

CHINOOK WINDS
COMMUNITY AREA STRUCTURE PLAN
IN THE
CITY OF AIRDRIE, AB

Bylaw 59-2004
Adopted by Airdrie Council
January 17, 2005
Amended by Bylaw No. B-06/2008
April 21, 2008
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March 16, 2009
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1.0 INTRODUCTION

The subject lands were brought in to the jurisdiction of the City of Airdrie on July 1, 2003. As per the provisions of the Municipal Government Act and Airdrie Municipal Policies, a Community Area Structure Plan (CASP) document is the next level of municipal planning policy.

1.1 Community Area Structure Plan Purpose

The Growth Area Management Plan (GAMP) adopted by Airdrie Council in January 2004, established four different planning areas for the lands annexed in to the City in 2003. The subject lands form one of these four planning areas and are being referred to as the Chinook Winds lands.

This S&R CASP forms the vision for the incorporation of the lands into the urban fabric of Airdrie. This vision addresses the existing site conditions, the policy context of adjacent lands, the overall land use pattern, the associated infrastructure requirements, and the strategies for successfully implementing the vision.

1.2 Community Area Structure Plan Objectives

The Chinook Winds CASP sets forth the following objectives that will guide the development of the plan area:

- Ensure comprehensive land use planning is undertaken for the annexation lands [GAMP].
- Though the lands are divided by a natural drainage course, the overall concept plan shall ensure that both portions are linked together to form a cohesive community.
- The subject area shall be used for predominately residential uses. Non-residential land uses considered appropriate are public and quasi-public facilities and a mixed land use sites (higher density residential and a commercial node) [GAMP].
- The development plans for the area provide for residential styles that accommodate a broad range of potential residents and income levels, as well as densities that are greater than those traditionally found in Airdrie [GAMP].
- Parks and natural features should be integrated into the comprehensive land use pattern for the lands [GAMP].
- The development plan formulated for the subject lands shall be integrated with the provisions of existing adjacent Area Structure Plans.
- Infrastructure strategies associated with the development plan will allow for the orderly and economically feasible development of the lands.
- Provisions within the plan shall be made for infrastructure requirements servicing the larger Airdrie community (e.g. water reservoirs, utility corridors and mains).
- Provisions within the plan shall allow for the orderly and efficient transition from the existing uses of the land.
- The development concept will minimize the impacts from the transition in land uses on the majority of the existing residents until such time as development becomes eminent in those areas.

2.0 DEVELOPMENT AREA

2.1 Location

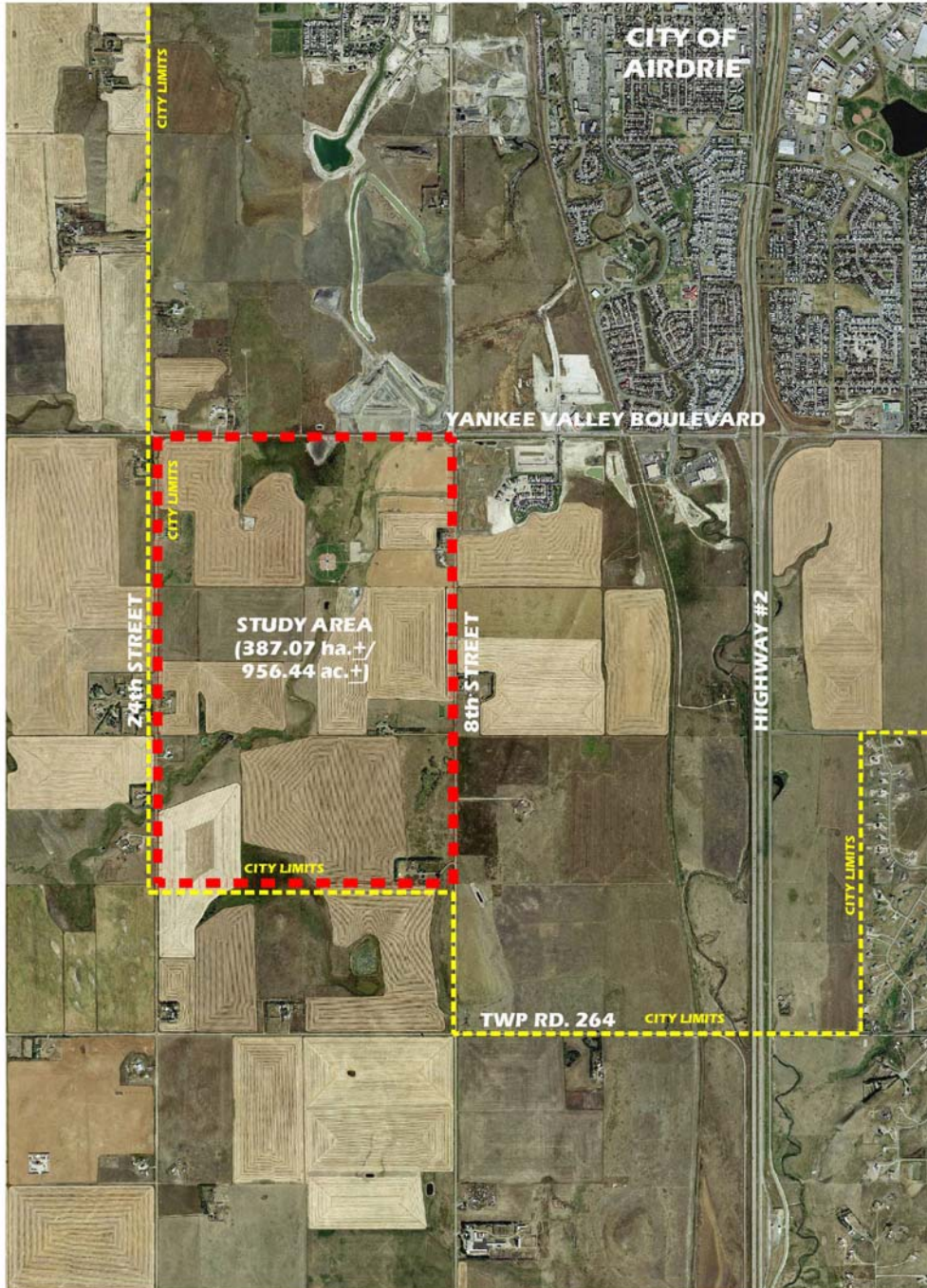
The plan area is located within the southwest quadrant of the City of Airdrie on lands recently annexed from the Municipal District of Rocky View. The lands are bounded by Yankee Valley Boulevard to the north, 8th Street to the east, undeveloped farmland to the south, and 24th Street to the west. The lands are also located approximately 1.5 km west of Highway 2 as shown on Figure 1.

2.2 Legal Land Ownership

The plan area encompasses ±387.07 hectares (±957.22 acres) of land located within the City of Airdrie and is legally described as Section 35-26-1-W5M and the north half of Section 26-26-1-W5M. The plan area is owned by a number of different landowners with parcels ranging between ±0.81 hectares and ±62.49 hectares as shown on Figure 2 and Table 1 below:

Table 1: Land Ownership

Landowner	± Hectares	± Acres	Certificate of Title
Melcor Developments Ltd.	32.40	80.06	031 284 267
Melcor Developments Ltd.	31.19	77.07	071 157 748
Mattamy (Airdrie) Ltd.	58.84	145.40	081 399 873 +5
Serhan & Montazi Jomaa	3.20	7.91	061 447 759
Merle Osborne	4.85	11.98	041 080 214
Mattamy (Westwinds) Ltd. City of Airdrie Board of Trustees - Rocky View School Division No. 41	62.49	154.42	181 155 885
Anthony & Susan Skaalrud	2.02	4.99	991 336 625
Mattamy (Airdrie) Ltd.	59.21	146.31	081 140 182
Robert & Kelly Crispens	1.21	2.99	061 338 826
Donald & Roxane Bell	8.09	19.99	981 156 255
Denaby Equities Ltd.	45.67	112.85	071 249 801 +1
Schickedanz Airdrie Inc.	2.51	6.21	081 107 846 +106
City of Airdrie	6.10	15.07	(Various)
Board of Trustees - Rocky View School Division No. 41	17.62	43.54	061 376 200
City of Airdrie	25.15	62.15	081 107 846 +107
MD of Rocky View (Road Widening)	0.81	2.00	101U118
Various	25.55	63.14	(Various)

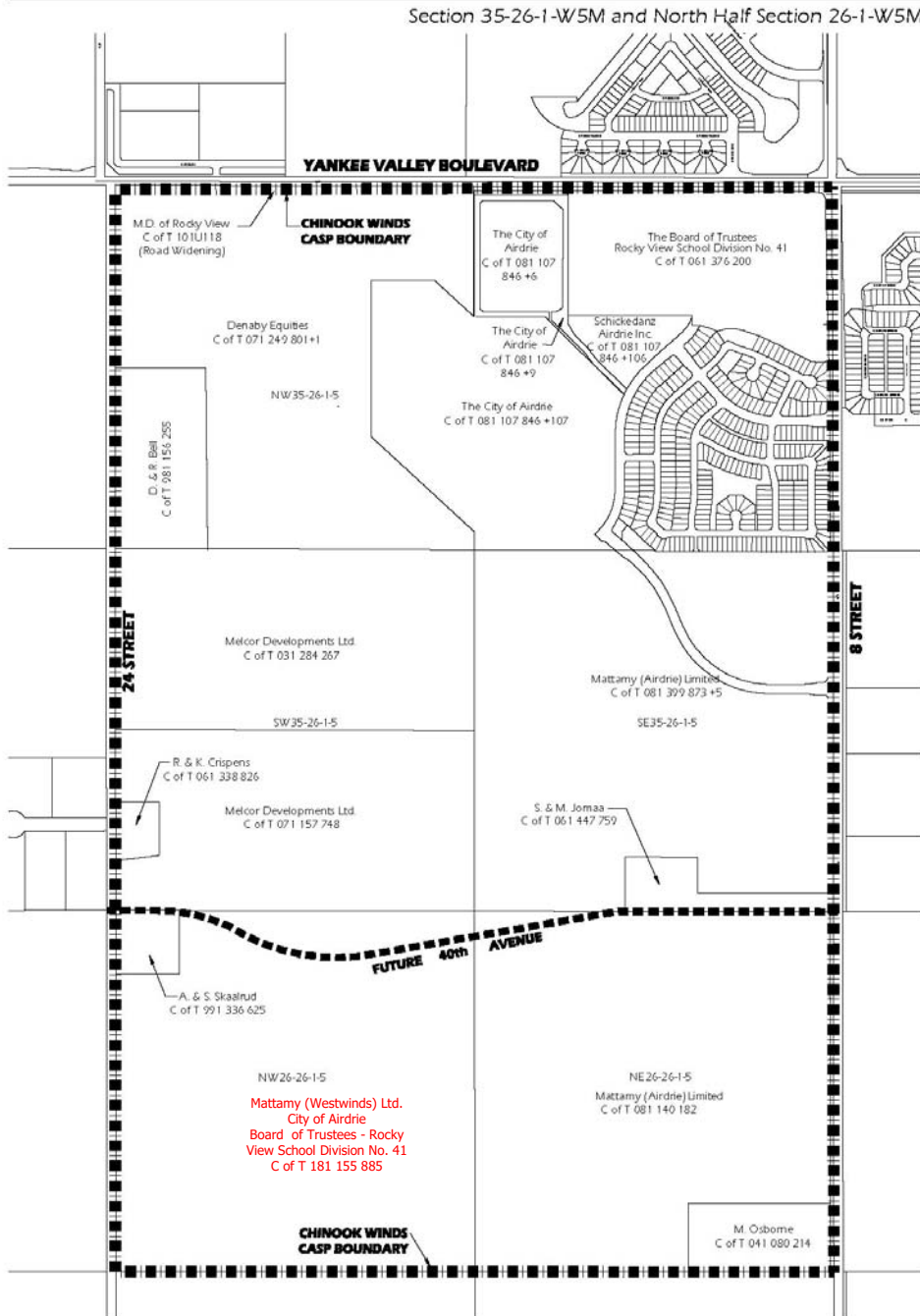


location plan

FIGURE
1



Scale
1:12,500



legal land ownership

FIGURE
2

Registered Encumbrances

The plan area is encumbered by natural gas utility rights-of-way. ATCO Gas and Toro Oil have secured rights-of-way through the plan area to ensure the required setbacks from their pipelines are maintained. These pipeline rights-of-way traverse the NW¼ of Section 35-26-1-W5M and run along the northern boundary of the SW¼ of Section 35-26-1-W5M and the western boundaries of the SE¼ of Section 35-26-1-W5M and the NE¼ of Section 26-26-1-W5M as shown on Figure 2. There is also an inactive gas well located in the NW¼ of Section 35-26-1-W5M currently operated by Kallisto Energy. Once the well site is fully reclaimed, there will be a permanent 10 metre diameter work-space setback applied from the well head.

