



area structure plan
revised
September 2015

South Airdrie

Bylaw No. B-34/2012
November 19, 2012

Last Amendment:
Bylaw No. B-04/2015

The Focus Corporation © 2005

Adopted By City Council Bylaw B-34/2012

FOCUS

BYLAW NO. B-04/2015
OF THE CITY OF AIRDRIE
IN THE PROVINCE OF ALBERTA

BEING A BYLAW of the City of Airdrie, in the Province of Alberta, to amend Bylaw No. B-34/2012, being the South Airdrie Area Structure Plan.

WHEREAS under the authority and subject to the provisions of the Municipal Government Act, Revised Statutes of Alberta 2000, Chapter M-26, and amendments thereto, the Council of the City of Airdrie may adopt an Area Structure Plan; and

WHEREAS Council has adopted the South Airdrie Area Structure Plan as Bylaw No. B-34/2012; and,

WHEREAS Council deems it desirable to enact that the said Bylaw is amended in the manner outlined below;

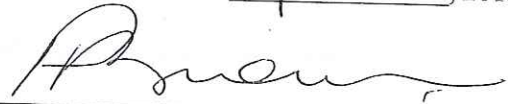
NOW THEREFORE the Municipal Council of the City of Airdrie in Council duly assembled enacts that Bylaw No. B-04/2015 amends Bylaw No. B-34/2012 "South Airdrie Area Structure Plan", in the manner as written and illustrated in the attached Schedule 'A'.

READ a first time this 8th day of September, 2015.

READ a second time this 8th day of September, 2015.

READ a third time this 8th day of September, 2015.

EXECUTED this 8th day of September, 2015



MAYOR



CITY CLERK

South Airdrie Area Structure Plan

Bylaw No. 21/91
September 17, 1991

Office Consolidation as of October 2015
Listing Only – Refer to Bylaws for Details
List of Amendments

Amendment 1:	Bylaw No. 15/96
Amendment 2:	Bylaw No. 34/00
Adoption:	Bylaw No. 16/03
Amendment 1:	Bylaw No. 14/04
Amendment 2:	Bylaw No. 06/05
Amendment 3:	Bylaw No. 38/09
Adoption:	Bylaw No. 34/12
Amendment 1:	Bylaw No. 04/15

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1 Introduction

1.1 Purpose of the Plan

This Area Structure Plan has been prepared pursuant to Section 633(1) of the Municipal Government Act (MGA) and is in accordance with the requirements of the City of Airdrie's Municipal Development Plan. It has also been structured to satisfy the requirements and intent of "The Terms of Reference for the Preparation of Area Structure Plans.....in the City of Airdrie".

Specifically, the South Airdrie Area Structure Plan is a statutory document establishing the framework for the further development of the subject lands. The plan begins to apply and implement the objectives of the Municipal Development Plan as they relate to the subject lands in order to ensure attractive, efficient and economical development in a manner that is compatible and complimentary to existing developments in south Airdrie.

1.2 Background to the Area Structure Plan

The South Airdrie Area Structure Plan was originally approved in 1991 under Bylaw 21/91 and amended in 1996 under Bylaw 15/96. On October 16, 2000, Bylaw 15/96 was rescinded and replaced with a new ASP Bylaw 34/00. Since the adoption of Bylaw 34/00, market factors have necessitated a redesign of the internal collector road system and parcel sizes and configurations for the commercial lands east of the railway. The presence of the railway and the future east/west arterials provide a set limitation and restricts any connectivity between the east and west sides. The independent planning of comprehensive residential uses proposed for the northwest quadrant further justified the preference to separate it from the eastern and southern commercial/industrial lands. It was therefore proposed that the South Airdrie Area Structure Plan be amended to exclude the lands west of the railway and north of the future central arterial and this new South Airdrie ASP be prepared to address the planning for the remaining area. This is therefore an amendment to Bylaw 34/00 - the South Airdrie Area Structure Plan.

The lands falling west of the railway and north of the central arterial have been included within the Cooper's Town Area Structure Plan which encompasses +/- 174 ha (+/- 430ac) of Section 36-26-1-W5.

1.3 The Approval Process

In conformance with the City of Airdrie's established process, the revised Area Structure Plan will be submitted to Administration for review. Through timely and open liaison, adjustments will be made as required allowing for advancement to the Municipal Planning Commission (MPC) for approval. This recommendation for approval will go to Council for 1st Reading, and following the appropriate advertisement, will be presented at the Public Hearing to be followed by 2nd and 3rd Readings. In order to adequately inform the public and solicit feedback prior to Public Hearing, an Open House is proposed to be undertaken at a time and place as agreed upon with Administration.

1.4 Policy and Legislative Framework

1.4.1 Municipal Government Act (MGA)

The framework for Area Structure Plans is established within Section 633 of the Municipal Government Act. Specifically, the legislation states that:

“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, and
 - iii. the density of population proposed for the area either generally or with respect of 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.*”

1.4.2 Airdrie City Plan

The original City Plan for the City of Airdrie (Bylaw B-07/2003) outlined the general growth and development objectives for the municipality as a whole. Within these goals and objectives is the identification of industrial land uses for the lands south of Yankee Valley Boulevard, and between the railway and highway to the west and east respectively. This bylaw was further amended with Bylaw (14/2002) which established a Regional Commercial site for the northern portion of the industrial area. In summary, this area has been identified to provide “a range of commercial goods and services and function as an employment node for Airdrie and the surrounding trade area”.

In September 2014, Council adopted a new Airdrie City Plan (Bylaw No. B-17/2014), which redesignated two parcels immediately south of 40th Avenue as residential uses (west of the CPR line) and commercial uses (east of the CPR line). Bylaw No. B-04/2015 was adopted in September 2015 to bring the South Airdrie ASP into alignment with the Airdrie City Plan.

1.4.3 Land Use Bylaw (LUB)

The LUB prepared and adopted by the City of Airdrie (Bylaw B-09/2005) has created land use districts to be assigned throughout the municipality. The South Airdrie ASP area will ultimately be assigned a number of districts for various areas with the concentration of commercial and industrial districts. The particular districts and their respective boundaries will be further identified within forthcoming Neighbourhood Structure Plan and specifically within land use redesignation applications.

1.4.4 Growth Study

The City's Growth Study adopted in February 2001 predicts a 30 year shortfall of commercial and industrial land. This plan is a hybrid of Growth Options A and B in that it identifies a combination of residential and industrial development within the N ½ of Section 25-26-1-W5. Both growth options have identified industrial development for the southerly half. The plan is based on development objectives to achieve the highest urban residential, commercial, industrial, and environmental standards possible, while fulfilling market requirements. The overall intent of the plan is to pursue orderly and economical staged development at the earliest date possible.

2 Development Area

2.1 Location and Size

The subject lands falling under the South Airdrie Area Structure Plan consist of +/-321 ha (+/-795ac) of land located within Section 25 and the east half of Section 36 of Township 26, Range 1, W5M within southwest Airdrie (Figure 1). The Airdrie municipal boundary (56 Avenue) establishes the south boundary, with 8 Street SW and the CP Rail mainline defining the west boundary for the south and north halves respectively. The north boundary is set along the central arterial alignment and Yankee Valley Boulevard for the areas falling west and east of the CP Rail mainline respectively. Highway 2 defines the east boundary for the length of the site (Figure 2).

2.2 Land Ownership

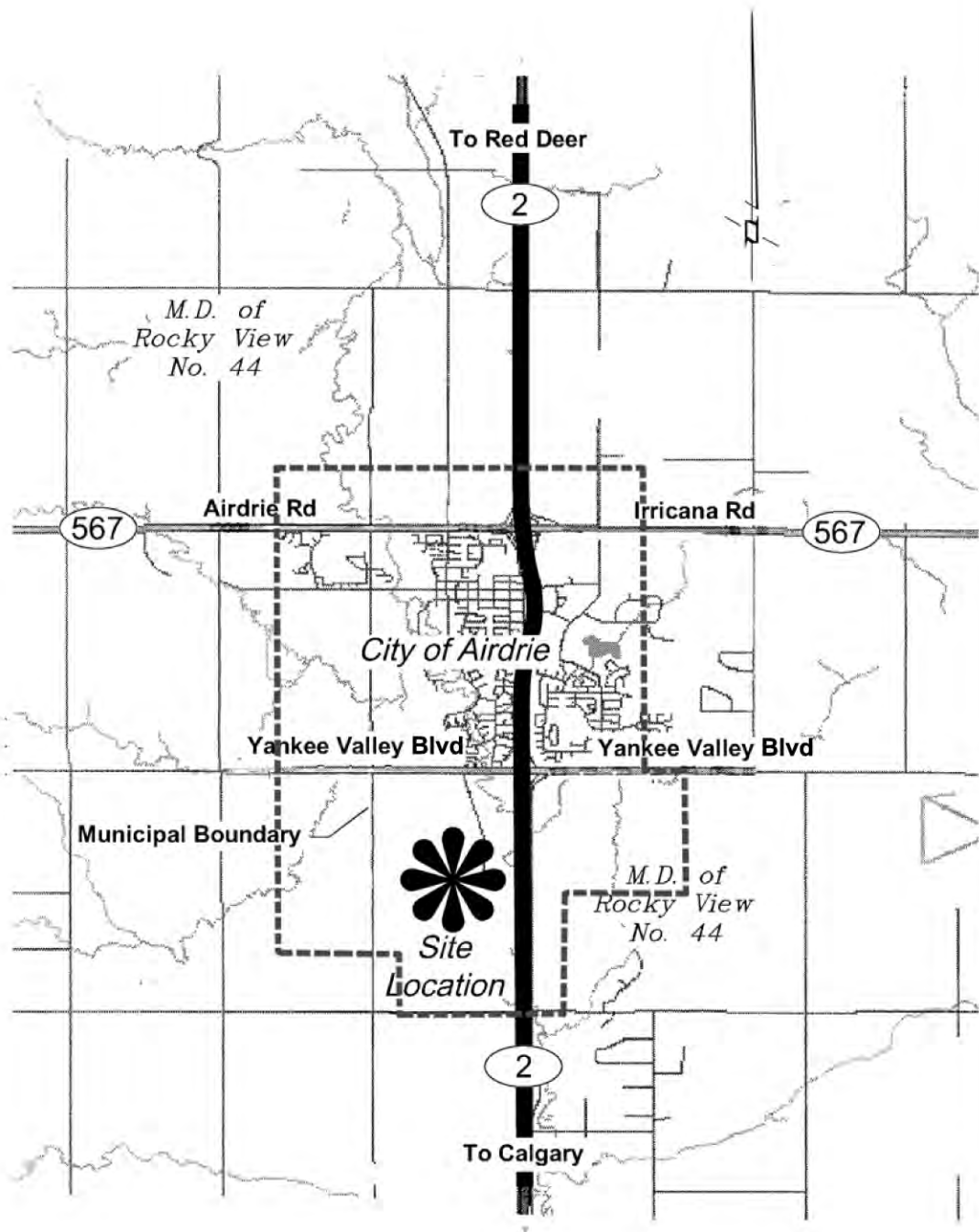
The subject lands fall under numerous titles with the majority consisting of a large group of shared interest owners of the NW ¼ of Section 25-26-1-W5. Single titles are held for the majority of the other quarters within this section. The existing partial development of the NE ¼ of Section 36-26-1-W5, along with parcels owned by the City of Airdrie and CP Rail, has resulted in numerous titles for this area as well. The breakdown of principal land owners is presented below and corresponds to the plan forming Figure 3.

