

OFFICE CONSOLIDATION
2024 July

REVISED
STONEY INDUSTRIAL
AREA STRUCTURE PLAN

NOTE: This office consolidation includes the following amending Bylaw.

Amendment	Bylaw	Date	Description
1	7P2009	2009 March 9	(a) Map 1 – delete and replace (b) Map 2 – delete and replace (c) Map 3 – delete and replace (d) Preface – delete and replace text (e) Section 2.1 – delete and replace text (f) Section 5.1 – delete and replace table
2	23P2009	2009 September 14	(a) Map 3 – delete and replace (b) Section 7.2 – delete and replace text (c) Section 8.2.1 – delete text (d) Section 8.2.2.3.b – delete (e) Section 12.1.2.8 – delete
3	30P2013	2013 July 22	(a) Map 3 – delete and replace (b) Map K – delete and replace (c) Map O – delete and replace
4	8P2014	2014 May 12	(a) Map 3 – delete and replace
5	59P2024	2024 July 17	(a) Section 8.1.1 – delete text (b) Section 8.1.2.2 – delete and replace policy (c) (c) Section 8.2.2 – delete subsection (2) (d) Section 8.3.2.2 – delete policy (a) (e) Section 9.0 – delete (f) Section 15.2 – delete (g) Section 15.3 – delete

Amended portions of the text are printed in *italics* and the specific amending Bylaw is noted.

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

PUBLISHING INFORMATION

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Part 1

Revised Stoney Industrial Area Structure Plan

**Revised
Stoney Industrial Area Structure Plan**

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Revised Stoney Industrial Area Structure Plan

PREFACE

The Stoney Industrial Area comprises approximately 932 hectares (2,303 acres) of land and is located in the northeast quadrant of the city. The area is bounded by the Transportation and Utility Corridor (TUC) containing the proposed Stoney Trail NE to the north, future industrial lands and the Calgary International Airport to the east, Airport Trail NE and the Calgary International Airport to the south and the Canadian Pacific Railway (CPR) line and the communities of Harvest Hills and Coventry Hills to the west. The Deerfoot Trail NE, a freeway, intersects the planning area.

Bylaw 7P2009

Since approval of the original Area Structure Plan (ASP) for the Stoney Industrial Area in 1983, the area has remained relatively undeveloped. However, with continuing outward growth of the city, the area is facing mounting development pressures. In response to these pressures, a transportation model has been undertaken for the area and this model has identified significant regional network constraints. Accordingly, Council directed that a comprehensive review of the original ASP be undertaken in recognition that this document has become outdated.

The review process commenced in late 2001 and involved transportation, environmental, market and land use studies; meetings with landowners; and input from the Calgary Airport Authority, River Valleys Committee, Northern Hills Community Association and other interested parties. The result of this process is a revised ASP that will provide a "blueprint" for the future development of the Stoney Industrial Area.

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

- **balancing of development opportunities**
- **achieving a viable industrial base**
- **conserving sensitive natural areas**
- **promoting quality urban design**

1.0 INTRODUCTION

1.1 Purpose of the Plan

Planning is the process of shaping the physical environment to achieve an orderly, economical and compatible pattern of urban growth. The process is complex involving decision-making on many different levels, with the most immediate planning document applied to the process being an area structure plan (ASP).

The purpose of an ASP is twofold. Firstly, it refines and implements The City’s broader planning objectives as contained in its strategic planning documents (*Municipal Development Plan, Calgary Transportation Plan*) by promoting development that is logical, efficient and sustainable. Secondly, it guides and directs land use, subdivision and development decisions, which when taken together determine the form that the planning area will take.

To accomplish this purpose, an ASP establishes a broad framework for future development. This framework consists of long term goals, design concepts, policy statements and implementation actions that all work together to ensure achievement of the plan. The framework must be concise, yet flexible. It must provide clear direction on a variety of land use planning issues for both the public and private sector. At the same time, the framework must accommodate creativity and innovation and be responsive to the ever changing demands of the market place. Simply stated, a successful ASP must be formulated with the understanding that planning requires a visionary, balanced and dynamic approach.

1.2 Authority of the Plan

The Revised Stoney Industrial Area Structure Plan (the ‘Plan’) has been adopted through a bylaw passed by Council in accordance with the *Municipal Government Act*. Section 633 of the *Municipal Government Act*, which authorizes a Council to adopt an area structure plan, states:

- (1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may, by bylaw, adopt an area structure plan.
- (2) An area structure plan
 - (a) must describe
 - (i) the sequence of development proposed for the area,
 - (ii) the land uses proposed for the area, either generally or with respect to specific parts of the area,

(iii) The density of population proposed for the area either generally or with respect to specific parts of the area, and

(iv) the general location of major transportation routes and public utilities,

and

(b) may contain any other matters the council considers necessary.

The adopted Plan comprises Part 1 and includes Appendix 1 contained within this part. Part 2, Background Information, does not form part of the adopted plan and has no legal status.

1.3 Timeframe of the Plan

The Plan is future-oriented and addresses how the Stoney Industrial Area is to be developed over an extended period of time through a series of public and private sector initiatives. No specific timeframe is applied to the Plan, although most of the development is expected to be realized within 30 years.

1.4 Interpretation of the Plan

1.4.1 Map Interpretation

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

1.4.2 Policy Interpretation

Where text accompanies a policy, it is provided for information purposes only. Should an inconsistency arise between the text and a policy, the policy will take precedence.

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

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

Where a policy requires compliance at the Outline Plan/Land Use Approval stage, that requirement may be deferred to the subdivision approval or development permit approval stage.

Where a policy requires submission of studies, analysis or information, the exact requirements of the studies, analysis or information shall be determined at the Outline Plan/Land Use Approval stage.

1.4.3 Design Guideline Interpretation

The design guidelines contained within Appendix 1 shall be interpreted and applied in accordance with the policies contained in section 11.2, Design Review Process.

1.5 Variance of the Plan

Where a variance to a policy within the Plan is requested in accordance with section 1.4.2, supporting information considered necessary to evaluate and justify the request shall be submitted by the applicant.

1.6 Amendment of the Plan

To make any change to the text or maps within the Plan, an amendment to the Plan shall be undertaken in accordance with the *Municipal Government Act*.

Where an amendment to the Plan is requested, supporting information necessary to evaluate and justify the amendment shall be submitted.

Part 2, Background Information is not subject to the Plan amendment process. The information contained in this part will be updated from time to time so that it remains current and accurate.

1.7 Monitoring of the Plan

The policies within the Plan shall be monitored to evaluate their effectiveness. Where determined necessary, the policies shall be updated through the plan amendment process either generally or in response to a specific issue.

2.0 PLANNING AREA

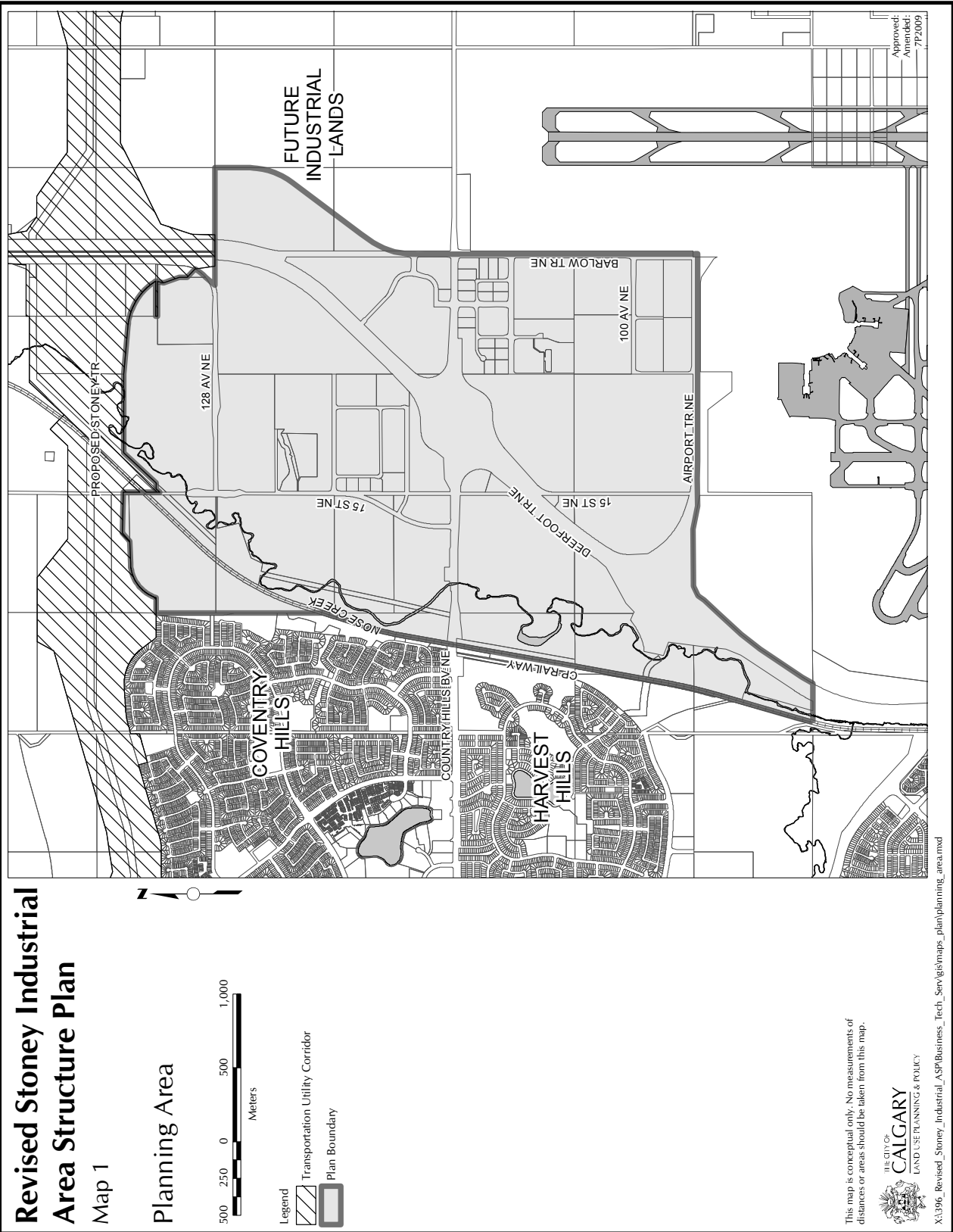
2.1 Application of the Plan

The Revised Stoney Industrial Area Structure Plan applies to the area shown on the Planning Area Map (Map 1). *The Stoney Industrial Area comprises approximately 932 hectares (2,303 acres) of land and is located in the northeast quadrant of the city.* The area is bounded by the Transportation and Utility Corridor (TUC) containing Stoney Trail NE to the north, the Canadian Pacific Railway (CPR) rail line and the communities of Harvest Hills and Coventry Hills to the west, Barlow Trail NE and the Calgary International Airport to the east and Airport Trail NE and the Calgary International Airport to the south. The area is intersected by Deerfoot Trail NE.

Bylaw 7P2009

2.2 Boundaries of the Plan

The boundary of the Stoney Industrial Area as shown on Map 1 is considered to be fixed and precise where it coincides with permanent boundaries such as the TUC, the CPR rail line and the Calgary International Airport. Conversely, the boundary will be subject to interpretation where it coincides with future road alignments or other features such as Barlow Trail NE that may be adjusted through subsequent studies. Where an adjustment is considered to be significant, an amendment to the Plan will be required to revise the planning area boundary shown on the map.



3.0 STRATEGY

3.1 Strategic Context

The planning strategy forms the basis for the approach taken within the Plan. This strategy is embodied in the following guiding principles:

- **Balanced Development Opportunities**
- **Viable Industrial Base**
- **Natural Area Conservation**
- **Quality Urban Design**
- **Effective Growth Management**

Each of these guiding principles is briefly described below.

3.2 Guiding Principles

3.2.1 Balanced Development Opportunities

As identified within The City's long range strategic planning documents (*Municipal Development Plan, Calgary Transportation Plan*) the Stoney Industrial Area is intended to serve as a strong business and industrial focus for the north sector of the city. At the same time, a sub-area transportation model undertaken for the area has identified significant regional road network capacity constraints. These constraints require that a balancing occur between land use intensity and transportation network capacity. This balancing will be achieved in two ways:

- distributing development density among the various landholdings throughout the area in a uniform manner in relation to the regional transportation network capacity in order to retain equitable development opportunities for each land holding, and
- creating the potential for higher intensity development projects that benefit the area and the City to proceed through either a co-operative transfer of development rights among the landowners or a site-specific approval based on the merits of the project.

3.2.2 Viable Industrial Base

The Stoney Industrial Area will function as predominantly a business and industrial area. At the same time, the area will likely attract specialized development projects that serve the Calgary International Airport, the travelling public, the local work force and the residential communities to the west. Thus, retaining a viable industrial base while recognizing the potential diversity of the area remains a key emphasize of the plan. This will be achieved in two ways:

- accommodating a diversity of industrial and other business-related development at a level of intensity that is determined appropriate to ensure economic viability of the area, and
- allowing alternative complementary retail and service commercial, institutional and recreational projects to develop on a limited and select basis where the transportation network is able to support these projects.

3.2.3 Natural Area Conservation

The most prominent natural feature within the Stoney Industrial Area is Nose Creek. The creek, together with its associated wetlands, ravines and escarpments, will form a contiguous open space corridor extending along the entire west side of the area that presents unique recreational opportunities. The corridor needs to be protected for the benefit of the surrounding communities and the local workforce within the Stoney Industrial Area. This will be achieved in two ways:

- acquiring and protecting the lands comprising this open space corridor wherever possible through environmental or municipal reserve dedication, the application of development controls or other innovative means, and
- enhancing the recreational function of this open space corridor through the introduction of complementary amenities and facilities while ensuring that any urban-level development allowed within or adjacent to the area is sensitively and compatibly designed.

3.2.4 Quality Urban Design

The Stoney Industrial Area will serve as a “gateway” to the City, due to its location along Stoney Trail NE and Deerfoot Trail NE, and its proximity to the Calgary International Airport. The area also borders Nose Creek and residential communities on the west side. This situation creates the need for a higher standard of design particularly at the more visible sites along entranceway roads, the creek and residential areas. This will be achieved in two ways:

- requiring development that borders entranceway roads, Nose Creek and residential areas to achieve high quality site design and building appearance, and
- providing for a range of uses along these entranceway roads, the creek and residential areas that are considered to be compatible and appropriate.

3.2.5 Effective Growth Management

The Stoney Industrial Area is extensive containing a projected 30 year land supply. Predictably, as the area develops, infrastructure issues will emerge relating to municipally financed utility and transportation improvements. These issues are complex and require innovative growth management and financing solutions. This will be achieved in two ways:

- ensuring that utility and transportation infrastructure improvements necessary to support development will be comprehensively analysed and identified, and
- requiring that any financing issues relating to municipal utility and transportation infrastructure improvements will be suitably addressed through the planning approval process.

4.0 VISION AND GOALS

4.1 Vision of the Future

The Stoney Industrial Area, in the year 2030, has been transformed into a vital and successful business area that generates employment opportunities, provides goods and services for the surrounding communities, complements the Calgary International Airport and creates a gateway for the City.

Deerfoot Trail NE, a north-south freeway, intersects the area, and Stoney Trail NE, an expressway, bounds the area to the north. These roads provide the main access to the Stoney Industrial Area and are augmented by Country Hills Boulevard NE, Barlow Trail NE and Airport Trail NE, all of which serve as major transportation routes into the area.

On the east side of Deerfoot Trail NE is a fully-serviced industrial area, together with a regional-scale retail centre. This area supports a full range of business activities together with service-oriented commercial uses along Airport Trail NE that cater to the needs of airport customers and employees. The retail centre attracts shoppers from nearby communities as well as drive-by traffic, and it remains convenient and accessible due to its central location.

On the west side of Deerfoot Trail NE is a business-oriented area containing predominately industrial uses together with some office, retail and service commercial development at select locations. Intersecting the area is Country Hills Boulevard NE, which provides a strong and direct link to the communities to the west. Business, commercial and service-oriented activities tend to gravitate along this road due to the advantages of exposure and access that exist. Overall, the area can be characterised as diverse accommodating commercial, industrial and other business development, with direct access to Stoney Trail NE and Deerfoot Trail NE.

While the area is not intended to be served by Light Rail Transit (LRT), it will contain efficient transit bus service throughout. Transit routes will link with the surrounding residential communities creating a strong home-to-work relationship for the area. Pedestrian connections in the form of sidewalks, walkways and pathways are located within the Stoney Industrial Area providing opportunities for people to walk and cycle. This localized pedestrian system is, in turn, linked to regional pathways that extend along West Nose Creek. The creek itself is a prominent feature and its related ravines and escarpments form an extensive linear open space and wildlife corridor that protects the creek and provides recreational opportunities for the local workforce and adjacent communities.

In total, the Stoney Industrial Area comprises a prominent business area, that conveys a positive image of growth, prosperity and diversity. The area performs a strong service and employment function, creates a quality environment in which to shop and work and contributes to a thriving and healthy city.

4.2 Goals for the Area

- **Business Development**

To provide for successful business and industrial development.

- **Airport Services**

To provide for service-related activities that complement and support the travelling public and the Calgary International Airport.

- **Commercial Vitality**

To provide for vital and attractive commercial facilities that meet the retail and service needs of regional and local markets.

- **Environmental Protection**

To provide for the conservation and enhancement of the Nose Creek Basin and its related floodway, wetlands, escarpment and ravines.

- **Pedestrian Circulation**

To provide for walking and cycling through the provision of strong and direct pedestrian connections.

- **Public Transit**

To provide for efficient public transit that serves as a viable alternative to private vehicles.

- **Attractive Design**

To provide for a visually-attractive entranceway to the city through effective urban design measures introduced along the major access roads.

- **Road Network**

To provide for a safe, effective and convenient internal and regional road network to serve the area.

- **Utility Services**

To provide for sanitary sewer, waterworks and sewer services and other infrastructure to meet the servicing needs of the area.

5.0 PLANNING CELLS

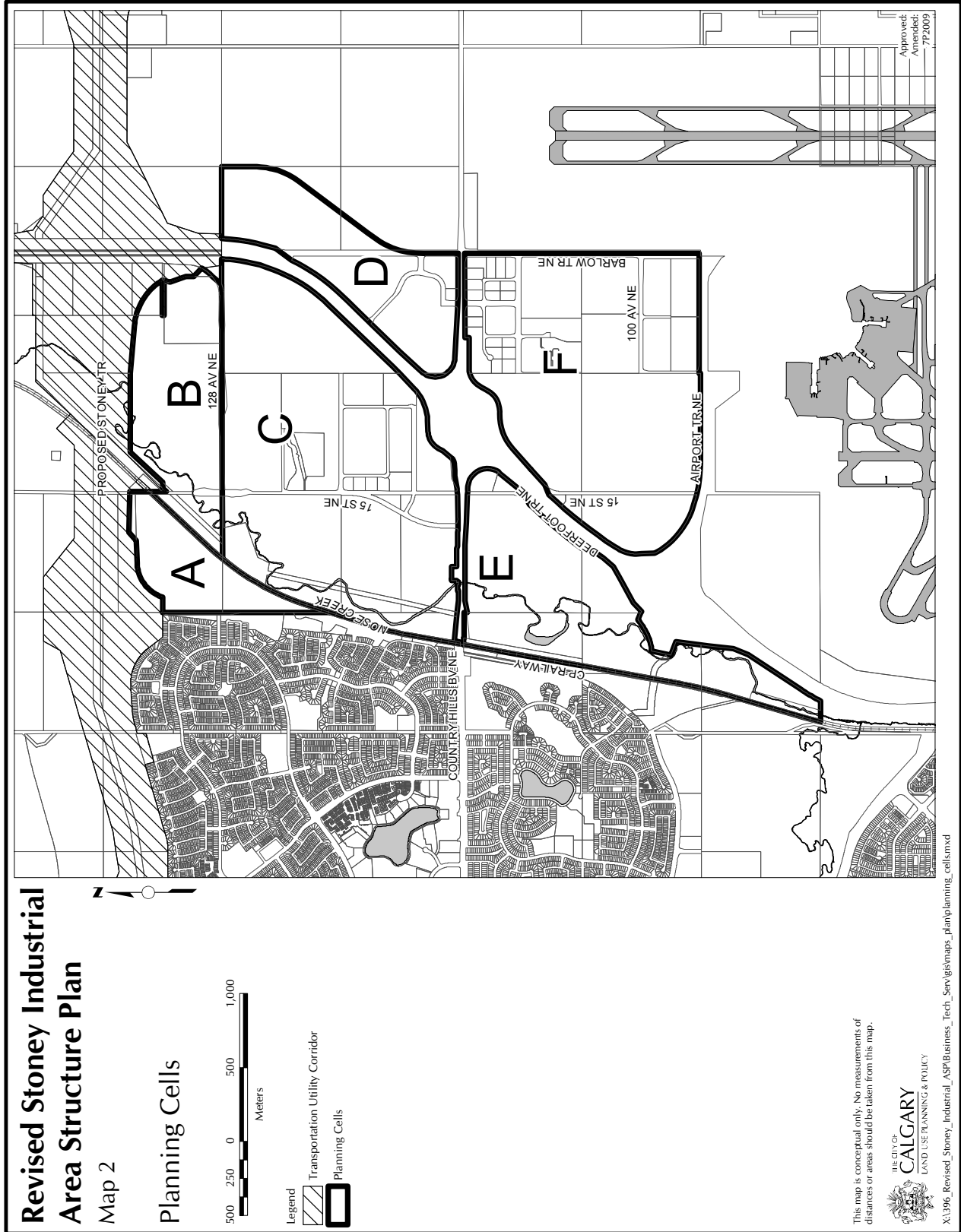
5.1 Planning Cell Map

The planning cells within the Stoney Industrial Area are shown on the Planning Cells Map (Map 2). These cells are defined by the arterial road network as well as the CPR rail line and Nose Creek and they represent the basic unit of planning, servicing and development within the Stoney Industrial Area. The size of each planning cell is identified in the following table and the cells are described in more detail in Part 2, Background Information.

Planning Cells Stoney Industrial Area		
Cell	Gross Area (Hectares)	Gross Developable Area (Hectares)
A	46	46
B	104	101
C	299	274
D	99	99
E	117	51
F	268	268

The size of the cells may be refined at the Outline Plan/Land Use approval stage.

Bylaw 7P2009



6.0 PLANNING CELL policies

6.1 Function of Cells

6.1.1 Purpose

The purpose of these policies is to provide for the comprehensive and coordinated development of land on a planning cell basis within the Stoney Industrial Area. The planning cells will function as the basic unit of analysis within the area. Accordingly, land use, transportation and servicing studies should apply to an entire cell and not an individual site. In addition, landowners will be encouraged to co-operate in terms of their individual development initiatives within a cell, and should be provided an opportunity to review the various development proposals within a cell that may impact their lands.

6.1.2 Policies

(1) Development Co-ordination

To ensure comprehensive and co-ordinated planning, a planning cell shall serve as the basic unit for planning and development within the Stoney Industrial Area.

(2) Planning Analysis

In accordance with subsection (1), unless determined otherwise, a land use, transportation or servicing study required in conjunction with an Outline Plan/ Land Use application should be undertaken on a planning cell basis rather than for an individual site within a cell.

(3) Landowner Co-operation

Landowners within the same planning cell shall be encouraged to co-operate in the comprehensive formulation of studies or the submission of development proposals within the cell.

(4) Comprehensive Review

Where practical and appropriate, landowners within a planning cell should be provided an opportunity to review and comment on studies and development proposals by another developer in the cell that may impact their lands.

6.2 Design of Cells

6.2.1 Purpose

The purpose of these policies is to provide for the comprehensive design of each planning cell, particularly in the case where there is multiple ownership of land within the cell. This will be achieved through the submission of a concept plan in conjunction with an Outline Plan/Land Use Amendment application for the balance of the lands within a planning cell but outside of the application area. The concept plan will show a schematic land use pattern and road network that provides a context for the proposal. The concept plan will need to demonstrate that the entire cell can be developed in a co-ordinated manner and that reasonable development options are retained for the various landholdings within the cell.

6.2.2 Policies

(1) Requirement for Concept Plan

As part of an Outline Plan/Land Use application, a concept plan should be submitted for

- (a) any residual lands within the planning cell but outside of the application area showing a schematic roadway and land use pattern for the residual lands, and
- (b) Cell A and the adjacent lands along Nose Creek
 - (i) showing a schematic roadway and land use pattern for the area, and
 - (ii) suitably addressing the
 - (A) regional park design,
 - (B) bridges across Nose Creek and CPR rail line,

- (C) residential interface, and
- (D) any other matters determined appropriate.

(2) Development Options Within Concept Plan

The concept plan required under (1) above shall demonstrate that reasonable and viable design options are retained for the entire cell and each parcel of land within the cell.

(3) Status of Concept Plan

The concept plan

- (a) shall not have any formal or legal status but rather be used for information purposes only to assist in making a decision on an Outline Plan/Land Use application, and
- (b) may be revised as necessary through the submission of a subsequent Outline Plan/Land Use application within the planning cell.