Other significant encumbrances include an overhead powerline owned by Fortis and a utility right-of-way, which Telus has secured within the north half of Section 35-26-1-W5M to accommodate an underground cable line. Deferred reserve caveats are registered on the certificates of title as outlined in Table 2. Only 30% of the land area has deferred reserve caveats registered on title. The larger parcels may not have been affected by subdivisions triggering reserve calculations. For the other existing smaller parcels, the documentation relating to reserve requirements will need to be reviewed. Given that the subject lands were previously under the control of a different municipal jurisdiction, reserve dedication requirements shall be confirmed prior to land use redesignation.

Table 2: Land Parcels with Deferred Reserve Caveats

Landowner	± Hectares	± Acres	Certificate of Title
MD of Rocky View No. 44	0.81	2.0	101U118
Melcor Developments Ltd.	32.37	80.0	031 284 267
Rick and Margaret Wooley	1.21	2.99	971 284 395
Aileen Jensen	31.19	77.07	891 084 069 +1
Board of Trustees Rocky View School Division	16.0	39.54	961 308 299
Airdrie and District Agricultural Society and The City of Airdrie	31.31	77.36	971 135 370
Douglas and Mary Goddard	8.09	19.99	951 133 572
Total	120.98	298.95	

Policy 2.2.1: All encumbrances and reserve requirements are to be confirmed prior to land use redesignation.

2.3 Topography and Drainage

The topography of the plan area is relatively flat with elevations ranging between 1,080 m and 1,112 m. A substantial low-lying area in the north central portion of the plan area encompasses the existing wetland south of Yankee Valley Boulevard. Conversely, there are a number of high points scattered throughout the southern half of the plan area with elevations ranging from 1,104 m to 1,112 m.

A portion of a drainage course referred to as 'North Dry Creek' traverses the plan area from the southwest corner to the northeast corner on route to Nose Creek. North Dry Creek is a shallow drainage course that maintains relatively little to no water levels throughout much of the year. North Dry Creek represents a central low-lying area dividing the plan area into two areas. The side slopes of the drainage course vary from under 15% to localized portions exceeding 22 percent as shown on Figure 3.

Policy 2.3.1: Other than scattered areas associated with the sides of the natural drainage course, there are no slopes that may constrain development of the subject lands.

Policy 2.3.2: The incorporation of the existing low lying lands within the plan area will need to be reviewed in conjunction with the environmental and infrastructure provisions of this CASP.

2.4 Subsurface Soil Conditions

In October of 2003, McIntosh Lalani Engineering Ltd. prepared a geotechnical evaluation of a portion of the plan area. The scope of the evaluation included the entire NW $\frac{1}{4}$ and SE $\frac{1}{4}$ of Section 35-26-1-W5M and the northern half of the SW $\frac{1}{4}$ of Section 35-26-1-W5M. The purpose of the evaluation was to assess the general subsurface soil conditions within the proposed development area and to provide geotechnical construction guidelines for future residential development. This test hole information is representative of the overall plan area.

The geotechnical fieldwork involved the drilling of 40 boreholes up to 9.0 m deep, the excavation of three test pits and the installation of standpipes to allow for the future monitoring of groundwater conditions. The report prepared by McIntosh Lalani describes how groundwater was encountered during the drilling process to a maximum depth of 1.06 m below the surface.

Samples were taken from all of the boreholes and test pits to determine the properties of the subsurface soils. The drilling program included 17 boreholes in the NW $\frac{1}{4}$ of Section 35-26-1-W5M and three test pits in the marshy area south of Yankee Valley Boulevard. The soil samples taken from the boreholes revealed black organic topsoil ranging between 150 mm and 400 mm deep covering silt till that contained a trace amount of sand and gravel. The soil was described as damp, compact and light brown in colour. The soil samples taken from the three test pits in the marshy area revealed topsoil ranging between 450 mm and 1,000 mm deep covering wet silt that ranged from soft to firm. The soil was described as being grey and rusty brown in colour with roots being detected. Sedimentary bedrock consisting of shale and sandstone was encountered at depths ranging from 1.5 m to 7.0 m.

The drilling program also included 23 boreholes scattered throughout the SE $\frac{1}{4}$ and north half of the SW $\frac{1}{4}$ of Section 35-26-1-W5M. The soil samples taken from these boreholes revealed black organic topsoil ranging between 150 mm and 500 mm deep covering silt till that contained traces of sand and gravel. The soils were described as dry to damp, compact and light brown in colour. Traces of clay were also detected in the northern half of the SW $\frac{1}{4}$ of Section 35-26-1-W5M. Strong sedimentary bedrock was encountered at depths ranging from 1.5 m to 7.5 m beneath the surface.

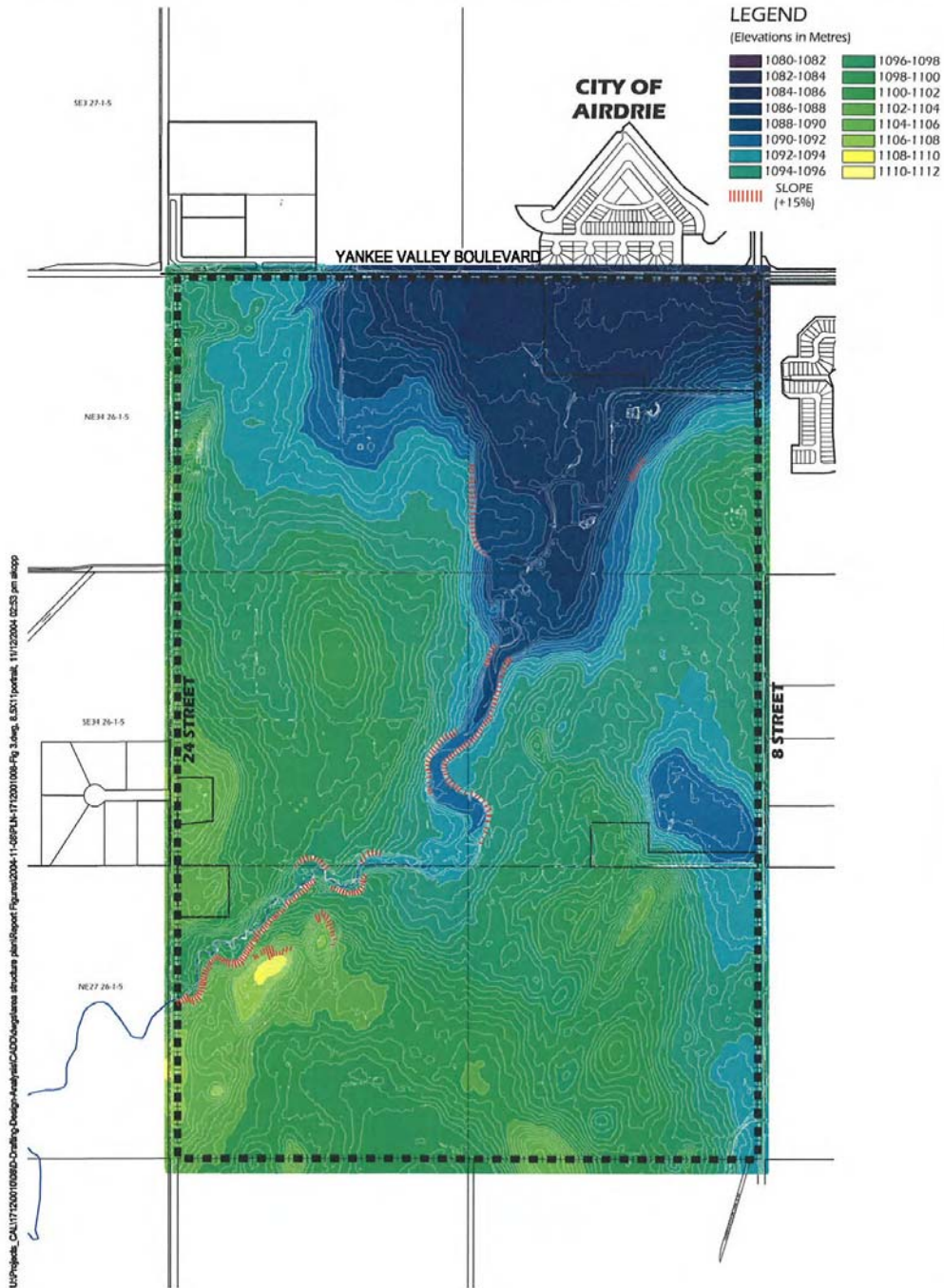
The geotechnical evaluation concluded that a portion of the northeast corner of the SE $\frac{1}{4}$ of Section 35 had previously been filled with unengineered fill and organics. The evaluation recommended the area be cleaned out to the undisturbed ground level and restocked with engineered fill during the grading process. The evaluation also recommended that a minimum of 2.0 m of engineered fill be located below the lowest footing elevation of any proposed development in the existing marshy area.

chinook winds community area structure plan



Section 35-26-1-W5M and North Half Section 26-26-1-W5M

Scale
1:15,000



topography

FIGURE
3

Additional geotechnical evaluations have been completed which focus on portions of the NW¼ of Section 35-26-1-W5M and SW¼ Section 35-26-1-W5M. The objective of these evaluations was to assess the general subsurface soil conditions at the site for the design and construction of the proposed residential development for each quarter section. These geotechnical evaluations have been submitted to the City of Airdrie under separate cover.

Policy 2.4.1: Geotechnical test hole investigations, as per the City of Airdrie requirements, shall be undertaken prior to construction approval for each parcel of land within the plan area.

2.5 Natural Environment Features

In the spring of 2004, Highwood Environmental Management conducted an environmental assessment of the subject lands. A phase 1 overview was conducted to determine overall site characteristics. The study area lies in the Foothills Fescue Grassland Natural Subregion. Expected vegetation communities in the area are grassland species like Fescue (*Festuca sp.*), Oatgrasses (*Danthonia sp.*) and associated grasses. Wildlife in the area includes a diverse range of bird species, deer and coyote.

The following environmental components exist within the plan area:

Shrub Communities

There are only three moderately sized patches of shrub community that exist within the plan area. Two patches are located near the operating gas well and the other is located in the southeast corner of the plan area. Vegetation in these shrub communities is mostly willow and alder. Fencerows associated with the existing rural homes and a strip of Caragana were also noted.