REFERENCE #	OWNERSHIP	LEGAL DESCRIPTION	Ha
1	Various Land Owners	Various	
2	1767195 Alberta Ltd.	Lot 1, Block 1, Plan 0411653	31.05
3	1767195 Alberta Ltd.	Lot 2, Block 1, Plan 0411653	28.47
4	1325573 Alberta Ltd.	Portions of 5;1;26;25;SE	23.49
5	All Canadian Properties Inc.	Lot 3, Block 1, Plan 0411562	36.09
6	Apex Land Fund G.P Ltd. & Shane Homes	Portion of 5;1;26;25 NW	62.68
7	Apex Land Fund G.P Ltd. & Shane Homes	Block 1 Plan 9511989	2.02
8	Dragon Fund Inc.	Lot 1, Block 1, Plan 0411562	31.34
9	Sierra Springs Development Inc.	Lot 2, Block 1, Plan 0411562	30.17
10	Altalink Management Ltd.	Plan 0614072	1.17

2.3 Natural Constraints to Development

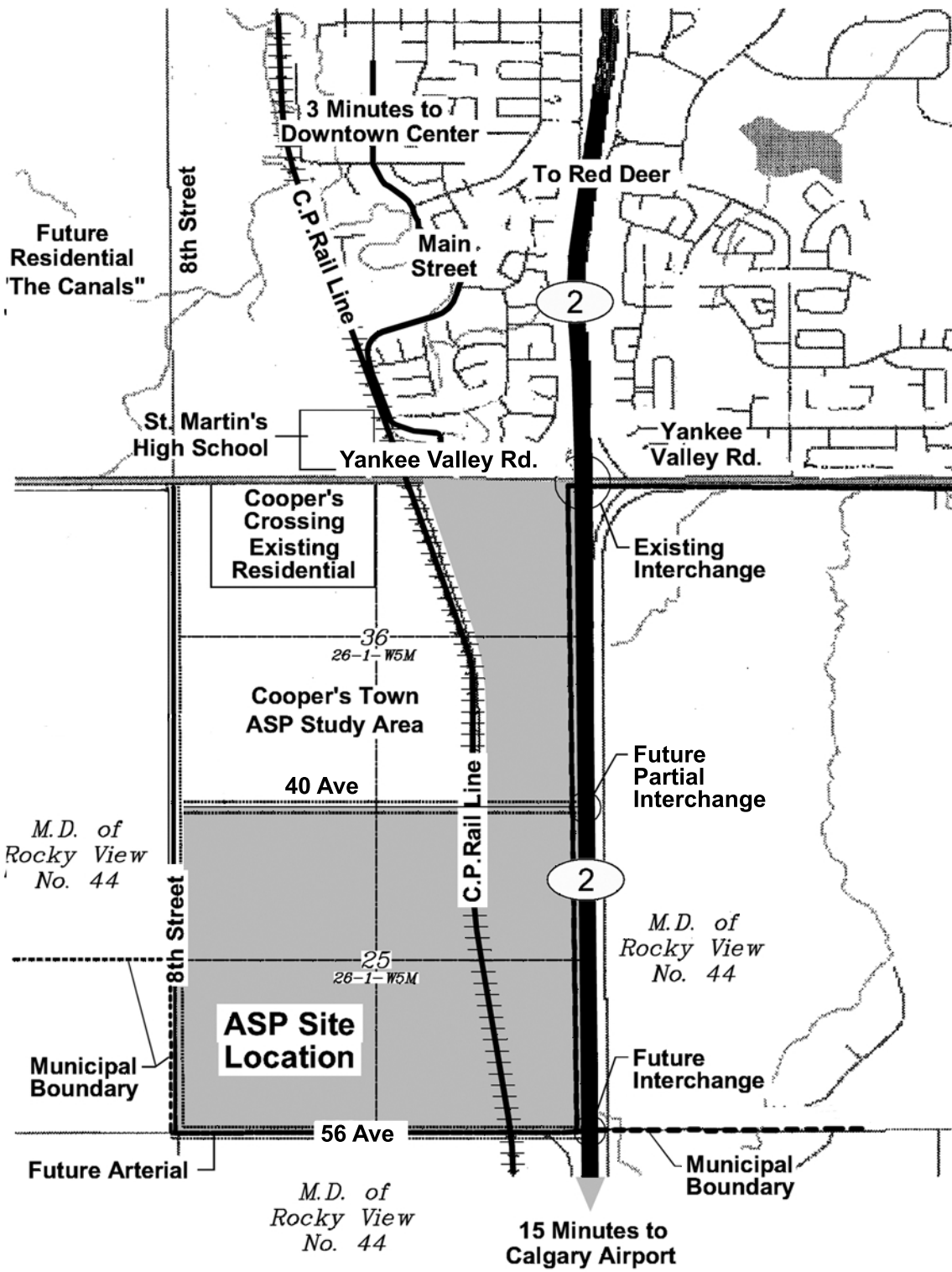
As mostly undeveloped agricultural lands, there are very few natural development constraints for the site. Nose Creek and corresponding floodway is of greatest importance due to its environmental significance and functioning as part of the overall stormwater management system. Similarly, the intermittent wetlands identified in the southwest portion of the site may be of significance but will require verification through further study (Figure 4).

South Airdrie
Area Structure Plan



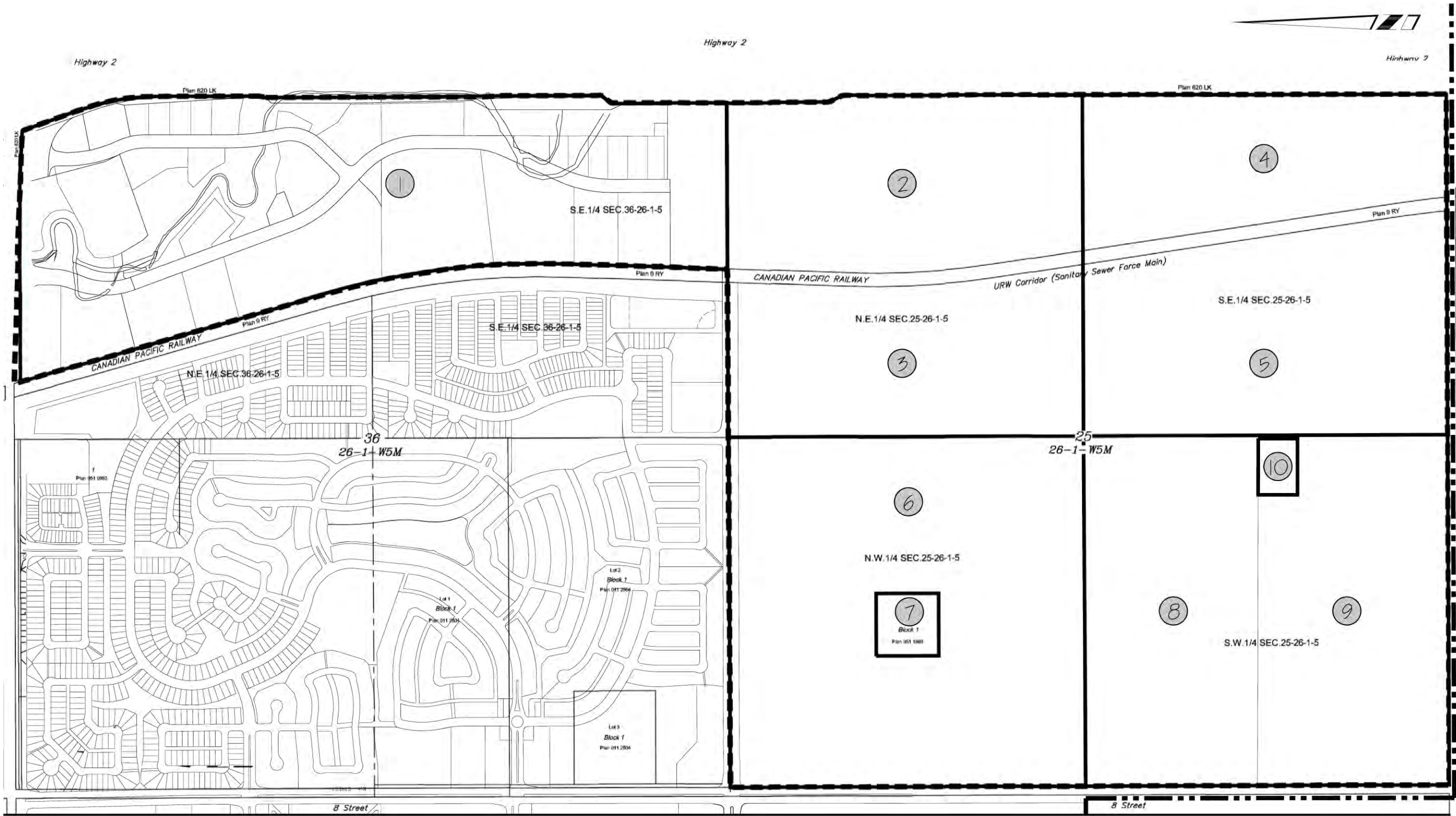
Location Plan
Figure 1

South Airdrie
Area Structure Plan



Context Plan
Figure 2

Plan Not To Scale



South Airdrie
Area Structure Plan

- Legend**
- Area Structure Plan Boundary
 - - - - - Municipal Boundary
 - Parcel Boundary
 - ④ Ownership Reference Number

Note: Please refer to Section 2.2 for ownership designation based on corresponding reference number.