6.3 Identity of Cells

6.3.1 Purpose

The purpose of these policies is to provide a distinct identity for the planning cells within the Stoney Industrial Area. The approach relies upon the application of uniform area names and street names within one or more cells, but not to individual sites within a cell. Thus, identification signage located at the entrance to a site or along a public road, or street names within a site, will reflect the overall cell name as approved by Council. The approach will be implemented through the subdivision process (approval of street names applied to public roads) and the development permit process (approval of identification signage).

6.3.2 Policies

(1) Name of Cell

- (a) One or more planning cells as identified on the Planning Cells Map should contain a uniform name as applied for by a developer and approved by Council.

- (b) A cell name should not be approved for a portion of a cell.

(2) Street Names within Cell

- (a) The street names to be used within the planning cell as approved by Council shall reflect the overall approved cell name in an acceptable manner.

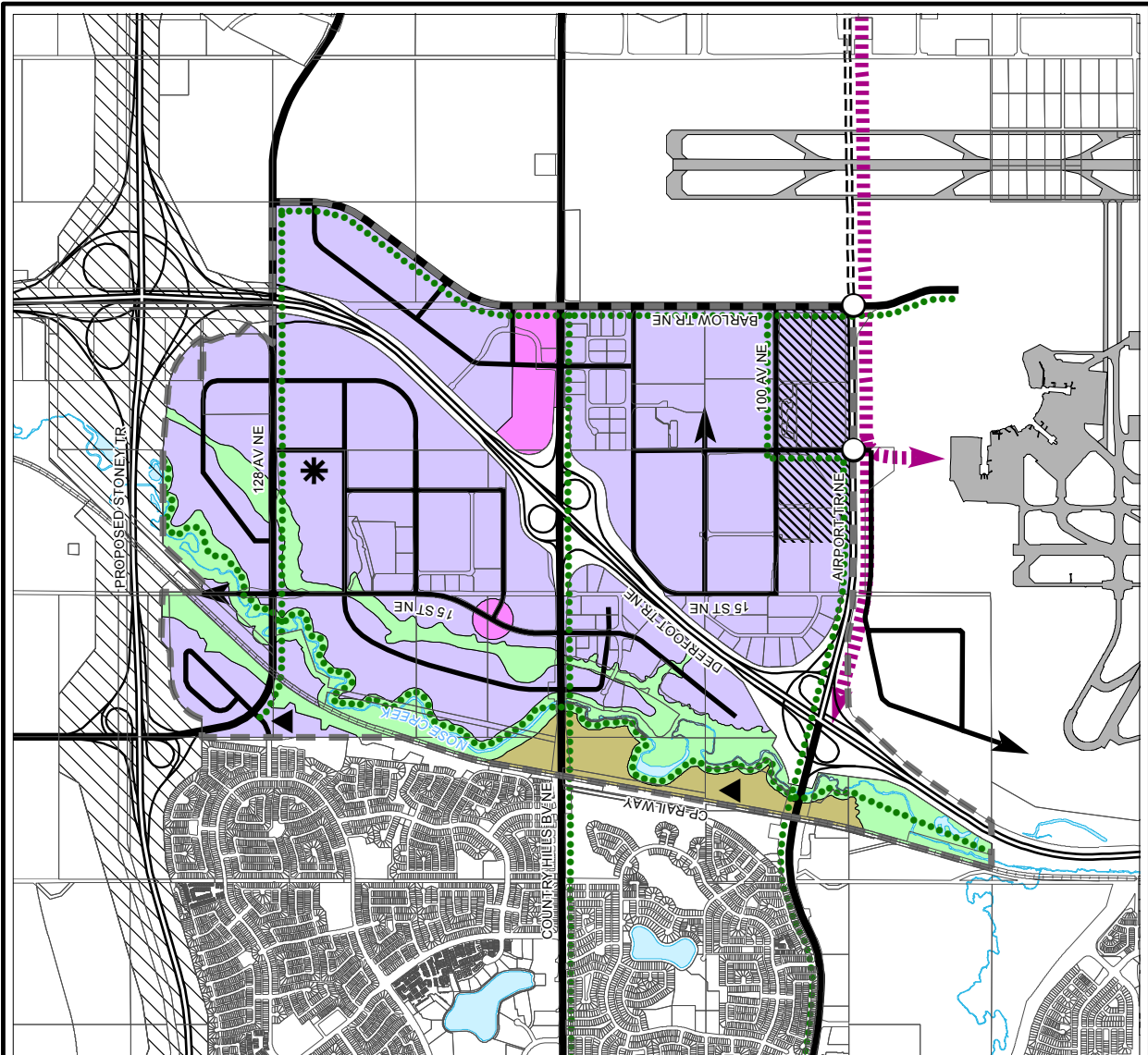
- (b) The street type names applied to public roads within a planning cell as approved by the Subdivision Authority shall be consistent with the street names approved by Council.

- (c) Major roads that extend adjacent to, through or between planning cells may contain names approved by Council that do not relate to the approved name of the cell but rather contain a neutral or generic name considered appropriate.

(3) Identification Signage within Cell

- (a) Identification signage at the entrance to a subdivision shall reflect the overall approved cell name in an acceptable manner.

- (b) Names applied by a developer to a comprehensively developed site, such as a commercial shopping centre, or a building, should be encouraged to reflect the overall approved cell name.



Revised Stoney Industrial Area Structure Plan

Map 3

Land Use Concept



- Legend**
- Plan Boundary
 - Transportation Utility Corridor
 - Business/Industrial Area
 - Retail Commercial Area
 - Limited Development Area
 - Conservation Area
 - Regional Park
 - Municipal Depot
 - Expressway (Skeletal Road)
 - Possible Future Expressway (Skeletal Road)
 - Regional Major Road (Aerial Street)
 - Internal Road Network
 - On/Off Ramp
 - Interchanges
 - Regional Pathway
 - Transportation Network Overlay
 - Airport Transit Connection (Technology TBD)

NOTE: The "Service Commercial" and "Special Development" areas are not currently shown on the Land Use Concept map, but are to be applied through an amendment to the map in response to a site specific development proposal in accordance with the policies of section 8.0.

This map is conceptual only. No measurements of distances or areas should be taken from this map.
 Approved: 16P2004
 Amend: 8P2014

7.0 Land Use Concept

7.1 Land Use Concept Map

The Land Use Concept map provides for a future land use pattern within the Stoney Industrial Area comprised of the following land use areas:

- **Business/Industrial Area**
- **Retail Commercial Area**
- **Limited Development Area**
- **Conservation Area**

Section 8.0 of the Plan, in turn, contains policies that apply to each of these areas. The policies identify general categories of land uses allowed within the areas and apply development criteria to these uses.

A Land Use Amendment application submitted for a site should comply with the policies of the land use area in which the site is located.

7.2 Amending the Map

Each of the Land Use Areas shown on the Land Use Concept map serves a distinct purpose. The Business/Industrial Area is applied extensively throughout the Stoney Industrial Area and will accommodate predominately light industrial uses, together with a full range of complementary development. The Conservation Area and Limited Development Area represent Land Use Areas that are intended to protect environmentally sensitive lands along Nose Creek while accommodating a more limited range of development.

Retail commercial development projects may be proposed over time within the Stoney Industrial Area, and these projects will only be able to be accommodated within the Retail Commercial Area. This area will need to be applied to a site shown on the Land Use Concept map. An amendment to the Land Use Concept map may occur within the context of a land use application for a commercial proposal at the discretion of the Approving Authority. The proposal will need to undergo a comprehensive evaluation in accordance with the policies of the plan, and will require the submission of the appropriate transportation, servicing, market and planning studies.

Bylaw 23P2009

8.0 LAND USE AREAS

8.1 Business/Industrial Area

8.1.1 Purpose

The purpose of this area is to provide for the development of a variety of light industrial uses within the context of a fully-serviced industrial/business park. In addition, medium industrial, secondary commercial, office, institutional, recreational and other land uses considered to be compatible and appropriate may also be allowed. The area comprises the majority of lands within the Stoney Industrial Area and its design will be determined through the Outline Plan/Land Use Approval process.

Deleted

Bylaw 59P2024

8.1.2 Policies

(1) Composition of Business/Industrial Area

- (a) Subject to the policies of this plan,
 - (i) light industrial uses shall be the predominant use of land within the Business/Industrial Area, and
 - (ii) service commercial uses, medium industrial uses, office uses, local commercial uses, service commercial uses, secondary commercial uses, recreational uses, institutional uses and public uses, and similar and accessory uses to the above, may be allowed within the Business/Industrial Area where determined to be compatible and appropriate.
- (b) The general categories of uses identified under (a) above shall be refined through the land use districts applied within the Business/Industrial Area.

(2) Development within Business/Industrial Area

- (a) Local commercial uses within the Business/Industrial Area should
 - (i) locate at the intersection of two roads,
 - (ii) not comprise a site exceeding 1.6 hectares of land at the corner of an intersection, and

- (iii) not, in the aggregate, compromise sites totalling more than 1.6 hectares of land at one or more corners of the same intersection.
- (b) A service commercial use shall only locate on a site
 - (i) with efficient access and good visibility lying adjacent or in close proximity to an entranceway road, and
 - (ii) not exceeding 4.0 hectares in size
- (c) *Medium industrial uses within the Business/Industrial Area should not be located:*
 - (i) *adjacent to Nose Creek,*
 - (ii) *adjacent to an escarpment, or*
 - (iii) *west of 15 Street NE.*
- (d) Secondary commercial uses, involving automotive sales or rentals, should not locate adjacent to
 - (i) Nose Creek, or
 - (ii) an escarpment.
- (e) Other than transitional uses relating to resource extraction as addressed in Section 16.1.2(3), heavy industrial uses shall not be allowed within the Business/Industrial Area.
- (f) A Municipal Depot site shall be provided within the Business/Industrial Area as shown on the Land Use Concept map.
- (g) A regional park should be provided within Cell A in the Business/Industrial Area.

Bylaw 59P2024

8.2 Retail Commercial Area

8.2.1 Purpose

The purpose of this area is to provide for retail commercial development within the Stoney Industrial Area in predetermined locations. The area will accommodate a variety of retail uses within comprehensively-planned commercial centre sites situated along the north side of Country Hills Boulevard NE. These sites will include a regional commercial centre site that received land use approval previously in the early 1980's; and, a future local/sector commercial site as depicted by a symbol on the Land Use Concept map on the west side of Deerfoot Trail NE.

Bylaw 23P2009

8.2.2 Policies

(1) Composition of Retail Commercial Area

- (a) Subject to the policies in this plan,
 - (i) retail commercial uses shall be the predominant use of land within the Retail Commercial Area, and
 - (ii) secondary commercial uses, service commercial uses, office uses, institutional uses, recreational uses and public uses, and similar and accessory uses to the above, may be allowed within the Retail Commercial Area where determined to be compatible and appropriate.
- (b) The general categories of uses identified under (a) above shall be refined through the land use districts applied within the Retail Commercial Area.

Deleted

Bylaw 59P2024

(2) Application of Retail Commercial Area

- (a) The Retail Commercial Area shall only be applied
 - (i) along the northside of Country Hills Boulevard NE east of Deerfoot Trail NE to accommodate a regional-scale commercial development, and
 - (ii) along the northside of Country Hills Boulevard NE, west of Deerfoot Trail NE to accommodate a local or sector commercial development comprising a maximum of 5.0 net developable hectares of commercial land.

(b) *Deleted*

Bylaw 23P2009

8.3 Limited Development Area

8.3.1 Purpose

The purpose of these policies is to provide for the development of sites that due to access and interface constraints present a limited range of development options. These sites are situated between Nose Creek and the Canadian Pacific Railway rail line along the west side of the Stoney Industrial Area. The sites can continue to be used for extensive agricultural purposes or, alternately, a portion of the sites may be dedicated or acquired for a regional park. This park will serve as a natural area adjoining the creek with its size and configuration to be determined upon its reserve land available. Where a site is not dedicated or acquired for the park, and the access and design issues can be resolved, recreational uses or, where appropriate, light industrial or secondary commercial uses could be allowed.

8.3.2 Policies

(1) Composition of Limited Development Area

- (a) Subject to the policies of this Plan, extensive agricultural uses shall be the predominant use of land within the Limited Development Area.

- (b) Notwithstanding (a) above,
 - (i) where determined feasible, lands within the Limited Development Area containing the symbol for a regional park as shown on the Land Use Concept map, shall be dedicated as municipal reserve land, or otherwise acquired, on an opportunity basis for a regional park, or

 - (ii) where lands within the Limited Development Area are not dedicated or acquired for a regional park, and any access and development constraints relating to the lands can be suitably resolved,
 - (A) recreational uses shall be the predominant use of land, or

 - (B) light industrial uses, secondary commercial uses, institutional uses and public uses, and similar and accessory uses to the above, may be allowed on the lands where determined to be compatible and appropriate.

- (c) The general categories of uses identified under (a) and (b) above shall be refined through the land use districts applied to the Limited Development Area.

(2) Development within Limited Development Area

Deleted

Bylaw 59P2024

- (a) Prior to Outline Plan/Land Use approval, a concept plan for a site within the Limited Development Area may be required showing the proposed
 - (i) design for and access to the subject site, and
 - (ii) interface treatment with Nose Creek, the CPR line and residential areas to the west.

(3) Application of Limited Development Area

The Limited Development Area shall be applied to developable land between Nose Creek and the CPR line.

8.4 Conservation Area

8.4.1 Purpose

The purpose of this area is to provide for the protection of environmentally significant lands within the Stoney Industrial Area, notably Nose Creek and its related floodway, wetlands, escarpment and ravines. These lands will form part of an integrated natural open space system that extends through the area serving as a passive and active recreational amenity. In some situations, these lands will be required to be dedicated as environmental reserve in accordance with the *Municipal Government Act*. In other situations, alternative means of acquiring and protecting these lands may need to be investigated. The means of dedication, acquisition and protection of these lands will be addressed at the Outline Plan/Land Use stage.

8.4.2 Policies

(1) Composition of Conservation Area

- (a) Subject to the policies of this plan,
 - (i) recreational uses, in the form of natural parks and low intensity and unstructured recreational facilities, shall be the predominant use of land within the Conservation Area, and
 - (ii) public uses, in the form of roads, pathways, utilities and stormwater facilities, may be allowed to locate within the Conservation Area where determined to be necessary and appropriate.
- (b) The general classifications of uses identified under (a) above shall be refined through the land use districts applied within the Conservation Area.

(2) Development within Conservation Area

Notwithstanding (1), where lands within the Conservation Area are not dedicated as reserve land, acquired through purchase or otherwise protected through the application of land use controls or on a voluntary basis in accordance with the policies of Section 10.0, the lands shall be considered to be appropriate for urban development and the policies of the adjacent land use area shall apply without requiring an amendment to the plan.

(3) Application of Conservation Area

The Conservation Area shall be applied to lands along Nose Creek, including the adjacent floodways, wetlands, ravines and escarpments, that comprise environmentally significant areas to be conserved and protected.

9.0 Density policies

Deleted

Bylaw 59P2024

10.0 Reserve policies

10.1 Creditable Reserve

10.1.1 Purpose

The purpose of these policies is to provide a basis for making decisions on the dedication of municipal reserve (MR) land within the Stoney Industrial Area. Municipal reserve owing on a parcel of land will need to be addressed at the time of subdivision of the parcel in accordance with the provisions of the Municipal Government Act. This reserve will normally be acquired as money-in-lieu of land except in specific circumstances where the dedication of reserve land for park space is determined to be more appropriate.

10.1.2 Policies

(1) Creditable Reserve Dedication

- (a) Subject to (b) below, municipal reserve owing on a parcel of land shall be provided as money-in-lieu of reserve land at the time of subdivision in the entire amount owing on the parcel.

- (b) As an alternative to the provision of money-in-lieu of land, municipal reserve owing on a parcel of land may be dedicated in full or in part as reserve land for
 - (i) natural parks that contribute to the natural open space corridor along Nose Creek in accordance with (2) below,

 - (ii) regional parks as shown on the Land Use Concept Map in accordance with (3) below, and

 - (iii) local parks that are determined appropriate to serve the local workforce. In accordance with (4) below.

(2) Natural Parks

- (a) Where municipal reserve is owing on a parcel of land adjacent to Nose Creek or a related ravine, wetland or escarpment, that reserve should be dedicated as land in order to contribute to the natural open space corridor along the creek.
- (b) Where the ownership pattern allows for the transfer of municipal reserve from a parcel that does not lie adjacent to Nose Creek or a related ravine, wetland or escarpment, to a parcel that does, the transfer and dedication of reserve land may be required through the subdivision process where it would contribute to the natural open space corridor along the creek.

(3) Regional Parks

- (a) The exact location, size and configuration of a proposed regional park as shown on the Land Use Concept Map shall be dependent upon the amount of reserve land available to be applied to the park.
- (b) Where municipal reserve is owing on a parcel of land containing a proposed regional park as shown on the Land Use Concept Map, that reserve shall be dedicated as land in order to contribute to the park.
- (c) Where the ownership pattern allows for a transfer of municipal reserve from other lands with the Stoney Industrial Area to contribute to a proposed regional park, the transfer and dedication of reserve land may be required through the subdivision process.

(4) Park Acquisition

- (a) In conjunction within Outline Plan/Land Use Amendment application adjacent to Nose Creek, the Administration shall review the proposal to determine if the need to purchase, or otherwise acquire, additional open space along the creek may be warranted.
- (b) Where it is determined that the purchase or acquisition of additional open space may be warranted, the matter shall be referred to the appropriate authority for review.

(5) Local Parks

- (a) Private parks that are owned and maintained by a business association comprised of the benefiting landowners, shall be encouraged and promoted in order to meet the recreational needs of the local workforce within the Stoney Industrial Area as an alternative to the dedication of municipal reserve land for public parks.

- (b) As an alternative to a private park, partnerships between The City and a developer in the dedication of municipal reserve and the provision of innovative public/private park concepts to serve the local workforce may be allowed where determined to be feasible and appropriate.

(6) Municipal Reserve Analysis

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

- (i) owing on the lands that are the subject of the application,

- and

- (ii) to be dedicated as land, paid as money-in-lieu of land or deferred by caveat pending future subdivision.

(7) Voluntary Municipal Reserve Dedication

Municipal reserve may be allowed to be dedicated in excess of the requirements of the Municipal Government Act on a voluntary basis through the subdivision process subject to a site specific evaluation of the proposal by the Subdivision Authority.

(8) Deferral of Municipal Reserve

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

10.2 Environmental Reserve

10.2.1 Purpose

The purpose of these policies is to provide a basis for making decisions on the dedication of environmental reserve (ER) within the Stoney Industrial Area. The dedication of ER will mainly occur within the Conservation Area as shown on the Land Use Concept map but may also involve natural wetlands or other environmentally significant features located outside this area. In most cases, an environmentally significant feature will be required to be dedicated as ER land in accordance with the Municipal Government Act. Where this is not possible or feasible, other alternatives for addressing the protection of the feature will be considered. Alternatives include the dedication of municipal reserve and the purchase of land by The City for park purposes. Any purchase of land will be subject to the municipal budgetary process and evaluated in relation to the needs of other areas and city-wide spending priorities.

10.2.2 Policies

(1) Dedication of Environmental Reserve

Lands within the Conservation Area, or elsewhere within the Stoney Industrial Area, comprising environmentally significant areas that qualify as ER under the *Municipal Government Act*, should be dedicated as ER through the subdivision process.

(2) Alternative Protection of Environmentally Significant Areas

- (a) Where determined practical and feasible, lands within the Conservation Area, or elsewhere within the Stoney Industrial Area, comprising environmentally significant areas that do not qualify as ER under the *Municipal Government Act* may be protected in their natural state through alternative means as determined appropriate by Council or an Approving Authority including, but not limited to
 - (i) dedication of the lands as creditable reserve,
 - (ii) purchase of the lands,
 - (iii) application of development controls to achieve mandatory protection of the lands, or
 - (iv) introduction of development incentives to encourage voluntary protection of the lands.

- (b) Development controls and incentives under subsection (2)(a)(iii) and (iv) may include, but are not limited to
 - (i) density bonusing systems,
 - (ii) slope - adaptive design measures,
 - (iii) building setbacks,
 - (iv) site grading restrictions, and
 - (v) enhanced landscaping treatments.

(3) Protection of Natural Wetlands as Environmental Reserve

- (a) Subject to a site specific evaluation, a natural wetland that is identified as significant on the Environmentally Sensitive Areas Map (Map D) contained in Part 2, Background Information, and that qualifies as environmental reserve under the Municipal Government Act, should be
 - (i) dedicated as environmental reserve,
 - (ii) integrated with the surrounding development,
 - (iii) engineered to remain viable and sustainable over the longer term, and
 - (iv) restored as determined necessary.
- (b) Notwithstanding (a), any other natural wetland within the Stoney Industrial Area that is not identified as significant on the Environmentally Sensitive Areas Map (Map D) contained in Part 2, Background information, may also be subject to the provisions of the subsection (a)(i) to (iv) where determined appropriate.
- (c) A natural wetland to be dedicated as environmental reserve shall be retained in a natural state except for
 - (i) the addition of passive recreational amenities such as pathways, benches and viewing areas considered necessary to enhance the public enjoyment of the area,

- (ii) naturalized planting or landscaping that restores the wetland and its immediate shoreline, and
 - (iii) grading or engineering improvements necessary to integrate the area with surrounding development and ensure its sustainability in an urban context.
- (d) Where determined to be practical and appropriate as an alternative to the dedication of environmental reserve for the protection of a natural wetland in accordance with subsection (3)(a) and (b),
- (i) the natural wetland may be allowed to be developed, and
 - (ii) an engineered wetland of an equivalent quality shall be provided in some other location as a compensatory measure.
- (e) An Outline Plan/Land Use application that contains a natural wetland shall be circulated to the Province to determine if the wetland qualifies as Crown Land.

(4) Grading of Environmental Reserve

- (a) Grading or other disturbance to lands to be dedicated as ER shall not be allowed unless
- (i) the grading or other disturbance is determined essential to facilitate urban development, and
 - (ii) no other reasonable or workable design alternative to avoid the grading or other disturbance exists.
- (b) Any grading or other disturbance allowed in accordance with (a) above shall be
- (i) minimized,
 - (ii) integrated with the landform in a compatible and adaptive manner, and
 - (iii) restored to a natural state by the developer.
- (c) Any lands to be dedicated as ER that have been graded or disturbed in the past, may be required to be restored to a natural state by the developer.

(5) Information Requirements for Environmental Reserve

Prior to Outline Plan/Land Use approval, where lands are to be dedicated as ER, the developer shall be required to submit

- (a) a field surveyed boundary of the ER lands, with the boundary to be shown on the Outline Plan,
- (b) a hydrological, geotechnical or other study considered necessary to define the nature and extent of the ER lands, including floodway and slope stability boundaries,
- (c) a biophysical impact assessment for the ER lands,
- (d) a preliminary grading plan showing the extent of any grading or disturbance proposed on the ER lands, including grading for roads, pathways and stormwater facilities, and
- (e) a landscape concept plan showing the proposed landscape and method of restoration for the ER lands that have been or are to be graded or disturbed.

(6) Voluntary Dedication of Environmental Reserve

- (a) A developer may be allowed to dedicated in excess of the requirements of the *Municipal Government Act* on a voluntary basis through the subdivision process subject to a site specific evaluation of the proposal by the Subdivision Authority.
- (b) Notwithstanding Policy (4), the grading and restoration of ER dedicated in accordance with subsection (6)(a) shall be addressed on a site specific basis.

10.3 Stormwater Facilities on Reserve Land

10.3.1 Purpose

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

10.3.2 Policies

(1) Stormwater Ponds on Reserve Land

- (a) A stormwater pond shall be located on a public utility lot.

- (b) Notwithstanding (a), and subject to the applicable policies, guidelines and standards in effect addressing stormwater ponds on reserve land
 - (i) stormwater detention (dry) pond may be allowed to locate on lands dedicated as creditable reserve, and

 - (ii) an engineered stormwater wetland may be allowed to locate on lands dedicated as environmental reserve where the ER comprises
 - (A) a man-made wetland to be dedicated on a voluntary basis as ER, or

 - (B) a natural wetland that is required to be engineered to ensure its sustainability in an urban context.

(2) Development of Stormwater Ponds on Reserve Land

- (a) Where an engineered stormwater wetland is dedicated as ER, the pond shall be
 - (i) designed and managed in a satisfactory manner, and

 - (ii) developed to enhance the wildlife habitat and to provide for

recreational opportunities.

- (b) Municipal reserve land may be dedicated in conjunction with ER land accommodating an engineered stormwater wetland, where the reserve land is considered necessary to complement the recreational use and wildlife habitat relating to the pond.
- (c) An engineered stormwater wetland dedicated as ER shall be located and configured to enhance and support the natural open space system.

(3) Evaluation of Stormwater Ponds on Reserve

Prior to Outline Plan/Land Use approval, where a stormwater facility is proposed to be located on reserve land, a developer should submit a

- (a) stormwater management report,
- (b) conceptual design plan,
- (c) preliminary grading plan,
- (d) restoration/landscape plan,
- (e) biophysical impact assessment report, and
- (f) such other information determined necessary in order to demonstrate compliance with the established policies, guidelines and standards of The City and the Joint Use Co-ordinating Committee.