The bird species observed at these communities include red-winged blackbirds, house sparrows, common magpie, and red-tailed hawks. Other species may be present at varying times of the year.

Seasonal Pond

A seasonal pond is was once located at the central portion of the north boundary of the plan area. The majority of this seasonal pond was converted into a stormwater management facility as part of the Prairie Springs development. The remnant area of the seasonal pond will be removed with the expansion of the stormwater management facility. A seasonal pond is defined as shallow marsh vegetation dominating the central areas of pond basins. Normally they maintain surface water for an extended period in spring and early summer, but are frequently dry during the later summer and fall (Wetland Conservation Plan, 2003). Marsh or riparian vegetation was observed around the pond including rushes, sedges and grasses.

There is an additional potential seasonal pond located in the central portion of the south boundary of the plan area. This feature overlaps onto lands outside of Airdrie's municipal jurisdiction. More detailed investigation of the water source and the vegetation is required to determine if the feature qualifies as a seasonal pond.

Drainage

There is a drainage course that enters the plan area in the southwest corner, then aligns central to the plan area. Seasonal flows moved from south to north and connect to the seasonal pond noted above.

There is also a man-made water dugout inside the drainage course immediately south of the ball diamonds. Further to the south, the terrain in the drainage courses consists of hummock. Hummock is mound or "turtle-backed" in form and is made of grasses and sedges.

Human Use Areas

Human use areas are comprised of lands used for cultivation, grazing pasture, ball diamonds, an operating natural gas well, and an abandoned gas well site.

In general, it was found that the plan area is not highly productive for wildlife or vegetation. However, there are opportunities to enhance future development through the use of the drainage course and seasonal pond areas to enhance natural amenities for residents.

Policy 2.5.1: Maintain, where feasible, all or portions of the three moderate shrub communities with particular emphasis on the ones adjacent to the seasonal pond.

Policy 2.5.2: Where deemed appropriate by the City, further environmental assessments may be conducted for the two seasonal pond areas and the drainage course prior to development approvals. Such further assessments may include a more detailed study of vegetation community types, determination of the historical sizes of the seasonal ponds, and recording wildlife and wildlife habitat.

2.6 Phase One Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) was prepared by Base Property Consultants in February of 2004. The assessment included a review of municipal and provincial records, historical air photographs and a site reconnaissance visit. The historical land title search revealed caveats by various oil companies on all parcels except the north half of the SW $\frac{1}{4}$ of Section 35-26-1-W5M. The historical air photographs also reveal the presence of oil wells within the plan area as early as 1974. A search of the IHS Energy Ltd. oil and gas well database confirmed that there is an active oil well operating in the NW $\frac{1}{4}$ of Section 35-26-1-W5M and an abandoned well site located in the SE $\frac{1}{4}$ of Section 35-26-1-W5M.

The environmental assessment describes how the two well sites have buried drilling sumps and flare pits associated with their initial drilling and that further investigations are required to determine if these facilities contain contaminants that could leach into the surrounding soils and groundwater. The assessment further noted that the existing buildings associated with the operating gas well contain construction materials made out of asbestos, fluorescent light fixtures with PCBs and lead-based paints on account of their age. Base Property concluded that the potential for environmental impairment exists on the NW $\frac{1}{4}$ and SE $\frac{1}{4}$ of Section 35-26-1-W5M related to the petroleum activities and recommended further soil and groundwater sampling be conducted in the vicinity of the two well sites.

Policy 2.6.1: A Phase II Environmental Site Assessment (ESA) shall be conducted in the vicinity of the operating and abandoned well sites prior to land use amendment approval.

Policy 2.6.2: Confirmation that abandoned wells have been decommissioned and the land reclaimed to original condition in accordance with AEUB regulations shall be provided to the municipality prior to land use redesignation.

2.7 Historical Resources Overview

An Historical Resources Overview (HRO) was prepared by Bison Historical Services in February of 2004. The report identified nine historical sites on adjacent lands and one historical site within the plan area. EhPm 36 is described as a surface scatter site located in the north half of Section 35-26-1-W5M. These types of historical resources are common to the Calgary region. These resources do not preclude the potential for development, and if required by Alberta Culture, when fully investigated.

Bison Historical recommended an Historical Resources Impact Assessment (HRIA) be conducted given the gently rolling topography of the area and the prevalence of previously recorded historical sites on adjacent lands.

Policy 2.7.1: Prior to any development approvals, an Historical Resources Impact Assessment (HRIA) shall be prepared for lands within an affected plan area.

2.8 Existing Land Uses and Development

The bulk of the plan area is comprised of agricultural land that has not been developed. There are seven residential dwellings scattered along the eastern and western edges of the site on parcels of land ranging in size from ± 1.2 hectares to ± 8.1 hectares in size. The existing farmsteads are serviced by water wells and septic fields that will eventually require decommissioning.

There is a Level I sour gas well located in the northwest corner of the plan area that is accessed by a service road that branches off of Yankee Valley Boulevard. The well is connected to a pipeline that extends southward and westward along the quarter section lines as shown on Figure 4.

The City of Airdrie maintains four baseball fields and associated parking facilities as part of the Chinook Winds Baseball Park in the northeast corner of the plan area. The remaining portion of the Society/City of Airdrie lands are undeveloped.

Policy 2.8.1: All existing water wells and septic fields shall be decommissioned and environmentally remediated prior to redevelopment.

Policy 2.8.2: As per the provisions of the Alberta and Utilities Board, residential development shall not be permitted within 100 m of the operating gas well or within 10 m of the abandoned gas well in accordance with provincial regulations.

Policy 2.8.3: As per the provisions of the Alberta and Utilities Board, there are no setbacks from the pipelines servicing the operating gas well other than the existing right-of-way width.

Policy 2.8.4: Oil and gas facilities shall be located by survey at the Neighbourhood Structure Plan stage.

2.9 Existing Transportation Network

The existing transportation network consists of Yankee Valley Boulevard, 8th Street and 24th Street which form the northern, eastern and western boundaries of the plan area. Highway 2 is located approximately 1.5 km east of the plan area as shown on Figure 5. Yankee Valley Boulevard is currently classified as an east/west 4-lane divided highway arterial road. 8th Street is classified as a 4-lane divided major road and 24th Street is classified as a 4-lane divided, major arterial road adjacent to the plan area. The intersection of Yankee Valley Boulevard and 8th Street is fully signalized similar to the intersection of Yankee Valley Boulevard and 24th Street. Highway 2 is a north/south 6-lane divided rural freeway with an interchange at Yankee Valley Boulevard.

The main roadway within the plan area is Chinook Winds Drive SW, a paved undivided primary collector. This road provides access to Chinook Winds Park, the Prairie Springs and Windsong subdivisions, the Rocky View Schools Education Centre, the Airdrie Fire Department Head Quarters-Chinook Winds Station, and a future school site that is currently under construction. The existing homes south of Windsong and the gas well site have private access driveways.

2.10 Existing Infrastructure

Within the plan area, the existing infrastructure includes pipelines associated with the gas well, shallow utility corridors, and service connections to existing rural home sites.

Urban deep utility services including sanitary, storm and water mains are located in the Prairie Springs and Windsong communities within the plan area. A 10,000 cubic metre City water reservoir is located near the intersection of 8th Street and 40th Avenue. The Prairie Springs storm pond north of Chinook Winds Park and the South Windsong pond are fully operational. Windsong is currently under construction and more land will become serviced as development continues. Water, sanitary and storm sewer systems are also present in the developing communities adjacent to the north boundary of the plan area.

Adjacent to the east boundary of the plan area within the 8th Street right-of-way exists the City of Airdrie water supply line connection to the City of Calgary. Other than distribution lines, no connections will be permitted to this watermain.

2.11 Summary of Opportunities and Constraints

There are several natural features, existing land uses and infrastructure requirements that pose distinct opportunities and constraints to developing the plan area as shown on Figure 4 and described in the following sub-sections.

Natural Features

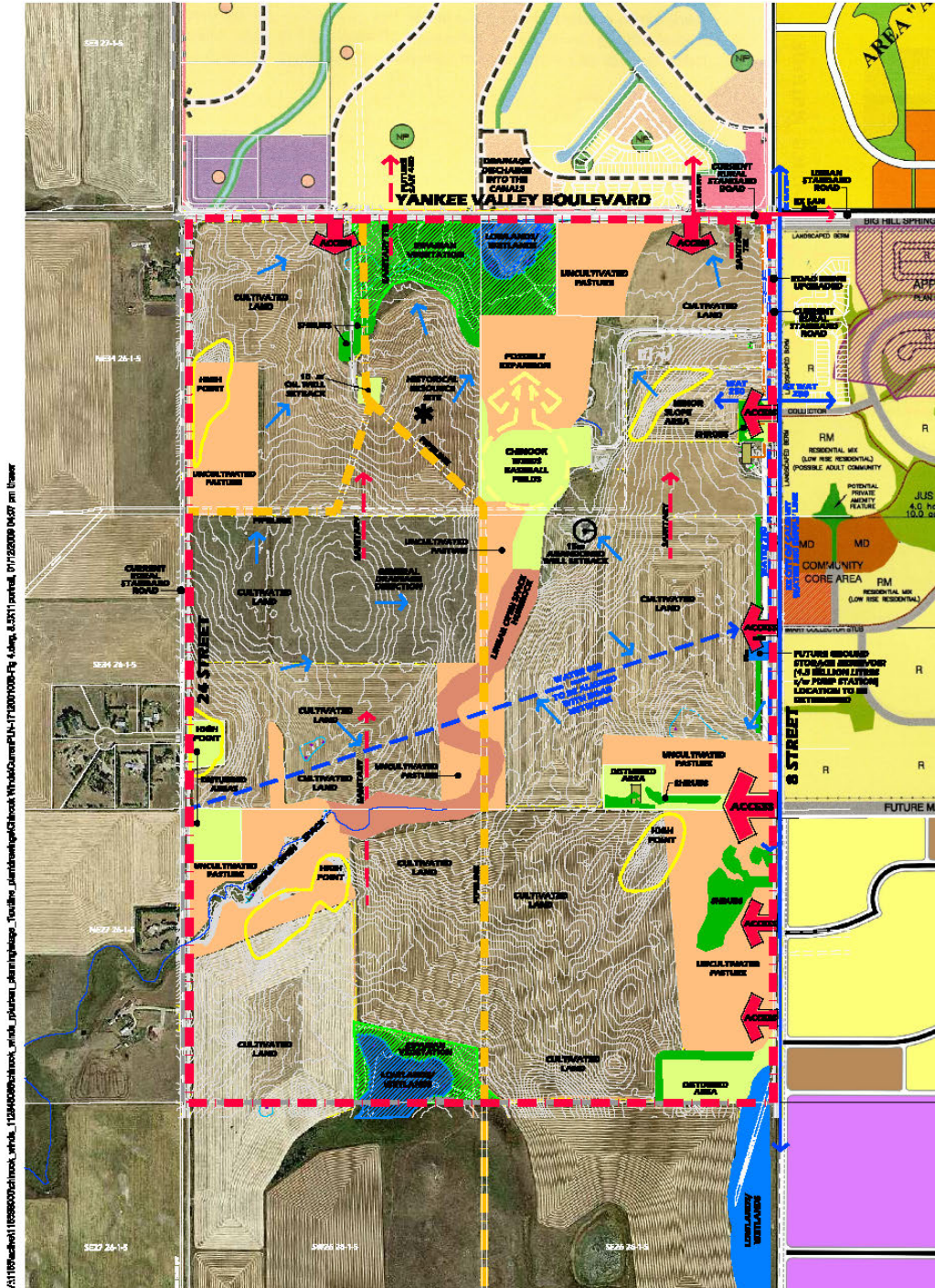
The natural topography of the site poses opportunities and constraints to developing the plan area. There is a substantial low-lying area situated along the northern boundary of the plan area that functions as a wetland during wet periods. The geotechnical evaluation reported that the soil found within this low-lying area was black and organic in nature with roots mixed throughout. This low-lying area may be viewed as an opportunity to create a unique open space amenity within the plan area or as an innovative way to handle stormwater on-site. The low-lying wetland area may be incorporated into a stormwater detention pond that is further integrated into a much larger stormwater management system. There is a

second low-lying wetland area along the southern boundary of the plan area that could be used for similar purposes.