Ownership Plan
Figure 3

2.4 Existing Land Use

Portions of the subject site have been previously redesignated as (P-1) Public Service District, (C-3) Regional Commercial District, (C-C) Convenience Commercial District, (IB-3) Industrial Business Park District Three, (IB-2) Industrial Business Park District Two, two (DC2 & DC20) Direct Control Districts which accommodate commercial development, one (DC18) Direct Control District which accommodates a temporary recreational vehicle storage facility, and an (RR-1) Rural Residential District site. The balance of the lands is (UH) Urban Holding District (Figure 5).

The northeasterly portion of the site currently is developed with a grocery store, a lumber supply store, a gas bar and other small pad retail/restaurant establishments. The railway traverses the site in a north/south direction. A small open space area has been developed adjacent to Yankee Valley Boulevard.

2.5 Adjacent Land Use

Lands to the north of Yankee Valley Boulevard are residential neighbourhoods previously developed. East of Highway 2 is predominantly agricultural in nature and falls within the MD of Rocky View as do the lands to the south. Both areas fall under the Urban Fringe classification within the Municipal Development Plan. The partially developed Cooper's Crossing community lies to the west of the subject lands within the NW $\frac{1}{4}$ of Section 36-26-1-W5. This area is encompassed by the Cooper's Town Area Structure Plan.

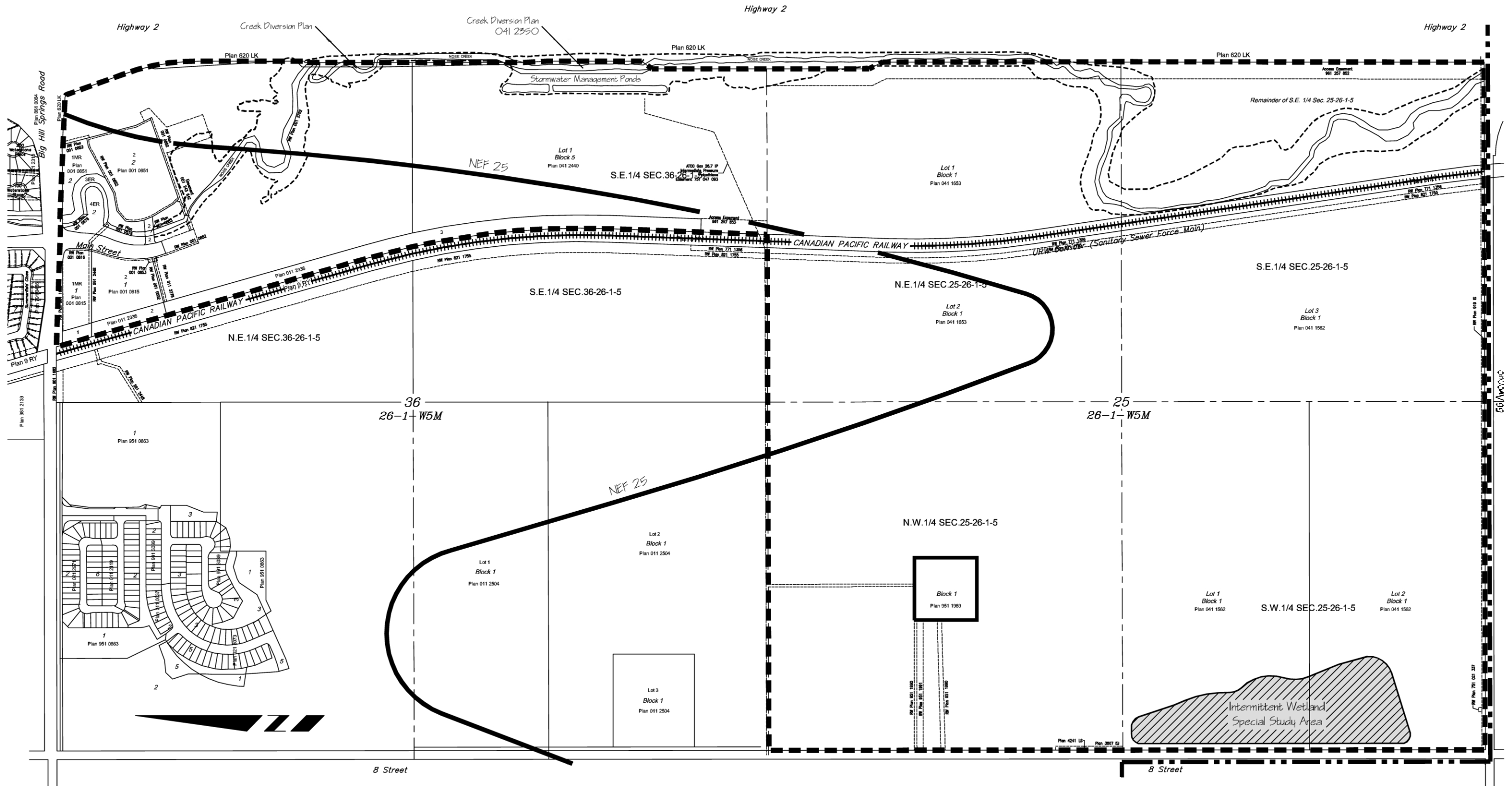
2.6 Topography and Drainage

The site generally comprises gently undulating topography with an elevation differential of 30m from west to east. A prominent knoll is evident within NW $\frac{1}{4}$ of Section 25-26-1-W5 that creates some steeper slopes in excess of 15% as well as limited viewshed opportunities to the mountains to the west (Figure 6). Topography is not anticipated to be of significance to the development of the lands other than providing opportunity for incorporation in the western most portion of the plan area. Overland drainage naturally flows west to east, and north to south into Nose Creek.

Nose Creek traverses the site in a north/south direction and will need to be crossed at various locations. Two creek diversions have been approved by Alberta Environment, with the most northerly location having been completed previously. The second diversion location will be initiated and completed in the spring of 2003. The entire Nose Creek floodway is intended to be maintained as such to handle the 1:100 year event. Development setbacks will be implemented as specified in the Municipal Development Plan, Land Use Bylaw and Nose Creek Watershed Water Management Plan.

An intermittent wetland has been identified in the SW $\frac{1}{4}$ of Section 25-26-1-W5. Further study of this wetland will be required at the Neighbourhood Structure Plan stage prior to development of this area.