11.0 INTERFACE POLICIES

11.1 Interface Treatment

11.1.1 Purpose

The purpose of these policies is to provide for a compatible interface between private development and Nose Creek, entranceway roads and residential areas bordering the Stoney Industrial Area. The policies will apply to private lands adjacent to:

- Nose Creek, or the ravine, a wetland, an escarpment, a ravine or other environmentally significant feature adjacent to the creek;
- entranceway roads that include Deerfoot Trail NE, Stoney Trail NE, Airport Trail NE, Country Hills Boulevard NE and 96 Avenue NE (but exclude Barlow Trail since this road is already addressed within the approved document entitled Improving Calgary's Entranceways)
- a residential area located within the communities to the west.

The policies are general in nature and have been refined through the more specific design guidelines contained within Appendix 1.

11.1.2 Policies

(1) Compatible Interface

Any development adjacent to Nose Creek, an entranceway road or a residential area shall provide for a compatible and appropriate interface treatment through the introduction of such measures as

- (i) setbacks that
 - (A) reduce any adverse visual impact of the development when viewed from public lands, and
 - (B) provide the protection for environmentally significant features,
- (ii) yards that
 - (A) achieve an appropriate separation distance for development, and
 - (B) accommodate suitable landscaping and screening,
- (iii) fencing that
 - (A) enhances the interface treatment of a site, and

- (B) defines the boundary between public and private lands,
- (iv) screening that
 - (A) enhances the visual appearance of a site, and
 - (B) minimizes the visual impact of parking, loading and other outdoor activities,
- (v) storage areas that
 - (A) are appropriately located and screened to minimize their visual impact, and
 - (B) are oriented and designed in a compatible manner,
- (vi) landscaping that
 - (A) compliments the built form, and
 - (B) provides year-round screening in an effective manner,
- (vii) architecture that
 - (A) reduces the massing of buildings, and
 - (B) is visually appealing and attractive.

(2) Co-ordinated Design

Any development adjacent to Nose Creek, an entranceway road or a residential area shall present a visually attractive image to the public by co-ordinating the elements of site design and building architecture in a suitable and appropriate manner.

(3) Private Maintenance Obligations

- (a) The formation of Business Associations or other private bodies to assume the ongoing maintenance obligations for fencing, landscaping, signage and other amenities in a comprehensive manner on sites interfacing with residential areas, entranceway roads and open space along the Nose Creek corridor shall be encouraged and supported.

- (b) In conjunction with an Outline Plan/Land Use Amendment application, information shall be submitted that identifies the method to be introduced to address the private maintenance and replacement of amenities that interface with residential areas, entranceway roads and open space along the Nose Creek corridor.

11.2 Design Review Process

11.2.1 Purpose

The purpose of these policies is to provide for a process for reviewing the design of development projects located adjacent to Nose Creek, an entranceway road or a residential area. This development will need to be evaluated in the context of the design guidelines contained within Appendix 1. The guidelines are to be incorporated into the land use controls and outline plan conditions applied to the site or introduced directly through subdivision and development permit approval process. Unlike policies, the guidelines are inherently flexible, and can be varied or revised as determined appropriate provided that it can be demonstrated that the resulting alternative design solution will create a suitable and compatible interface treatment. Where a variance or revision to a guideline is requested, plans and other supporting information showing the alternative design solution will need to be submitted.

11.2.2 Policies

(1) Application of Guidelines

The design guidelines contained within Appendix 1 shall apply to any lot located adjacent to

- (a) Nose Creek, including ravines, wetlands and escarpments along the creek,
- (b) an entranceway road, and
- (c) a residential area.

(2) Compliance with Guidelines

- (a) Subject to (3) and (4) below a Land Use application, subdivision application and development permit application should comply with the Design Guidelines.

- (b) Compliance to the design guidelines contained within Appendix I should not be interpreted as having an exemption from
 - (i) compliance with any other design related policies, standards or requirements applicable to the proposal, and
 - (ii) application of additional design guidelines or standards to the site.

(3) Implementation of Guidelines

- (a) As determined appropriate, the design guidelines shall be
 - (i) incorporated into the land use controls or outline plan conditions applied to a site at the Outline Plan/Land Use Approval stage, or
 - (ii) applied directly by the Approving Authority at the development or subdivision approval stage.
- (b) The land use controls or outline plan conditions applied to a site in accordance with subsection (a)(i) need not necessarily contain the exact wording as the design guideline but may be revised as determined necessary provided the general intent of the guideline is achieved.
- (c) In order to implement the design guidelines, the principle uses within a land use district applied to site adjacent to
 - (i) Nose Creek, including ravines, wetlands and escarpments along the creek,
 - (ii) on entranceway road, and
 - (iii) a residential area,should be discretionary.

(4) Variance of Guidelines

- (a) A Design Guideline may be varied where it is determined that the alternative design proposal

- (i) represents an equivalent or improved solution, and
 - (ii) complies with the policies of Section 11.1.2.
- (b) A request to vary a Design Guideline shall
- (i) be approved in a uniform and consistent manner on a series of sites at the Outline Plan/Land Use approval stage as opposed to an individual site, or
 - (ii) where (i) cannot be achieved due to existing circumstances, only be approved on an individual site where it will result in compatible and co-ordinated development in relation to the adjacent sites, and
 - (iii) include the appropriate plans and other supporting information considered necessary to evaluate the alternative design solution.

12.0 Transportation Policies

12.1 Road Network

12.1.1 Purpose

The purpose of these policies is to provide for a regional and local road network that is functional, safe and efficient. In addition, the road network should minimize the impact on natural features, integrate the various types of development within the area and accommodate public transit. The road network within the Stoney Industrial area consists of regional roads (freeways, expressways, majors), which provide critical links for traffic to and through the area, and internal roads (majors, industrial standard roads), which accommodate local traffic. The general alignment of the regional and internal roads is shown on the Land Use Concept map.

12.1.2 Policies

(1) Transportation and Utility Corridor

- (a) The Transportation and Utility Corridor (TUC) and the Stoney Trail NE alignment shown on the Land Use Concept map may be subject to refinement by the Province of Alberta.
- (b) Any surplus TUC lands should, where possible, be incorporated into the design of the adjacent lands.
- (c) No development, including berming, grading or other land disturbance, shall be allowed within the TUC without permission being granted by the Province of Alberta.

(2) Deerfoot Trail

- (a) No development, including berming, grading or other land disturbances, shall be allowed within the Deerfoot Trail NE right-of-way without permission being granted by the Province of Alberta.
- (b) The construction of a right-out egress southbound from 128 Avenue NE to Deerfoot Trail NE may occur in advance of the construction of the future half diamond interchange planned at this location.

(3) Regional Roads

- (a) The regional road rights-of-way, and the related interchange areas shall be generally located as shown on the Land Use Concept map.
- (b) The final alignment of major roads including 128 Avenue NE and Barlow Trail NE, and the intersections and interchanges along Airport Trail NE, shall be determined through a Design Study.
- (c) Prior to completion of a Design Study, land use or subdivision approval on lands adjacent to 128 Avenue NE, Barlow Trail NE or Airport Trail NE may be withheld where the approval can potentially compromise the final alignment of these roads.
- (d) The Regional Road network should provide for the use of High Occupancy Vehicle (HOV) lanes at appropriate locations in order to better manage demand for regional vehicle trips. HOV lanes would be implemented to also support the public transit strategy for the area, and further, that the introduction of implementation of an HOV lane would be subject to a transportation study to evaluate system-wide impact.

(4) Internal Roads

- (a) The standards of the internal road network shown on the Land Use Concept map shall be re-evaluated and revised as necessary through the Outline Plan/Land Use Approval process without requiring an amendment to the map.
- (b) Internal roads that are considered to be minor in nature and do not impact the Conservation Area may be allowed to be approved through the Outline Plan/Land Use Approval process without having to be identified on the Land Use Concept map.
- (c) The internal road network should provide for
 - (i) direct connections to origin and destination points,
 - (ii) safe and efficient traffic flows, and
 - (iii) efficient bus transit routing.

(5) Road Alignments Across or within Conservation Area

- (a) Except as shown on the Land Use Concept map a public road shall not be allowed across or within the Conservation Area.
- (b) Where a road is proposed across or within the Conservation Area and the road is not shown on the Land Use Concept map
 - (i) an amendment to this map to identify the road within the area shall be required prior to Outline Plan/Land Use approval, and
 - (ii) the developer shall be required to
 - (A) provide cross-section and plans showing the impact of the road on the natural feature, and
 - (B) introduce restoration measures considered necessary to mitigate the impact of the road on the natural feature.
- (c) A bridge or other structure across Nose Creek should
 - (i) incorporate pedestrian walkways and the regional pathway,
 - (ii) facilitate wildlife movement, and
 - (iii) be sensitively and compatibly designed in relation to the creek.

(6) Retention of Original 128 Avenue Road Right-of-Way

As determined appropriate, the portion of the original 128 Avenue right-of-way previously dedicated adjacent to the residential area to the west that is not required to form part of this road shall be retained as open space.

(7) Road Network Overlay Area

- (a) A proposed Outline Plan/Land Use Amendment application and where determined appropriate, a subdivision application or a development permit application, on lands located within the Road Network Overlay Area as shown on the Land Use Concept map shall
 - (i) be circulated to the Calgary Airport Authority for review, and
 - (ii) be evaluated in relation to the current transportation planning affecting the area by The City and the Calgary Airport Authority as identified in the Airport Master Plan.
- (b) The acquisition of land or rights-of-way for roads or other transportation infrastructure within the Road Network Overlay Area as shown on the Land Use Concept map shall occur on an opportunity basis through such mechanisms as purchase from the landowner, dedication through the subdivision approval process or expropriation.

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12.2 Pedestrian Circulation

12.2.1 Purpose

The purpose of these policies is to provide for direct and convenient pedestrian circulation within the Stoney Industrial Area by means of regional and local trails, pathways, sidewalks, and other features. Regional pathways are intended to create connections through the area and within corridors such as Nose Creek, the ravines and the powerline right-of-way. Local trails, pathways, sidewalks and walkways, should combine to form an interconnected system throughout the area that is pedestrian and transit supportive.

12.2.2 Policies

(1) Regional Pathways

- (a) The regional pathway should
 - (i) generally be aligned as shown on the Land Use Concept map, and
 - (ii) wherever possible, be located within reserve land.
- (b) Where the regional pathway cannot be located within reserve land, it may locate within a road right-of-way in the form of a pathway constructed in place of a sidewalk.
- (c) To minimize any adverse impact of the regional pathway on a natural feature within the Conservation Area, the pathway may be required to
 - (i) locate on reserve land along the top-of-bank on one or both sides of the feature, or
 - (ii) incorporate measures such as bridges and retaining walls in its design where located within the feature.
- (d) The prededication of land for and the construction of the regional pathway on an entire site shall be encouraged and supported in order to active the completion of the pathway system in a timely and comprehensive manner.

(2) Trails, Sidewalks and Walkways

- (a) The alignment of trails, sidewalks and walkways should be determined at the Outline Plan/Land Use Amendment stage.
- (b) Trails, sidewalks and walkways should be located to
 - (i) accommodate short, convenient and direct pedestrian connections to reserve land, the regional pathway system and transit bus stops,
 - (ii) promote walking, cycling and transit use, and
 - (iii) create direct and efficient pedestrian routes with commercial, office and other higher intensity development areas.
- (c) Whenever possible, road standards that incorporate sidewalks on both sides of the road shall be provided on roads accommodating potential public transit routes.

(3) Building and Site Design

- (a) Sites should be situated and designed to provide direct pedestrian and cycle connections to building entrances from regional pathways, walkways, trails and transit stops.
- (b) Developers should be encouraged to provide locker rooms and shower facilities within buildings for employees using regional pathways, walkways and trails to commute to work.

12.3 Public Transit

12.3.1 Purpose

Transit service plans for the area includes the development of direct, cross-town bus route connections to the future Northeast LRT and the Bus Rapid Transit/ North Central LRT service that is planned along Harvest Hills Boulevard NE and, potentially, Nose Creek in the northeast of Calgary. The transit bus connections will access the Stoney Industrial Area via 128 Avenue NE, Country Hills Boulevard NE and 96 Avenue/Airport Trail NE. These transit bus services will facilitate access from major transit corridors serving commuters living in the surrounding communities. Currently, LRT is not planned to be routed through or into the Stoney Industrial Area.

12.3.2 Policies

(1) Transit Service

- (a) Transit service requirements should be achieved, through the provision of
 - (i) direct roadway connections that facilitate the efficient operation of transit bus service,
 - (ii) sidewalks along both sides of roads that are identified for transit bus service,
 - (iii) sidewalks along one side of roads that provide connections to roads with transit bus servicing, and
 - (iv) walkway connections that allow pedestrians to access bus service from areas not directly serviced by transit.
- (b) Buildings and parking areas should be located and oriented to minimize the walking distance to transit bus zones.

(2) Transit Stop Distribution

Transit bus zones should be located to

- (i) minimize walking distances from business development,
- (ii) serve higher density commercial and business-related development directly, and
- (iii) facilitate convenient transit service.

(3) Transit Routes

The transit routes should

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

(4) Transit Shelters

Transit shelters should be located at transit stops, particularly at those stops serving commercial and higher intensity business-related development.

(5) Transit Connections

- (a) A “bus only” transit and pedestrian connection between Cell A and the adjacent residential community to the west may be accommodated within the existing right-of-way created for this purpose.
- (b) A public roadway accommodating vehicular traffic between Cell A and the adjacent residential community to the west shall not be allowed.

13.0 SERVICING POLICIES

13.1 Utility Services

13.1.1 Purpose

The purpose of these policies is to provide for a suitable level of utility servicing within the Stoney Industrial Area. Any development within the area will need to be fully-serviced with piped municipal utilities (water, sanitary sewer and stormwater) as well as shallow utilities (gas, electrical, telecommunications). Utilities will need to be constructed in sequence as development proceeds, and rights-of-way and easements will need to be acquired to accommodate the extension of utility services through a site. Utility alignments will be identified at the Outline Plan/Land Use Approval stage. Limited-serviced subdivisions will not be allowed within the Stoney Industrial Area.

13.1.2 Policies

(1) Municipal Utilities

- (a) Development within the Stoney Industrial Area shall be serviced with municipally piped water, sanitary sewer and stormwater utilities.
- (b) The alignment and capacity of water distribution and feeder mains, sanitary sewer trunks and mains and storm sewer trunks and mains should be to the satisfaction of The City.
- (c) Utility rights-of-way and easements shall be required to accommodate municipal utilities within a site as determined necessary.

(2) Shallow Utilities

- (a) Development within the Stoney Industrial Area shall be serviced with shallow utilities.
- (b) The location of shallow utilities and the provision of related line assignments, easements and rights-of-way, should be addressed to the satisfaction of the utility companies.
- (c) Utility rights-of-way and easements shall be provided to accommodate shallow utilities within a site as determined necessary.

(3) Utility Alignments

- (a) Prior to Outline Plan/Land Use approval, a developer shall submit studies and information determined necessary to identify the location and alignment requirements for municipal utilities within a site.
- (b) Where it is determined that utilities are required to be aligned across Nose Creek or an escarpment, the utilities should be, wherever possible, be located within a road right-of-way.
- (c) A developer may be required to provide, or enter into an agreement to provide when required, utility rights-of-way or easements necessary to accommodate the extension of municipal utilities through a site in advance of development to allow for the servicing of an adjacent site.

(4) Limited-Serviced Subdivisions

- (a) The subdivision of land to create unserviced or limited-serviced parcels shall not be allowed within the Stoney Industrial Area on the basis that the subdivision will tend to prematurely fragment the land base, rendering resubdivision, redevelopment or retrofitting of municipal services more difficult in the future due to the inherent ownership, financial and development constraints created.
- (b) Notwithstanding (a), the subdivision of land to create unserviced or limited serviced parcels may be allowed in select circumstances only where it is determined that the subdivision will
 - (i) be agricultural-related or necessary to resolve a unique ownership issue, and
 - (ii) not compromise the eventual transition of the site to a fully-serviced subdivision.

13.2 Water Distribution

13.2.1 Purpose

The purpose of these policies is to provide for a suitably designed water distribution system to serve development within the Stoney Industrial Area. The area encompasses two water pressure zones: The North Hill Water Reserve Zone and the Greenview Water Pressure Zone. Water feeder mains are aligned along the CPR rail line on the west side of the area and along 128 Avenue NE. A 400 mm distribution main is in place along 96 Avenue NE. A future large feeder main will be located along Country Hills Boulevard NE to support the North Hill Pressure Zone as development proceeds to the east. Development within the area will need to connect to those feeder mains in response to the rate and direction of development. Pressure reduction valves may be required to serve the lower lands along Nose Creek.

13.2.2 Policies

(1) Design of Water Distribution System

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

(2) Impact of Water Distribution System

Insofar as possible, the water distribution system should be aligned to minimize its impact on natural features within the Conservation Area.

13.3 Sanitary Sewers

13.3.1 Purpose

The purpose of these policies is to provide for a suitably designed sanitary sewer system to service the Stoney Industrial Area. The existing Nose Creek Sanitary Sewer Trunk extends along the CPR Rail line, 96 Avenue NE and 128 Avenue NE. Lands within this area will be serviced by a gravity system connecting to this trunk. East of Deerfoot Trail NE, the sewer system will extend along 128 Avenue. The lower lands east of Deerfoot Trail NE will be likely require lift stations as part of the sewer servicing system.

13.3.2 Policies

(1) Design of Sanitary Sewer System

The sanitary sewage system for the Stoney Industrial Area shall be designed to adequately and efficiently serve the ultimate development of the area.

(2) Location of Stormwater Management Facilities

Insofar as possible, the sanitary sewage system shall be aligned to minimize its impact on natural features within the Conservation Area.

13.4 Stormwater Management

13.4.1 Purpose

The purpose of these policies is to provide for the development of a suitable and efficient stormwater management system to serve development within the Stoney Industrial Area. A Master Drainage Plan has been prepared for the area that proposes an extensive network of stormwater facilities to manage storm drainage and direct it into Nose Creek. The developer will be required to construct the stormwater facilities in accordance with established standards, and the location, size and configuration of these facilities will be determined at the Outline Plan/Land Use Amendment stage. Stormwater run-off is to be restricted to the rates set by the Nose Creek Drainage Study and stormwater quality entering the creek will be required to meet the standards set by Alberta Environmental Protection for water quality..

13.4.2 Policies

(1) Design of Stormwater Management System

The Stormwater Management System for the Stoney Industrial Area shall be designed to adequately and efficiently serve the ultimate development of the area.

(2) Location of Stormwater Management Facilities

- (a) Stormwater facilities shall be generally located as shown on the Storm Servicing Map (Map K), Background Information, with the location subject to refinement at the Outline Plan/Land Use Approval stage through the submission of a Stormwater Management Study.
- (b) Where a stormwater facility is required to serve a catchment area under multiple landownership, the various landowners involved shall be encouraged to co-operate in the location, design, timing and financing of the facility with the resolution of these matters to be to the satisfaction of the Approving Authority.
- (c) Where the landowners cannot reach a consensus on those matters identified under (b) above, the Approving Authority should identify the location of and mechanism for land acquisition for the stormwater facility prior to Outline Plan/Land Use approval within the stormwater catchment area.

- (d) Where, due to the landownership pattern, the construction of a stormwater facility necessary to serve a stormwater catchment area will be delayed, an interim stormwater management solution shall be introduced as a requirement of Outline Plan/Land Use approval within the stormwater catchment area.

(3) Best Management Practices for Stormwater Management

- (a) As part of the preparation of a Stormwater Management Plan, “Best Management Practices” and alternatives for stormwater quality and quantity enhancement shall be assessed with regard to the following:
 - (i) developing stormwater facilities with a preference for source controls as opposed to end-of-pipe solutions, and
 - (ii) introducing naturalized methods, such as natural wetlands, to mitigate the effects of stormwater run-off on Nose Creek as opposed to hard engineering measures.
- (b) The stormwater management system should introduce mitigation measures where determined appropriate to address the potential impact on the water quality of existing wetlands and Nose Creek.
- (c) That the Administration explore innovative stormwater management systems that incorporate best practices, including technologies that allow the re-use of stormwater, in all development adjacent to the Nose Creek Valley.

(4) Stormwater Facilities in Relation to Airport

In order to mitigate potential local hazards in the vicinity of the Calgary International Airport, stormwater retention facilities should, as determined appropriate

- (a) incorporate design measures that ensure that the facilities do not become attractions to birds, especially waterfowl, and
- (b) avoid locations directly under runaway approaches.

14.0 Growth Management Policies

14.1 Staging of Growth

14.1.1 Purpose

The purpose of these policies is to ensure that urban growth within the Stoney Industrial Area proceeds in an efficient and economical manner through the Outline Plan/Land Use Approval process. An Outline Plan/Land Use application will need to comprise a logical development and servicing area, and any utility and transportation infrastructure issues will need to be resolved prior to approval of the application. Where servicing or transportation capacity constraints arise due to the timing of municipal infrastructure construction, development may need to be staged in response to these constraints.

14.1.2 Policies

(1) **Logical Planning and Servicing Area**

- (a) An Outline Plan/Land Use application shall
 - (i) comprise a logical and feasible planning and servicing area, and
 - (ii) provide for an efficient and economical pattern of development.
- (b) Any proposed Outline Plan/Land Use application, or a subdivision or development permit application, shall be suitably serviced with utility and transportation infrastructure.

(2) Evaluation of Outline/Land Use Application

In evaluating an Outline Plan/Land Use application in terms of its compliance with (1) above, the following factors shall be considered:

- (i) the ability to identify the future utility infrastructure improvements and resolve any related municipal financing responsibilities for these improvements in a satisfactory manner for the site,
- (ii) the ability to identify the future on-site and downstream transportation infrastructure improvements, and resolve the municipal financial responsibilities for these improvements in a satisfactory manner for the site, and
- (iii) the continuity of the site to the existing and emerging pattern of urban growth in the area.

(3) Staging of Land Use Approval

- (a) Where it is determined that Land Use approval needs to be staged in conjunction with the timing of required transportation network infrastructure improvements, such staging shall occur in a logical and contiguous manner within a planning cell outward from these infrastructure improvements, with those areas closer to the improvements given higher priority to receive land use approval.
- (b) Notwithstanding (a), where unique landownership, financial or development factors exist, Land Use approval may be allowed to occur in a non-sequential manner within a planning cell.

14.2 Financing of Growth

14.2.1 Purpose

The purpose of these policies is to address the timing (rate) of urban growth as determined through the Land Use Approval process in relation to the financing of the roadway and utility infrastructure improvements necessary to serve such growth. Infrastructure improvements would be funded by The City and the developer. A developer’s requirements to finance infrastructure improvements would normally be addressed through the Standard Development Agreement or, in select circumstances, a special development agreement. The City’s financing requirements for infrastructure improvements are subject to the municipal budgeting process.

14.2.2 Policies

(1) Financing of Development

Unless otherwise provided for through a policy within this Plan, any expenditure for facilities or improvements proposed within the plan shall be funded in accordance with the standard practice for land development in effect at the time the facilities or improvements are being considered.

(2) Financing by The City

- (a) Any public expenditures for improvements or municipal programs proposed within this Plan to be funded by The City shall be
 - (i) subject to The City’s capital budgeting priorities and approval process, and
 - (ii) evaluated in relation to the needs of other areas and city-wide spending priorities.

(3) Financing by Developer

- (a) A developer, as and when subdivision and development proceeds on a parcel of land, and in accordance with the Standard Development Agreement in place at the time, shall pay an appropriate share of the costs of infrastructure required to service a site.

- (b) Where a developer finances the cost of extending infrastructure that would normally be financed by an adjacent developer, an endeavour to assist from the benefiting developer will be provided for in accordance with the Standard Development Agreement.

- (c) Where a developer finances the cost of extending infrastructure that would normally be financed by The City, The City shall enter into a servicing and financing agreement with the developer that details the facilities to be constructed and the method and timing of cost-recovery to the developer.

- (d) Each developer shall pay applicable acreage assessments.

14.3 Co-ordination of Growth

14.3.1 Purpose

The purpose of these policies is to provide for co-ordination between the Land Use Approval process and the budgeting process for publicly-financed utility and transportation infrastructure necessary to service growth within the Stoney Industrial Area. The policies identify the basic options that Council may exercise where co-ordination issues arise. These options would typically need to be exercised at the Land Use Approval stage.

14.3.2 Policies

(1) Co-ordination of Land Use Approval and Budgeting Priorities

The Land Use Approval process and the budgeting process for municipally or provincially-financed utility and transportation infrastructure improvements shall be co-ordinated in a manner satisfactory to Council.

(2) Co-ordination Options

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

- (a) a commitment from The City or the Province to undertake the financing of the infrastructure improvements shall be received, or
- (b) the matter shall be addressed in some other manner satisfactory to Council, including but not restricted to,
 - (i) entering into a special agreement with the developer that addresses funding requirements for infrastructure improvements,
 - (ii) granting Land Use approval to enable development to proceed and realigning budgetary priorities accordingly,
 - (iii) granting Land Use approval to enable development to proceed and continuing to monitor the situation in relation to budgeting priorities, or
 - (iv) withholding Land Use approval or otherwise placing limitations on development until such time as the funding for the required infrastructure improvements is resolved.

14.4 Decisions on Growth

14.4.1 Purpose

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

14.4.2 Policies

(1) Resolution of Growth Management Issues

- (a) Prior to submission of an Outline Plan/Land Use application, a developer should meet with the Administration to review the proposal with respect to its conformity with policies of this section.