The topography of the plan area is rolling with high and low-lying areas distributed throughout. There is a natural dry low-lying area situated along the eastern boundary of the plan area that will require a large amount of engineered fill before it may be developed for residential purposes. In contrast, there are six high points scattered throughout the plan area that offer exceptional views to the east, south and west.

North Dry Creek is another important natural feature that poses distinct opportunities and constraints to developing the plan area. North Dry Creek essentially divides the plan area in half and is characterized by well defined side slopes. The drainage course poses a challenge to developing an internal road network, however, the drainage course also poses an opportunity to create an extensive central linear open space that will enhance the pedestrian environment of the plan area and serve as a public amenity. The drainage course could also serve a more engineered role and be included into the stormwater management plan.

Though the plan area is not highly productive for wildlife or vegetation, there are a couple of key features that require further assessment: the moderate shrub communities, the seasonal ponds, and the drainage course. These environmental resources are opportunities to enhance the community as natural amenities for residents.



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opportunities and constraints

FIGURE
4

The one known historical resource site, or others found through more detailed assessments, can be mitigated or incorporated into the overall development plan.

Existing Land Uses

There is a 100 m setback in effect from the operating Level I sour gas well located in the northeast corner of the plan area that poses a constraint to development. A “Level 1” classification is the lowest category assigned by the provincial Energy and Utilities Board for levels of concern associated with gas extraction operations. Development in the area is further constrained by the utility rights-of-way registered on the titles of the properties associated with the pipelines. However, due to the type of gas being transmitted through the pipelines, there is no additional setback required other than the right-of-way itself. There is an abandoned gas well located in the central portion of the plan area southeast of the Chinook Winds Baseball Park. Provincial legislation similarly prohibits development within 10 m of an abandoned well head. The presence of these gas wells must be incorporated into the overall concept and phasing plans. The land encumbered by the setbacks may be used to enlarge planned open spaces or to enhance linkages between residential and recreational spaces or held for residential development once the gas extraction is complete.

There are several single-family residential acreages scattered throughout the plan area. These residences are serviced with water wells and septic fields that will need to be decommissioned when redevelopment occurs. The existing acreages will also be redeveloped and incorporated into the overall land use concept for the area.

Existing Infrastructure

Other than the pipelines servicing the gas well and shallow utility lines, the plan area is unencumbered with existing infrastructure. The plan area is located next to communities currently under construction. Utilities exist in the area to serve these development communities along with the subject lands. The subject lands are bounded by an existing and planned arterial road network which provides access to other portions of Airdrie and Highway 2.

Airdrie and District Agricultural Society Lands

In 1995, the Airdrie and District Agricultural Society purchased ±31.6 hectares (±78 acres) of land within the plan area. The purpose of the purchase was to offset a lack of recreational facilities within the Airdrie region. The concept plans prepared for the Society’s lands include play fields, a recreational building (twin hockey arenas) and a campground.

Subsequently, the Society leased then sold a portion of their lands to the Rocky View School Division. Four baseball diamonds were constructed in the northeast corner of the plan area in conjunction with the City of Airdrie (hence the reason both names appear on the title) and are operated by the Society under the name of “Chinook Winds Baseball Park”.

The existing baseball park and the future uses for the undeveloped lands will be incorporated into the overall development plan.

Rocky View School Division Lands

The Board of Trustees of the Rocky View School Division (RVSD) own ±16.0 hectares (±39.54 acres) of land in the northeast corner of the plan area (purchased from Airdrie and District Agricultural Society in 1996). The RVSD lands encompass a portion of the north central low-lying area with elevations ranging between 1,080 m and 1,090 m.

The concept plans for these lands include a high school (1,500 students), administration building and residual lands, which could be made for development. Construction of the high school site is not contemplated for some time. The RVSD recently received approval from the City for a development permit to construct the administration building.

The plans for the uses on the RVSD lands will be incorporated into future neighbourhood sector plans. Similarly, the specific development plans for the RVSD will need to be in keeping with the provisions of this CASP.

3.0 MUNICIPAL POLICIES

3.1 City of Airdrie Annexation

The provincial government approved the annexation of ±1,163 hectares (±2,873 acres) of land from the Municipal District of Rocky View to the City of Airdrie effective July 1, 2003. The annexation lands include five quarter sections north of Highway 567, six quarter sections south of Yankee Valley Boulevard and west of 8th Street (plan area), and eight quarter sections south of Yankee Valley Boulevard and east of Highway 2. The plan area is located in the recently annexed lands in the southwest corner of Airdrie.

3.2 Growth Area Management Plan

The Growth Area Management Plan (GAMP) was prepared by an urban planning firm on behalf of the City of Airdrie in January of 2004. The GAMP is intended to provide a long term development framework for the lands recently annexed into the City of Airdrie from the Municipal District of Rocky View. The GAMP essentially recommends a land use scenario designed to meet the Municipality's land requirements for commercial, industrial, institutional, residential, and open space areas over the next 25 years.

The GAMP recommends four planning areas be established to guide the development of future planning initiatives for the recently annexed lands. The GAMP describes how the four planning areas stem from a collective desire to ensure comprehensive land use planning initiatives are undertaken for the annexation lands and that detailed infrastructure strategies document requirements, timing and cost allocation.

The GAMP describes the southwest planning area (plan area) as being comprised of six quarter sections intended for public and quasi-public uses, residential uses and a mixed use site as shown on Figure 6. The proposed public and quasi-public uses include a ±16.19 hectare (±40.0 acre) parcel of land owned by the Board of Trustees of the Rocky View School Division intended to accommodate a high school and their administration headquarters, as well as a ±16.19 hectare (±40.0 acre) parcel of land owned by the Airdrie and District Agricultural Society who maintains the Chinook Winds Baseball Park. The GAMP recommends that the Chinook Winds Baseball Park be maintained and that any residual land not required by the Rocky View School Division be evaluated for its development potential.

The GAMP designates the bulk of the southwest planning area for residential uses and recommends that the form of residential development be varied to accommodate a broad range of potential residents and income levels. The GAMP generally describes how residential densities should be greater than those traditionally found in the City of Airdrie and how land use patterns should encourage proper community design and provide for appropriate transitioning or buffers.

The GAMP identifies a ±12.1 hectare (±30.0 acre) mixed use site in the central portion of the plan area adjacent to 8th Street. The GAMP describes how the preferred location of the mixed use site is adjacent to the Chinook Winds Baseball Park and opposite the mixed use site proposed in the Cooper's Town Area Structure Plan (ASP). The commercial site should also be developed as a community node with mixed uses surrounded by higher residential housing forms.

The GAMP also identifies a regional pathway extending throughout the southwest planning area along the quarter section lines. The GAMP generally describes how parks and natural features should be integrated into the comprehensive land use pattern and specifically how efforts should be taken, through detailed design and potential municipal reserve dedications, to preserve the existing tree stands in the southwest portion of the plan area.

- Policy 3.2.1:** The subject area shall be used for predominately residential uses. Non-residential land uses considered appropriate are public and quasi-public facilities and a mixed land use site (higher density residential and a commercial node).
- Policy 3.2.2:** The development plans for the area shall provide for residential styles that accommodate a broad range of potential residents and income levels, as well as densities that are greater than those traditionally found in Airdrie.
- Policy 3.2.3:** Parks and natural features should be integrated into the comprehensive land use pattern for the lands.
- Policy 3.2.4:** A north-south regional pathway extending through the central portion of the planning area shall be integrated into the overall development plan.

The City of Airdrie's growth strategy was updated through their 2011 Comprehensive Growth Strategy (CGS). Neighbourhood Structure Plans for lands within this CASP shall conform to applicable policies and goals of the 2011 CGS.

3.3 Municipal Development Plan

The Municipal Government Act requires all municipalities with a population of 3,500 or more to adopt by bylaw a Municipal Development Plan. The Airdrie City Plan was originally adopted by Council on June 20, 2003 under Bylaw B7/2003 to guide growth and development within the City limits. The scope of the plan was broad and addressed a wide variety of issues including land use, environmental protection, economic prosperity, and social well-being. The plan also provided the framework for more detailed area structure plans and community planning documents.

The Airdrie City Plan was subsequently amended to include the lands annexed by the City of Airdrie from the Municipal District of Rocky View and the new plan was adopted by Council on February 17, 2004 under Bylaw B4/2004. Overall community existing and target densities are reviewed from time-to-time by the Municipality.

The Airdrie City Plan states that "providing a range of housing opportunities is necessary for a balanced community, both socially and economically". Therefore specific policies address housing needs for a range of lifestyle and work alternatives.

- Policy 3.3.1:** The residential densities of this CASP shall conform to the density provisions contained in Airdrie's Municipal Development Plan.
- Policy 3.3.2:** Neighbourhood Structure Plans prepared for lands within this CASP shall provide for a variety of housing stock in accordance with the Airdrie City Plan.

The City of Airdrie adopted the City Plan in 2015 which is an update to their 2008 Municipal Development Plan. Neighbourhood Structure Plans for lands within this CASP shall conform to applicable policies and objectives of the City Plan.

3.4 Land Use Bylaw

The Municipal Government Act requires all municipalities to pass a Land Use Bylaw. The City of Airdrie Land Use Bylaw was adopted by Council under Bylaw 955 and provides the foundation for the land use redesignation and development permit processes within the City limits. The Land Use Bylaw divides the Municipality into a series of land use districts and establishes the permitted and discretionary uses and development rules for each of these districts. The Land Use Bylaw outlines the procedures for processing and evaluating land use amendment applications and development permits.

The City of Airdrie Land Use Bylaw was recently amended to include the annexation lands. The Land Use Bylaw shows the plan area as predominately Urban Reserve District (UR). The UR land use designation will be maintained until subsequent land use amendment applications are submitted by the landowners to accommodate residential, commercial, institutional, open space, and other uses. There are also portions of the plan area designated as P-1 (RVSD and Agricultural Society lands) and RR-1 (smaller acreages).

3.5 Intermunicipal Development Plan

The City of Airdrie/MD of Rocky View Intermunicipal Development Plan (IDP) was approved by both Councils by bylaw in July and August of 2001, respectively. The purpose of the plan is to address planning issues on lands bordering both municipalities. The IDP was completed prior to the land annexation in 2003.

According to the IDP, the land included in this CASP is located within the "Primary Urban Growth Corridor". This indicates that the area is a reasonable and desirable place to encourage growth in the area. Further, the intent of the IDP has been incorporated into this plan through policies addressing the transition between municipalities and land uses in Section 5.11 - Interface Area.

Policy 3.5.1: The Municipal District of Rocky View will continue to be advised and be asked to comment on proposed development occurring within this plan area.

Policy 3.5.2: Land use along the west and southwest portions of the CASP shall be generally comprised of lower density residential land uses.

