicing will be provided by two trunk sewers systems (Map N).

The northeast portion of the Plan area will be serviced by extending the existing 162 Avenue SW sanitary trunk from the east, currently servicing the community of Evergreen. The remainder of the Plan area will be serviced by extension of the 9 Avenue SW trunk, currently servicing the community of Silverado, along Spruce Meadows Trail SW. Servicing and finance agreements for extension of these trunk lines will need to be in place prior to development taking place within the Plan area.

The topography of the Plan area is such that the sanitary flows generated within the westerly portion of the Plan area will need to be pumped to the gravity trunks located in the eastern portion of the Plan area. To minimize the amount of pumping required, the grades should be selected so as to maximize the amount of area that can be serviced by means of gravity.

The design criterion for the new systems will be finalized through the ASP preparation process. The inflow and infiltration allowance of 0.28 L/s/ha that the Province of Alberta utilizes will be required for this system.

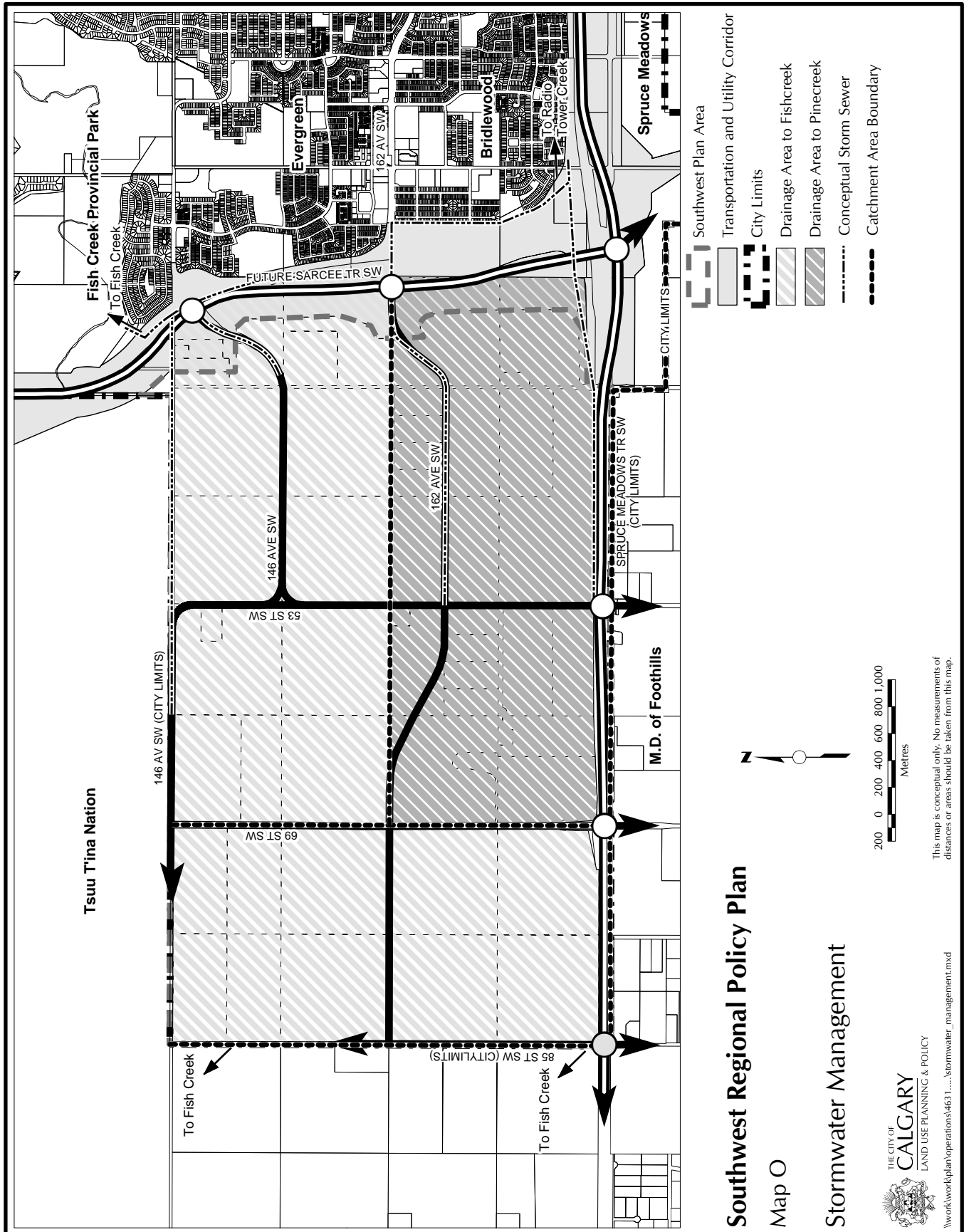


13.3 Stormwater Management

Stormwater servicing will be provided by new outfalls to Fish Creek and Radio Tower Creek (Map O).

In accordance with the approved Fish Creek Drainage Study Final Report (July 2000), the southern portion of the Plan area located east of 69 Street SW will drain to Pine Creek. This drainage will be accommodated by a new storm trunk along Spruce Meadows Trail SW to a new outfall at Radio Tower Creek, which is a tributary of Pine Creek. Discharges will be subject to the results of the new Pine Creek drainage study currently in progress. The remainder of the Plan area will drain to Fish Creek in compliance with the Fish Creek Drainage Study report.

On-site stormwater detention storage facilities will be required to provide the necessary improvements in the quality of the stormwater, and to control the discharges from the Plan area into Fish Creek and Radio Tower Creek (Pine Creek). Developers are encouraged to implement other best management practices that will potentially lessen the volume of stormwater discharged to Fish Creek and Pine Creek by reuse, infiltration or evaporation upon urbanization.



14.0 SHALLOW UTILITIES

14.1 Natural Gas

ATCO Gas will provide the natural gas distribution service for all customers connected to City water and sewer systems within the Plan area. ATCO Gas provision will be located generally as indicated on Map P. Large diameter feeder mains will follow the arterial and collector roadway alignments, and generally be located within their rights-of-ways. Distribution mains will follow collector and residential street alignments, either within or in easements adjacent to their rights-of-ways. A high pressure to intermediate pressure gate station is required and will need a 30m x 30m parcel of land. Further planning and design of natural gas services will occur at both the ASP and Outline Plan/Land Use Amendment stage.

14.2 Electricity

Enmax will be the electrical utility provider to the Plan area and will distribute electricity to all industrial, commercial, and residential customers and design the distribution systems for street lighting, transit access and park lighting. Distribution lines are generally as indicated on Map O. Further planning and design of electrical services will occur through both the ASP and Outline Plan/Land Use Amendment stages.

14.3 Telecommunications

TELUS Communications Inc. will provide services for residential and business customers in the Plan area. These services will be provided as indicated on Map O. The location of required easements and/or direct buried shallow facilities, and their relationship to roads and lanes, will be determined at either the ASP or Outline Plan/Land Use Amendment stage.

14.4 Alberta Infrastructure

Alberta Infrastructure (AI) is responsible for acquiring land for the Transportation and Utility Corridor (TUC) and providing an administrative and management role in coordinating approvals for all activities within the TUC. The location of the TUC within the Plan area, comprising the Sarcee Trail Extension and Spruce Meadows Trail SW, is indicated on Map O.