- (b) Where issues are identified through the Outline Plan/Land Use Approval process concerning the policies contained in this section, a developer should be encouraged and given the opportunity to address and resolve those issues at the pre-application stage or the initial application stage recognizing that such issues may be fundamental to the support and approval of an application.

(2) Growth Management Steering Committee Recommendation

Where determined necessary, a pending or outstanding Outline Plan/ Land Use application that presents issues relative to the funding of municipal capital projects necessary to support the proposal, the application may be referred to the Growth Management Steering Committee for a recommendation.

15.0 EVALUATION Policies

15.1 Outline Plan/Land Use Review

15.1.1 Purpose

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

15.1.2 Policies

(1) Comprehensive Studies

- (a) Prior to Outline Plan/Land Use approval, supporting information, above the normal application requirements, may be required to be submitted in order to assist Council and Calgary Planning Commission in a evaluating a proposal in terms of its conformity with this plan.

- (b) When the required supporting information is not provided by a developer in a satisfactory manner, the Outline Plan/Land Use application shall not be approved.

(2) Concept Plans

- (a) Prior to Outline Plan/Land Use approval or subdivision approval, as determined necessary, a concept plan may be required to be submitted in order to assist Council or Calgary Planning Commission in evaluating a proposal in terms of its conformity with this Community Plan.

- (b) Where a concept plan is required either through a policy in this plan, or as part of the Outline Plan/Land Use Review process, the plan should show conceptually the proposed
 - (i) land use areas,
 - (ii) building locations,
 - (iii) vehicular access/egress routes,
 - (iv) parking areas,
 - (v) public roads,
 - (vi) transit stops,
 - (vii) pedestrian connections,
 - (viii) regional pathways,
 - (ix) public parks,
 - (x) stormwater ponds, and
 - (xi) adjacent roads and development.

- (c) The above requirements may be relaxed or modified as determined necessary in response to a specific proposal.

- (d) Where a required concept plan is not provided in a satisfactory manner, the Outline Plan/Land Use amendment shall not be approved.

15.2 Transportation review

Deleted

Bylaw 59P2024

15.3 Trip Generation Review

Deleted

Bylaw 59P2024

15.4 Market Review

15.4.1 Purpose

The purpose of these policies is to provide for the analysis of a commercial proposal from a market perspective. The analysis will be required in conjunction with an Outline Plan/Land Use application to assist in evaluating the merits of the commercial proposal and the potential positive or detrimental impacts the project may have on the retail hierarchy in the north sector of the City. The analysis will take the form of a market demand and impact study submitted by a professional market analyst.

15.4.2 Policies

(1) Planned Function of Commercial Development

- (a) A proposed commercial development shall complement and support the existing and planned retail hierarchy within the north sector of the City.

- (b) Further to (a), a proposed commercial development shall be analysed in terms of the
 - (i) market demand for additional commercial development needed to serve the Stoney Industrial Area and the north sector of the City, and

 - (ii) market impact on existing or planned commercial development within the Stoney Industrial Area and the north sector of the City.

(2) Submission of Market Demand and Impact Analysis

- (a) Prior to Outline Plan/Land Use approval, a developer shall submit a market demand analysis and a market impact analysis to demonstrate compliance with (1) above.
- (b) Notwithstanding (a), a market demand analysis and market impact analysis may not be required where a proposed commercial development is not considered to be significant due to its location, size or function.
- (c) A market demand analysis and market impact analysis shall be prepared by a professional market analyst in accordance with any guidelines or requirements established by Council or an Approving Authority.

(3) Review of Market Demand and Impact Analysis

A market demand analysis or a market impact analysis may be required to be evaluated by an independent consultant as part of the review process with the cost of this evaluation to be borne by the developer.

15.5 Development Review

15.5.1 Purpose

The purpose of these policies is to provide for compatible development within the Stoney Industrial Area. The policies establish compatibility criteria that development should achieve and a review process that development should undergo. The review process may require the submission of a development impact statement at either the Land Use approval or development permit approval stages, and the corresponding imposition of mitigation measures to address any impacts where determined appropriate.

15.5.2 Policies

(1) Development Impact

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

(2) Development Impact Statement

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

(3) Mitigative Measures

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

15.6 Environmental Review

15.6.1 Purpose

The purpose of these policies is to provide for the evaluation of the impact of an Outline Plan/Land Use application within the Stoney Industrial Area from an environmental perspective. This evaluation will involve circulation of a proposal to the appropriate external agencies for review and comment; and, the submission of the appropriate environmental, biophysical, archeological and grading information necessary to undertake this review.

15.6.2 Policies

(1) Environmental Site Assessment (ESA)

- (a) Prior to Outline Plan/Land Use approval, a developer should
 - (i) submit a Phase 1 Environmental Site Assessment for the subject site that identifies any actual or potential soil and groundwater contamination and determines if the site is suitable for the intended use,
 - (ii) if the Phase 1 ESA identifies any actual or potential site contamination, submit a Phase 2 ESA to determine if there is a requirement for remediation or risk management on the site, and
 - (iii) if the Phase 2 ESA determines a need for site remediation or risk management, submit a Phase 3 ESA to address the manner and extent that the site will be remediated or managed to render it suitable for the intended use.
- (b) An ESA shall be prepared by a qualified professional in accordance with accepted guidelines, practices and procedures that include but are not limited to those of the Canadian Standards Association.
- (c) Prior to Outline Plan/Land Use approval, a developer shall submit an assessment of the environmental impact of any operating or abandoned oil or gas wells that may impact the site.

(2) Biophysical Impact Assessment (BIA)

- (a) Prior to Outline Plan/Land Use approval, where the proposal may impact Nose Creek or another environmentally significant areas, the developer should submit a Biophysical Impact Assessment prepared by a qualified consultant to evaluate the impact and identify any mitigative measures to be introduced.

- (b) Where required, the developer shall undertake those mitigative measures for the subject site identified in the Biophysical Impact Assessment.

(3) Historical Resources Impact Assessment (HRIA)

- (a) Prior to Outline Plan/Land Use approval,
 - (i) submit a Stage 1 Historical Resources Impact Assessment for the subject site, and

 - (ii) if identified as necessary through the Stage 1 Historical Resources Impact Assessment, submit a Stage 2 Historical Resources Impact Assessment.

- (b) Where required, the developer shall undertake the protection or mitigation measures for the subject site identified in the Historical Resources Impact Assessment.

(4) Hydrological Study

- (a) The floodplain and floodway boundaries of Nose Creek shall be determined by the Province, through a Hydrological Study and identified within the Land Use Bylaw.

- (b) Where the floodplain and floodway boundaries of Nose Creek have not been determined by the Province and an Outline Plan /Land Use Amendment application for a site containing lands that are potentially located within those boundaries is submitted, a developer shall prepare a Hydrological Study that defines the boundaries to the satisfaction of the Province prior to the approval of that application.

(5) Site Grading Plan

- (a) A Site Grading Plan should not be approved in proximity to Nose Creek or a natural wetland until such time as an Outline Plan/Land Use application for the site has been approved.

- (b) Where grading occurs in proximity to Nose Creek or a natural wetland
 - (i) detailed information showing the extend and impact of the grading on the creek or a wetland shall be provided, and

 - (ii) the conservation measures to be introduced to address any grading impacts on the creek or a wetland.

15.7 Financial Review

15.7.1 Purpose

The purpose of these policies is to ensure that major infrastructure improvements required to serve development within the Stoney Industrial Area are identified prior to Outline Plan/Land Use approval. This infrastructure would include both on-site and off-site roadway and utility improvements. It is intended that the information would form part of the decision-making process on an Outline Plan/Land Use proposal.

15.7.2 Policies

(1) Infrastructure Improvement Analysis

As part of an Outline Plan/Land Use application, a developer shall identify

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

(2) Public Infrastructure Improvements in Relation to Budgeting Priorities

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

(3) Report to Council

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

15.8 Servicing Review

15.8.1 Purpose

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

15.8.2 Policies

(1) Water Distribution System

In conjunction with an Outline Plan/Land Use Amendment application, information shall be submitted to demonstrate that the subject site development can be serviced in accordance with the overall design of the water distribution system for the area.

(2) Sanitary Sewage System

In conjunction with an Outline Plan/Land Use Amendment application, a sanitary sewer servicing analysis shall be submitted to demonstrate that

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

(3) Stormwater Management System

In conjunction with an Outline Plan/Land Use Amendment application, a Stormwater Management Plan, consistent with the Master Drainage Plan as approved by The City and the Province, shall be submitted to demonstrate that

- (i) the subject site can be serviced in accordance with the overall design of the stormwater management system for the area, and
- (ii) the system will be designed to accommodate off-site drainage as determined appropriate.

15.9 Design Review

15.9.1 Purpose

The purpose of these policies is to provide for a suitable and compatible site and building design within the Stoney Industrial Area. This design may be reviewed at either the Land Use Approval stage (in the case of a proposed site specific redesignation) or the development permit approval stage. In either case, a developer will be required to provide plans and other supporting information to demonstrate that the layout of the site and the architecture of the buildings is acceptable.

15.9.2 Policies

(1) Site Design

The design, layout and relationship of a site shall be compatible, functional and appropriate.

(2) Building Design

The design, character and appearance of a building shall be compatible and visually attractive.

(3) Design Analysis

In conjunction with

- (i) an Outline Plan/Land Use application to accommodate a specific development on a site, or
- (ii) a development permit application,

plans and supporting information, including, if required, architectural renderings and building elevations, should be submitted as determined appropriate in order to demonstrate compliance with (1) and (2) above.

15.10 Transit Review

15.10.1 Purpose

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

15.10.2 Policies

(1) Transit Service Coordination

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

(2) Transit Impact Analysis

A Transit Impact Analysis shall address

- (i) proposed and existing public transit routes, and transit stops in relation to the site,
- (ii) transit coverage areas and walking distances in relation to parcels or building locations,
- (iii) pedestrian connections from the site to transit stops,
- (iv) any enhanced transit facilities to be included in the development, and
- (v) any other matters determined necessary to achieve the long term co-ordination with public transit service in the area.

15.11 Pedestrian Circulation Review

15.11.1 Purpose

The purpose of these policies is to provide for convenient, direct and accessible pedestrian and bicycle routes throughout the Stoney Industrial Area including the Nose Creek corridor. In this regard, a Pedestrian/Bicycle Routing Plan will need to be provided as part of an Outline Plan/Land Use application. This plan will need to identify both regional and local pedestrian routes in relation to the site as well as the connections to the regional pathway system, transit stops and local service commercial facilities.

15.11.2 Policies

(1) Pedestrian/Bicycle Routing Efficiency

In conjunction with an Outline Plan/Land Use Amendment application a Pedestrian/Bicycle Routing Plan should be submitted to demonstrate that a co-ordinated, direct and efficient routing network is provided for local and commuter pedestrian and bicycle trips in relation to the site and the surrounding area.

(2) Pedestrian/Bicycle Routing Plan

A Pedestrian/Bicycle Routing Plan shall address

- (i) the regional pathway system in relation to the site,
- (ii) the local pathway system (trails, sidewalks, walkways) in relation to the site,
- (iii) the connections from the site to the Nose Creek corridor, transit stops, local service commercial sites and other amenities within the area,
- (iv) any enhanced pedestrian or bicycle facilities to be provided on the site, and
- (v) a consideration of the development of an enhanced connective pedestrian/bicycle pathways to the adjacent regional pathway system.

16.0 Implementation Policies

16.1 Approval Process

16.1.1 Purpose

The purpose of these policies is to provide for the implementation of this Plan. The principle means of implementation will occur through the Outline Plan/Land Use Amendment process. Under this process, lands are retained within a holding district that will allow the development of only low intensity agricultural uses. Once it is determined appropriate for urban growth to proceed, lands will be redesignated to the applicable industrial, commercial, recreational or other districts determined appropriate. Prior to redesignation, an outline plan will need to be approved in order to resolve any subdivision design, servicing and transportation issues.

16.1.2 Policies

(1) Land Use Approval

- (a) The timing, direction and extent of urban growth within the Stoney Industrial Area shall be determined primarily through the Land Use Approval process, which establishes the land use pattern for a site and enables urban level subdivision and development of the land to proceed.

- (b) Until it is determined appropriate by Council for urban level subdivision and development to proceed, lands shall be retained within a "holding district", such as the Urban Reserve District, or a comparable district.

(2) Outline Plan Approval

Except in unique circumstances, where the future subdivision of a site is intended, Land Use approval under Policy (1) above shall not be given unless an outline plan for the site is first approved by Calgary Planning Commission.

(3) Transitional Uses

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

(4) Temporary Uses

- (a) A temporary use, such as outside storage, may be allowed on a site provided that the use does not compromise the future subdivision or development of the site.
- (b) Development of a temporary use should
 - (i) be subject to a time limit imposed through the development permit process,
 - (ii) not include permanent buildings or structures,
 - (iii) not be allowed along an entranceway road, or a residential area, and
 - (iv) be compatible and visually attractive in relation to the surrounding area.

16.2 Compliance with Applicable Legislation

16.2.1 Purpose

The purpose of these policies is to ensure that Outline Plan/Land Use, subdivision and development permit applications within the Stoney Industrial Area are reviewed in terms of conformity with the applicable Federal and Provincial regulations and, municipal bylaws, particularly as they relate to the Calgary International Airport. The Calgary International Airport Vicinity Protection Area (AVPA) Regulation identifies land uses that are restricted within the various Noise Exposure Forecast (NEF) contours that surround the airport. In addition, the Regulation places restrictions on development permit applications that might result in the accumulation of materials attractive to birds and, in turn, pose a danger to aircraft. The restrictions could have a bearing on the feasibility of constructing stormwater retention (wet) ponds in certain areas. The Federal Airport Zoning Regulations prescribe height restrictions along the various approaches to the airport. They also regulate radio transmissions and anything else that may interfere with the landing or navigation systems of aircraft. These matters require Transport Canada approval. Applications within the Stoney Industrial Area will be circulated to the Calgary Airport Authority. The Authority would then review and respond to the proposal in the context of the Provincial legislation or forward the proposal to Transport Canada where a Federal regulation applies.

16.2.2 Policies

(1) Compliance with Other Legislation and Bylaws

Nothing in this plan shall be construed to allow a planning approval to be granted on a site that does not comply with applicable Federal or Provincial Legislation, or municipal bylaws, in effect.

(2) Airport Vicinity Special Regulations

Outline Plan/Land Use applications, subdivision applications and development permit applications within the Stoney Industrial Area shall be subject to the

- (a) *Calgary International Airport Vicinity Protection Area Regulation, and*
- (b) *Calgary International Airport Zoning Regulation.*

(3) Airport Review

An Outline Plan/Land Use application and, where determined necessary, a subdivision application or development permit application, shall be referred for review and comment to

- (a) the Calgary Airport Authority, and
- (b) where determined appropriate, Transport Canada and NavCanada.

(4) Supporting Information

An Outline Plan/Land Use application and, if determined necessary, a subdivision or development permit application shall include information submitted by a developer addressing the conformity of the proposal to the Regulations identified under (2) above.

16.3 Previous Planning Approvals

16.3.1 Purpose

The purpose of these policies is to recognize planning decisions that have occurred within the Stoney Industrial Area prior to the approval of this Plan. These decisions involve land use, subdivision and development approvals on lands throughout the area. The applicable provisions of the *Municipal Government Act* will apply to these approvals. In addition, some discretion in the application of the policies will be allowed to be exercised in the case of an inconsistency between a discretionary use under a land use district applied to a site and the Land Use Concept map.

16.3.2 Policies

(1) Interpretation of Land Use Concept Map

Where a land use district has been applied to a site prior to approval of this Plan, other than the Urban Reserve District, and a discretionary use contained within the district is not consistent with the policies of the Land Use Area in which it is located as shown on the Land Use Concept map, a subdivision or development permit application to accommodate the use

- (i) shall be evaluated in accordance with the policies of the Plan, and
- (ii) where determined to be compatible and appropriate, may be approved without requiring an amendment to the Land Use Concept map.

16.4 Intermunicipal Referral

16.4.1 Purpose

The purpose of these policies is to provide for the circulation and evaluation of Outline Plan/Land Use Amendment applications by the Municipal District of Rocky View in relation to the provisions of the Intermunicipal Development Plan. This plan, approved by the Councils of the Municipal District and The City, identifies an area of mutual interest within both municipalities and establishes policies and processes for dealing with issues that may arise within the area. This area currently extends into the northerly portion of the Stoney Industrial Area.

16.4.2 Policies

(1) Intermunicipal Review

- (a) An Outline Plan/Land Use Amendment application comprising any lands within the *Intermunicipal Development Plan* area, and a subdivision application and development permit application as referenced in the plan, shall be referred to the Municipal District of Rocky View for review and evaluation in relation to the policies of the *Intermunicipal Development Plan*.
- (b) The referral of an Outline Plan/Land Use Amendment application to the Municipal District of Rocky View shall occur in accordance with the provisions of the *Intermunicipal Development Plan*.

16.5 Community Circulation

16.5.1 Purpose

The purpose of these policies is to provide for the circulation of Outline Plan/Land Use Amendment applications and development permit applications to the Community Association on sites adjacent to the residential communities to the west. This circulation will allow for comment on the proposal prior to its approval.

16.5.2 Purpose

(1) Community Association Review

An Outline Plan/Land Use application, or where determined appropriate, a development permit application for a discretionary use, on a site located west of Deerfoot Trail NE should be circulated to the Community Association representing the communities to the west for review and comment.

17.0 INTERPRETATION

17.1 General Definitions

The following general definitions shall apply:

- (1) **Abutting** means directly opposite in the case of a yard and sharing the same lot line in the case of a lot;
- (2) **Adjacent** means a lot that is contiguous with Nose Creek, or an escarpment, ravine, or wetland along the creek, entranceway road or a residential area and includes a lot that would be contiguous if not for a service road or reserve land;
- (3) **Approving Authority** means the Subdivision Authority, Development Authority or Subdivision and Development Appeal Board of The City of Calgary, as the context implies;
- (4) **Calgary Planning Commission** means the Calgary Municipal Planning Commission constituted pursuant to the Municipal Planning Commission Bylaw;
- (5) **Council** means the Council of The City of Calgary;
- (6) **Creditable Reserve Land** means the reserve owing on a parcel of land that is to be dedicated as municipal reserve (MR), school reserve (SR) or municipal and school reserve (MSR) through the subdivision approval process in accordance with the *Municipal Government Act*;
- (7) **Entranceway Road** means a major, expressway or freeway standard road that provides access and egress to and from the Stoney Industrial Area and includes Stoney Trail NE, Deerfoot Trail NE, Barlow Trail NE, Airport Trail NE, Country Hills Boulevard NE and 96 Avenue NE;
- (8) **Environmentally Significant Area** means a natural area which, because of its features or characteristics, is significant from an environmental perspective in the City, and has the potential to remain viable within an urban context;
- (9) **Gross Developable Area** means the area of a site being subdivided, excluding

Interpretation

environmental reserve, expressways, freeways and interchange lands, and any lands purchased by The City;

- (10) **Holding District** means the Urban Reserve District within the Land Use Bylaw, or an equivalent district, that retains land at a low intensity of development pending redesignation to a land use district that will allow urban level subdivision and development to occur;
- (11) **Internal Road** means an industrial major road, standard road, or other type of road that provides internal access to sites within the Stoney Industrial Area and connections to the regional road network;
- (12) **Net Developable Area** means the area of site that is being developed;
- (13) **Regional Road** means a major road, expressway or freeway that accommodates traffic flows to or through the Stoney Industrial Area and includes Deerfoot Trail NE, Stoney Trail NE, Country Hills Boulevard NE, Airport Trail NE, Barlow Trail NE, 96 Avenue NE and 128 Avenue NE.

17.2 Land Use Definitions

The following land use definitions shall apply:

- (1) **Accessory Use** means the use of land, buildings or structures for a purpose that is incidental or subordinate to the principle use of the site;
- (2) **Extensive Agricultural Use** means the use of land, buildings or structures for the purpose of the raising of crops or rearing of livestock either separately or in conjunction with one another in a unified operation but does not include an intensive agricultural use;
- (3) **Light Industrial Use** means the use of land, buildings or structures for the purpose of manufacturing, processing, fabricating, assembly, warehousing, storage and distribution of goods or materials that does not create conditions that are determined to have a significant adverse impact or are dangerous beyond the boundaries of the site by way of noise, odours, airborne emissions, outdoor lighting or vibration, conducts its operation primarily within an enclosed building and is not dependant to a significant extent upon outdoor storage of goods or materials as part of its operation, and may include, but is not limited to, indoor storage depots, warehouses, distribution centres and laboratories;
- (4) **Heavy Industrial Use** means the use of land, buildings or structures for the purpose of manufacturing, extracting, processing, fabricating or distributing goods or materials that creates conditions that are objectional or dangerous beyond the boundaries of the site by way of noise, odours, airborne emissions or vibration, or other adverse impacts and may include but is not limited to, resource extraction and processing operations, manufacturing plants, feedlots, oil refineries and rendering plants;
- (5) **Institutional Use** means the use of land, buildings or structures for the purpose of religious, charitable, educational, health, welfare or correctional activities and may include, but is not limited to, places of worship, public or private schools, post-secondary institutions, hospitals, reformatory or correctional facilities, medical clinics, cemeteries, and day-care centres;
- (6) **Local Commercial Use** means the use of land, buildings or structures for the purpose of providing retail goods and services on a limited scale to primarily local employees or patrons in the area and may include, but is not limited to, restaurants, convenience stores, service stations and gas bars, and financial institutions;
- (7) **Medium Industrial Use** means the use of land, buildings or structures for the purpose of manufacturing, processing, fabricating, assembly, warehousing, storage or distribution of goods or materials that may create moderate impacts beyond the boundaries of the site by way of noise, odours, airborne emissions, outdoor lighting or vibration, conduct specific activities outside of an enclosed building or requires outdoor storage of goods and materials that cannot be reasonably mitigated through screening or other measures, and may include, but is

not limited to, cleaning, servicing, testing, and repairing operations, manufacturing plants and processing plants;

- (8) **Office Use** means the use of land, buildings or structures for the purpose of conducting executive, professional, research, administrative or similar affairs of business including ancillary services for office workers, and may include but is not limited to, administrative offices, consultants offices and research offices;
- (9) **Public Use** means the use of land, buildings or structures for the purpose of accommodating public or quasi-public services, utilities or facilities and may include, but is not limited to, essential public services, municipal utilities, and public facilities;
- (10) **Recreational Use** means the use of land, buildings or structures for the purpose of active or passive leisure pursuits, sporting activities and other customary and usual recreational pursuits and may include, but is not limited to, golf courses and driving ranges, ice skating rinks, sport fields, recreational centres, and parks and playgrounds;
- (11) **Retail Commercial Use** means the use of land, buildings or structures for the purpose of selling retail goods and services to the final consumer, and includes the storage of merchandise on or about the premises in quantities sufficient to supply the establishment, but does not include secondary commercial uses as defined herein, and may include, but is not limited to grocery stores, department stores, restaurants, automotive repair centres, entertainment facilities, and financial institutions;
- (12) **Secondary Commercial Use** means the use of land, buildings of structures for the purpose of providing retail goods, services or entertainment to the final consumer that by its nature requires extensive indoor or outdoor areas for storage or display or carrying out the activity, entertainment or service and may include, but is not limited to, warehouse stores, automotive sales and rentals and bingo halls;
- (13) **Service Commercial Use** means the use of land, buildings or structures for the purpose of providing goods and services to the travelling public on sites dependent upon exposure and efficient access from roads carrying higher volumes of traffic and may include, but is not limited to, hotels, motels, restaurants, service stations, and convenience grocery stores;
- (14) **Similar Use** means the use of land, buildings or structures for a purpose that is similar in form or function to a use identified within a land use area shown on the Land Use Concept map within the Plan but does not meet the definition of that use in all respects.

Appendix 1

Design Guidelines

Appendix 1 - Design Guidelines

Development Along Nose Creek, Entranceway Roads and Residential Areas

1. Setbacks

(1) Nose Creek Corridor

- (a) A 30 metre setback for buildings, and any other development identified through the land use controls or subdivision conditions applied to a site, should be provided from the high watermark of Nose Creek.
- (b) An 18 metre setback for buildings, any other development identified through the land use controls or subdivision conditions applied to a site, should be provided from the top-of-bank of an escarpment.
- (c) As part of an Outline Plan/Land Use application, a field survey should be undertaken to define the required setback boundary from the high watermark of Nose Creek and the top-of-bank of an escarpment in relation to the site.
- (d) At the subdivision approval or development permit approval stage
 - (i) a plan of survey should be submitted to define the required setback boundary from the high watermark of Nose Creek and the top-of-bank of an escarpment in relation to the subject site, and
 - (ii) a restrictive covenant should be registered against the title of any lots within the required setback boundary from Nose Creek and an escarpment identifying the development prohibited within the setback.
- (e) Subject to compliance with the policies contained in Section 11.2.2
 - (i) the 18 metre setback may be varied on a site only where
 - (A) reserve land is being dedicated on a voluntary basis to protect the escarpment adjacent to the site,

- (B) the maximum building height allowed on the site will not have a significant adverse visual impact when viewed from below the escarpment, and
 - (C) the interface between the site and the reserve land is determined to be suitable and compatible in terms of setbacks, yards, fencing and landscaping, and
- (ii) the 30 metre setback may be varied on a site only where
- (A) reserve land or other open space amenities are provided on a voluntary basis and to an appropriate extent to enhance the Nose Creek corridor, and
 - (B) the interface between the site and the Nose Creek corridor is determined to be suitable and compatible in terms of setbacks, yards, fencing and landscaping.