Policy 3.5.3: Open space elements within the plan area shall be coordinated with land uses adjacent to the plan area.

Policy 3.5.4: The road and servicing infrastructure should take into account the potential for future urbanization of adjacent lands.

4.0 EXISTING AREA STRUCTURE PLANS

The following information provides the existing policy context for the area adjacent to the subject lands (see Figure 5). The provisions of these adjacent ASP's provide the context and some of the policy directions for this Chinook Winds CASP.

4.1 West Airdrie Area Structure Plan

The West Airdrie Area Structure Plan (ASP), located north of the plan area, was adopted by City Council on June 18, 2001 under Bylaw 14/2001. The plan area encompasses ±388.5 hectares (±960 acres) of land legally described as Section 2-11-27-W5M and the S½ of Section 2-27-1-W5M. The plan area is bounded by 1st Avenue to the north, 24th Street to the west, 8th Street to the east, and Yankee Valley Boulevard to the south.

The West Airdrie ASP describes how development will begin in the northeast, southeast and northwest corners of the plan area and will continue moving towards the centre as services and infrastructure are extended. The proposed development will primarily feature low density single-family residential dwellings and small pockets of duplex residential and multi-family residential uses. The overall residential density of the proposed development will range from 13.58 to 19.76 units per hectare or 5.5 to 8.0 units per acre.

The ASP further describes how linear parks will be incorporated into the canal system as part of a larger open space plan. The proposed development will include three joint use sites, as well as a number of neighbourhood parks and tot lots in addition to the Monklands Soccer Park. The development will also include a small commercial node in the northeast corner of the plan area and a neighbourhood shopping centre in the southwest corner. A fire hall is proposed in the southeast corner of the plan area.

The West Airdrie ASP lands will be serviced by an existing 350 mm water line buried within 8th Street that connects to the Municipality's overall water system. The northern lands will be serviced by an existing sanitary sewer line buried within 8th Street that will convey the flow eastward across the Canadian Pacific Railway line to a main lift station, while the central and southern lands will be serviced by a gravity trunk system that will cross 8th Street near the northern boundary of the SW¼ of Section 2-27-1-W5M. The stormwater management plan for the area consists of a system of canals and dry ponds that will convey the upstream flow and controlled development discharge to Nose Creek via an existing drainage course that flows eastward from 8th Street.

4.2 Luxstone Park Estates Area Structure Plan

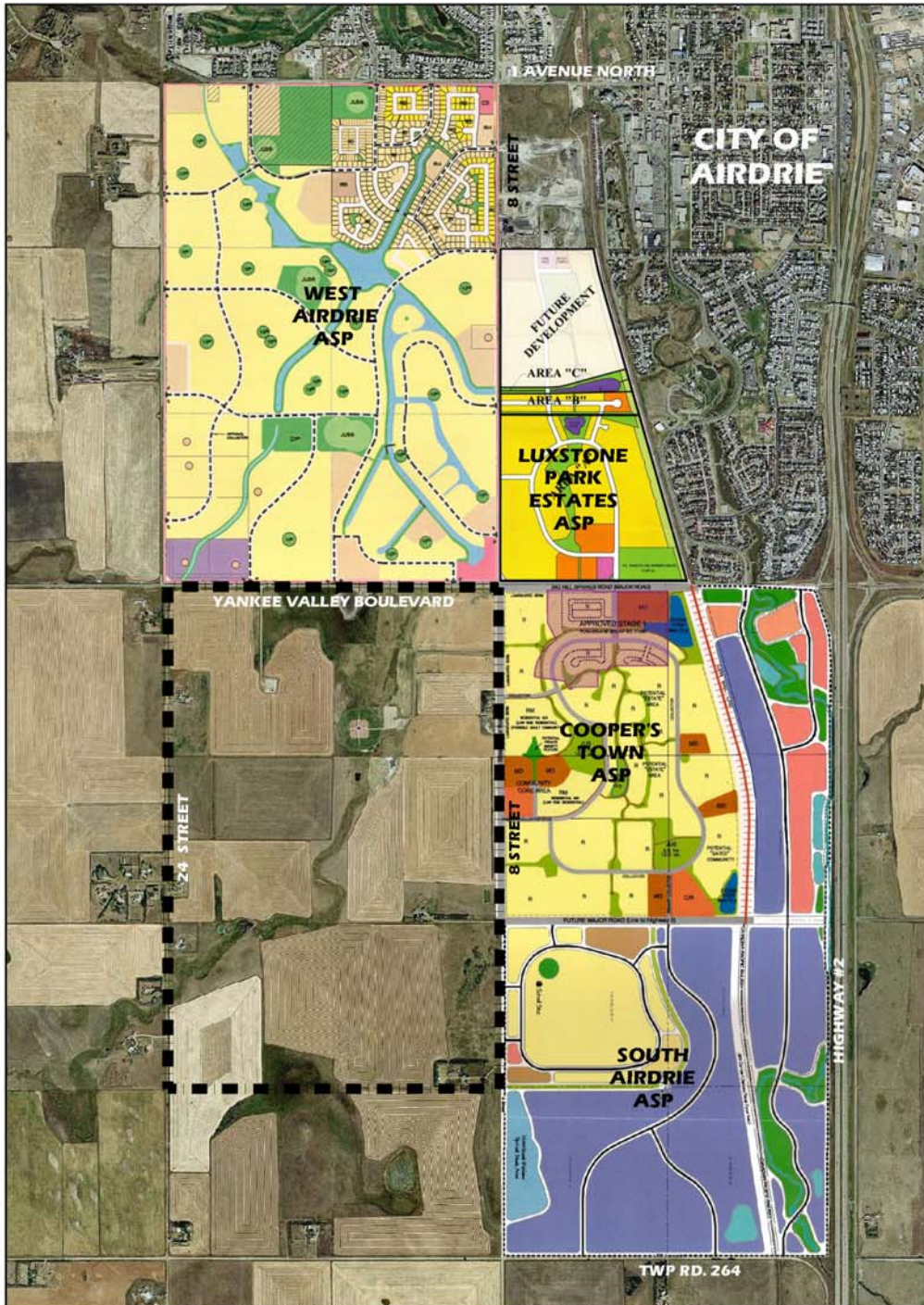
The Amended Luxstone Park Estates ASP, located northeast of the plan area, was adopted by Council on November 7, 2003 under Bylaw 36/2003 and amended June 7, 2004 under Bylaw 30-2004. The plan area encompasses ±103 hectares (±255 acres) of land legally described as a portion of the W½ of Section 1-27-1-W5M. The plan area is bounded by undeveloped land to the north, the Canadian Pacific Railway line to the east, Yankee Valley Boulevard to the south, and 8th Street to the west.

The ASP describes how development will begin in the southeast corner of the plan area (adjacent to the St. Martin de Porres school site) and proceed toward the northwest. The proposed development will contain a wide variety of low density single-family residential dwelling units, as well as small pockets of multi-family residential dwelling units. The overall residential density of the proposed development is projected to be 5.83 units per acre.



Section 35-26-1-W5M and North Half Section 26-26-1-W5M

Not to Scale



approved policy plans

FIGURE
5

The ASP also describes how the development will feature a combination of linear open spaces and public open spaces adjacent to stormwater management facilities and a local park that will provide for a variety of recreational opportunities. A local pathway is also planned to traverse the centre of the plan area in order to provide local residents with pedestrian access to the adjacent communities to the east and west.

Initial access into the plan area will be off of Yankee Valley Boulevard with subsequent access being provided off of 8th Street and through the lands to the north. A collector road will loop through the southern portion of the plan area before extending northward. A small commercial node is planned next to the Yankee Valley Boulevard access and a fire hall is proposed adjacent to the access to the lands in the north portion of the plan area. The proposed commercial node is intended to serve a local neighbourhood function. The first phases of development along the southern boundary of the plan area are under construction.

The Luxstone ASP lands will be serviced by water and sanitary sewer trunk lines buried within Luxstone Boulevard. These existing trunk lines have sufficient capacity to service the entire plan area. Stormwater will be managed by an extension of the canal system to the north and by storm sewer infrastructure that will discharge into a wet pond located in the central portion of the ASP plan area.

4.3 Cooper's Town Area Structure Plan

Council adopted the Cooper's Town ASP, located east of the plan area, on August 6, 2002 under Bylaw 20/2002. The plan area encompasses ±174 hectares (±429 acres) of land legally described as a portion of Section 36-26-1-W5M. The plan area is bounded by Yankee Valley Boulevard to the north, the Canadian Pacific Railway line to the east, undeveloped farmland to the south, and 8th Street to the west.

The ASP describes how the plan area will be developed in six phases and contain a variety of low density, mixed low rise and multi-family residential uses connected by an open space system that is proposed to include two joint use sites and an extensive linear park network. The overall residential density will range between 14 and 20 units per gross developable hectare or 5.7 to 8.1 units per acre and accommodate an ultimate population (based on a 3 person household) of 7,200 to 10,500 residents.

The ASP also describes how the plan area will feature a community core area that will include one of the two joint use sites adjacent to a combination of higher density residential uses and mixed use commercial sites. The higher density residential uses will include semi-detached and apartment style units. The community core area will be located along the western boundary adjacent to 8th Street.

Primary access into the plan area will be provided off Yankee Valley Boulevard with secondary accesses being provided off of the future major road to the south and 8th Street to the west. An internal collector road will also loop through the plan area and serve to circulate traffic throughout the community. Development is expected to occur along 8th Street in the summer of 2004.

The Cooper's Town ASP lands will be serviced by connections to existing watermains along 8th Street, Yankee Valley Boulevard and Main Street. The area will also be serviced by an existing sanitary sewer main that will drain northward through the Luxstone subdivision and by a proposed line along the eastern boundary of the plan area that will service the low-lying areas located west of the Canadian Pacific Railway line. The stormwater management plan consists of a combination of wet and dry stormwater retention ponds that will ultimately discharge into Nose Creek via a piped system buried underneath the railway line. A dry pond will be located in the central portion of the plan area immediately east of the joint use site and will function as part of the larger central open space system.

4.4 South Airdrie Area Structure Plan

The South Airdrie ASP, located southeast of the plan area, was adopted by Council on June 16, 2003 under Bylaw 16/2003 (amended April 5, 2004 under Bylaw 14-2004). The plan area encompasses ±321 hectares (±795 acres) of land legally described as Section 25-36-1-W5M and the east half of Section 36-26-1-W5M. The plan area stretches southward from Yankee Valley Boulevard to 208th Avenue and eastward from 8th Street to Highway 2 excluding the lands contained within the Cooper's Town ASP described above.

The ASP describes how the plan area will be developed in four phases with the first and second phases located east of the Canadian Pacific Railway line and the third and fourth phases located south of the developing community of Cooper's Town. The ASP also describes how development east of the railway line will include a mix of commercial and general light industrial uses, as well as a series of open spaces along Nose Creek. The bulk of the lands located west of the railway line are designated for general light industrial uses with the exception of the land located south of Cooper's Town which has been designated for low density residential uses and small medium density residential uses. The overall residential density will be 12.7 units per gross developable hectare (5.15 units per gross developable acre). A community park and potential joint use site have also been identified for this area, as well as a small commercial node and landscaped buffer intended to provide a buffer between the proposed residential and industrial uses.

Access into that portion of the plan area located east of the railway line will be provided off of Yankee Valley Boulevard and the proposed extension of Main Street will serve as the primary north/south corridor within the plan area. A second access will eventually be provided off of Yankee Valley Boulevard to further service this portion of the plan area. The remainder of the plan area will have access off of 8th Street and through the Cooper's Town community to the north. Development has yet to occur within the plan area.