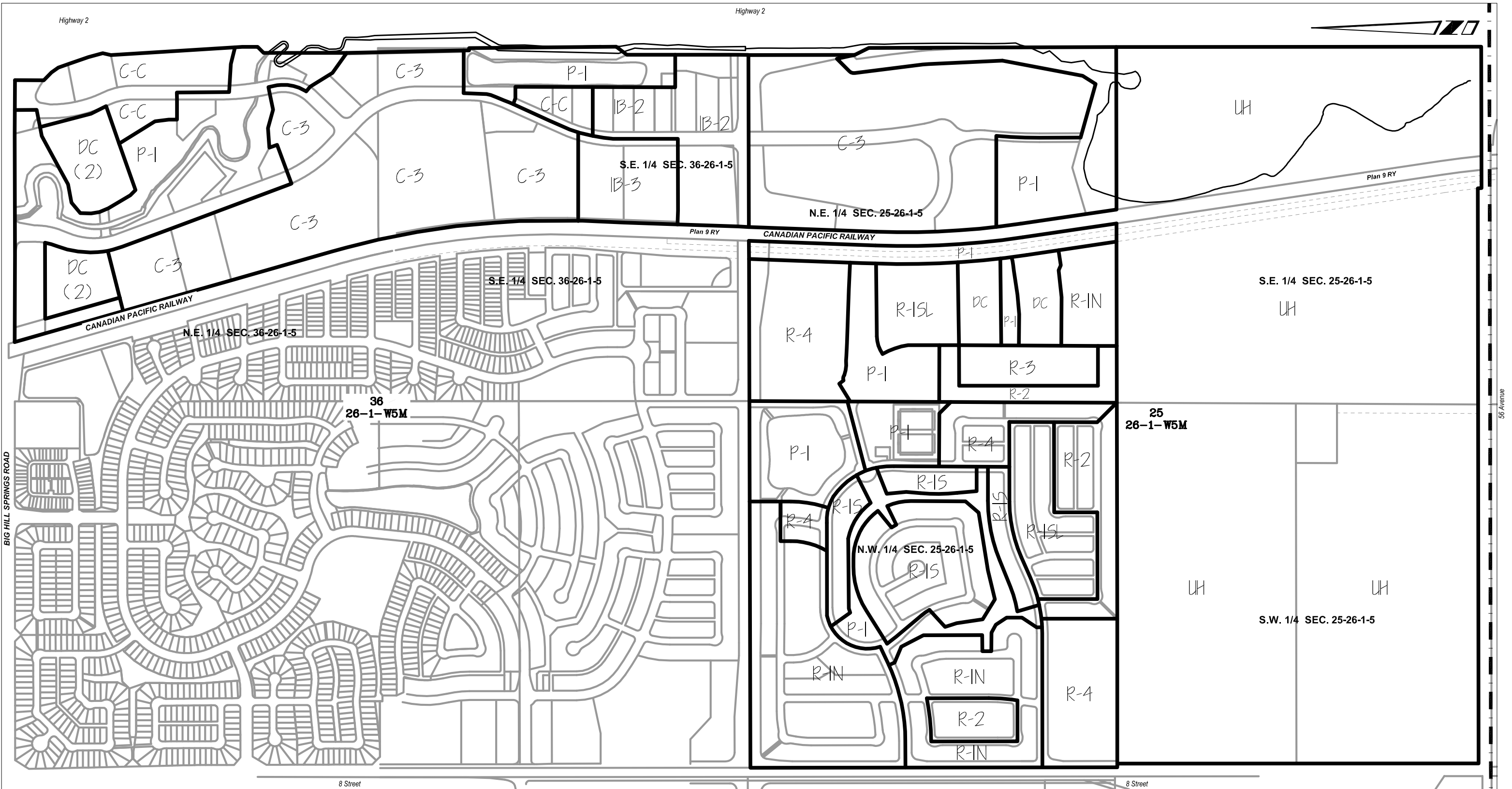
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- Legend**
- Area Structure Plan Boundary
 - Municipal Boundary
 - ||||| Canadian Pacific Railway Tracks
 - Flood Way
 - ~~~~~ Nose Creek

South Airdrie
Area Structure Plan

Existing Conditions Plan
Figure 4



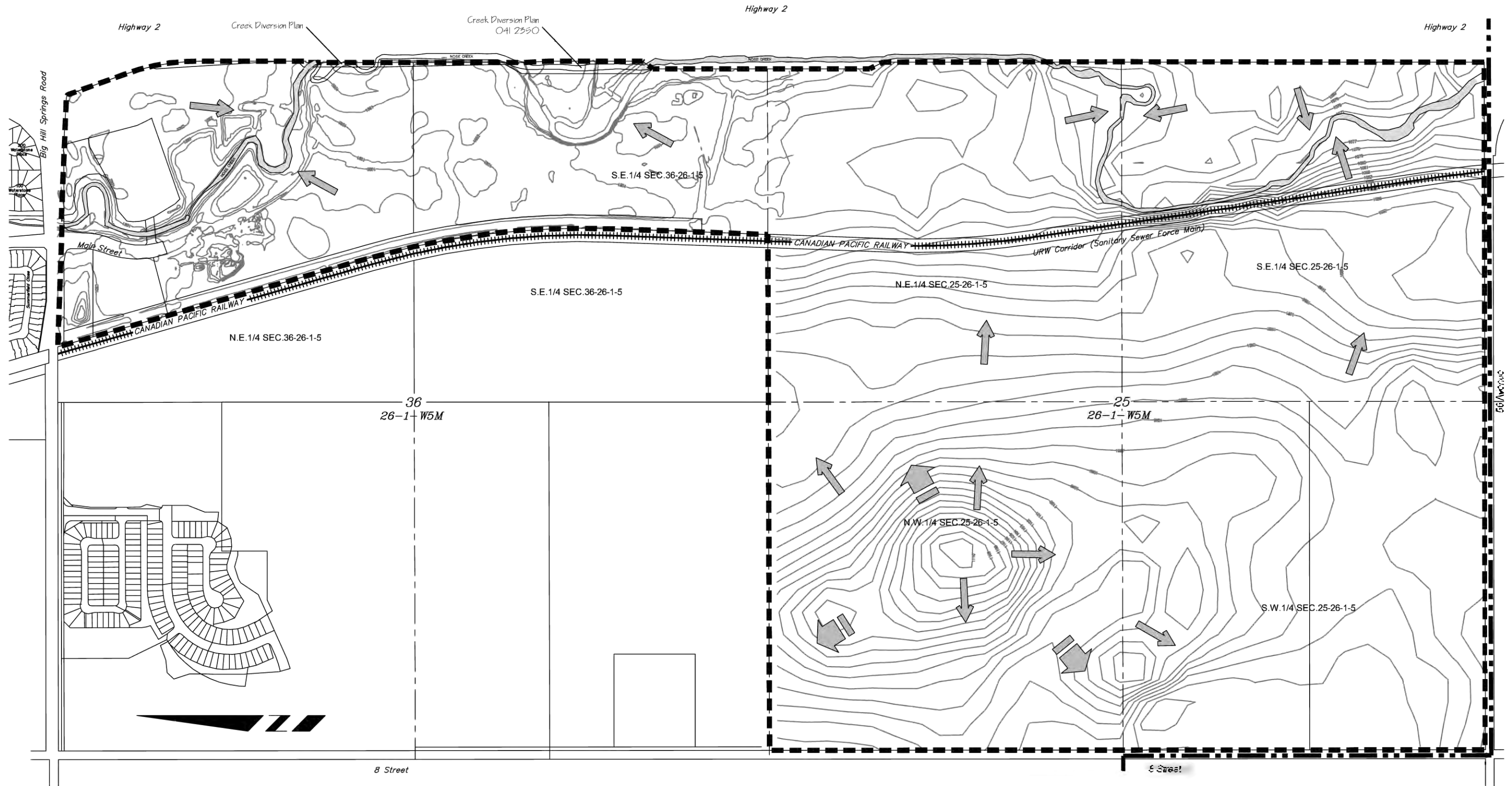
Legend

- | | | | | | | | |
|---|--------------------|------------------------------|--|--|--|---|-------------------------|
|  | Municipal Boundary | C-C | Convenience Commercial District | R-IN | Residential Single Dwelling Narrow Lot | P-1 | Public Service District |
|  | Land Use Boundary | IB-2 | Industrial Business Park District Two District | R-1S | Residential Single Dwelling Small Lot | | |
| | DC | Direct Control District | IB-3 | Industrial Business Park District Three District | R-1SL | Residential Single Dwelling Small Lot Laned | |
| | UH | Urban Holding District | RR-1 | Rural Residential District | R-2 | Residential Two Dwelling | |
| | C-3 | Regional Commercial District | R-3 | Residential Low Density Multi Dwelling | R-4 | Residential Medium Density Multi Dwelling | |

South Airdrie
Area Structure Plan

Existing Land Use Plan
Figure 5

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- Legend**
- Area Structure Plan Boundary
 - Municipal Boundary
 - Canadian Pacific Railway Tracks
 - Nose Creek
 - Direction of Overland Flow
 - Viewshed Opportunities

South Airdrie
Area Structure Plan

Topography Plan
Figure 6

2.7 Historical Resources Overview

A Historical Resources Assessment was undertaken in 1986 as part of the annexation study. The study concluded that there is limited historical and pre-historical significance across the subject lands due primarily to ongoing agricultural activity. No further studies were recommended or planned.

2.8 Soils

The subject lands are classified as a mix of glaciofluvial channel sediments as well as alluvium. The underlying bedrock geology is comprised of sandstone and limestone overlaid by sandstone, siltstone and mudstones of the Paskapoo and Porcupine Hills formation. Shallow bedrock may be found in isolated pockets. Soils and surficial geology will not pose major constraints and are generally suitable for development. Site specific geotechnical investigations will need to be completed in fulfillment of the requirements of a Neighbourhood Structure Plan for respective development areas.

2.9 Vegetation

The subject lands are generally free of vegetation with a portion of the southern area under cultivation. Plant species found along the shores of Nose Creek will not be affected by the development of this area as they will be protected through the implementation of an Environmental Reserve classification.

2.10 Environmental Assessment

An Environmental Assessment was performed by AXYS Environmental Consulting Ltd. in 1996. This study included the E ½ of Section 36-26-1-W5 and identified Nose Creek as an important linear corridor linking wildlife habitat with the Nose Hill Park area in Calgary. In April of 2003, an Environmental Overview Assessment was conducted by Spencer Environmental Management Services Ltd. It essentially concurred with the findings of the earlier AXYS report and makes specific recommendations regarding construction practices and mitigation measures. It is recommended that the creek be retained and buffered setback zones created.

2.11 Calgary International Airport – Airport Vicinity Protection Area (AVPA)

The majority of the ASP area is affected by the 25-28 Noise Exposure Forecast (NEF) contour delineated in the Airport Vicinity Protection Area (AVPA) Regulations for the Calgary International Airport. Although this has minimal effect on the industrial and commercial areas, the residential areas will be subject to additional acoustical insulation requirements, the details of which will be determined at the time of development.

In addition to the noise restrictions, height restrictions for airport activities are also controlled through zoning regulations. These suggest a maximum permitted height based on the distance from the runway and landing/take-off alignments. The distance from the airport sets these limits beyond reasonable commercial and industrial structure heights and thus will not impact the developability of the lands.

3 Development Concept

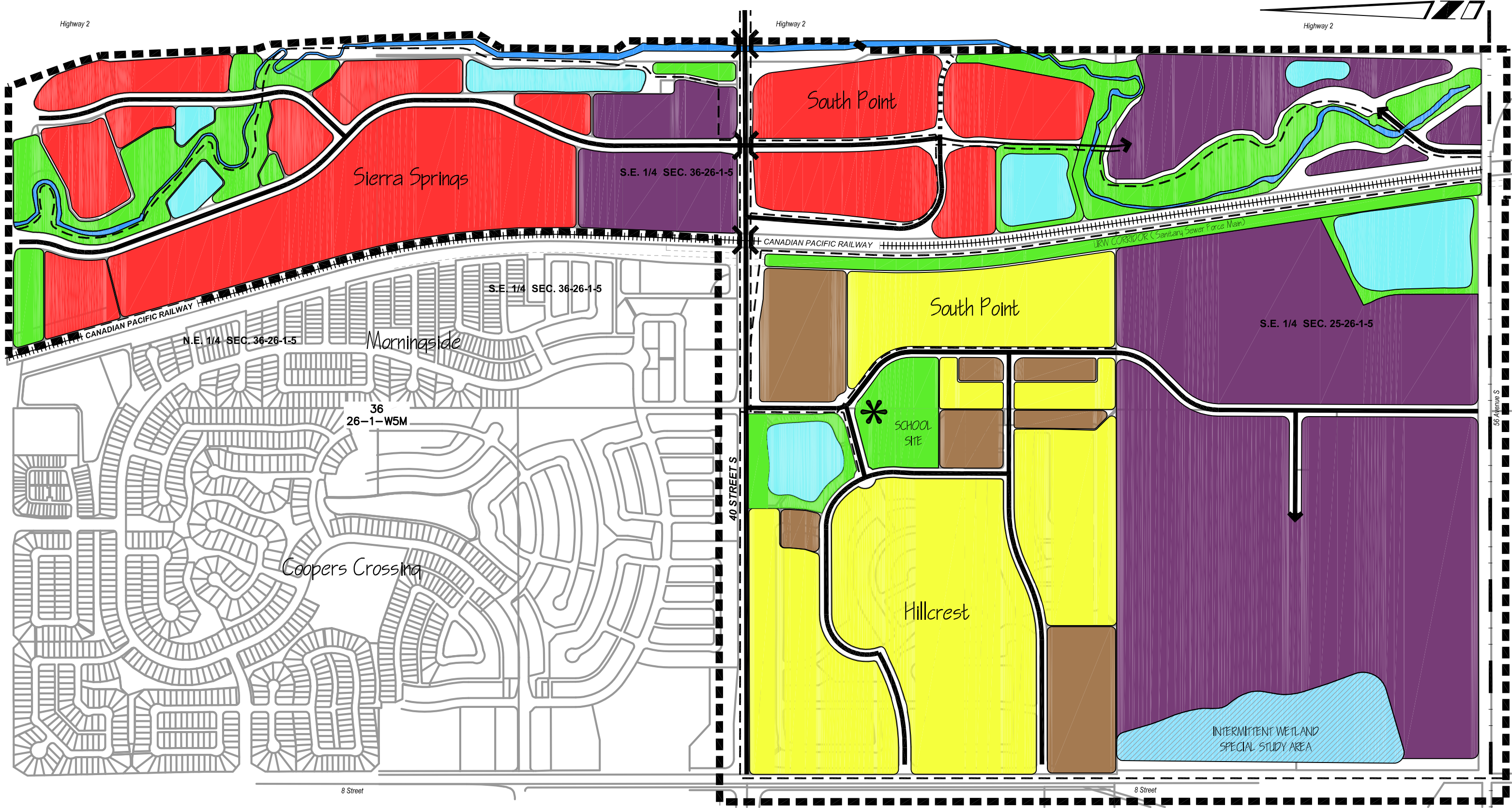
3.1 Development Plan

The development plan created and presented as the South Airdrie ASP area is a product of numerous inputs including municipal policy, best engineering and planning practices, and market conditions. Commercial lands, of a nature that will not pose direct competition to the CBD, have been concentrated near Highway 2 and Yankee Valley Boulevard. This maximizes visibility and exposure while providing safe and easy vehicular access (Figure 7).

Regional Commercial uses occupy the lands falling between the railway and highway. Not only does this prevent non-compatible residential uses within this area, it capitalizes on the accessibility and exposure to both the highway and railway. The fostering of an employment centre in this area of Airdrie Compliments the regional commercial uses to the north, fostering a strong commercial corridor adjacent to the highway. The railway provides buffering to the residential uses to the west.

The naturally occurring landforms found in the west area offer an inherent benefit for residential development in addition to complimenting the planned residential to the north. The railway and regional PUL adjacent to the railway provide buffers between the residential area and regional commercial area.

The overall land use composition is supported with a transportation network that allows for unimpeded access in and out of the commercial/industrial areas while restricting the potential conflict with residential traffic. Accessibility and safety are the paramount concerns for the transportation network.



South Airdrie