(2) Entranceway Roads

Building setbacks from entranceway roads should be in accordance with the yard requirements in 2(2) "Entranceway Roads".

(3) Residential Area

A 45.7 metre setback should be provided between an industrial use and a residential building.

2. Yards

(1) Nose Creek Corridor

- (a) Any yard adjacent to Nose Creek or an escarpment (including reserve land along the creek or escarpment) should be a minimum of 6.0 metres in depth.
- (b) Subject to compliance with the policies contained in Section 11.2.2, the yard requirements adjacent to Nose Creek or an escarpment (including reserve land along the creek or an escarpment) may be reduced to a minimum of 1.2 metres where the interface between the building and the lot line is determined to be suitable and compatible in terms of screening, fencing, storage and landscaping.

(2) Entranceway Roads

- (a) Any yard adjacent to an entranceway road (including a service road along the entranceway road) should
 - (i) be considered to be a front yard,
 - (ii) in the case of a freeway or expressway, be a minimum of 15.0 metres in depth, and
 - (iii) in all other cases, be a minimum of 6.0 metres in depth.
- (b) Subject to compliance with the policies contained in Section 11.2.2, the yard requirement adjacent to an entranceway road may be reduced to a minimum of 6.0 metres where
 - (i) the appearance of a building when viewed from the entranceway road will be visually attractive and promotes a strong and positive image of The City, and
 - (ii) the interface between the site and the entranceway road is

determined to be compatible and appropriate in terms of screening, fencing, storage and landscaping.

- (c) Unless a side yard is used for vehicular circulation or is relaxed to less than 10 metres in accordance with (b) above, a minimum side yard of 5 metres in width should be provided within 20 metres of a freeway or expressway.
- (d) Only one side yard should be used for vehicular circulation.
- (e) Outdoor storage of goods or materials should not be allowed in a front yard adjacent to an entranceway road.

(3) Residential Areas

- (a) A yard abutting a residential area should be a minimum of 7.5 metres in depth.
- (b) Notwithstanding (a), in the case of an industrial use adjacent to a residential lot (or reserve land adjacent to a residential lot)
 - (i) the yard should be increased to 15.0 metres in depth,
 - (ii) a minimum 10.0 metre treed and landscaped area within the yard should be provided, and
 - (iv) outdoor storage and parking should only be allowed within the yard where determined to be compatible and appropriate.

3. Screening

(1) Nose Creek Corridor

- (a) All parking, loading areas, service areas (including outdoor sales lots), mechanical equipment and areas with high levels of vehicular activity should be suitably screened.
- (b) Screening should comprise of a solid fence, wall, berm or landscaping, or some combination, that limits visibility into a site when viewed from reserve land or a public road.
- (c) All roof top mechanical equipment should be recessed from the roof edge or screened with architectural elements so that they are not visible from reserve land or a road.
- (d) Where landscaping or tree planting is used to provide screening, its composition should ensure adequate screening year-round.
- (e) Screening requirements should take into account any topography and elevation differences that exist.

(2) Entranceway Roads

The screening requirements of (1) above should also apply to sites adjacent to entranceway roads.

(3) Residential Areas

The screening requirements of (1) above should also apply to sites adjacent to residential areas.

4. Fencing

(1) Nose Creek Corridor

- (a) The fencing on a lot abutting reserve land dedicated along Nose Creek or an escarpment should be compatible and appropriate in terms of its quality and design.
- (b) Where the boundary of a privately-owned lot is located within the building setback from Nose Creek required under 1 (1)(a) above, fencing along the property line should be limited to a post-and-cable fence, or an equivalent form of fencing, required to demarcate the property line.

(2) Entranceway Roads

- (a) The fencing between a privately-owned land and an entranceway road, or a service road adjacent to an entranceway road, should be compatible and appropriate in term of its quality and design.
- (b) Fences and walls should be constructed of durable materials complementary to the exterior building materials.
- (c) Fences and walls that are greater than 15.0 metres in length should be varied in their design and provide for landscaping to create visual interest.
- (d) Fences and walls that are greater than 2.0 metres in height should be varied in their design and provide for landscaping to create visual interest.
- (e) Fences and walls should not be located within any required landscape area except as decorative landscape elements.
- (f) The maximum height of fences and walls should be 3.0 metres.
- (g) Barbed wire should not be allowed in conjunction with any fence.

(3) Residential Areas

The guidelines contained in (2) above should also apply to fencing adjacent to residential areas.

5. Storage

(1) Nose Creek Corridor

Outdoor storage of goods or materials should not be allowed in a required yard adjacent to Nose Creek.

(2) Entranceway Roads

(a) Outside storage of goods or materials should not be allowed on a required yard adjacent to an entranceway road.

(b) Materials and sales inventory stored outdoors should be fully screened from entranceway roads.

(c) Service and outdoor storage enclosures should be constructed of materials that match and complement building materials.

(d) Outdoor display areas should be located to the front or side of a building and not within any required yard along an entranceway road, or a service road adjacent to an entranceway road.

(e) Outside displays should be limited to a sample of items provided, processed or sold by the development on the site.

(3) Residential Areas

(a) Outside storage of goods and materials should not be allowed in a required yard adjacent to a residential area.

(b) The guidelines contained in (2) above should also apply to outdoor storage adjacent to residential areas.

6. Landscaping

(1) Nose Creek Corridor

- (a) All minimum yards adjacent to Nose Creek or an escarpment should contain continuous landscaping, except for access ways from public thoroughfares.

- (b) Landscaping should be provided to enhance the visual appearance of
 - (i) pedestrian areas,

 - (ii) building walls,

 - (iii) parking areas, and

 - (iv) vehicular access ways.

when viewed from reserve land along Nose Creek or an escarpment.

(2) Entranceway Roads

The guidelines contained in (1) above shall also apply to landscaping along entranceway roads.

(3) Residential Areas

The guidelines contained in (1) above shall also apply to landscaping along residential areas.

(4) Xeriscaping

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

7. Architecture

(1) Nose Creek Corridor

- (a) Building materials adjacent to Nose Creek or an escarpment should
 - (i) be durable and permanent in quality and composition, and
 - (ii) require low maintenance.
- (b) Building facades adjacent to Nose Creek or an escarpment should contain architectural elements that provide visual interest and reduce the massing of larger structures.
- (c) Architectural elements under (b) may include
 - (i) facade modulation (i.e. building intervals that are stepped forward or back 0.5 to 1.5 metres),
 - (ii) facade enhancement (i.e. distinctive roof forms, arcades, reveals, cornices), and
 - (iii) facade articulation (i.e. horizontal articulation of buildings greater than 7.0 metres in height to reduce visual massing).

(2) Entranceway Roads

The guidelines contained in (1) above should also apply to building architecture on sites adjacent to entranceway roads.

(3) Residential Areas

The guidelines contained in (1) above should also apply to building architecture on sites adjacent to residential areas.

Part 2

Background Information

Revised

Stoney Industrial

Area Structure Plan

**Revised
Stoney Industrial Area Structure Plan**

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Part 2
Background Information**

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1.0 PLANNING AREA

1.1 Location

The Stoney Industrial Area comprises approximately 1,012 hectares (2,500 acres) of land located in the northeast sector of the city. The area is bounded by the Transportation and Utility Corridor (TUC) on the north, undeveloped urban reserve lands under agricultural production to the east, the Calgary International Airport to the south and the communities of Harvest Hills and Coventry Hills to the west. Deerfoot Trail NE (Provincial Highway □2) traverses the area from the northeast to the southwest. The area is in close proximity to the northern city limit and a portion of the area is within The *M.D. of Rocky View/City of Calgary Intermunicipal Development Plan* area boundary.

1.2 Historical Context

The Stoney Industrial Area was annexed to The City of Calgary from the Municipal District of Rocky View No. 44 in 1979. The airport, situated immediately south and east of the Plan area, was established in 1939 as a City owned airport called McCall Field. It later became known as the Calgary International Airport and was taken over by the Federal Government in 1966. The establishment of the airport has and will continue to have a significant impact on adjacent lands. The most apparent restriction that the airport imposes on lands within the Plan area is the preclusion of residential uses.

In anticipation of development, the *Stoney Industrial Area Structure Plan (ASP)* was drafted and approved by Council in 1983. Despite the Plan's adoption, the area has remained largely undeveloped. With the recent receipt of several applications and competing landowner interests it was determined that a review and update of the ASP was required to evaluate the applications and ensure that municipal goals and responsibilities would be realized.

1.3 Policy Framework

The Revised Stoney Industrial Area Structure Plan is a statutory plan under the *Municipal Government Act (MGA)*. Pursuant to section 633 of the Act, an ASP must describe:

- the sequence of development for the proposed area;
- the land uses proposed for the area, either generally or with respect to specific parts of the area;
- the density of population proposed for the area either generally or with respect to parts of the area; and

- the general location of major transportation routes and public utilities.

The *Municipal Government Act* further directs, under section 622(3) of the Act, that every statutory plan and Land Use Bylaw, be consistent with the provincial land use policies. These provincial land use policies were established by Lieutenant Governor in council 1996 November 6.

Municipally, the Area Structure Plan must be consistent with the other policy plans of the municipality. There are three existing Land Use Policy Plans that incorporate lands within the Stoney Industrial Area: *The City of Calgary Municipal Development Plan (The Calgary Plan)*; the *Calgary North Phase 1 Area - Structure Plan*, and the *M.D. of Rocky View/City of Calgary Intermunicipal Development Plan (IDP)*. In addition, The City has adopted policies that guide development including such documents as *The Transportation Plan*, *The Calgary Entraceways Study*, and *Sustainable Suburbs*.

The Calgary Plan provides an overall vision for the City and identifies a “Future Conceptual Urban Structure” for lands within the City’s boundaries. Lands within the northern portion of the *Stoney Industrial ASP* have been identified as an area for employment concentration while lands south of Country Hills Boulevard NE have been identified for industrial uses. Through the development of the Revised Stoney Industrial ASP, it was determined that the transportation constraints in the area significantly limit development alternatives such that an employment concentration in this area is not feasible. A *Calgary Plan* amendment is therefore required and will be brought forward in conjunction with this Plan.

Portions of the Stoney Industrial Area are also within the *Calgary North - Phase 1 ASP* area. The development of these lands is logically included within the Revised Stoney Industrial ASP because the access, land use, and development constraints on these lands are similar and intrinsically linked. While the land uses proposed in the *Calgary North - Phase 1 ASP* are not in conflict with those proposed within the Revised Stoney Industrial ASP, an ASP amendment will be brought forward in conjunction with the Revised Stoney Industrial ASP to modify the boundary of the *Calgary North ASP*.

The *M.D. of Rockyview/City of Calgary Intermunicipal Development Plan* is a statutory plan under the *Municipal Government Act* and includes lands that are of mutual interest to both jurisdictions. Lands located north of 128 Avenue NE are within the intermunicipal planning area and therefore the policies of the IDP apply to these lands.

2.0 LAND FORM AND HABITAT ASSESSMENT

2.1 Archeological Sites

The West Nose and Nose Creek valley system were both travel corridors and an area for seasonal native hunting and settlement. This is evidenced by several stone circle sites that have been discovered in the area, including some with provincial significance which are located within the Nose Creek / West Nose Creek Confluence Park, south of the Stoney Industrial Area.

Archeological sites have also been identified within the Stoney Industrial Area. In 1999, The City and the Province jointly undertook an initiative to inventory and assess archeological sites and resources within The City of Calgary. The inventory identifies 293 native sites in Calgary, 53 of which have regional significance. Map C identifies known archeological sites within the Stoney Industrial Area.

All archeological resources in Alberta are considered crown. All applications for redesignation, subdivision, and development that are known to have an archeological site should be circulated to Alberta Community Development for comment. In addition, development activities near these sites may require that a Historical Resources Impact Assessment be conducted in accordance with provincial legislation. Moreover, if an archeological site is discovered Alberta Community Development must be contacted.

2.2 Site Description and Natural Habitat

The predominant land use in the study area is rangeland and cropland. The area is bounded on the west by suburban development, with agricultural land to the north and east. The Calgary International Airport lands lie to the south. The dominant feature of the site is Nose Creek and the associated escarpments forming the valley. There are riparian wetlands associated with Nose Creek as well as several wetland basins scattered throughout the uplands. Many of these features are evident on Map A, which is an air photo of the Stoney Industrial Area.

2.3 Climate

The area falls within the Foothills Fescue subregion of the Grasslands Natural Region (Alberta Environmental Protection 1993). This subregion is strongly influenced by chinook winds and thus has a milder winter than other subregions. Mean annual precipitation averages about 500 mm in the Calgary area, with the majority of precipitation falling during the growing season, with a mean May-September precipitation of 290 mm. The mean annual temperature is 3°C, with a mean May-September temperature ranging from 11 to 13°C. The frost-free period is ninety days.

2.4 Soils and Topography

The study area consists of southwest to northwest trending escarpments on either side of Nose Creek. The superficial geology of the area is defined primarily by the Balzac formation. This formation consists largely of till, although the tills around Nose Creek are underlain by silty lacustrine sediments.

The uplands are dominated by soils from the Rockyview series. These soils are typically well drained Black Chernozemic soils; these soils are developed from fine loess deposits over loamy tills. The site is generally level with rolling topography. There are numerous depressions throughout which typically have Gleysolic soils indicative of the wet conditions.

The northeast corner of the area is dominated by soils of the Balzac series. These soils are poorly drained Humic Gleysols; these soils typically occur in areas of groundwater discharge. Saline groundwater is close to the surface in this series-slight irregularities and outwash channels have led to the development of a series of permanent alkaline sloughs. These soils developed on lacustrine deposits overlying till.

Soils in the Nose Creek Valley are predominantly well- to moderately drained Black Chernozemic soils in the Nose Creek group. The subsoils are often saline. These soils developed from fine loamy to loamy skeletal till with recent reworking by fluvial action.

Undifferentiated soils (typically Regosolic soils) are found along steep slopes and escarpment edges.

2.5 Plant Communities

The upland areas of the site are predominantly agricultural; either cereal crops or hay. Many wetlands show some evidence of disturbance, though overall they are in good condition relative to other wetlands in the region. Disturbance related to agricultural use is minor. The edges of some wetlands have been cultivated, resulting in a fringe of weedy species directly adjacent to cultivated lands.

Anthropogenic (disturbed)

Includes cultivated lands as well as residences, and storage yards. Common plant species are typically weedy and/or invasive.

Aspen Forest

Aspen (*Populus tremuloides*) forest is found in only one location in the study site. The understory is dominated by snowberry (*Symphoricarpos albus*), prickly rose (*Rosa acicularis*). Grass species include smooth brome (*Bromus inermis*) and minor amounts of Kentucky bluegrass (*Poa pratensis*).

Low shrub communities

Typically dominated by snowberry, prickly rose and minor amounts of wolfwillow (*Eleagnus commutata*) in drier exposed sites. Low shrub communities are frequently found on steep escarpment lands and cutbanks along Nose Creek. This community type frequently intergrades with native grassland and is found in more sheltered sites.

Native grasslands

Prairie, or grassland communities grow in the driest, most exposed sites, where trees and shrubs are unable to establish. Moisture is often the most limiting factor, especially in well-drained hillsides. Native grasslands are typically found on the south to west-facing slopes of ravines and escarpments. Virtually all grassland within the area have been grazed, though they remain in good condition.

Dominant species include rough fescue (*Festuca scabrella*), June grass (*Koeleria macrantha*), western wheatgrass (*Agropyron smithii*). Blue grama grass (*Bouteloua gracilis*) is present in drier, exposed slopes. June grass (*Koeleria macrantha*), wheat grasses (*Agropyron* spp.) and needle grasses (*Stipa* spp.) grow in mixed communities on the driest hillside and escarpments. The escarpment slopes have some of the best quality native grassland in the site. Most of the valley sides appear to be subject to overgrazing.

The grassland communities generally support an abundance of wildflowers and other forbs. Prairie crocus (*Anemone patens*) is a common spring flower, while other species, such as golden bean (*Thermopsis rhombifolia*), sticky geranium (*Geranium viscosissimum*) and smooth blue penstemon (*Penstemon nitidus*) are locally abundant.

Non-native grassland

These sites are typically dominated by introduced forage grasses such as smooth brome and timothy (*Phleum pratense*) that have established and naturalized. These sites have some value for wildlife habitat, but typically have much lower species diversity than native sites.

Wetlands

There are a number of wetlands located throughout the area. Wetland types are typically alkaline marshes dominated by rushes (*Juncus balticus*). The presence of wetland conditions in these sites are supported by the presence of wetland soils (generally Gleysols or Solonchic in drier areas).

The wetlands have a mix of emergent, submergent and floating-leaved aquatic communities typical of saline basin marsh communities. Emergent communities are dominated by cat-tail (*Typha latifolia*) in fresher ponds and rush (*Juncus balticus*) or bulrush (*Scirpus* sp.) in more saline ponds.

The wet margins around the open water are typical wet meadow communities dominated by sedges (*Carex* spp.), rushes (*Juncus balticus*) and numerous grasses such as slough grass (*Beckmannia syzigachne*) and manna grass (*Glyceria* sp.).

2.6 Fauna

A diversity of wildlife have been observed on the site that reflects quality and diversity of native habitat on the site. A total of 36 bird species were observed in the Plan area.

Mammal species observed include white-tailed deer (*Odocoileus virginianus*), Richardson's ground squirrel (*Spermophilus richardsonii*), coyote (*Canis latrans*), northern pocket gopher (*Thomomys talpoides*) and the American badger (*Taxidea taxus*). Boreal chorus frog (*Pseudacris maculata*) was the only amphibian species noted on the site.

3.0 ENVIRONMENTALLY SENSITIVE AREAS

3.1 Identification of Environmentally Sensitive Areas

An Environmentally Significant Area (ESA) is a natural area which, because of its features or characteristics, is significant to Calgary from an environmental perspective, and has the potential to remain viable within an urban environment.¹

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 a natural system
- presence of distinctive and/or unusual landform
- limited representation within the area or city

ESAs in the Stoney Industrial Area are predominately located in the Nose Creek Valley. Other significant areas comprise the ravines connecting to the valley. Wetlands in proximity to each other (i.e. wetland complexes) generally have higher significance because of the greater variety of wetland types and juxtaposition of upland and wetland habitat types. Although individually these wetlands may in some cases be considered to be less significant, complexes generally offer increased breeding and stopover habitat and will support large numbers and diversity of wildlife. In addition, there are various wetlands located on the upland plain areas as shown on Map D.

While agricultural activities including grazing and cultivation have modified much of the lands within the Stoney area, natural areas of grasslands and shrubs have been retained along the valley and ravines.

Both the *Calgary Plan* and the *Urban Park Master Plan* identify Nose Creek as a open space corridor that is expected to be developed into a continuous park system along the creek valley and connect to the Confluence Park, located south of the plan area.

3.2 Protection of Environmentally Significant Areas

Areas identified as ESAs are not automatically acquired and/or protected from development but rather subjected to review at the Land Use/Outline Plan stage. The protection of ESAs can occur through dedication as Environmental Reserve (ER) or Municipal Reserve (MR) or by purchase.

⁷ ¹ The City of Calgary, "Calgary Plan," 1998, p. 101.

4.0 LAND USE

4.1 Existing Land Uses

The predominant land use in the Stoney Industrial Area is agriculture including pasture, cultivation, and an intensive livestock facility that is located north of Airport Trail NE and east of 15 Street NE. Other existing land uses, as shown on Map E, include a park 'n' jet facility north of Airport Trail NE and west of Barlow Trail NE; a tree farm located at the northwest corner of the Barlow Trail NE and Country Hills Boulevard NE intersection; and a recreational vehicle storage yard situated west of 15 Street NE approximately 400 m north of Country Hills Boulevard NE. In addition, recently designated lands within the Freeport Business Park are actively undergoing development.

The majority of lands within Stoney Industrial Area have an Urban Reserve designation, however, there are eleven Direct Control Districts that have been applied in the area. These Direct Control Districts were used to allow specific uses, including the golf driving range; recreational vehicle storage; the tree farm; a sales and service for mobile offices (undeveloped); agricultural implement dealerships (undeveloped); self storage (undeveloped); and a regional sector shopping centre (undeveloped).

Adjacent land uses include:

- residential areas to the west;
- the Transportation and Utility Corridor to the north of lands west of Deerfoot Trail NE;
- an auction house to the north of lands east of Deerfoot Trail NE;
- farmland to the east, north of Country Hills Boulevard NE;
- an undeveloped runway for the airport to the east and south of Country Hills Boulevard NE;
- the Calgary International Airport to the south;
- the Aurora Business Park to the southwest.

4.2 Regional Shopping Centre Site

Lands immediately east of Deerfoot Trail NE and north of Country Hills Boulevard NE are zoned for a regional centre. These lands were given a commercial land use under a Direct Control District in the early 1980s. In addition to the provisions of the DC bylaw, an agreement was struck between The City and the developer. Several points of this agreement are worth noting.

The developer has an obligation to commence construction of Phase I of the Regional Centre within two years following the date by which the resident population of the area reaches 140,000 AND The City has given them written notice of that fact. The population area includes all of the lands within Ward 3 excepting out lands south of McKnight Boulevard NE. It will likely be a substantial number of years before the critical population is reached in this area. If the developer defaults in his obligation to construct, he is required to initiate an application to redesignate the Regional Centre back to Urban Reserve.

The development of the Regional Centre requires the introduction of several transportation improvements including the widening of Barlow Trail NE and 112 Avenue NE (Country Hills Boulevard) as well as the prohibition of direct access to Deerfoot Trail NE. Additional transportation infrastructure was contemplated including a northbound exit ramp and underpass at Country Hills Boulevard NE to a service road with a design that meets the approval of the City Engineer. It is worth noting that the development of such an exit ramp from Deerfoot Trail NE may no longer be feasible. The interchange between Deerfoot Trail NE and Country Hills Boulevard NE has been redesigned and the original design concept is no longer possible. In addition, provincial approval will now be required since Deerfoot Trail NE is no longer under municipal jurisdiction.

Other provisions of the agreement include:

- transit provisions, which include a 250 stall park 'n' ride site and ability for transit to enter directly onto the site;²
- The City's ability to purchase or lease space from the developer for City Services;
- 5.22 ha of municipal reserve is still owing on the subject lands and the development agreement requires that cash in lieu be paid at the time that the site is developed.

The Regional Shopping Centre site is subject to the provisions of a Direct Control District as well as a *Special Development Agreement*, *Deferred Reserve Caveat*, and a *Restrictive Covenant*. These documents should be referenced directly in review of any applications pertaining to these lands.

² In reviewing transit options within the Stoney Area, it was determined that Transit may no longer require a Park'n Ride at this location.

5.0 DEVELOPMENT CONSTRAINTS

5.1 Airport

5.1.1 Airport Vicinity Protection Area Regulation

Lands within the Stoney Industrial Area are influenced by their proximity to the Calgary International Airport. The airport both impacts and is impacted by activities on adjacent lands. To ensure compatible land uses and the safe operation of the airport, lands within the vicinity of the airport require careful review.

Noise associated with aircraft movements is the most evident issue in relation to airports. In determining the noise impacts that an airport has beyond its operations, a study may be conducted that forecasts noise exposure in concentric contours radiating from the runways. Such contours are known as Noise Exposure Forecast contour lines or NEF lines. The higher the NEF number is, the greater amount of noise is experienced at the location. Accordingly, contour lines closest to the airport have the highest contour numbers and this number decreases at each contoured interval that radiates out.

The Calgary International Airport has an *Airport Vicinity Protection Area (AVPA) Regulation* that places restrictions on lands within areas around the airport. Generally, the *AVPA Regulations* impose development limitations on specified lands and are registered by caveat against the land titles. The boundaries of the AVPA for the Calgary International Airport have been defined by the NEF contour lines. With the intent of limiting future land use conflict between the airport and adjacent uses, the *AVPA Regulation* imposes limits on development with the most restrictions on lands within the highest NEF contour areas. Restrictions may restrict specific land uses or impose higher building standards or height restrictions in these areas.

All lands within the Stoney Industrial Area, are impacted by the AVPA. Portions of the Plan area are within the 40, 35, and 30 NEF contours and are subject to the specific land use restrictions defined in the *Regulation* for that NEF. Since the Plan area is wholly within the 30 (or higher) NEF, residential development is precluded. In addition, many agricultural, public, recreational, commercial and some industrial uses have restrictions and in some instances are also precluded. Map F illustrates the lands within the Plan Area that are within the various NEF contours. The *AVPA Regulations* is amended from time to time; therefore, this document should be referenced directly in reviewing applications.

5.1.2 Aeronautics Act

The *Calgary International Airport Zoning Regulations*, as defined in the *Aeronautics Act* (Federal), also places restrictions on lands within the Stoney Industrial Area. These restrictions are based upon the glide-path of planes and their use of radar and other electronic equipment for the departure and arrival of planes. No building or object is permitted to proceed in these areas without Transport Canada approval.