The South Airdrie ASP area will be serviced by a 300 mm watermain within Main Street and a tie across Highway 2. The area will also be serviced by a system of sewer mains and two lift stations that will force the flow northward to a regional lift station. The stormwater management plan includes an underground piped collection system and an overland storage and detention system with storm ponds scattered throughout the plan area. The ASP describes how the intermittent wetlands within the plan area may also be used as naturalized stormwater management facilities.

5.0 PROPOSED LAND USE CONCEPT

5.1 Development Plan Vision

The Chinook Winds CASP lands provide the opportunity to provide a community for future residents which is a blend of enhanced natural characteristics of the site, predominately residential homes, with significant non-residential focal points. Some 15,000 residents will call this community home and live in a variety of housing forms. The central open space system will be an important feature that joins the residents together rather than dividing them. Opportunities to work in the area will be provided through the public service and commercial areas located in the plan. Recreational opportunities range from formal active sports facilities to trails and passive open space. Educational facilities will range from kindergarten to high school.

Figure 6 illustrates the development plan for the CASP area, as well as the context with adjacent communities. The following sub-sections outline the specific provisions of the plan.

5.2 Residential Development

As indicated in the GAMP document, the primary use of the lands contained within the plan area is residential in nature.

The predominant type of residential units will be single family detached housing. This form of housing will be geared to accommodate a variety of economic and lifestyle characteristics of the future residents. The location for homes addressing these characteristics will be suited to access considerations, community facilities and the amenities of the area.

Other forms of residential housing will include semi-detached, townhouse, low rise multi-family units. Similarly to the single detached housing, the location for these forms of housing will take into account access to transportation networks, community facilities and community amenities.

Policy 5.2.1: A variety of housing forms shall be provided through the plan area to provide residents with a choice of housing options.

5.3 Population Projections and Densities

Density for the Chinook Winds CASP shall range from 5.5 to 7.0 units per gross acre. The CASP gross area is 956.44 acres. Therefore, the range of housing will be a minimum 5,260 homes and a maximum of 6,700 homes. The average number of people per household in Airdrie is 2.7. Therefore, the projected population of the CASP area will range from approximately 14,200 to 18,090 residents.

The housing mix shall comprise three main categories: Low density residential, medium density residential and high density residential. Low density residential housing consists of primarily single family homes, with a minority of semi-detached (or duplex) homes. The target distribution of low density residential housing should comprise approximately 65% of the total housing mix. Medium density residential consists of townhomes, which may be in the form of rowhouses or stacked townhomes. The live/work units represented in the Chinook Winds Land Use Concept map (Figure 6) will likely be street-oriented rowhouses having a small commercial component. The target distribution for medium density

residential is approximately 30% of the total housing mix. High density residential is essentially apartment buildings that are typically 4-storey walk-ups. In the Chinook Winds CASP, high density residential will be limited to the northeast portion of the CASP area and will comprise approximately 5% of the total housing mix. Table 3 shows the breakdown and range of units anticipated for the CASP, based on density range and housing type.

The overall density gradient for the CASP will generally have higher densities in the eastern portion of the site – especially along Yankee Valley Boulevard and 8th Street, and will have lower densities in the western portion of the CASP – particularly near the Dry Creek riparian corridor.

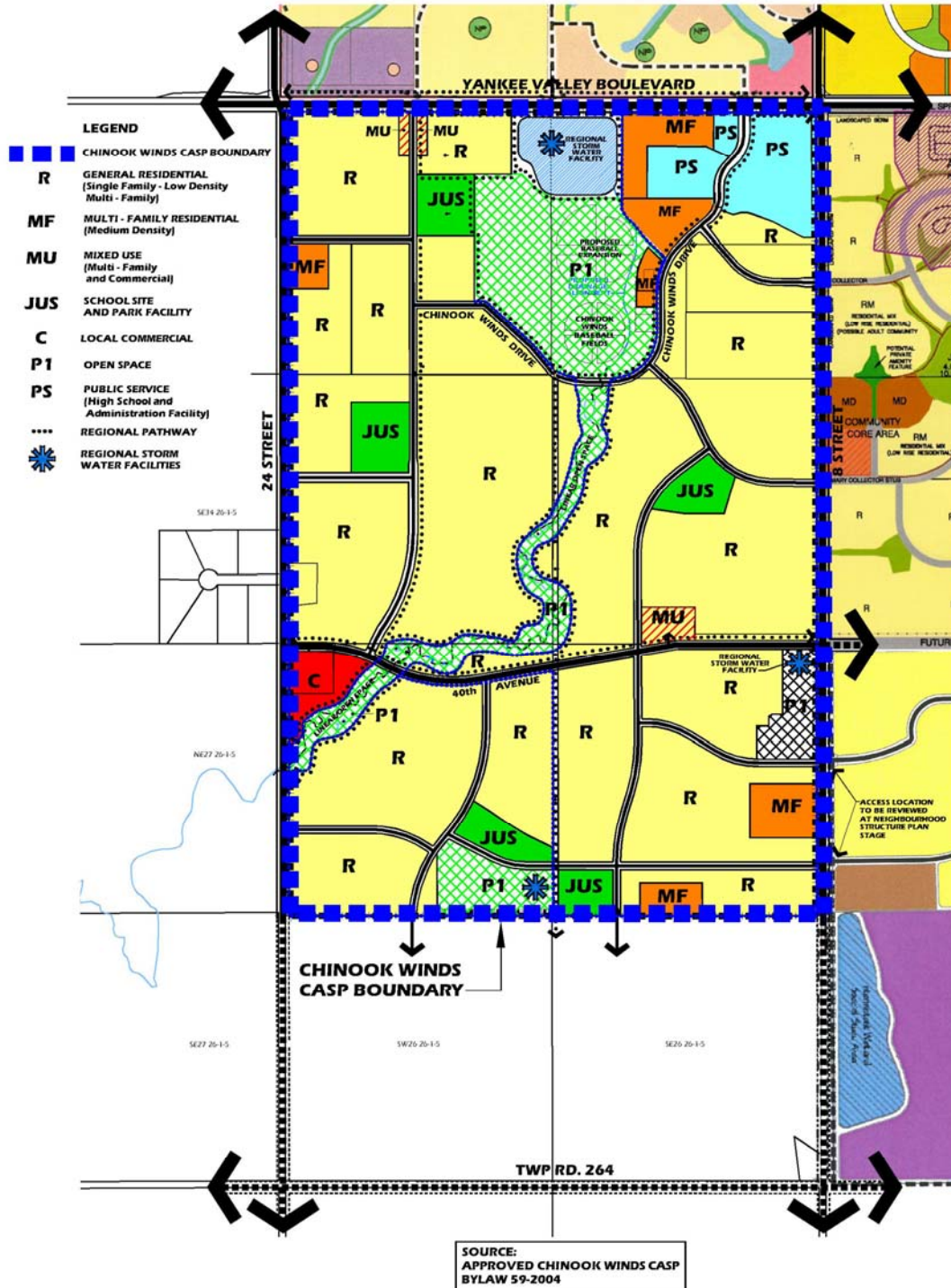
Table 3: Projected Number of Housing Units

Housing Type	Housing Distribution Target	Low Density Range (5.5 Units Per Acre)	High Density Range (7.0 Units Per Acre)
Low Density (Single & Semi-detached)	65%	3,420	4,355
Medium Density (Townhome)	30%	1,580	2,010
High Density (Apartments)	5%	260	335
Totals	100%	5,260	6,700

The numbers listed in the table are approximate and will be more defined by each Neighbourhood Structure Plan located within the Chinook Winds CASP.



Section 35-26-1-W5M and North Half Section 26-1-W5M



land use concept

FIGURE
6

Policy 5.3.1: The density within the overall CASP area shall range from 5.5 to 7.0 units per gross acre. Each Neighbourhood Structure Plan within the CASP area may adhere to density policies set forth in the City's Municipal Development Plan (Airdrie City Plan).

Policy 5.3.2: Low density residential areas shall comprise approximately 65% of the total housing mix and consist of primarily single family homes, and may include some semi-detached homes.

Policy 5.3.3: Medium density residential areas shall comprise approximately 30% of the total housing mix and consist primarily of townhomes. Live/work units can be included in this housing category.

Policy 5.3.4: The high density residential area shall comprise approximately 5% of the total housing mix and consist of apartments. The high density residential area shall be restricted to the northeast portion of the CASP along Yankee Valley Boulevard.

5.4 Mixed Use Development

There are two areas of the plan that allow for mixed use commercial within the Chinook Winds CASP area. The smaller mixed use area in the northern portion of the concept plan (Figure 6) is located at one of the major entries into the CASP area from Yankee Valley Boulevard. This mixed use is envisioned to be in the form of street-oriented townhouses having a live/work component. The commercial businesses located here are likely to be small-scaled and cater to personal services rather than retail.

The larger mixed use area, located in the southeastern portion of the plan off of 40th Avenue, is viewed as a "vertical" mixed use area, which means medium density housing would be located immediately adjacent to a small neighbourhood retail node. The businesses here will likely comprise of local convenience retail and services.

Further descriptions of the mixed use sites will be provided in the corresponding Neighbourhood Structure Plans and specific detailing will be provided at the Development Permit stage.

5.5 Commercial Uses

In conjunction with the two mixed use development areas, a local commercial retail facility is proposed at the junction of the central east-west road link and 24th Street. This use will provide local-scale retail support facilities for the southwestern portion of the plan.

Policy 5.5.1: Local commercial uses should provide facilities oriented to serve primarily the adjacent community.

5.6 Open Space System

The open space system is a network of site features interconnected with the proposed land uses for the CASP lands. The central focus of this system is the existing drainage course. The drainage course will function as a key open space element to the community, as well as providing an infrastructure role through the stormwater management plan. The internal road network is designed to limit the number of breaks in this key component of the plan. This drainage course will be enhanced through the additions of a trail system and landscaping measures.

There are two large low-lying areas/seasonal water bodies located at the north and south ends of the project which will provide 'anchors' to the open space system. These areas will also take on functions as part of the overall stormwater management program.

Area parks will be located throughout the remainder of the plan area and be comprised of sub-neighbourhood parks, school sites and linear parks. These open space elements are connected to the central open space spine via pedestrian trails and road networks.

Municipal and Environmental Reserve (where applicable) will be determined at the Neighbourhood Plan/Land Use Redesignation stage of development approvals. Further detailed investigations and detailed design will provided the criteria, given the provisions of the Municipal Government Act, for determining the appropriate reserve categories.

Policy 5.6.1: Development applications shall provide the appropriate mechanisms for maintaining the vision for the central open space corridor. Neighbourhood Plans and Land Use Redesignation shall define this key open space element in terms of its reserve and/or public utility status.

Policy 5.6.2: The remainder of the open space elements will provide for a variety of recreational activities and serve to connect the central open space corridor to the overall community.

5.7 Schools

The plan area will be home to a large number of Airdrie residents. The predominant land uses for the plan area are residential in nature which results in the potential generation of children needing to access a school system. Based on the proposed land use concept for the ASP area, schools have been located in a manner that provides for well defined catchment areas. The concept also takes into account the number of large land uses within the plan area which will not generate school children.

The school sites are located with consideration to the municipal reserve requirements associated with the particular parcel of land. Also, the locations are a balance between locating the schools within close proximity to the central open space system, as well as locations which are 'early' in the development phasing. Access to the school sites shall be provided by no less than two frontage roads.