Area Structure Plan

Legend

- | | | | | | | | |
|--|------------------------------|--|---------------------------------|--|---|--|----------------------------|
| | Area Structure Plan Boundary | | Canadian Pacific Railway Tracks | | Light Industrial | | Open Space/ Parks |
| | Municipal Boundary | | Nose Creek | | Commercial | | Stormwater Management Pond |
| | Road Network | | Low Density Residential | | Intermittent Wetland Special Study Area | | Regional Path |
| | Bridge | | Medium Density Residential | | School Site | | |

Development Plan
Figure 7

3.2 Goals and Objectives

The development of the South Airdrie Area Structure Plan lands will have a direct and immediate impact on the urban fabric of the City of Airdrie due to the nature and scope of the development contemplated via several projects with Local and Regional benefits to the City. These benefits include but are not limited to; providing the Planned 40th Ave Grade Separation at the CP Rail tracks, with a direct connection to the Main Street; provide a southbound at grade merge access to Highway 2; reduced size of Sanitary Lift Station; Securing the right of ways required for the 40th Avenue Interchange. As a result, the formulation and presentation of development objectives will be critical to ensuring quality and orderly development compatible to itself and the community in general. The respective development objectives for each of the land uses planned follow:

3.2.1 Overall Objectives

- to conserve and optimize the use of the natural environment through sensitive integration of the development with Nose Creek;
- to preserve any significant viewpoints for integration into the development area;
- to provide services to the standards of the municipality;
- to offer commercial and industrial employment areas in close proximity to residential areas, sensitively integrated into the area through the use of controls to protect against any adverse noise, air, or ground pollution, and mitigating against any negative visual or aesthetic impacts;
- to provide planning flexibility and stimulate innovation in planning and design of residential areas through the use of architectural and development controls;
- to encourage energy efficiency in planning whenever possible with the use of proper site orientation techniques and vegetation;
- to allow for economical, phased development at the earliest date practical, consistent with municipal policies;

3.2.2 Commercial Objectives

- to provide a range of commercial land uses to serve the regional and sub-regional needs of the City of Airdrie;
- to promote commercial site locations that will offer opportunities for locating land intensive commercial uses not deemed appropriate in the CBD;

3.2.3 Industrial Objectives

- to provide a range of light industrial land uses to meet the industrial needs of the City of Airdrie;
- to provide viable employment opportunities in close proximity to residential neighbourhoods in both the City of Airdrie and City of Calgary;
- to provide for the development of industrial uses which are sensitive to visual and other impacts on neighbouring residences;

3.2.4 Residential Objectives

- to provide needed accommodation alternatives in south Airdrie;
- to create an attractive residential community to accommodate approximately 4,700 persons;
- to conform to neighbourhood planning requirements utilizing quality urban design principles;
 - to promote the establishment of a heterogeneous community and establish a hierarchy of neighbourhood and sub-neighbourhood units containing a variety of housing types;
 - to conform to "density guidelines" established by the City to ensure complimentary relationships;
 - to create sub-neighbourhood sectors which are flexible to change at subsequent planning stages dependent upon area analysis and market conditions at that time;

3.2.5 Open Space Objectives

- to meet the needs of future residents for parks and open space;
- to recognize Nose Creek as an open space and passive recreation opportunity;
- to fulfil the statutory requirements of the Municipal Government Act by providing up to 10% of the area as Municipal Reserve in the form of land or money-in-place of land or a combination thereof;
- to provide a continuous pathway system along the Nose Creek corridor in accordance with the City's standards;

3.3 Design Concept and Principles

The intent of any area structure plan is to establish a development plan for a large tract of land at a cursory level only. In addition to formulating the objectives and principles as presented above, the plan identifies anticipated land uses, the spatial relationship between said uses, and the order of development. The plan, once adopted, provides assurances to developers, the City, and the general public that a specific development intention will be undertaken across an area or each will be duly notified if there is a desire to seek a variance from the plan. Similarly, a servicing program consisting of both scheme and staging is presented to assure the development intention can be adequately serviced to municipal standards.

All of these items are more exact at the Neighbourhood Structure Plan stage and further refined and confirmed during detailed engineering design. As a result, the road network presented is of a conceptual nature in that the exact alignment may change to reflect lotting preferences, servicing requirements, and topography.

3.3.1 Design Concept – Commercial

The proximity to the highway combined with the excellent arterial access makes the northeast corner of the plan area the preferred location for commercial development. Approximately 64.5 ha (159.4ac) have been identified as future commercial lands capitalizing on the exposure to Highway 2 and the pending improvements to the interchange with Yankee Valley Boulevard. Uses are expected to be a concentration of large box retailers. With the majority of this development falling along the east perimeter maximizing visibility from the highway, a concentration of highway commercial uses is planned.