5.2 Environmental Site Information

Map G identifies known existing and past gas wells, pipelines, and other known nuisances and/or hazards in the area. All proposed development must be in accordance with applicable setback distances from operating and abandoned oil and gas facilities. Prior to Land Use/Outline Plan approval, all operating and abandoned oil & gas facilities should be assessed for potential environmental impact.

5.3 Gravel Deposits

Located north of 128 Avenue NE and immediately east of Nose Creek is a knoll that is composed of gravel. Provincial land use policies encourage the extraction of natural resources prior to development. The developer, as part of the grading and contouring of the site, may mine the gravel deposit.

5.4 Overhead Powerline

A 138kV transmission line crosses the plan area north-south and is located partly on lands owned by Enmax and partly across private lands via a 10 m wide right-of-way. Urban development is permitted on adjacent lands to the right-of-way, however, restrictions may apply to any roads, pathways, parks, light standards, landscaping or tree planting that may occur on or near the right-of-way in accordance with the *Alberta Electrical and Communication Utility Code*.

5.5 Nose Creek

Nose Creek traverses the Stoney Industrial Area north-south. The creek is susceptible to periodic flooding and is subject to the *Floodway, Floodplain and Overland Flow Area Special Regulations* as contained in the *Land Use Bylaw*. Floodway lands are normally acquired and protected in their natural state through the subdivision process as environmental reserve land.

An escarpment also extends along both sides of the Nose Creek. Portions of the escarpment may be unstable and prone to erosion and subsidence. Detailed geotechnical information will need to be submitted at the Outline Plan/Land Use Approval stage to determine the stability of these lands

6.0 TRANSPORTATION MODELING

Transportation modeling has played an important role in the development of this ASP. The purpose of the modeling work was twofold. First was to determine appropriate land uses in relation to the available transportation capacity and second was to determine the internal road network.

A sub-area model was prepared within the city-wide transportation modeling system. This model projects the amount of traffic generated by a specific land use pattern and was projected at full build out of the Stoney Industrial Area at 1.25 million. Subsequent to this model projection, an analysis of key intersections was completed using an intersection-modeling program. By running various land use scenarios through the models, a greater understanding of the transportation constraints and how they impact land use was achieved. Many of the density, transportation and growth management policies in this ASP were drafted on the basis of this analysis.

6.1 Transportation Northeast Sub-Area Model Methodology

The method used to establish the land use and supporting transportation system for the Stoney Industrial area is as follows:

- The 1.25 million population horizon was selected as the base year. This horizon was selected since it is far enough into the future that it would provide adequate insight into how the transportation system could be developed to accommodate the Stoney Industrial Area if it was to become fully developed.
- The area was divided into transportation zones for analysis (as shown on Map H).
- The net developable acres was estimated for each transportation zone by taking the gross area, subtracting out any potential environmental reserve lands to get gross developable area, and multiplying this number by .85 to account for non-employment land uses such as utility right-of-ways and major roads.
- The number of jobs (employees) per net developed acre was calculated by looking at survey data and existing transportation zones with similar land uses as those projected.
- Estimating the morning and afternoon weekday peak hour trips per employee by land use type.

- Estimating traffic generated from various land use combinations in the Stoney Industrial Area using the information compiled in the tasks above.
- Establishing additional regional road improvements that would be required in the immediate area to accommodate the traffic generated from the Stoney Industrial Area. This task is required since the study assumes that the Stoney Industrial Area is fully developed in the 1.25 million population time horizon. This assumption made it necessary to include some road improvements in the study area that were anticipated to be in place between the 1.25 and the 1.5 million time horizons. This is a worst case scenario, since it is possible that the Stoney Industrial Area may not be fully developed by the 1.25 population time horizon.
- Developing an internal road system for the Stoney Industrial lands.
- Testing various land use and internal network options until the most suitable combination could be found that met the following objectives:
 - That the land uses proposed are suitable for the envisioned area structure plan.
 - That the land use does not generate traffic volumes which exceed the capacity of a transportation system most likely to be in place by the 1.25 million population time horizon, if the Stoney Industrial Area was fully developed.

6.2 Manufacturing and Warehouse District

In the development of the Revised Stoney Industrial ASP, it was determined that it would be appropriate to develop a Land Use District that would accurately reflect the uses and development intensity (or density) for the area. The predominant uses in this district are warehouse and manufacturing. The density for these uses is 0.35 Floor Area Ratio (FAR). Other, complementary uses that support a healthy industrial business community are also included in this district as discretionary uses. In addition, warehouse and manufacturing uses with greater than 0.35 FAR are also discretionary. The discretionary uses will likely require a traffic study to support their use.

7.0 REGIONAL ROAD NETWORK

7.1 Regional Roads

The regional transportation network heavily influences the Stoney Industrial Area. Deerfoot Trail NE and Stoney Trail NE are both expressways that are developed and maintained by the Province. In addition, Airport Trail NE is classified as an expressway from Deerfoot Trail NE east to Barlow Trail NE. Country Hills Boulevard NE, Barlow Trail, 96 Avenue and future 128 Avenue NE are regional majors.

7.2 Regional Transportation Model

A regional transportation model simulation was conducted to forecast the amount of traffic being generated within the Stoney Industrial Area and to determine how its development impacts the regional network. The model studied the impacts on the network at a 1.25 million population.

Deerfoot Trail NE

In addition to being the major north-south transportation link in The City, Deerfoot Trail NE also forms a part of the provincial road network as an important link in the CANAMEX corridor. Access to Deerfoot Trail NE is restricted to the interchanges of Country Hills Boulevard NE, Airport Trail NE, and a future half-interchange of 128 Avenue NE. The Country Hills Boulevard NE interchange is central to the Stoney Industrial Area and facilitates all turning movements. Airport Trail NE and future 96 Avenue NE will also have all turning movements, however, due to topographic and road design standards, lands west of Deerfoot Trail NE will not have access to 96 Avenue NE at this location. The future interchange at 128 Avenue NE is considered a half interchange because it will facilitate southbound but not northbound access to Deerfoot Trail NE from lands within the Stoney Industrial Area.

At the build out of the Stoney Industrial Area, Deerfoot Trail NE is assumed to be developed to three lanes per direction, north of Country Hills Boulevard NE and developed to four lanes per direction, south of Country Hills Boulevard NE. This is consistent with the *Deerfoot Functional Study*.

Stoney Trail NE

Future Stoney Trail NE will be constructed in the Transportation and Utility Corridor (TUC), which bounds the Stoney Industrial Area to the north. At its completion, Stoney Trail NE will form a part of a ring road expressway system that will encircle The City. Access to Stoney Trail NE will be via 128 Avenue NE in the northwest corner of the Stoney Industrial Area. As a provincial road, construction of the road and its timing will be dependent upon demand and municipal negotiation with the Province. At full build out of the Stoney Industrial Area, it is estimated that Stoney

Trail NE will be constructed to 4 lanes (2 per direction).

Airport Trail NE / 96 Avenue NE

Airport Trail NE is the main link between the Airport and the region. East of Deerfoot Trail NE, the road is identified as an expressway and is currently constructed to 4 lanes from Deerfoot Trail NE to Barlow Trail NE. West of Deerfoot Trail NE, the road is identified as 96 Avenue NE and is considered a major. At the build out of the Stoney Industrial Area, it is estimated that Airport Trail NE/96 Avenue NE will be built to 6 lanes. The airport is currently undergoing transportation studies to determine the best entry from Airport Trail NE to the Airport Terminal. Several options are being considered including the use of Barlow Trail NE and an intersection at a mid-point between existing Barlow Trail NE and 15 Street NE. It is anticipated that an intersection would be constructed at this juncture to manage the traffic volumes. In addition, current City plans show the potential for extending 96 Avenue NE from Barlow Trail NE to the East Freeway.

Barlow Trail NE

Barlow Trail NE is a major north-south road connection that links the airport and lands south of the airport to Country Hills Boulevard NE. It is anticipated that in the future this road will continue north along an alignment that parallels Deerfoot Trail NE and links to 128 Avenue NE. At the build out of the Stoney Industrial Area, it is estimated that Barlow Trail NE will be built to 3 lanes per direction.

Country Hills Boulevard NE

Being the central east-west link to Deerfoot Trail NE from four of six development cells, Country Hills Boulevard NE and its functioning is critical to the development of the Stoney Industrial Area. In addition, Country Hills Boulevard provides access to Deerfoot Trail NE from the residential areas lying west of the Plan area. At build out of the area, Country Hills Boulevard NE will be 3 lanes per direction.

128 Avenue NE

The north portion of the plan will be served by 128 Avenue NE. While this major road will largely service lands within the Stoney Industrial Area, it also functions regionally because it connects several regional roads and will likely extend east of Barlow Trail NE in the future. A Functional Design Study was conducted to determine the road's alignment and crossing of the rail line and Nose Creek. Environmental, land ownership, topographic, and road design considerations were all evaluated in determining the alignment. At build out, 128 Avenue NE will be 6 lanes (3 per direction).

8.0 FUTURE LAND USE

8.1 Land Use Demand

In preparation of the Revised Stoney Industrial ASP, The City commissioned a Commercial and Industrial Demand Analysis. The projections in that study are summarized in the following table:

TABLE A COMMERCIAL AND INDUSTRIAL DEMAND			
Land Use	2020 sq. feet	2020 Gross Acres (Hectares)	2020 Net Acres (Hectares)
Sectoral Regional	1,200,000	100	80
Retail		(40)	(32)
Highway Commercial Retail	600,000	50 (20)	40 (16)
Convenience & Service Retail	300,000	25 (10)	20 (8)
Suburban Office	3,488,000	218 (88)	174 (70)
Industrial	14,040,000	1,165 (471)	932 (377)
Hotel	780 rooms	65 (26)	52 (21)

Source: Table 7.17, Stoney Area Commercial Demand Analysis, February 2002, Thomas Consultants Inc.

8.2 Higher Intensity Land Uses

Due to the severe transportation constraints within the area, the Business/Industrial Area will be the predominant land use within the Stoney Industrial Area. A developer wishing to pursue higher intensity uses will be required to amend this Plan in accordance with the policies herein. The following identifies some locational criteria that should be considered in the application of the higher intensity land uses in the Stoney Industrial Area.

8.2.1 Retail/Commercial West of Deerfoot Trail NE

Retail uses located west of Deerfoot Trail NE should be located north of Country Hills Boulevard NE to minimize the left turning movements required to access these areas on the home bound trips. The regional transportation model identifies that retail uses located in this area would be accessed predominantly by people who reside west of the Plan area and work south or east of the Plan area and thus will be returning home via westbound Country Hills Boulevard NE. By placing retail uses north of Country Hills Boulevard NE, left turn movements to access the retail area are minimized.

8.2.2 Service Commercial Areas

Service commercial areas that include hotels, motels, restaurants, service stations and convenience stores, should be located in areas that are easily accessed by the travelling public and employees of the business and industrial areas.

8.2.3 Business Development Areas

The Business Development Areas will provide an area of well designed, high quality light, and medium industrial and office uses. Where possible, these adjacent to conservation areas, and in other areas where transportation capacity is available. The lands south of Country Hills Boulevard NE have been identified as an area that may be particularly suited to this type of use due to its high exposure to Deerfoot Trail NE, Country Hills Boulevard NE, and the Nose Creek corridor. Traffic patterns, as shown in the Transportation model, suggest that this area would be best suited to employment uses.

9.0 CIRCULATION SYSTEM

9.1 Internal Roads

The internal road system, as shown on Map O, comprises a series of collectors and major roads. This road pattern will be refined through the Outline Plan/Land Use Amendment process.

9.2 Pedestrian Routes

The main pedestrian routes will comprise sidewalks and local and regional pathways. Sidewalks will be located within the road rights-of-way throughout the industrial and commercial areas. Regional pathways, as shown on Map O, will follow Nose Creek through the conservation area and extend east along the major transportation routes and north-south along the east boundary of the Stoney Industrial Area. In addition, a pedestrian trail will be provided along the top of the east escarpment.

9.3 Public Transit

Transit feeder bus routes will be provided within the industrial business area to ensure maximum coverage.

10.0 PLANNING CELLS

The Stoney Industrial Area has been divided into six planning cells. The road and rail network determined the boundaries of the cells because these rights-of-way are natural edges for planning purposes. The cells are alphanumerically identified on Map 2 and the land ownership is identified on Map B.

Cell A

Located in the northwest corner of the Stoney Industrial Area, Cell A, is bounded by the Transportation and Utility Corridor (TUC) and future Stoney Trail NE to the north, by the community of Coventry Hills to the west, and by the CP rail line to the east and south. The cell contains approximately 46 gross hectares of land. The most prominent topographical features within this cell are the steep slopes and coulees that parallel the railway. These slopes have a southeast aspect and have been identified as part of the conservation area within Stoney Industrial Area. The land ownership in this cell has a low degree of fragmentation and is currently used as pasture.

Cell B

Situated north of 128 Avenue NE, east of Nose Creek, and south of Stoney Trail NE, Cell B includes approximately 104 gross hectares of land. Nose Creek meanders along the western edge of the cell. Immediately to the east of the creek is a knoll that is composed of gravel.

Cell C

Cell C is the largest planning cell in the Stoney Industrial Area with approximately 293 gross hectares of land. It includes lands west of Deerfoot Trail NE and is bounded by 128 Avenue NE on the north; by the rail line to the west and by Country Hills Boulevard NE to the south. This cell has numerous topographical features. Nose Creek meanders along the western edge of the cell and an escarpment traverses north-south through its centre. The escarpment has north and west aspects and divides the upper plateau from the valley basin. In addition, there is a glacial erratic located near the creek on its western bank. The land ownership within this cell is quite fragmented, with several small holdings in the southeast quadrant of the cell.

Cell D

Encompassing lands east of Deerfoot Trail NE and north of Country Hills Boulevard NE, Cell D includes approximately 99 hectares of land. The topography is relatively flat and is currently used in farming operations. The land ownership in this cell is somewhat fragmented and a significant portion has been zoned for commercial use.

Cell E

Bounded by Country Hills Boulevard NE to the North; Deerfoot Trail NE to the East; and community of Harvest Hills to the west, Cell E contains 110 gross hectares. Future 96 Avenue NE will extend west from Airport Trail NE, separating the south portion of the cell from the balance. Cell E has the most significant topographic variation within the Plan area. It is traversed by the Nose Creek basin escarpment and Nose Creek, which runs north-south through the cell. The presence of the CP rail line on the west and engineering, environmental, and topographic constraints to the north, south, and east, make access to this cell very limited. Much of the western portions of the cell, therefore, have been identified for limited development and have the potential to become a part of a regional park.

Cell F

East of Deerfoot Trail NE, south of Country Hills Boulevard NE, and bounded by airport lands to the south and east is Cell F, which contains approximately 268 gross hectares. The topography is generally flat and the land ownership fragmented. Some lands within this cell may be restricted by the runway glide path of the airport.

Cell G

Cell G contains approximately 80 gross hectares and includes lands south of Airport Trail NE and east of Deerfoot Trail NE. Lands within this cell are close in proximity to one of the airport runways, which bounds the cell on the east and south. The majority of the cell is relatively flat, however, adjacent to Deerfoot Trail NE, there are steep slopes and associated coulees that have been identified in the Plan as part of the conservation area.

**TABLE B
PLANNING CELLS**

Cell	Future Land Use	Gross Ha (1)	Estimated Gross Developable Hectares (2)	Estimated Net Developable Hectares (3)	Cell AM Peak Trip Generation (4)	Cell PM Peak Trip Generation (4)	Estimated Number of Employees
A	Light Industrial	46	46	39	580	580	1,448
B	Light Industrial	104	101	86	1,280	1,280	3,197
C	Lt. Industrial	287	269	229	3,400	3,390	8,483
	Commercial (5 net ha)	6	6	5	90	850	255
D	Lt. Industrial	57	57	49	720	720	1,811
	Commercial (35 net ha)	42	42	35	630	4,310	1,751
E	Light Industrial	110	73	62	1,870	1,520	4,116
F	Light Industrial	268	268	228	3,380	3,370	8,428
G	Light Industrial	80	80	68	1,010	1,010	2,527

- Notes:**
- (1) Gross hectares is the total estimated land area that is located in each Cell.
 - (2) Gross developable hectares is the total estimated land area less Expressways, Nose Creek ER, and lands within the Limited Development Area.
 - (3) Net developable acres was estimated by taking the gross developable hectares and multiplying this number by .85 to account for non-employment uses such as utility rights-of-way and major roads.
 - (4) AM and PM peak trip generation is a blended number of both inbound and outbound trips as was determined in the Transportation Modeling exercise. Verification of the trip generations will be subject to finalization through detailed capacity analysis.

11.0 vehicle trip allocation

11.1 Application of Base Vehicle Trip Generation Factor

The transportation modelling exercise has determined that there are significant capacity constraints at intersections along the regional road network serving the Stoney Industrial Area. As such, each planning cell can support only a limited number of vehicle trips if the intersections are to operate at an acceptable level of service. This limited number of vehicle trips equates to a base vehicle trip index of 15 vehicle trips per net developable hectare during the peak PM period. The base vehicle trip index will initially be applied to all sites within the Stoney Industrial Area except for the previously approved regional commercial site (east of Deerfoot Trail) and the future local commercial site (west of Deerfoot Trail). These sites have a different vehicle trip index in recognition of the commercial land uses that they will accommodate.

11.2 Increase in Base Vehicular Trip Index

The Base Vehicle Trip Index can be increased above the maximum 15 vehicle trips per net developable hectare in three ways:

- by identifying a surplus of vehicle trips within the subject planning cell through an updated transportation analysis and allocating this surplus to a specific site,
- by transferring vehicle trips from one site to another,
- by granting a variance to the base vehicle trip index where a proposed development is determined to be beneficial to the city.

Each of these means of increasing the base vehicle trip index is addressed in Section 8.2, Density Increase, of the Plan.

11.3 Regulation of Vehicle Trip Index

The maximum vehicle trips allowed to be generated on a site is difficult to regulate directly through the land use district and development permit process. Rather, the index needs to be translated into a development standard and incorporated into the land use controls. The proxy for the 15 vehicle trips per hectare allowed during the peak PM hour has been determined to be a 0.35 floor area ratio (FAR) for industrial uses. The proxy for non-industrial uses or a higher vehicle trip generation index will need to be determined on a case-by-case basis and addressed in the land use controls.

11.4 Change to Base Vehicle Trip Index

Because the Base Vehicle Trip Index of 15 vehicle trips during the peak PM period may change over time, Map P and Table C will be used to track these changes. Accordingly, the map and table will need to be regularly updated to ensure that they remain current. The map will identify those sites that have a difference base Vehicle Trip Index than the 15 vehicle trips per net developable acre. Through sequential numbering this site will be referenced in the table. The approach is intended to ensure that an accurate record of the vehicle trip allocation within a cell occurs over time.

TABLE C		
VEHICLE TRIP ALLOCATION		
Site	Cell	Maximum Vehicle Trip Allocation During the Peak PM Hour
1	D	Maximum vehicle trip allocation to be determined through a transportation impact analysis and in accordance with the provisions of Bylaw 108Z83 and 56Z97.
2	C	Maximum vehicle trip allocation to be determined through a transportation impact analysis.
For the location of a site referenced in this table refer to Map P. All sites have a maximum of 15 vehicle trips per net developable hectare during the peak PM hour unless otherwise referenced in this table.		

12.0 PUBLIC SERVICE SITES

12.1 Municipal Depot

The City has determined that there is a need to locate a Municipal Depot within the Stoney Industrial area for use by various Business Units. The depot will be located on City owned land and accommodate offices, maintenance facilities and storage areas for City use. The following table indicates the estimated site area required by various departments:

Business Unit	Site Area (Hectares)	Site Area (Acres)
Roads	5.0	12.4
Parks	2.47	6.1
Fleet and Supply Management	2.14	5.3
Waterworks	0.04	0.1
Wastewater Public Response	0.04	0.1
Wastewater Storm Maintenance	0.04	0.1
Recycle Collections	0.24	0.6
Total Site Area	9.97	24.7

12.2 Fire

Station 31, which is located at 302 Country Village Way NE, is the closest station to the Stoney Industrial Area.

12.3 Emergency Medical Services (EMS)

The closest Emergency Medical Services site to the Stoney Industrial Area is located in Country Hills .

12.4 Police Services

Lands within the Stoney Industrial Area are currently a part of District 3 and are served by the District 3 Office, which is located at 4303 14 Street NW.

12.5 Library

The library in closest proximity to the Stoney Industrial Area will be the Country Hills Library, to be located in the Nose Creek Recreation and Library Centre and will be constructed by the fall of 2004.

12.6 Regional Park

Parks has identified an opportunity to create a regional park on the west side of Nose Creek in the south portion of the Stoney Industrial Area. This park would provide a strong link to the existing Confluence Park, which is located south of the Plan area. Lands may be acquired, in accordance with this Plan, through reserve dedication when lands are subdivided. In addition, landowners with multiple parcels may be required to defer reserves owing to parcels that have been identified for inclusion into the regional park. The City may also consider the transfer of reserves owing between different landowners, where all effected parties are able to come to an agreement.

13.0 UTILITY SERVICES

13.1 Waterworks

The Stoney Industrial Area straddles two water pressure zones and is served by two feeder mains. A third feeder main is planned along Country Hills Boulevard NE at some future date as shown on Map I. The Greenview Water Pressure Zone is a long narrow strip, which spans Nose Creek and is along the westerly side of the Stoney Industrial Area. The remaining easterly area is within the North Hill Pressure Zone.

A water feeder main extends along the CPR tracks and another along 128 Avenue NE. These feeder mains are at North Hill pressure. To serve the Greenview Water Pressure Zone, ties to the feeder main, complete with pressure reducing valves or internal PRVs, are required. A distribution main also exists in 96 Avenue NE along the south edge of the Plan area. The feeder main along 128 Avenue NE has an “Endeavor to Assist” to remain in force until January 1, 2013.

13.2 Sanitary Sewer

The Stoney Industrial Area will be provided with sanitary sewer service by connecting to the existing Nose Creek trunk as shown on Map J. The trunk currently exists west of the CPR tracks and extends to the northern city limit. The service area has been established for upstream lands. The development’s trunk sewer will be constructed with capacity for all upstream lands based on *The City of Calgary Design Guidelines*.

Lands offsite and upstream of the development area, north of Country Hills Boulevard NE, will be serviced by the Stoney Industrial Area’s trunk sanitary sewer system. The trunk sewer alignment can be carried to the eastern boundary of the development at 128 Avenue NE for upstream connection. Sewers flowing through the development do not service lands east of the development area and south of Country Hills Boulevard NE.

13.3 Storm Sewer

Storm sewer drainage generated within the Stoney Industrial Area is to be directed into Nose Creek through a system of stormwater management facilities the developer will be required to construct in accordance with established policies and standards. Lands upstream of the development area will be serviced by the Stoney Industrial Area's trunk storm sewer system, with an alignment carried to the eastern boundary of the development, possibly at 128 Avenue NE.

Lands offsite and upstream of the development area, less Calgary Airport Authority property, north of 96 Avenue NE, will be serviced by the Stoney Industrial Area's trunk storm sewer system. The trunk sewer alignment can be carried to the eastern boundary of the development at 128 Avenue NE for upstream connection. The area's stormwater quality and controlled discharge to Nose creek can be satisfied with Stormwater Management Facilities. The upstream development controlled discharge can flow through the Stoney Industrial Area's pond facilities and discharge to Nose Creek through a common outfall structure. Stormwater ponds are shown conceptually on Map K, their exact number, location and size of stormwater management facilities will be determined at the Outline Plan /Land Use Amendment stage.

Lands within the development area, south of Country Hills Boulevard NE and West of Deerfoot Trail NE, will be serviced by the Stoney Industrial Area's trunk storm sewer system. Lands within the development area, south of Country Hills Boulevard NE and east of Deerfoot Trail NE, will be serviced by the existing 96 Avenue NE trunk storm sewer system and outfall.

Stormwater drainage is addressed for portions of the Stoney Industrial Area within the 96 Avenue NE Master Drainage Plan, prepared by Westhoff Engineering Resources, Inc. The balance of the area's stormwater drainage is addressed in Master Drainage Plans submitted by Westhoff Engineering Resources, Inc., currently being reviewed by The City of Calgary. As part of the development process Staged Master Drainage Plans and Detailed Stormwater Management Reports will be required for construction approvals.

Stormwater run-off is to be restricted to the rates set by the Nose Creek Drainage Study and stormwater quality will be implemented in accordance with the requirements of Alberta Environmental Protection. New outfalls will need to be provided and will require the necessary approvals.

13.4 Shallow Utilities

13.4.1 Natural Gas

Existing and proposed natural gas feedermain systems are shown on Map L. The existing high-pressure Jumping Pound transmission pipeline requires a 15 m building setback. Natural gas distribution systems will tap into these feeder mains, and provide service to customers.

13.4.2 Electrical

Existing and proposed power lines are indicated on Map M. Rights-of-way for new lines will be required at the time that lines are extended into the area. Additional rights-of-way are required for some of the existing lines and should be acquired at time of development. The developer is responsible to maintain clearance of buildings from transmission lines in accordance with the *Alberta Electrical and Communication Utility Code*.