Airdrie is served by two school boards: the Rocky View School District and the Calgary Separate School Board. It is Airdrie's policy to maintain the school sites as municipal reserve under the jurisdiction of the City until such time as the school site is needed by either school board. At that time, the schools sites are changed to a School Reserve designation and transferred to the school board. This plan provides for a general distribution of school sites - exact shape and sizes of these sites will be determined at the Neighbourhood Structure Plan stage.

The concept plan indicates Joint Use Sites (JUS) which are a combination of building envelopes for future schools and park space for active play areas.

In keeping with historical practice, the Chinook Winds Community Area Structure Plan identifies five Joint Use school sites for Elementary and Middle School purposes. The City of Airdrie has expressed concerns that the matter of the number and size of future school sites may not be supportable due to uncertainty of Capital Funding for Schools. Also, opportunities for site efficiencies can be obtained by co-locating schools with City Recreation Facilities; site design should take such opportunities into account. As such, prior to consideration of the allocation of school sites within the Plan area, further review of the number of and design of school sites is required.

An additional high school site is planned to be co-located with a new municipal recreation facility in the southwest corner of the Plan area. The regional pathway network will connect this site to the remainder of the CASP lands.

Policy 5.7.1: The school sites will be provided as municipal reserve and maintained under the jurisdiction of the City until such time as the school site is needed by a school board.

Policy 5.7.2: The school sites will be located with not less than two frontage roads.

Policy 5.7.3: The exact location and size of each school site shall be determined at the Neighbourhood Structure Plan stage.

Policy 5.7.4: School sites shall be allocated to each school jurisdiction in accordance with the agreement between the two schools and the City of Airdrie.

5.8 Pedestrian Connections

As per the provisions of the GAMP, the land use concept provides for a central north-south pathway system. A portion of this system will be provided along the existing drainage course and low-lying areas, as well as along the pipeline right-of-way. This will allow for community linkages to the major open space/recreational components of the plan. For the portion of the system along the drainage course, a path shall be constructed on both sides of the drainage course, where feasible.

East-west connections are provided to link the school sites to the central spine system, as well as providing connections to the mixed use focal area. The road network also provides pedestrian linkages to key components of the plan.

Policy 5.8.1: The pedestrian network shall be comprised of a north-south spine system located in the central portion of the plan.

Policy 5.8.2: East-west pedestrian connections shall be provided by trails in open space linkages or through the use of sidewalks within the road network.

Policy 5.8.3: The pedestrian network shall provide connections to pedestrian systems contained in adjacent approved policy plans.

5.9 Rocky View School Division Lands

As per the overall development concept for the Rocky View School Division (RVSD) lands, plans call for an administration building, high school and residual lands. The administration building will be the head office and provide administrative functions for the schools through out the RVSD catchment boundaries. The high school site is anticipated to provide educational services for 1500 students.

The RVSD lands will have access off of Yankee Valley Boulevard opposite the access already constructed to the community to the north. This access would be a primary collector standard roadway that would bisect the RVSD lands as shown in Figure 6. The RVSD has identified the lands to the east of the collector road for a high school site and the lands to the west of the collector for an administration building and auxiliary uses.

The proposed high school site will encompass ± 6.9 to ± 8.1 hectares of land, while the administration building will encompass ± 2.0 to ± 2.8 hectares of land. The remaining lands are residual to the site uses planned by RVSD and RVSD proposes that these lands be used for medium density residential uses.

Policy 5.9.1: A primary collector standard road shall be provided through the RVSD lands as part of the overall road network.

Policy 5.9.2: Residual RVSD shall be redesignated to allow for residential development.

5.10 Airdrie and District Agricultural Society/City of Airdrie Lands

In 2004, the Airdrie Agricultural Society conducted a review of their land holdings within the plan area along with their objectives for the land. Due to the shape of the parcel, the proposed road network, and adjacent land uses, this review process has resulted in a change to the vision for the lands.

The proposed concept for the Society/City lands now includes the expansion of the ball diamond facility to include an additional four fields immediately to the north of the existing ball diamonds. The land identified for expansion has a low elevation and will require a large amount of earthworks before it can accommodate development of the baseball fields. The low lying portion of these lands will be used to accommodate stormwater management infrastructure.

The Society no longer foresees the development of a recreational building with twin hockey arenas in this area. The Society will look for opportunities to develop this type of facility elsewhere in the region.

Policy 5.10.1: Future development plans for this facility shall provide for an expansion of the existing baseball park facility.

Policy 5.10.2: Society/City lands that are no longer required for recreational purposes shall be redesignated to allow for development of residential and public infrastructure uses.

5.11 Land Use Statistics

The development plans for Chinook Winds result in the land use statistics listed in the table below. Specific types of land uses for these broad categories will be determined at the neighbourhood sector plan and land use redesignation stages.

Table 4: Land Use Statistics

Land Use Category	± Hectares	± Acres	%
Residential - Low Density	237.74	587.47	61.4%
Residential - Medium Density	9.45	23.35	2.4%
Residential - Mixed Use	9.39	23.20	2.4%
Residential Subtotal	260.45	643.59	66.3%
Public Service (RVSD)	27.77	68.62	7.2%
Open Space System *	43.62	107.79	11.3%
Schools/Joint Use Sites	16.68	41.22	4.3%
Commercial - Local Retail	4.73	11.69	1.2%
Road Network	34.23	84.58	8.8%
Pipeline Facilities	3.49	8.62	0.9%
Total for all Land Uses	387.10	956.54	100.0%

* Note: The areas referred to in the general land use category of "Open Space System" may contain portions of municipal reserve, environmental reserve and public utility lots to be determined at the land use redesignation stage. Also, additional open space in the form of smaller park spaces may be contained within the residential land use areas.

5.12 Interface Area

The subject lands were annexed to the City of Airdrie for the purposes of urbanization. To the north and east of the CASP area are urban communities presently under construction. An ASP is currently underway for lands to the west. These lands are ~~outside of the current City limits and~~ are rural in nature with a mix of agricultural and country residential land uses. To the south of the CASP area are two quarter sections of agricultural land, ~~located outside of the City limits. However, the owner of these lands is the same owner as the two southerly quarter sections within the CASP area.~~

The land use concept contains lower density residential land uses along the west and southwesterly edges of the plan. The higher density residential uses and the more intense non-residential uses are located to the north and east portions of the CASP in relation with adjacent urban development. Also, open space and school sites provide for both an open space connection and a buffer to lands abutting the south boundary of the plan. Road connections are designed to facilitate access from/to adjacent lands.

Policy 5.12.1: Land use along the west and southwest portions of the CASP shall be generally comprised of lower density residential land uses, open space and school facilities.

Policy 5.12.2: Open space elements within the plan area shall be coordinated with land uses adjacent to the CASP area.

Policy 5.12.3: The road network within the plan area shall provide for future road connections to service adjacent areas.

6.0 TRANSPORTATION

6.1 Transportation Objectives

The following objectives provide guiding principles for the transportation network contained in this CASP (see Figure 7):

- provide a road network which is compatible with the existing and future regional road network;
- provide frequent and direct access from the boundary arterial roads to the internal road network, but limits direct short-cutting through the plan area;
- provide for a major east-west road link in the central portion of the plan area;
- balance the need to minimize the amount of road crossings of the existing drainage course with the need to provide strong connections to both sides of the plan area;
- provide an internal road network that focuses accessibility to the major open space and public service facilities within the plan area; and
- locate the internal road network in a way that maximizes the opportunity for future public transit usage.

6.2 Proposed Regional Transportation Network

The City of Airdrie has undertaken several regional roadway projects in the area over the past few years and further projects are projected to be completed in the future. For Chinook Winds, the ultimate regional road designs are proposed as follows:

Yankee Valley Boulevard: 6 lane divided arterial
8th Street SW: 4 to 6 lane divided arterial
24th Street SW: 4 to 6 lane divided arterial
40th Avenue SW: 4 to 6 lane divided arterial

As development occurs, partial construction of the regional roads is expected until such time as regional traffic demands warrant the ultimate road widths. Traffic signals at main intersection locations will be installed as required to meet increased traffic volumes in the area.

Upgrades to the Yankee Valley Boulevard interchange at Highway 2 were recently completed. Additional interchanges are also planned along Highway 2 as shown on Figure 7. A partial interchange (exit off of northbound Highway 2 and entrance onto southbound Highway 2) will be developed at the south boundary of the Cooper's Town ASP, while a full access interchange will be constructed at the intersection of Highway 2 and Township Road 264 at the south boundary of Airdrie. The timing of interchange/interchange improvements is dependent upon provincial budgeting and extension of services into the area.

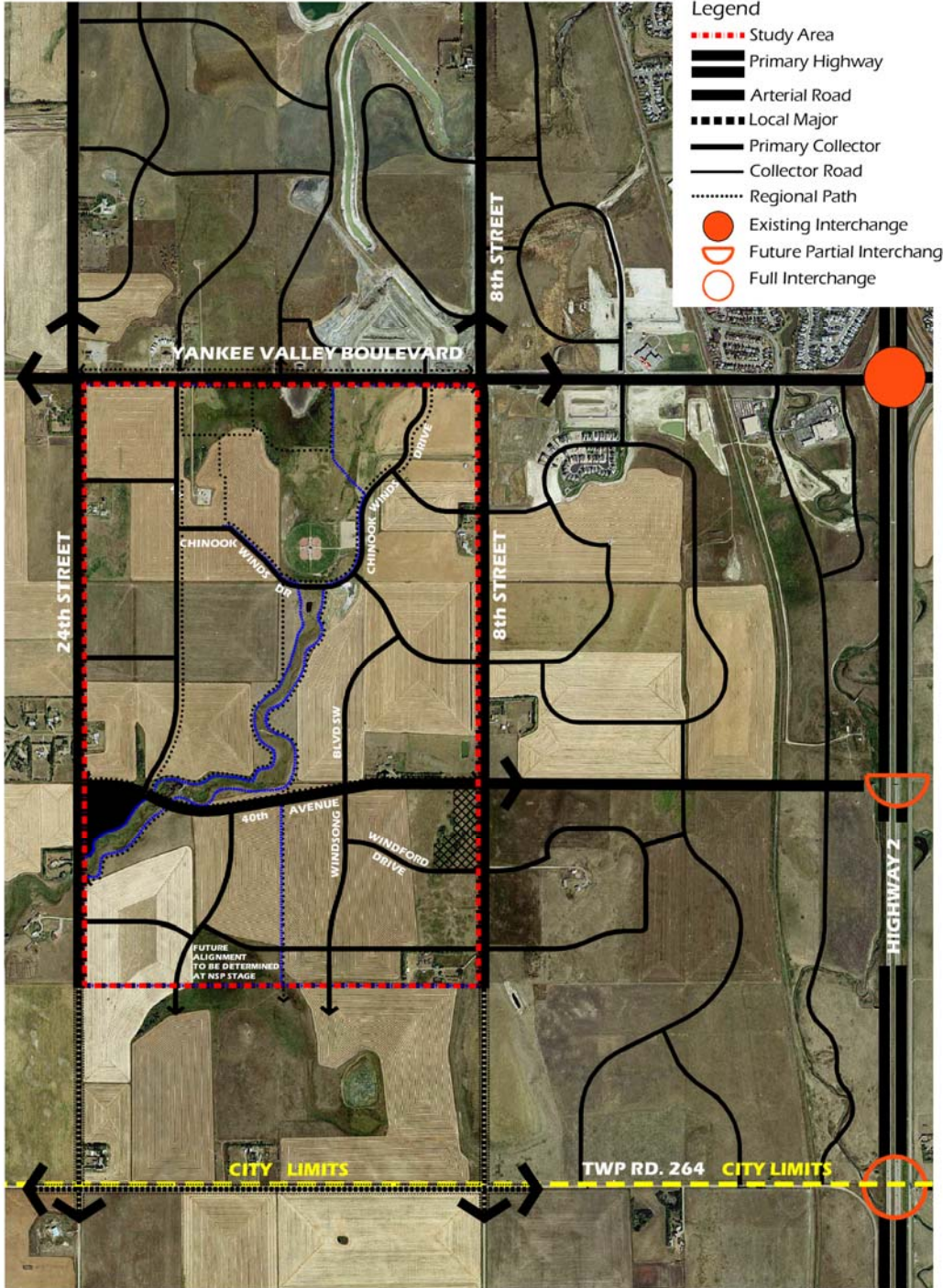
Policy 6.2.1: The internal road network shall be designed to be compatible with the existing and future regional road network.