- Maintain the concentration of commercial development near the highway, 40th Avenue Interchange and Yankee Valley Boulevard.
- Provide for a visually appealing view from Highway #2 through enhanced landscaping, signage and building design.
- Reduce the impacts of development on the natural environment by implementing the recommendations of the AXYS Environmental and Spencer environmental reports.

3.3.2 Design Concept – Industrial

The south portion ($\pm 32\%$) of the plan area has been identified for industrial development. The ± 103.2 ha (255.0 ac) of industrial development will be light industrial. The uses anticipated will be in conformance to the land use district parameters established within the Land Use Bylaw. Outdoor storage accompanying any industrial use will be located adjacent to the railway or on other internal sites with limited visibility. In addition, each site will be required to maintain appropriate screening and buffering. Industrial development in close proximity to residential areas will be of a light industrial nature so as not to generate noise, air, or visual pollution to the adjacent residents. Similarly, each facility will be required to provide visual buffering in the form of increased setbacks, berming, fencing and landscaping. The setback requirements and development controls will ensure a sensitive transition is maintained. These parameters will be further expanded upon during Neighbourhood Structure Plan preparation.

- Restrict outdoor storage visibility.
- Do not negatively impact adjacent residential development.
- Use setbacks to improve overall aesthetics.

3.3.3 Design Concept - Residential

Approximately 75.4ha (186.3ac) of residential development is planned for the northwest portion of the lower half of the subject lands. Upon full development, the community will house approximately $\pm 4,700$ persons in $\pm 1,700$ residential units. The natural topography and mountain views deem this area a superb residential enclave. Lower density development will be from single-family dwellings on typical residential lots. Higher density development will come from duplex and multi-family precincts anticipated near the primary entrance locations and nearer the collector road system. Actual densities and locations are to be determined during Neighbourhood Structure Plan preparation and identified within that document.

- Capitalize on topographical features of the site.
- Keep higher densities along the collectors.

3.3.4 Design Concept - Open Space

For the commercial and industrial development areas, open space will be limited to the Nose Creek corridor and high interface areas. In addition to the actual creek alignment, open space will be provided to encompass the floodway and adjacent lands. The combination of Municipal Reserve and Environmental Reserve will protect the creek, its alignment, and water quality.

Potential impacts in high interface areas, by one use on another, (e.g. Industrial / residential) should be minimized and/or mitigated by the obtrusive use through berming, buffering, landscape design, and/or site design. Details in high interface areas are to be determined at the Neighbourhood Structure Plan stage.

The remaining obligatory dedication will come in the form of money-in-place which can be put against the acquisition and improvement of new and existing park areas within the community. A complete dedication of 10% is planned for the residential

area with much of that land forming a large central neighbourhood park.

- Use Environmental and Municipal Reserve to preserve Nose Creek.
- Keep the regional pathway along the creek alignment.

3.4 Density and Statistics

Land Use	Summary Of Land Uses (Projected Area In Hectares)	%
Total Gross Area	321.7	
Nose Creek	3.2	
Net Developable Area	318.5	100.0%
Parks / Open Space	46.4	14.5%
Intermittent Wetland	8.4	2.6%
Stormwater Management Ponds	20.6	6.5%
Residential Land	75.4	23.7%
Industrial Land	103.2	32.4%
Commercial Land	64.5	20.3%
Minimum Residential Area Average Density equal to 22.54units / hectare		

4 Transportation

4.1 Existing Transportation Network

The subject site is, or will be, encompassed by major arterial roadways. Highway 2, although inaccessible from the site, forms the east boundary and is the primary transportation link between Calgary and Edmonton. As such, this site will be exposed to thousands of vehicles per day which will draw a portion of those trips into the site and subsequently onto the road network. Of critical importance to this development, are the planned improvements to the interchange at Highway 2 and Yankee Valley Boulevard. The new on and off ramps to/from Highway 2 will be completed in 2010.

Improvements to the Highway 2 and Yankee Valley Boulevard interchange were completed in 2010 and provides two access points into the existing Sierra Springs commercial area via Sierra Springs Drive and the southerly extension of Main Street, which is planned to extend south of 40th Avenue.

The CPR tracks bisect the plan area. This is a major rail line that currently includes CPR's mainline track between Calgary and Edmonton, and a siding facility. Future expansion plans may include high-speed rail and regional commuter rail service between Airdrie and Calgary. A grade-separated crossing is planned on 40 Avenue, over the rail tracks. The 40 Avenue connection will provide access between the site and the fast-growing residential neighborhoods in southwest Airdrie, and ultimately to Highway 2 through a half-interchange oriented to/from the south.

The next major north-south route to the west is 8 Street, which is ultimately a 4-lane arterial. 40 Avenue is also planned for construction as a two-lane arterial from 8 Street to Reynolds Gate in 2014.