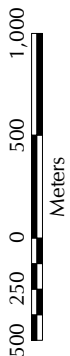
13.4.3 Telecommunications



TELUS Communications Inc. will provide communication services for the businesses in the Stoney Industrial Area. The potential routing of main infrastructure (conduit) is within major road rights-of-way as shown on Map N. The location of required hub locations, easements, and direct buried shallow facilities, and their relationships to roads and lanes will be determined at the outline plan stage.

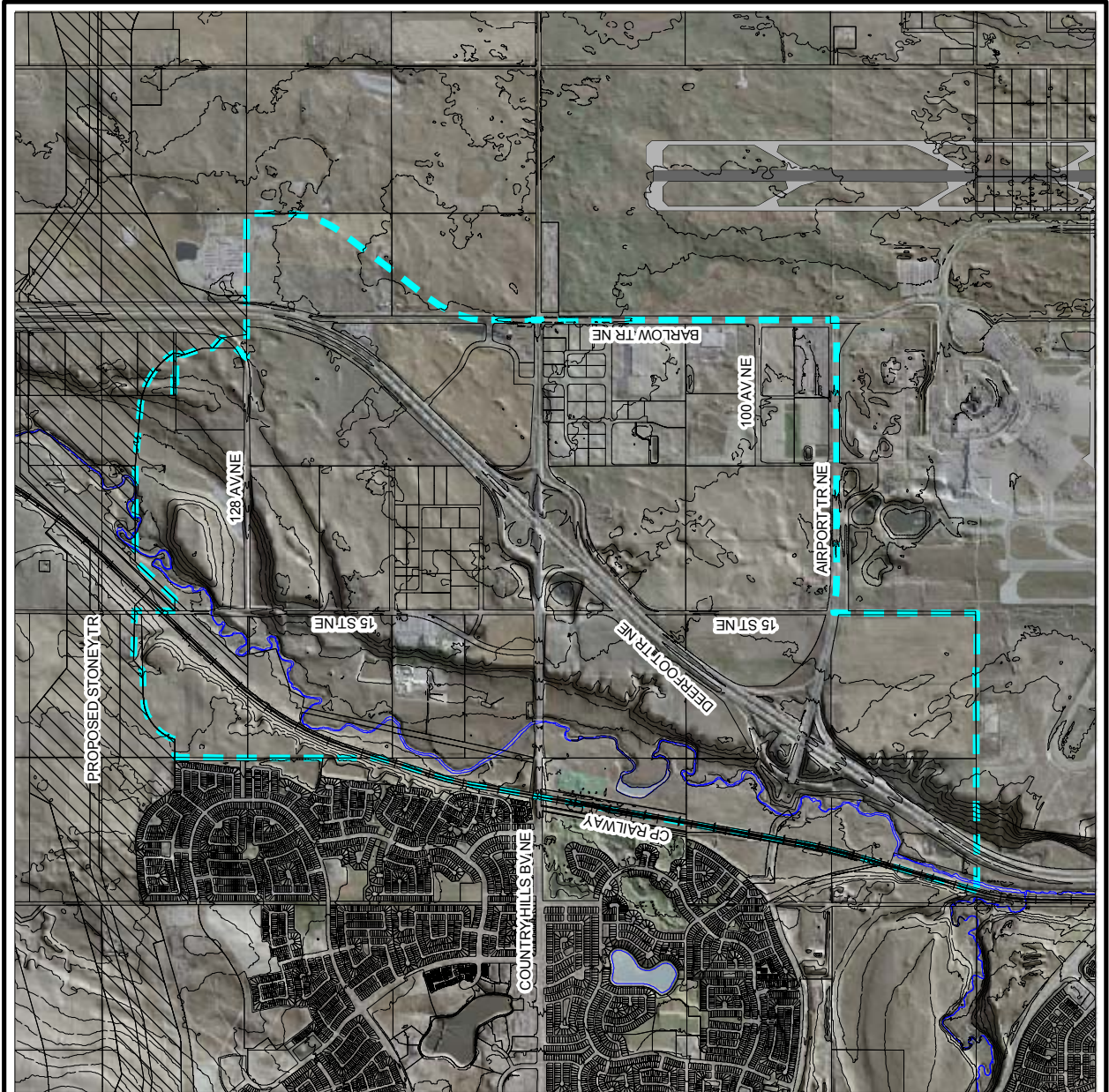
Revised Stoney Industrial Area Structure Plan

Map A

Air Photo



-  Transportation Utility Corridor
-  Plan Boundary



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

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Map B

Ownership



Meters



Transportation Utility Corridor



Plan Boundary



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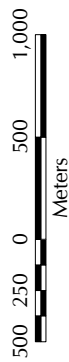
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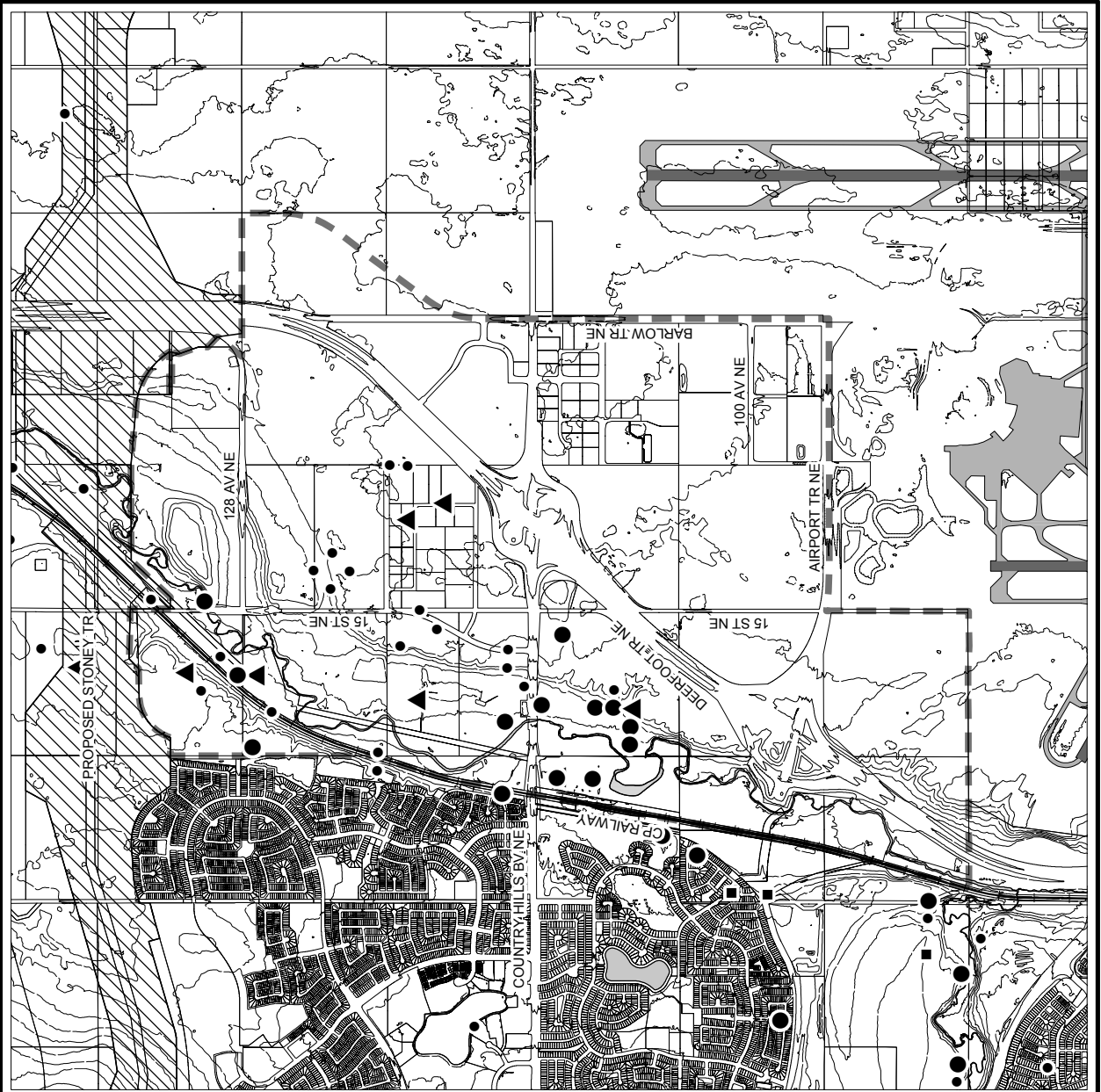
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Map C

Archeological Sites



-  Transportation Utility Corridor
-  Plan Boundary
-  Regionally Significant
-  High Locally Significant
-  Locally Significant
-  Non-Significant

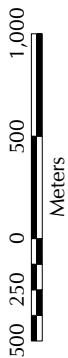


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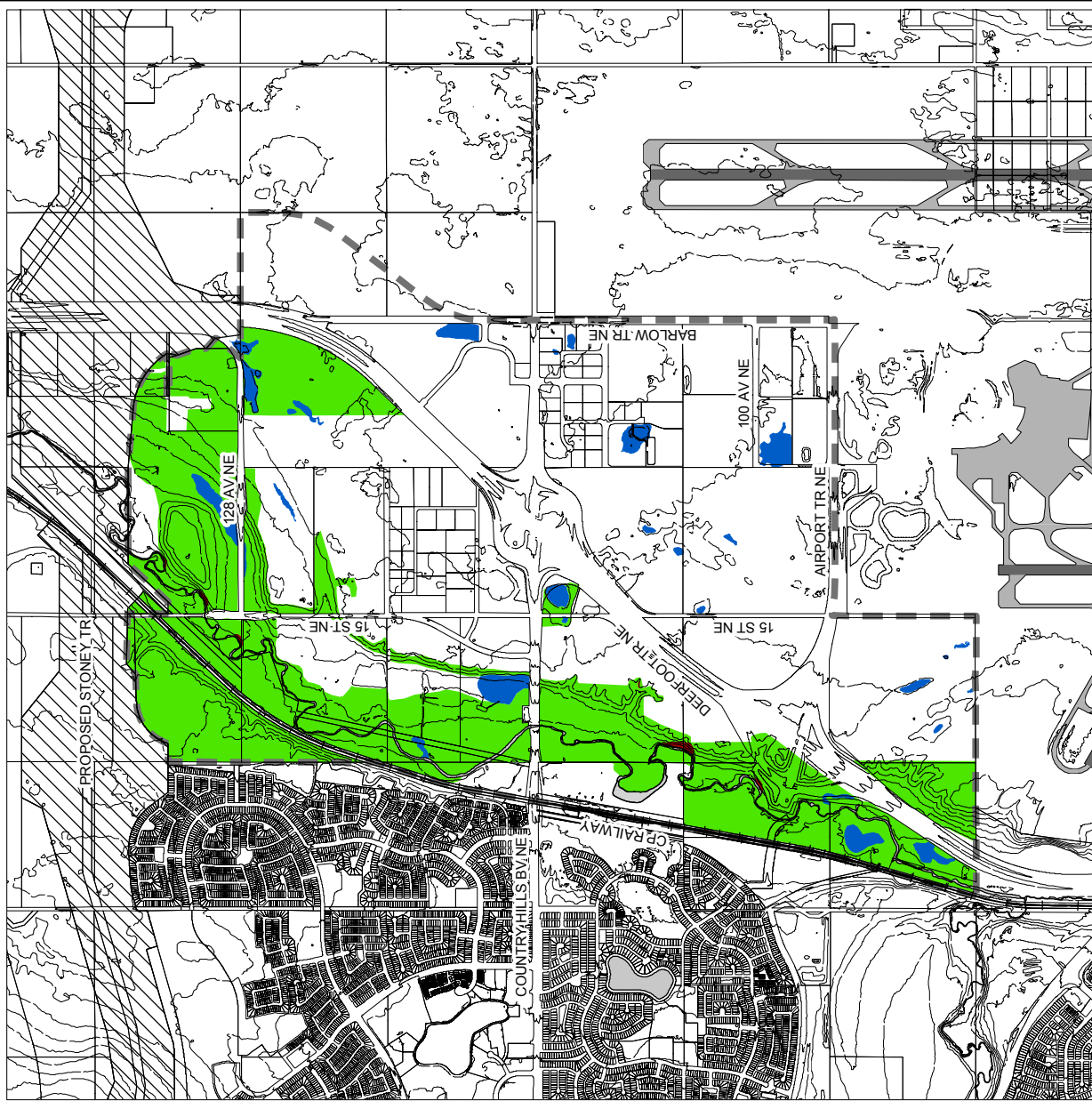
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Map D

Habitat



-  Transportation Utility Corridor
-  Plan Boundary
-  Aspen Woodland
-  Low Shrub
-  Native Grassland
-  Wetland

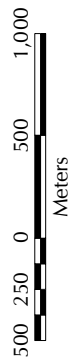





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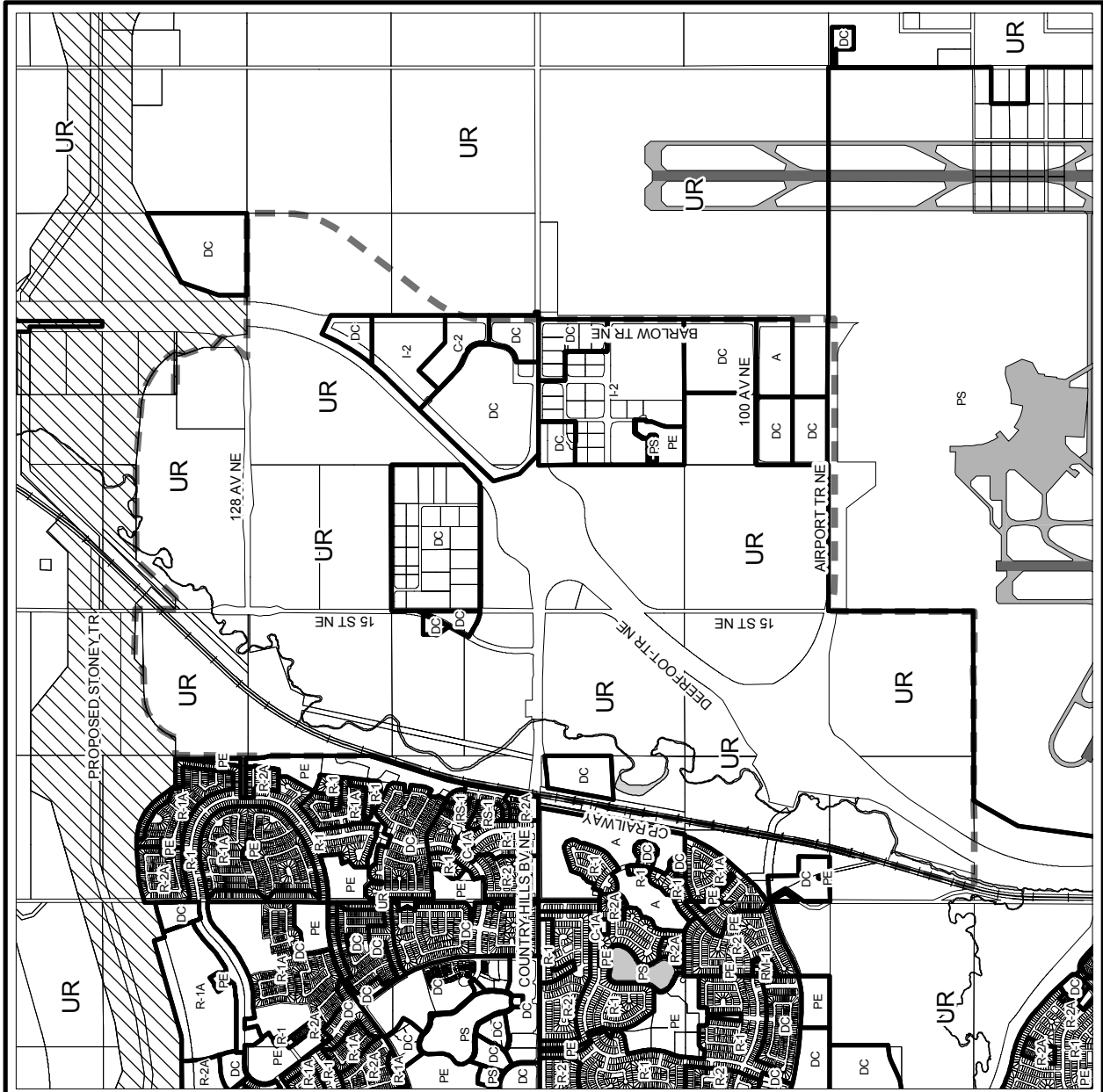
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Map E

Current Land Use



-  Transportation Utility Corridor
-  Plan Boundary
-  Land Use Boundary

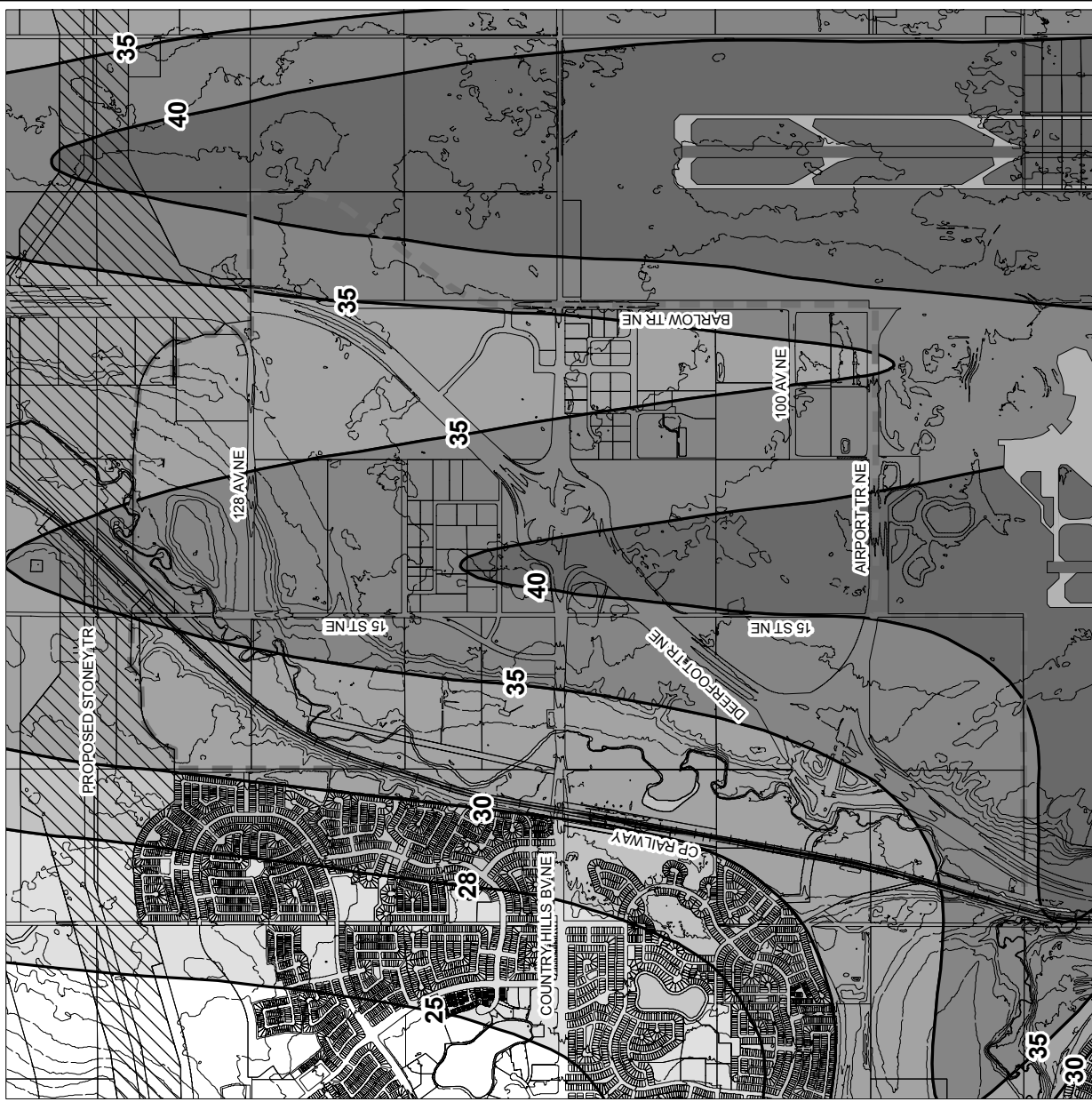
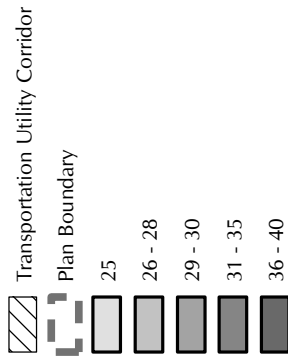
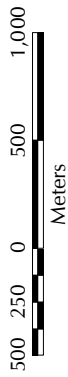


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Map F

Noise Exposure Forecast (N.E.F.) Contours



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Map G

Oil And Gas Infrastructure



Meters



Transportation Utility Corridor



Plan Boundary



Operating Oil Well



Operating Sour Gas Well



Abandoned Oil Well



Abandoned Sour Gas Well



Abandoned Gas Well

Sour Gas Pipeline

Crude Oil Pipeline



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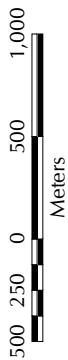


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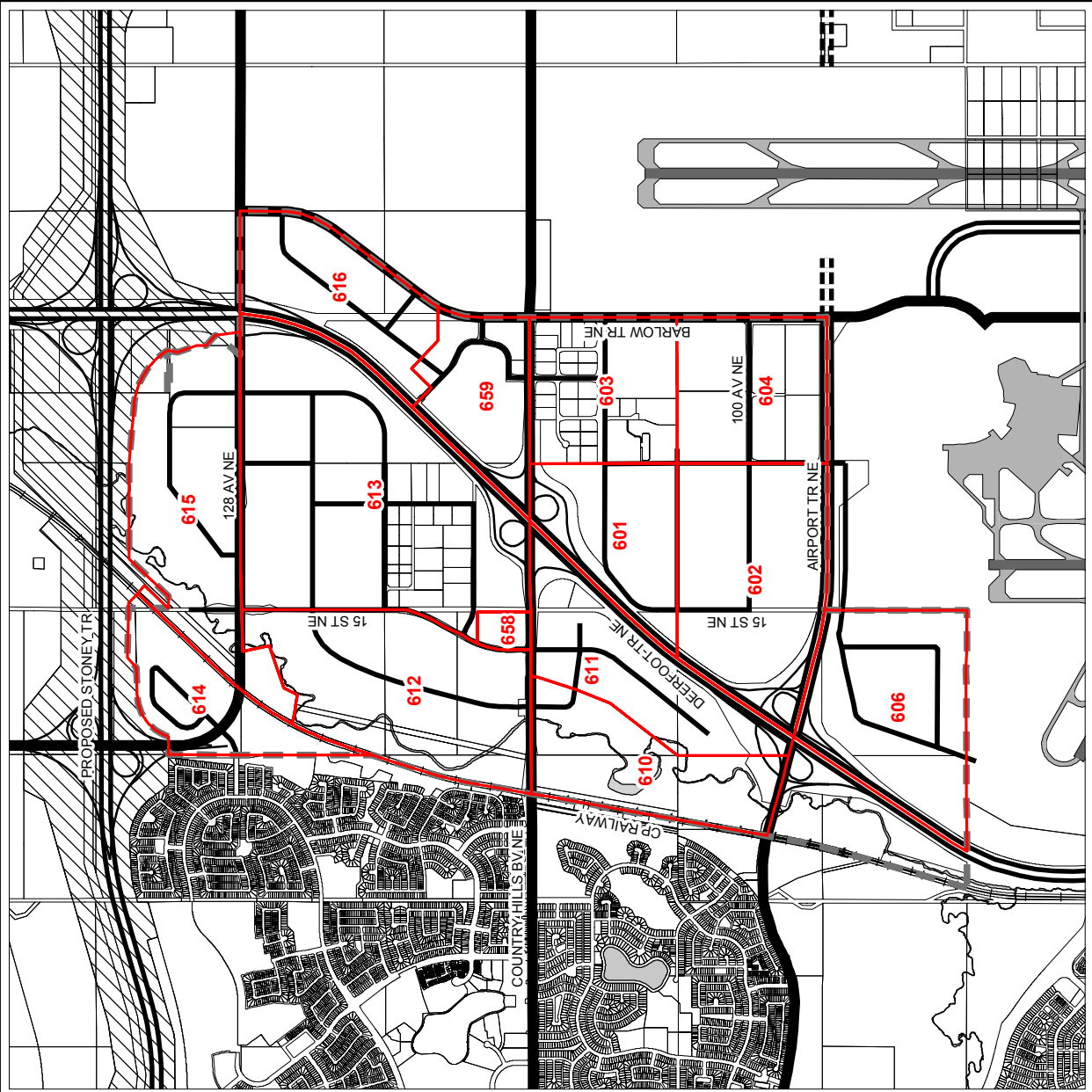
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Map H

Transportation Sub-Zones



- Transportation Utility Corridor
- Plan Boundary
- Transportation Sub-Zones
- Freeway/Expressway
- Possible Freeway/Expressway
- Regional Major Road
- Internal Road Network
- On/Off Ramp