The south boundary of the plan area is 56 Avenue. This will also be developed as a major route in future, with a full access interchange at Highway 2. This interchange, which will support development in both Airdrie and Rocky View County and is considered a long-term plan.

Yankee Valley Boulevard defines the north boundary and provides access into the Sierra Springs commercial area via Main Street.

In order to permit the orderly and functionally acceptable development of the subject site, a comprehensive transportation network must be created within the site as well as integrated into the existing and future adjacent network. The system planned for the South Airdrie ASP area is based around the following objectives.

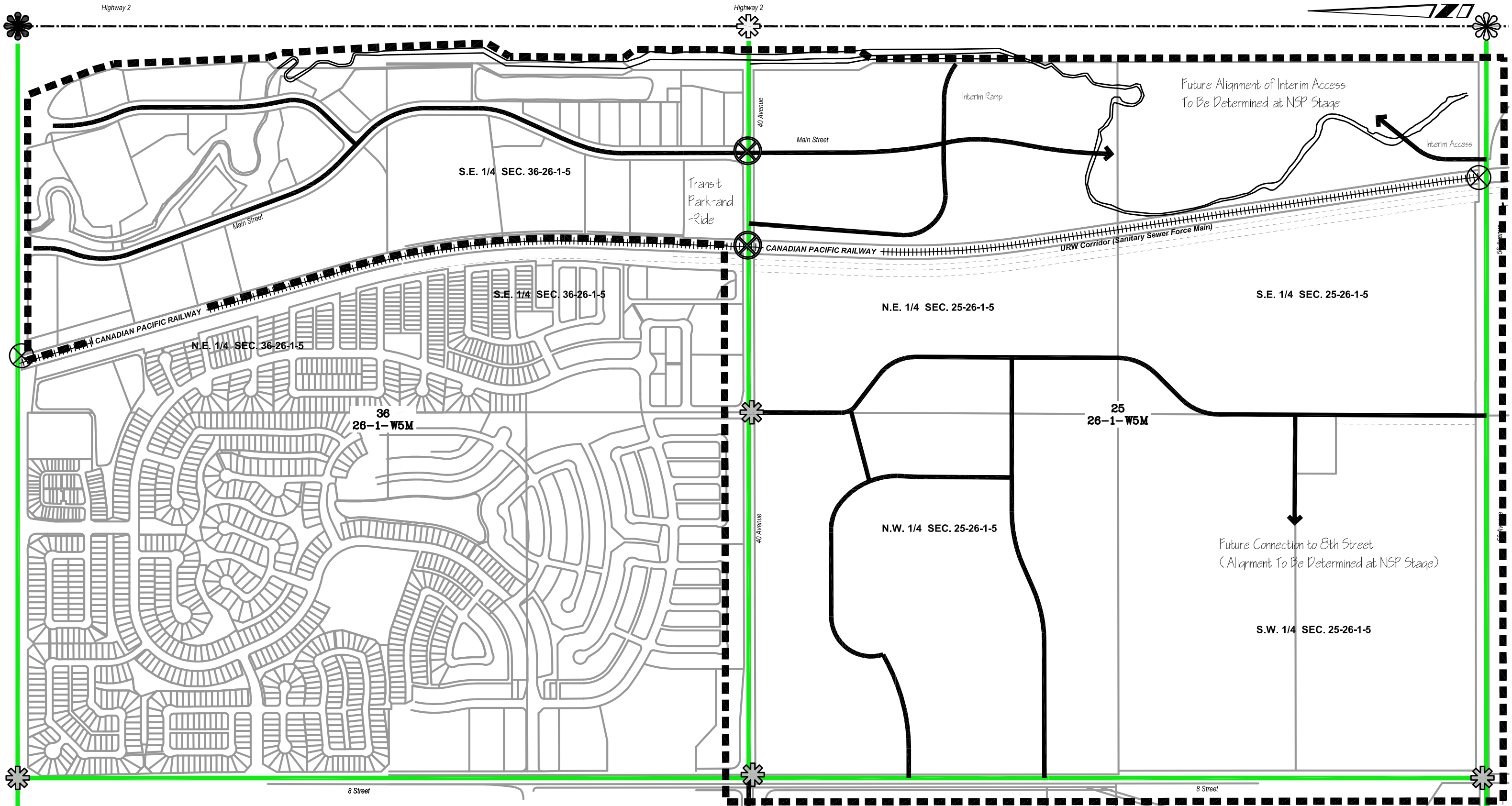
4.2 Transportation Objectives

- Provide key local and regional transportation connections on 40 Avenue including the 40 Avenue/Main Street interchange, grade separated CP Rail crossing and an interim direct southbound access to Highway 2;

- to provide safe and convenient access for residents to the school site in the adjoining neighbourhood to the north;
- to provide for safe and convenient access for pedestrians through the Nose Creek corridor;
- to provide all directional access from the commercial area onto Yankee Valley Boulevard in accordance with Alberta Transportation and the City of Airdrie requirements;
- to provide an efficient hierarchical circulation system for automobiles, pedestrians and bicycles to connect to surrounding major arterials;
- to recognize Highway 2 as a major thoroughfare and accommodate the future interchange needs including rights-of-way;
- to provide for all types of parking requirements without impeding traffic flow
- to allow for safe pedestrian access to and from commercial developments;


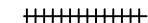











4.3 Access and Circulation

In addition to Yankee Valley Boulevard and the improved interchange with Highway 2, major arterial access will ultimately come from the west and south with additional Highway 2 access at the interchange planned for 56 Avenue. These routes will provide ample accessibility for both residential and commercial traffic as the area builds-out (Figure 8). In the interim, it is proposed that the City's planned 40 Avenue / CPR overpass would connect to Main Street via the ultimate connector road, which will be aligned within the site to protect the City's long-term access needs while also optimizing the land area available for development. An interim direct southbound access to Highway 2 is planned from the Connector Road. This access would benefit both the site and the City at large by providing an alternate access to southbound Highway 2 from southwest Airdrie. The partial interchange from 40th Avenue to Highway 2 will ultimately provide access to and from the South.



South Airdrie
Area Structure Plan

Legend

-  Area Structure Plan Boundary
-  Canadian Pacific Railway Tracks
-  Existing Grade Separation Interchange
-  Future Grade Separation Interchange
-  Highway 2
-  Arterials
-  Collectors
-  Future Partial Interchange
-  Highway 2
-  Arterials
-  Collectors
-  Major Intersections
-  Grade Separated Crossing Required

Transportation Plan
Figure 8

Internally, collector roadways will connect the perimeter arterials with the Main Street extension south being the primary north/south linkage. Main Street will provide a single intersection point with both 56 Avenue and the 40 Avenue crossing the midpoint of the subject site. Sierra Springs Drive will provide a secondary access support to the existing commercial development.

The potential amount of development in the Plan area could exceed the roadway improvements proposed to be constructed concurrently with the first phase. The City will monitor such development, and will not process for approval any applications for development which have the potential to place excessive demand on the roadway system.

Two relatively independent systems are planned west of the railway tracks with limited grade separated track crossings planned for 56 Avenue and the 40 Avenue. The residential network is planned to be a circuitous central collector with linkages to the adjacent collectors and arterials. This will separate residential and commercial traffic increasing safety and reducing volumes. The industrial precinct will be based around a primary north/south collector spine road connecting 56 Avenue and the 40 Avenue. Additional collector 'arms' may be developed based upon ultimate configuration and anticipated traffic volumes. These will be determined at the time of Neighbourhood Structure Plan preparation.

4.4 Public Transit

Transit service is anticipated through both the commercial/industrial and residential areas at some point in the future. The networks planned will allow for efficient and effective routing throughout the subject site when deemed necessary and feasible. This will be confirmed in greater detail with the completion of the respective Neighbourhood Structure Plans.

The Calgary Regional Partnership's "Calgary Regional Transit Plan" (2009) recommended implementation of BRT service between Calgary and Airdrie in the short term, and that Airdrie become a Regional / Inter City Gateway Hub in future. The City's Intercity Express (ICE) Service began in 2010 and provides direct, high-quality transit connections between Airdrie and Calgary. The City has located a Park & Ride site as shown in Figure 8. The location of a major transit hub at this location would be beneficial to the plan area, providing high quality transit service within walking distance of the residential neighborhoods and strong access for employees and customers in the commercial area. High quality pedestrian connections will be important to leverage these opportunities.

4.5 Pathways

The Nose Creek Regional Trail System crosses the plan area east of the railway. The Nose Creek corridor and associated open space will provide the alignment for the majority of the length as it will be aesthetically more pleasing and safer for pathway users. Linkages to the west into the industrial area and residential enclave will be accommodated to ensure relatively direct access to the trail system. Uninterrupted access will be provided wherever possible, with signalized at-grade street crossings