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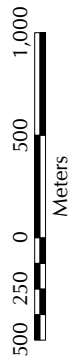







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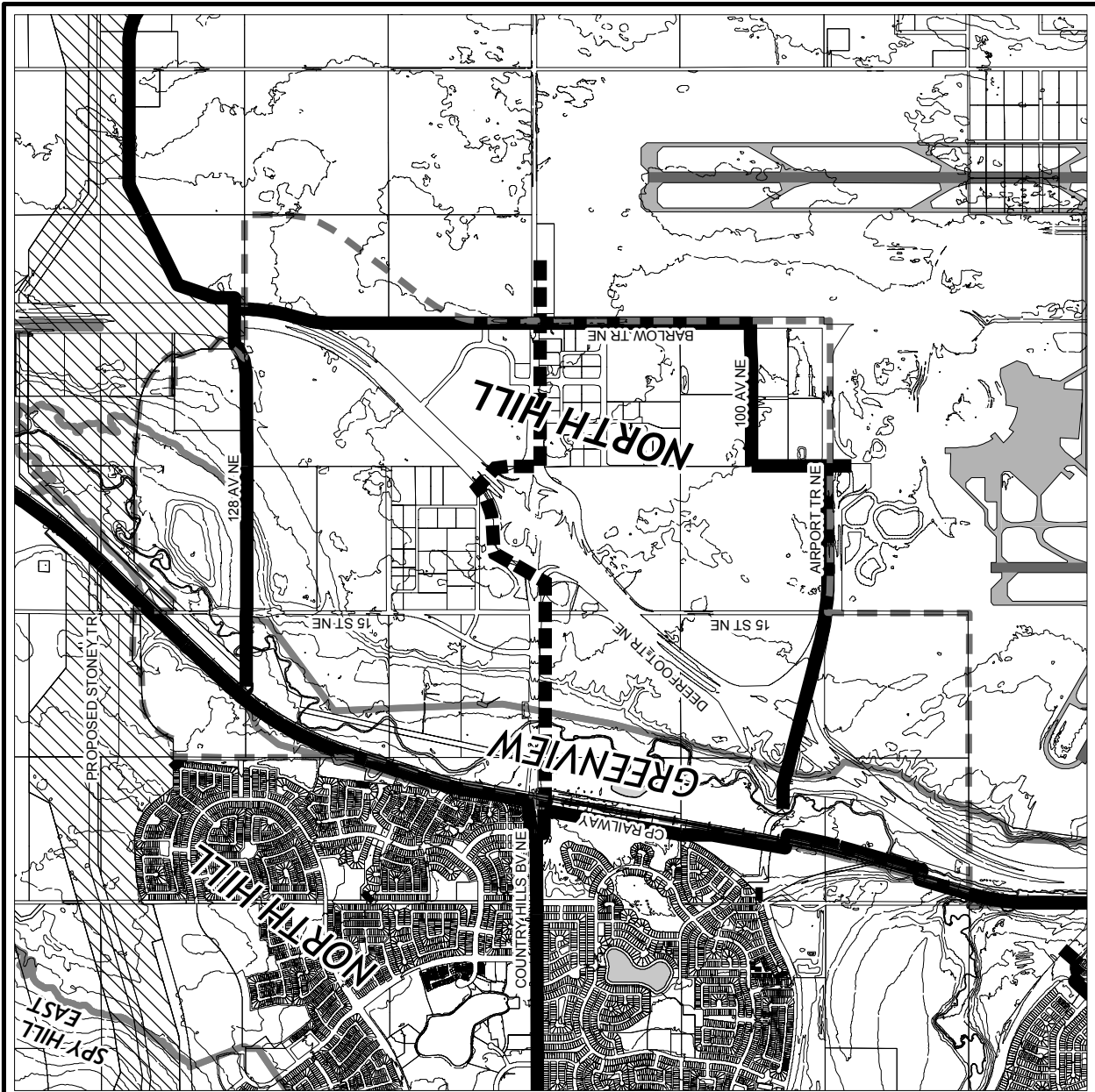
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Map 1

Water Supply



-  Transportation Utility Corridor
-  Plan Boundary
-  Existing Watermain
-  Future Watermain
-  Pressure Zone Boundary



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Map J

Sanitary Servicing

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Meters

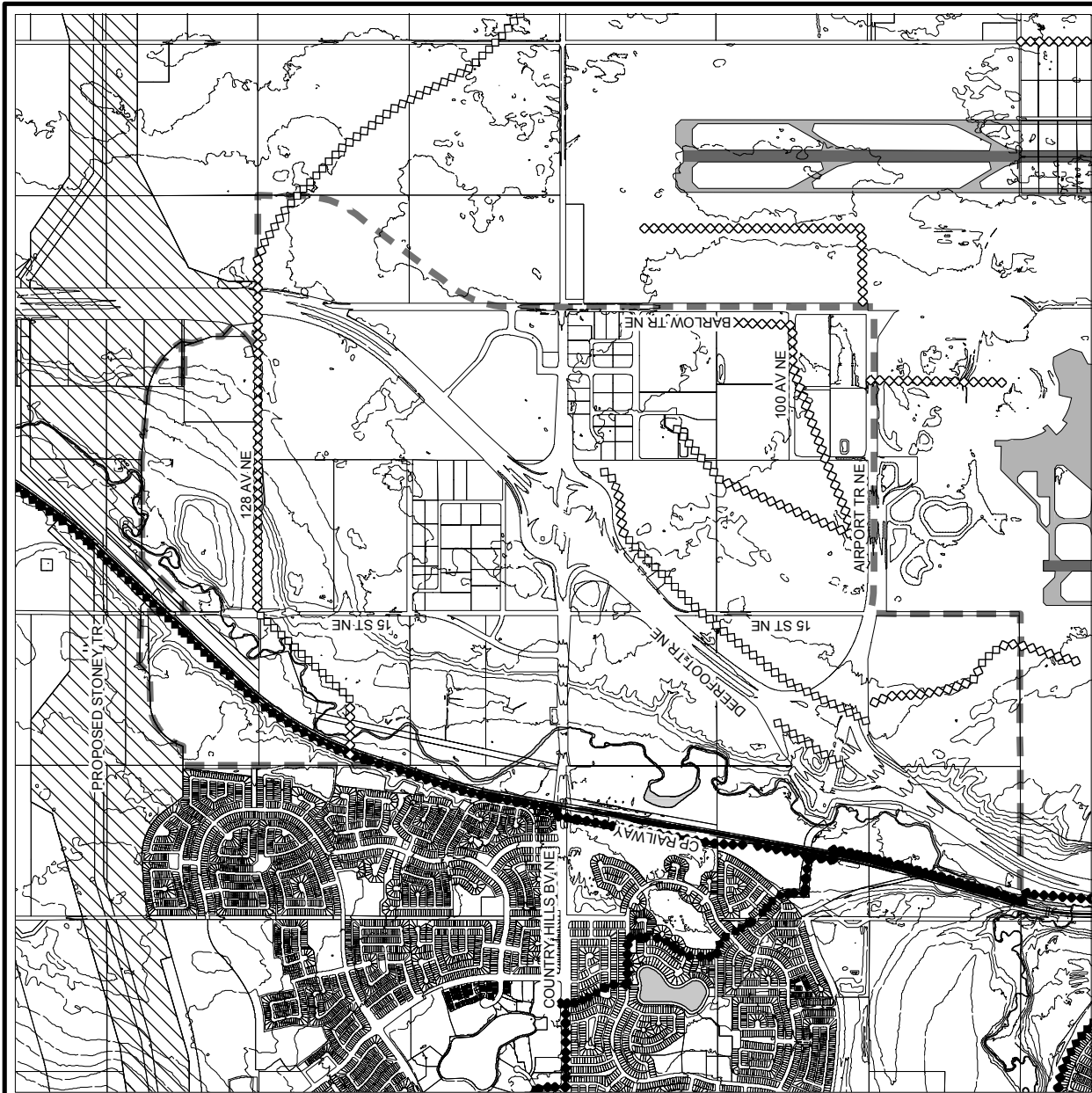
-  Transportation Utility Corridor
-  Plan Boundary
-  Existing Sanitary Sewer Trunk
-  Proposed Sanitary Sewer Trunk

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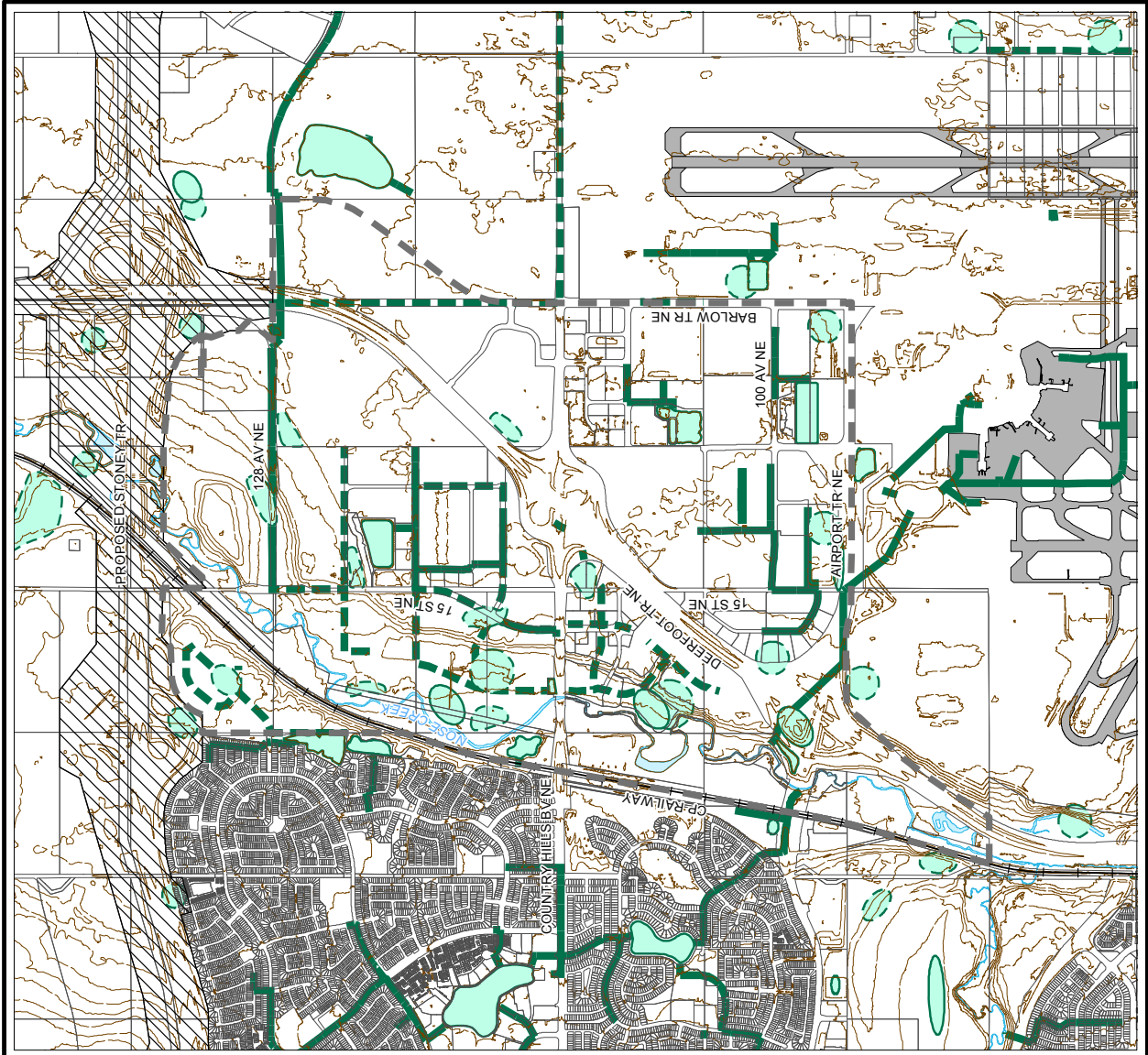
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Map K

Storm Servicing



- Legend**
- Plan Boundary
 - Transportation Utility Corridor
 - Existing Storm Trunk
 - Proposed Storm Trunk
 - Existing Storm Pond
 - Proposed Storm Pond



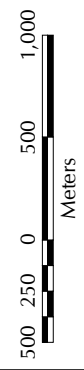
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





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Amended: 30P2013

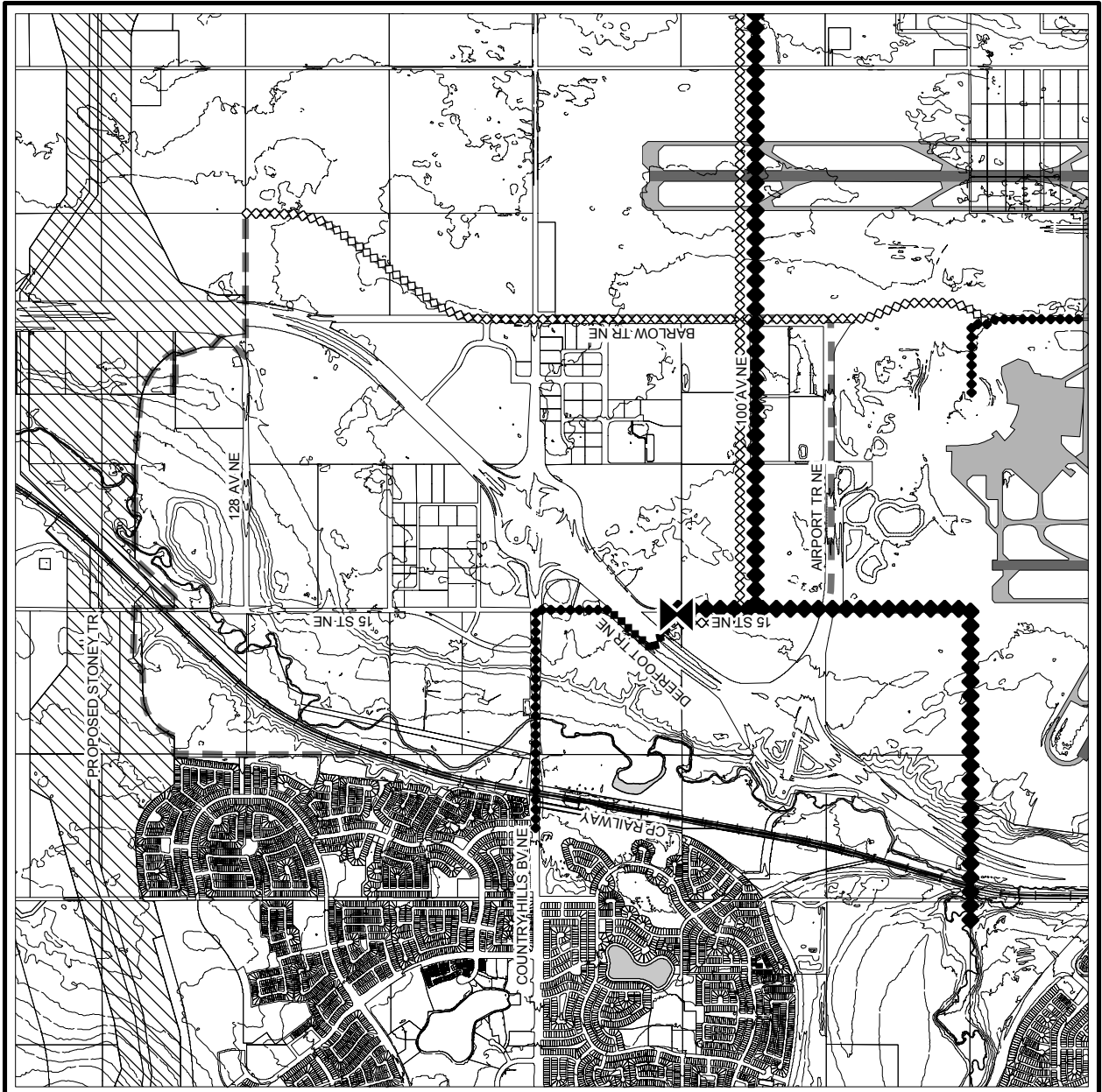
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Map L

Natural Gas



-  Transportation Utility Corridor
-  Plan Boundary
-  Existing IP Feedermain
-  Existing Transmission Pipeline
-  Proposed IP Feedermain
-  Existing "Harvest Hills" Gate Station



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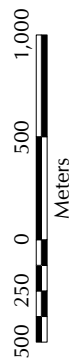






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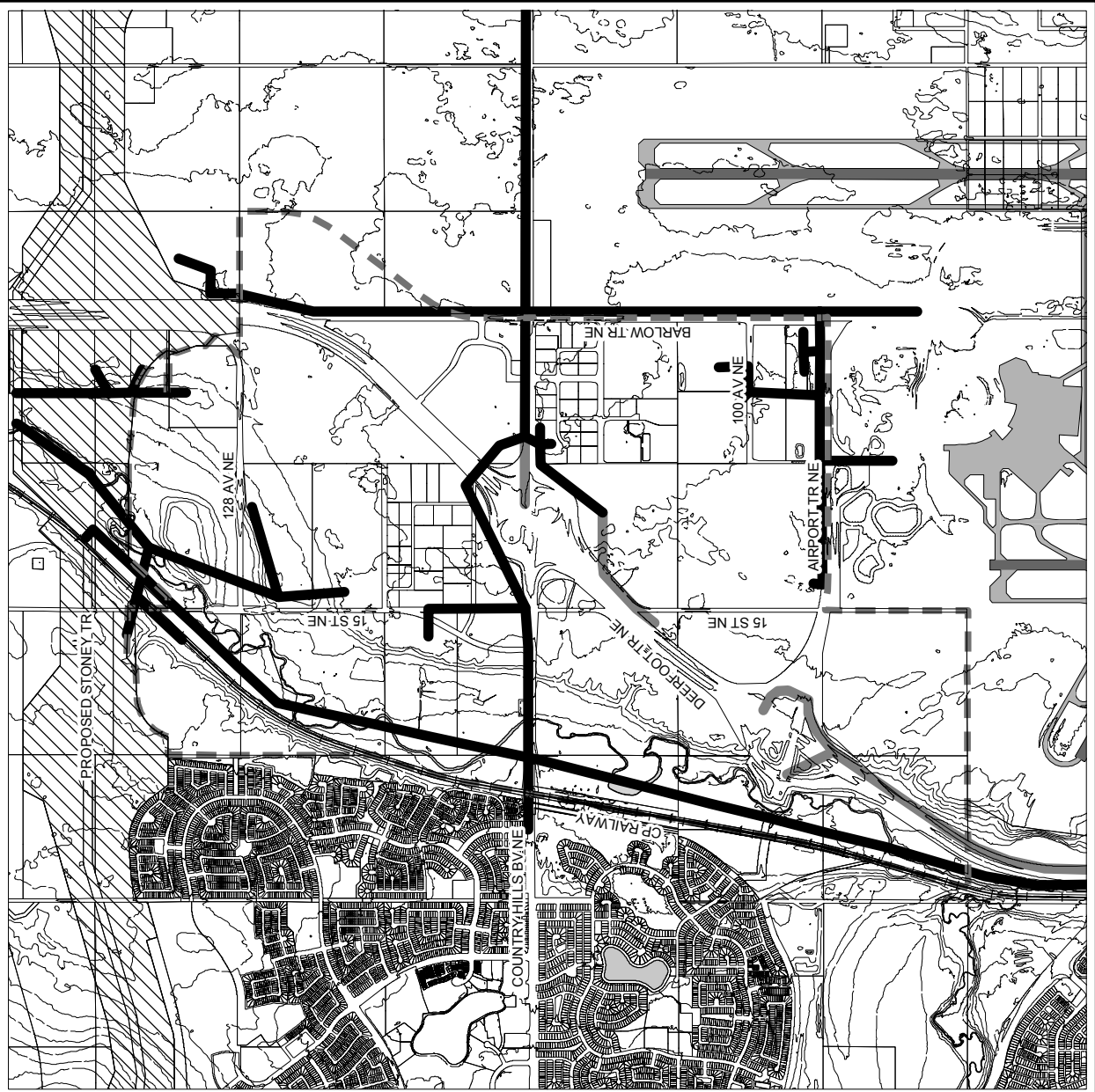
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Map M

Electric



-  Transportation Utility Corridor
-  Plan Boundary
-  Overhead Electric Infrastructure
-  Underground Electric Infrastructure

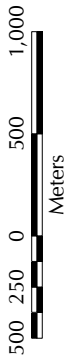






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Map N

Telecommunications



-  Transportation Utility Corridor
-  Plan Boundary
-  Proposed Feeder Route Extension
-  Proposed Sub Routing



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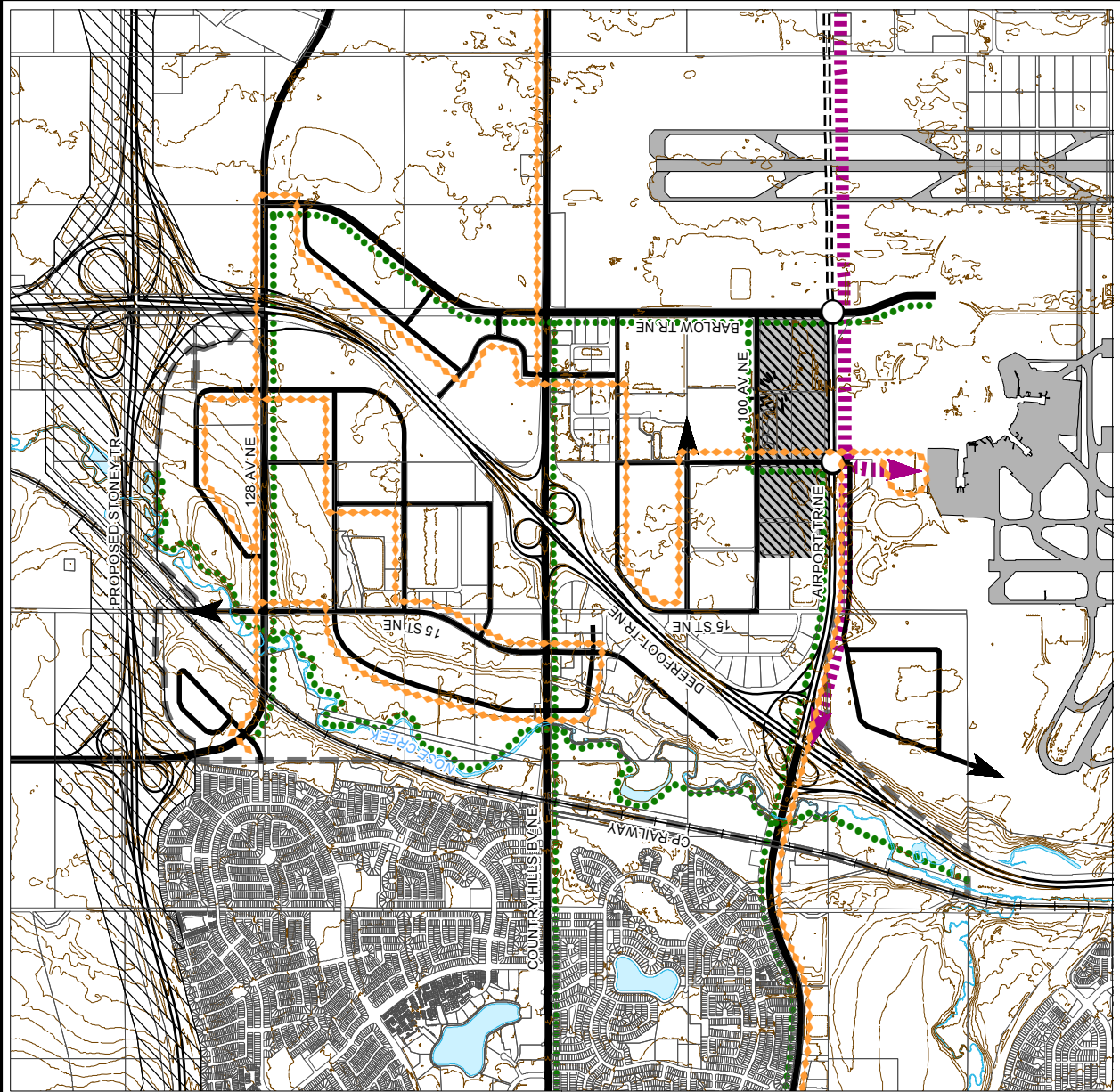
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Map O

Transportation



- Legend**
- Plan Boundary
 - Transportation/Utility Corridor
 - Expressway (Skeletal Road)
 - Possible Future Expressway (Skeletal Road)
 - Regional Major Road (Arterial Street)
 - Internal Road Network
 - On/Off Ramp
 - Possible Interchange
 - Transportation Network Overlay
 - Regional Pathway
 - Transit Route
 - Airport Transit Connection (Technology TBD)

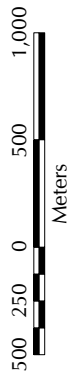




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 Approved: 16P2004
 Amended: 30P2013

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Map P

Vehicle Trip Generation



-  Transportation Utility Corridor
-  Plan Boundary

All sites shown on this map have a maximum allowable vehicle trip generation of 15 vehicle trips per net developable hectare during the peak PM hour unless otherwise identified as a numbered site on the map and referenced in Table C.

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