provided where required. The neighborhood plans shall continue the Morningside pathway system on the west side of the CPR, routing users under the 40 Avenue / CPR overpass.

Within the residential area, walkways and pathways will be created to provide access to parks and the school site planned in the South Airdrie ASP. Pedestrian crossing of the railway will be discouraged except in conjunction with roadway at-grade crossings or through grade separated crossings to be determined at the time of implementation.

5 Servicing and Utilities

Servicing for the South Airdrie Area Structure Plan study area will be designed and constructed in full conformance to City standards and good engineering practice. Logical extension of services will be undertaken as development warrants with the appropriate capacities factored into the design.

5.1 Servicing and Utility Objectives

- to provide an economical servicing system and phasing sequence based on the logical extension of municipal services;
- to utilize stormwater retention and detention facilities in the plan as an amenity wherever possible;
- to maximize the efficiency and utilization of each stormwater management facility while reducing the number of facilities required and providing amenity value to future residents;

5.2 Water Supply and Distribution

The City of Airdrie currently has adequate supply to service the South Airdrie ASP area through complete build-out. On-site water servicing will be provided through a series of underground mains that have been preliminarily laid-out and sized (Figure 9). A complete detailed Water Network Analysis will be required with each phase of development accompanying the detailed design tasks.

5.3 Sanitary Servicing and Wastewater Collection

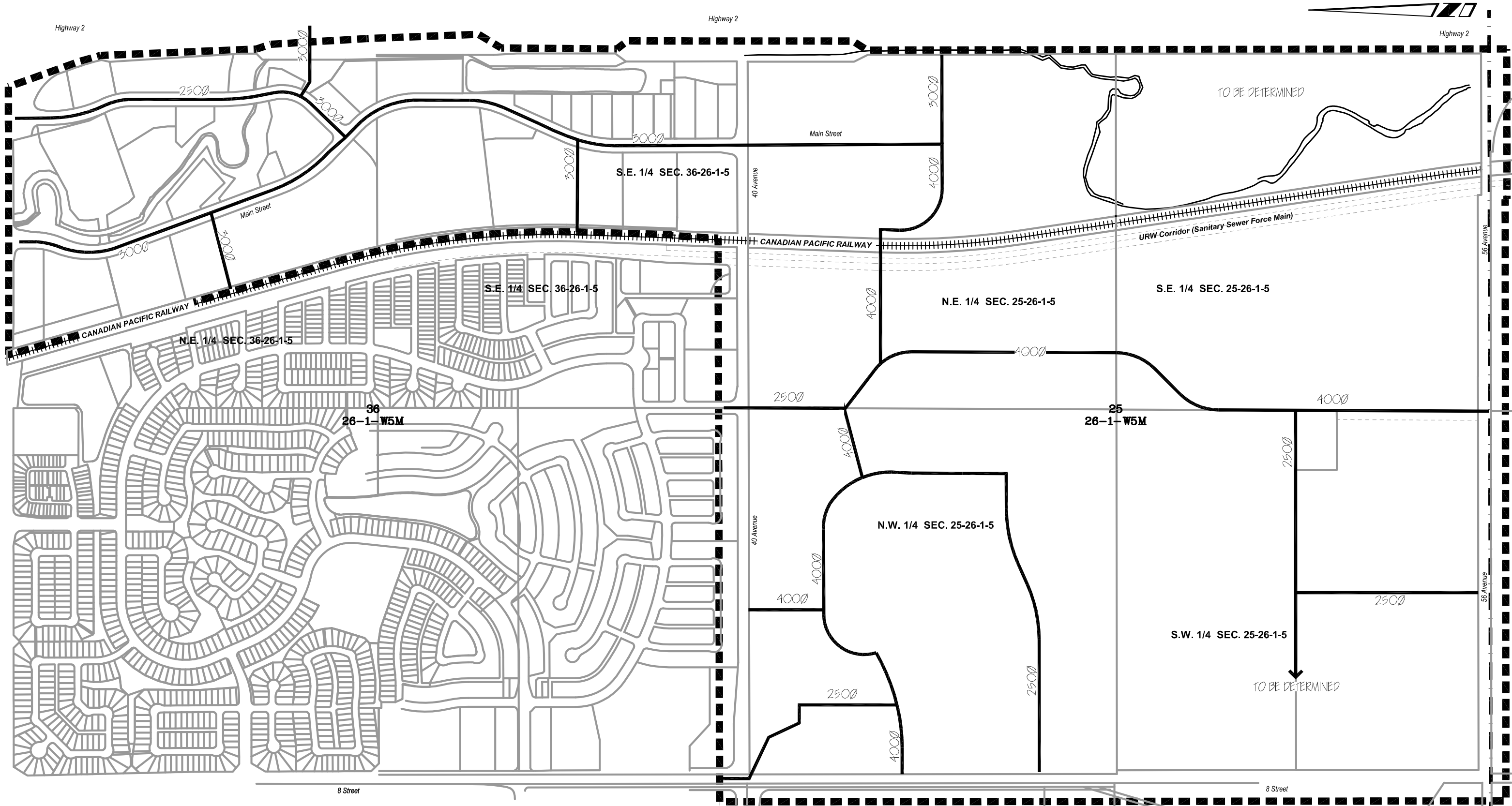
Sanitary servicing will be provided by a system of sewers and two sewage lift stations (Figure 10). The sewers will be sized to adequately service the intended land uses and are expected to generally flow northward to connect to a regional lift station. The lift station will direct flows via forcemain towards either the existing or future forcemain flowing to Calgary. This will be determined at the time of detailed design. Preliminary pipe sizes have been provided but will be confirmed with further review at Neighbourhood Structure Plan stage and prior to any development occurring on site.

5.4 Stormwater Management

Stormwater management will be conducted with a combination of underground piped collection systems and overland storage and detention facilities. The planned storm ponds will be either wet or dry ponds and located in the areas identified on the plan (Figure 11). Specific sizing will be completed at the time of Neighbourhood Structure Plan with the corresponding completion of a drainage analysis for the respective area. The intermittent wetlands found within SW ¼ of Section 25-26-1-W5 may be utilized as a naturalized stormwater management facility dependent upon further study.

5.5 Shallow Utilities

All shallow utility servicing will be undertaken as per municipal standards for both industrial and residential developments. The service providers will be those currently servicing Airdrie.



South Airdrie
Area Structure Plan

Legend

- ■ ■ ■ ■ Amendment Area
- - - - - Municipal Boundary
- +++++ Canadian Pacific Railway Tracks
- Watermain

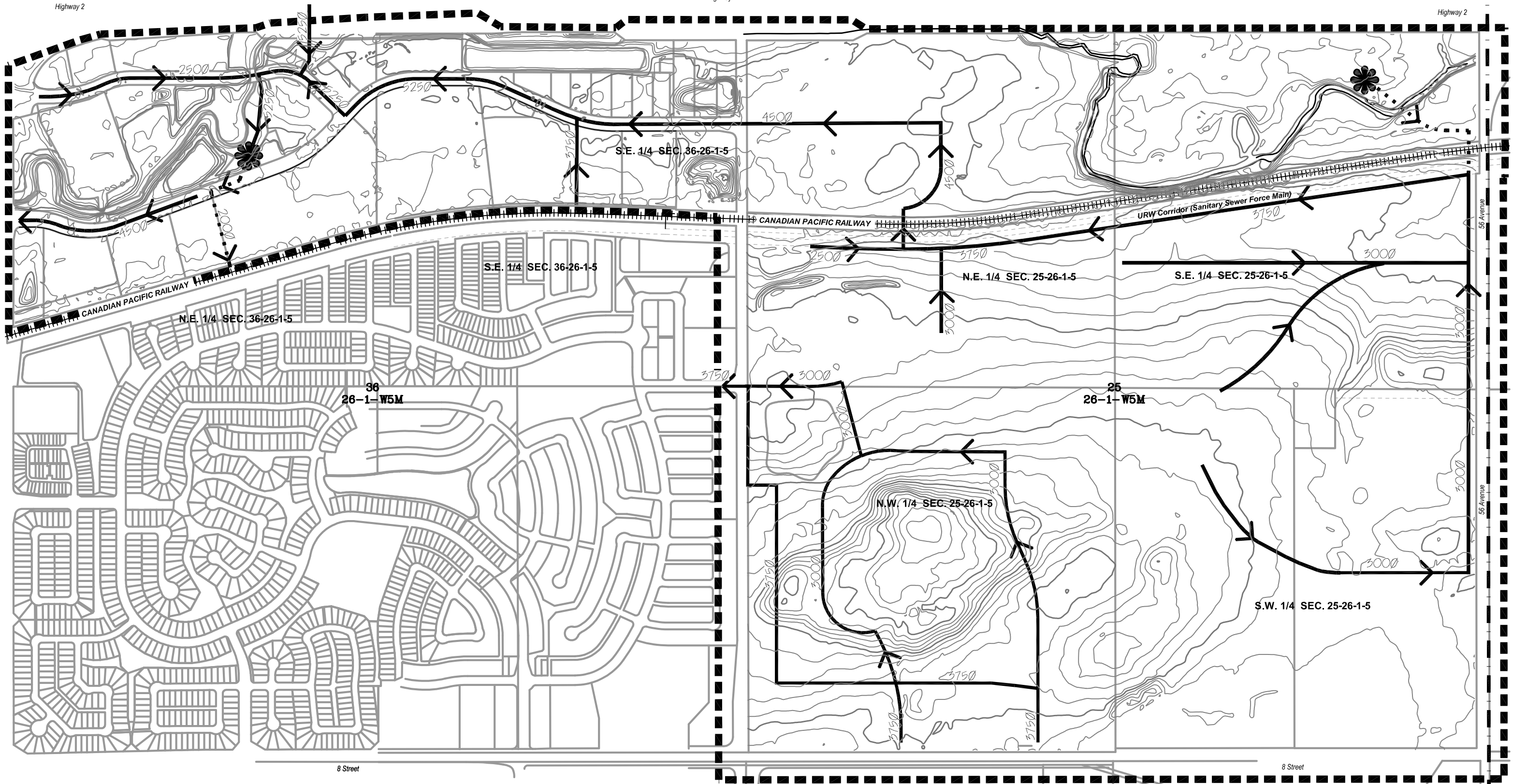
Note: Watermain sizes are preliminary only. Engineering analysis is required prior to development. All diameters are in millimeters.

Water Servicing Plan
Figure 9

Highway 2

Highway 2

Highway 2



Legend

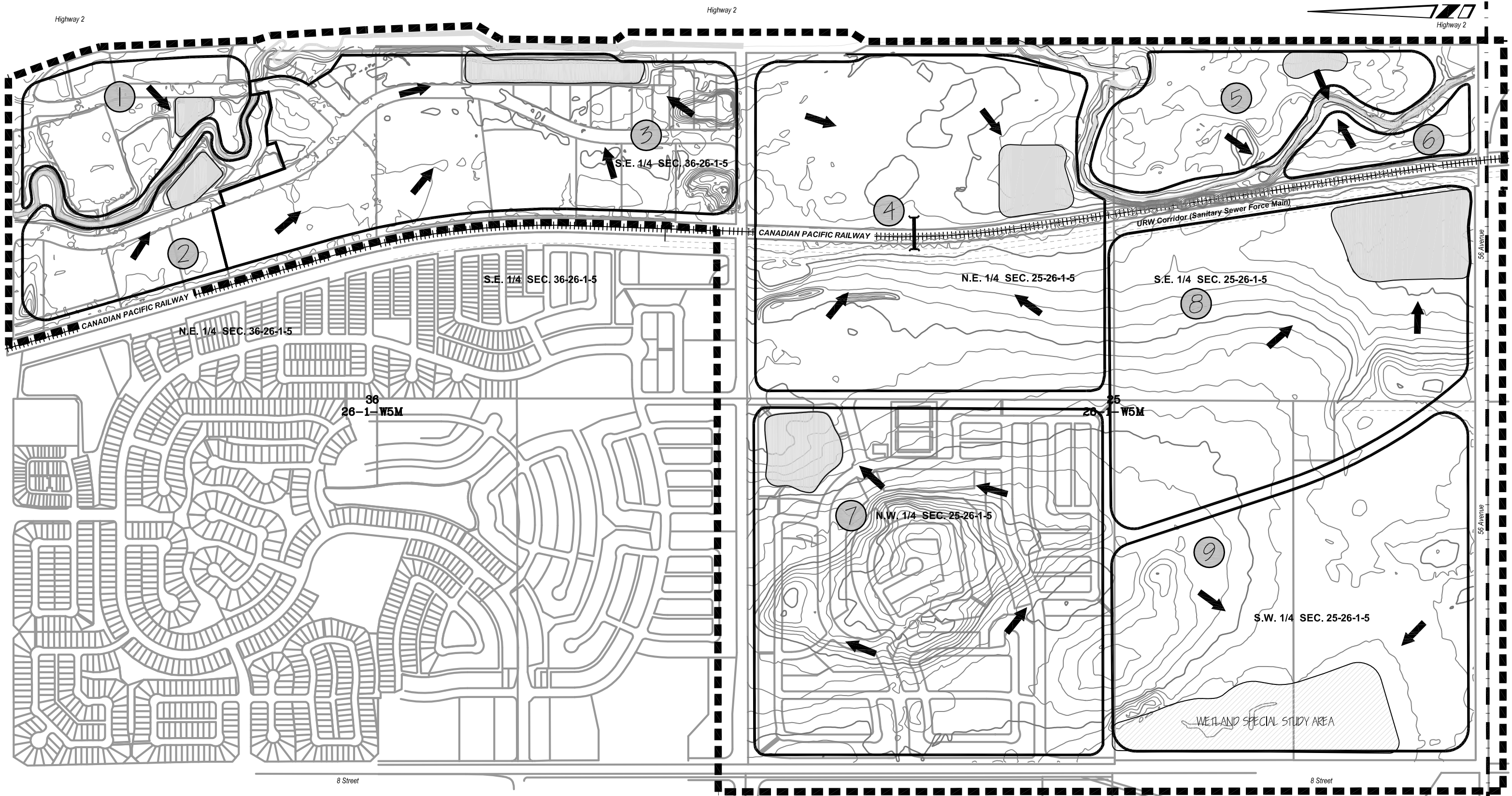
-  Area Structure Plan Boundary
-  Municipal Boundary
-  Canadian Pacific Railway Tracks

-  Force Main
-  Sanitary Sewer
-  Lift Station

Note:
Sanitary sizes are preliminary only.
Engineering analysis is required prior to
development.
All diameters are in millimeters.

South Airdrie
Area Structure Plan

Sanitary Servicing Plan
Figure 10



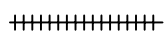
Legend



Area Structure Plan Boundary



Municipal Boundary



Canadian Pacific Railway Tracks



Nose Creek



Drainage Boundary Area



Overland Flow Direction



Stormwater Management Pond



Wetland Special Study Area



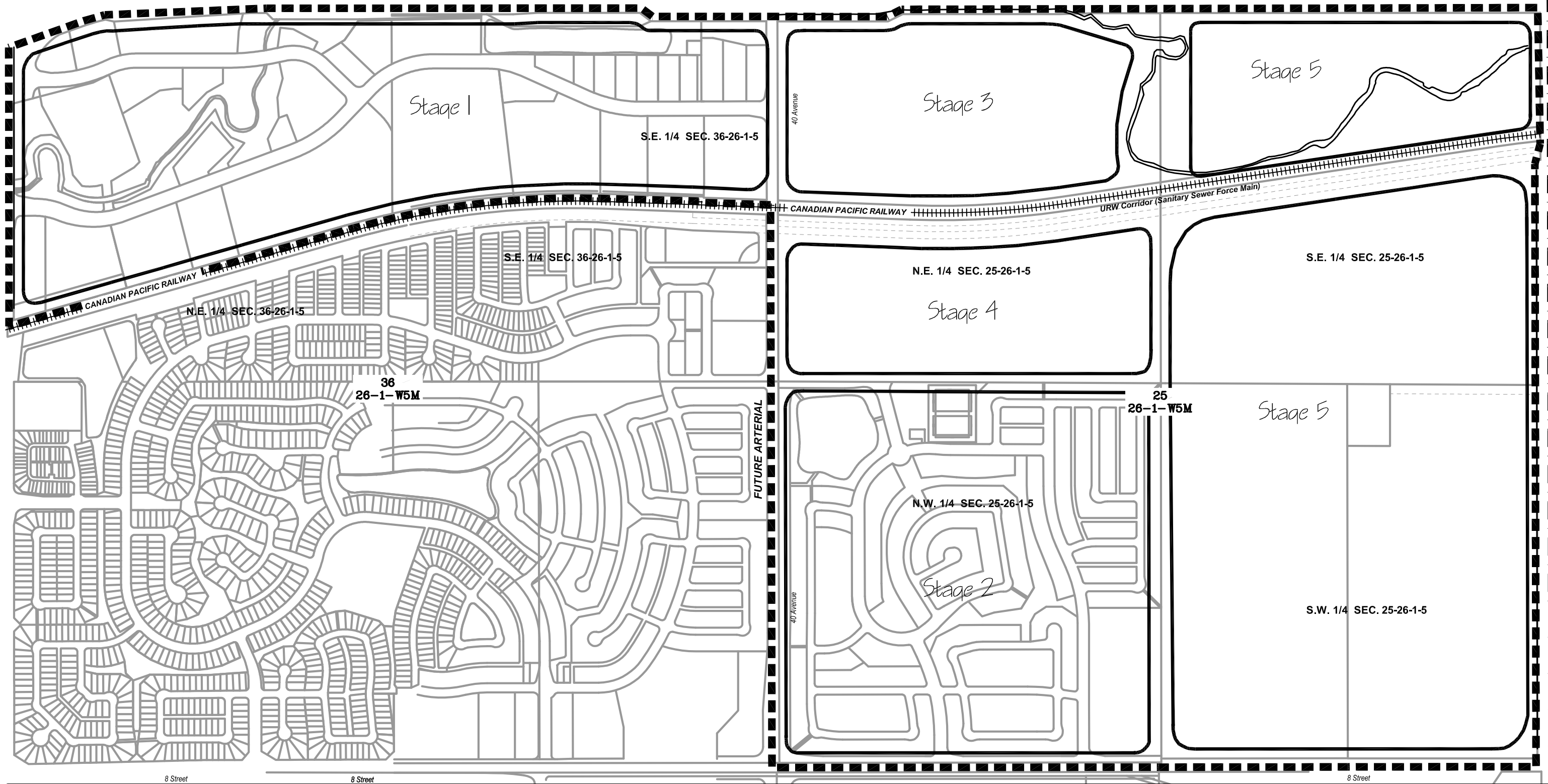
Servicing Conduit

6 Implementing the Plan




As a cursory level planning document and recognizing the breadth of area encompassed under the South Airdrie ASP, delineating detailed phasing at this time is difficult. The extension of municipal services including critical transportation networks will dictate how the development will evolve. These considerations will be further explored and factored into development advancement with the completion of subsequent Neighbourhood Structure Plans.

6.1 Staging

Stage 1 is recognized as entailing the +/- 72 ha (178ac) found with the E ½ of Section 36-26-1-W5. Interchange improvements at Yankee Valley Boulevard, the extension of Main Street southward, and similar extension of municipal services makes the continuance of the existing commercial area a logical choice for the first stage (Figure 12). Stage 2 will focus around the residential neighbourhood planned for the NW ¼ of Section 25-26-1-W5. Stage 3 will encompass regional commercial development -in the NE ¼ of Section 25-26-1-5. Stage 4 is anticipated to be a continuation of the residential development west of the E ½ of Section 25-26-1-W5. Stage 5 will encompass the balance of planned industrial development falling west of the railway and entailing the balance of Section 25-26-1-W5.



South Airdrie
Area Structure Plan

- Legend**
-  Amendment Area
 -  Municipal Boundary
 -  Staging Boundary

Phasing Plan
Figure 12