Policy 6.2.2: The plan shall provide an east-west major road link in the central portion of the plan to enhance the regional road network.



Section 35-26-1-W5M and North Half Section 26-1-W5M

Scale
1:15,000



transportation network

FIGURE
7

Plan Area Access and Internal Circulation

The internal road network is comprised of a series of looped collector roads located in the central portion of the plan area. This looped road system enhances the focus on the central open space system while providing key linkages to both sides of the drainage course. The internal collector road system is also designed to facilitate access within the plan area to the three core areas of the plan: 1) the north open space/recreational/public service area; 2) the mixed use node located along the central portion of the eastern boundary of the plan area; and 3) the potential south open space area. The collector road network divides the plan area into a number of smaller planning units. These units will contain the majority of the lower density residential land uses.

The internal looped collector road system is connected to the external arterial road network. Generally, the principle of one connection per quarter section frontage has been maintained except for areas constrained by natural features or where connections are restricted to previously approved adjacent ASPs.

A Transportation Overview Report was conducted by Urban Systems Ltd. (USL) in conjunction with the preparation of the CASP. The report evaluated the road connections to the external arterial road network, as well as internal road alignments (see Figure 7) and associated projected traffic volumes. The findings of the study concluded that all internal primary network roads meet the parameters for collector/primary collector standards as indicated on Figure 7 other than the central east-west road. This east-west linkage road is to be designed as a local major standard road which will facilitate the through traffic for the regional network yet provide compatible design characteristics which will minimize the potential impacts on the community. These design characteristics include the road design standards, intersection spacing and use compatibility.

The most southerly collector road connection to 8th Street will need to be reviewed in conjunction with the plan area immediately to the east. The intersection spacing shown in the South Airdrie ASP does not meet current City standards.

Policy 6.3.1: The east-west road in the centre of the plan shall be classified as a local major road.

Policy 6.3.2: The remaining primary internal road standards shall be classified as collector/primary collector roads.

Policy 6.3.3: Collector road connections to 8th Street in the southern portion of the plan shall be reviewed at the affected Neighbourhood Structure Plan stage.

6.3 Public Transportation

The layout of the road network internal to this CASP provides for an efficient route for public bus routing. The internal collector road loop system maximizes the number of units within a short distance of the collector road which could act as a future bus route. Generally, the residential areas are within 400 metres of a collector road which could act as a bus route. This will provide shorter overall walking distance to the possible bus route and any associated stops.

Future bus routes shall be determined in conjunction with specific transit facilities plans when they are prepared by the Municipality.

Similarly, the land use concept for the lands contain a number of higher density residential land uses along with significant public service land uses located along the collector road/possible future bus route.

Policy 6.4.1: The internal collector road system will provide the opportunity for future transit service.

6.4 Road Naming

Municipal practices require the naming of significant roads at the Community Area Structure Plan stage if those roads provide connections to potentially more than one community. This ensures continuity between the various stages of development. Consequently, the collector road link in the north portion of the plan has been named Chinook Winds Drive (in reference to the existing play fields). Also, the major east-west road linkage has been referred to as 40th Avenue SW.

The remaining roads within the plan area will be named at the Neighbourhood Structure Plan stage. Consideration for names could include references to the history of the land, long time landowners or overall community themes.

Policy 6.5.1: The two significant roads linking the east and west portion of the plan shall be referred to as Chinook Winds Drive and 40th Avenue SW.

7.0 SERVICING SCENARIO

7.1 Servicing Objectives

The objectives for the servicing strategy are:

- using the existing topographic conditions to determine the most effective and efficient servicing strategies;
- maintain and enhance the natural site environments (using existing site features, minimize crossings of the drainage course);
- selecting the type and locating stormwater facilities which minimize the number of facilities and enhance the site natural features; and
- provide for regional infrastructure requirements (water reservoir, 400 mm water line) which serve the greater Airdrie area, as well as the plan area.

7.2 Proposed Water Supply and Distribution

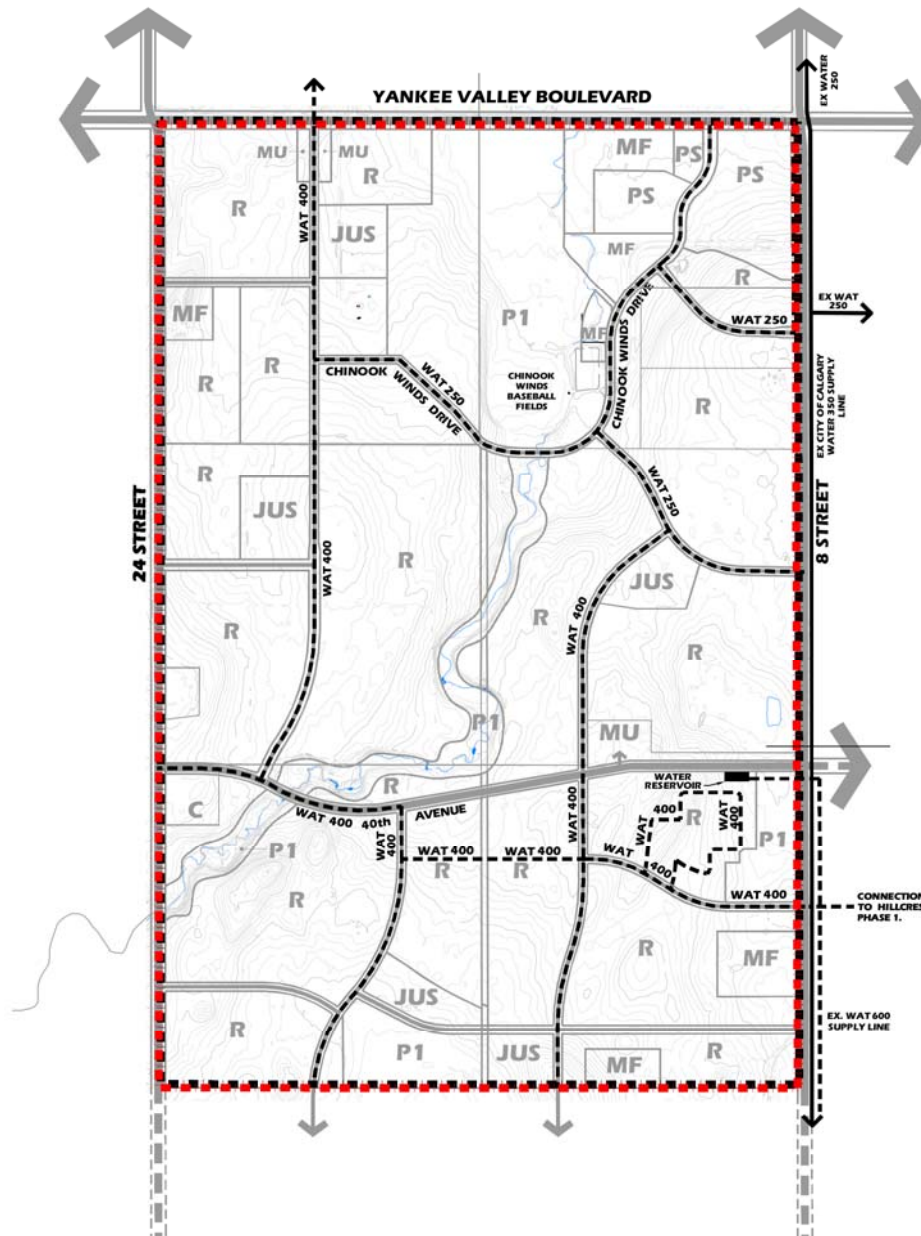
The lands contained within the Southwest Area Structure Plan are all within the same water pressure zone. The potable water line from the City of Calgary to the City of Airdrie is located adjacent to the east boundary of the plan area within the 8th Street road right-of-way (see Figure 8). The Growth Area Management Plan identified a need for a new water reservoir for the City of Airdrie when the population reaches 50,000 people. Since Airdrie is on a pumped water distribution system, the elevation of the reservoir is not as critical. The development plan contained within this CASP provides a location for the future reservoir facility close to the existing Airdrie-Calgary water feeder main along 8th Street. The exact size and location will be determined at the time the affected neighbourhood sector plan is prepared.

The lands will be serviced by the extension of a 400 mm water distribution line which connect to the water reservoir located near the intersection of 8th Street and 40th Avenue and will then travel westward, cross the drainage course, head north through the northwest quarter section and connect to the existing 400mm water main stub north of Yankee Valley Boulevard, in the Bayside subdivision. This 400 mm regional distribution line will be located within the road network and will also provide direct feeds to the homes in the area.

Policy 7.2.1: Provisions will be made in the plan area for a future water reservoir.

Policy 7.2.2: A 400 mm water distribution line will provide direct connections to homes as well as servicing the greater Airdrie area.

Policy 7.2.3: Connections to the Airdrie-Calgary watermain will be limited to main distribution lines only.



water supply and distribution

FIGURE
8

7.3 Proposed Sanitary Servicing and Wastewater Collection

The Growth Area Management Plan provides general direction with respect to servicing of the plan area. The GAMP indicated that the three quarter sections on the western side of the plan area would be serviced by a single sanitary trunk line running from south to north through the middle of the quarter sections (see Figure 9). There is an existing 450mm sanitary trunk line on the north side of Yankee Valley Boulevard in the Bayside subdivision. This trunk line will be extended south across Yankee Valley Boulevard to service the Chinook Winds CASP area and flow through the western portion of the West Airdrie ASP. The GAMP also indicated that the most northerly and easterly two quarter sections would be serviced through a line running north-south through the central portion of those quarter sections. This line eventually ties to a line flowing eastward in Yankee Valley Boulevard. The remaining quarter section in the southeast corner of the plan area will have a sanitary line that flows through the future development southeast of the plan area.

~~Based on the findings of this CASP, it is recommended that a modification be made to the general sanitary servicing scheme to avoid crossing of the drainage course with a sanitary trunk line. Due to the amount of land, which will not generate sewage effluent in the plan area (open space system, recreation fields), it is recommended that the sanitary sewer catchment boundaries be modified for the two southern most quarter sections of land. A portion of these lands could drain northeast and a portion to the southeast in order to avoid crossing of the drainage course with a sanitary trunk line. This option will require further investigation at the detailed engineering design stage.~~

For the lands in the eastern sanitary trunk line catchment area, interim servicing strategies may be available on a temporary basis by utilizing existing spare capacity in the sanitary trunk in the development to the north.

Policy 7.3.1: The plan area will be serviced by three separate sanitary trunk lines: east alignment, west alignment, and southeast alignment.

Policy 7.3.2: It is recommended that further investigations take place regarding the general sanitary servicing scheme to avoid crossing of the drainage course with a sanitary trunk line.

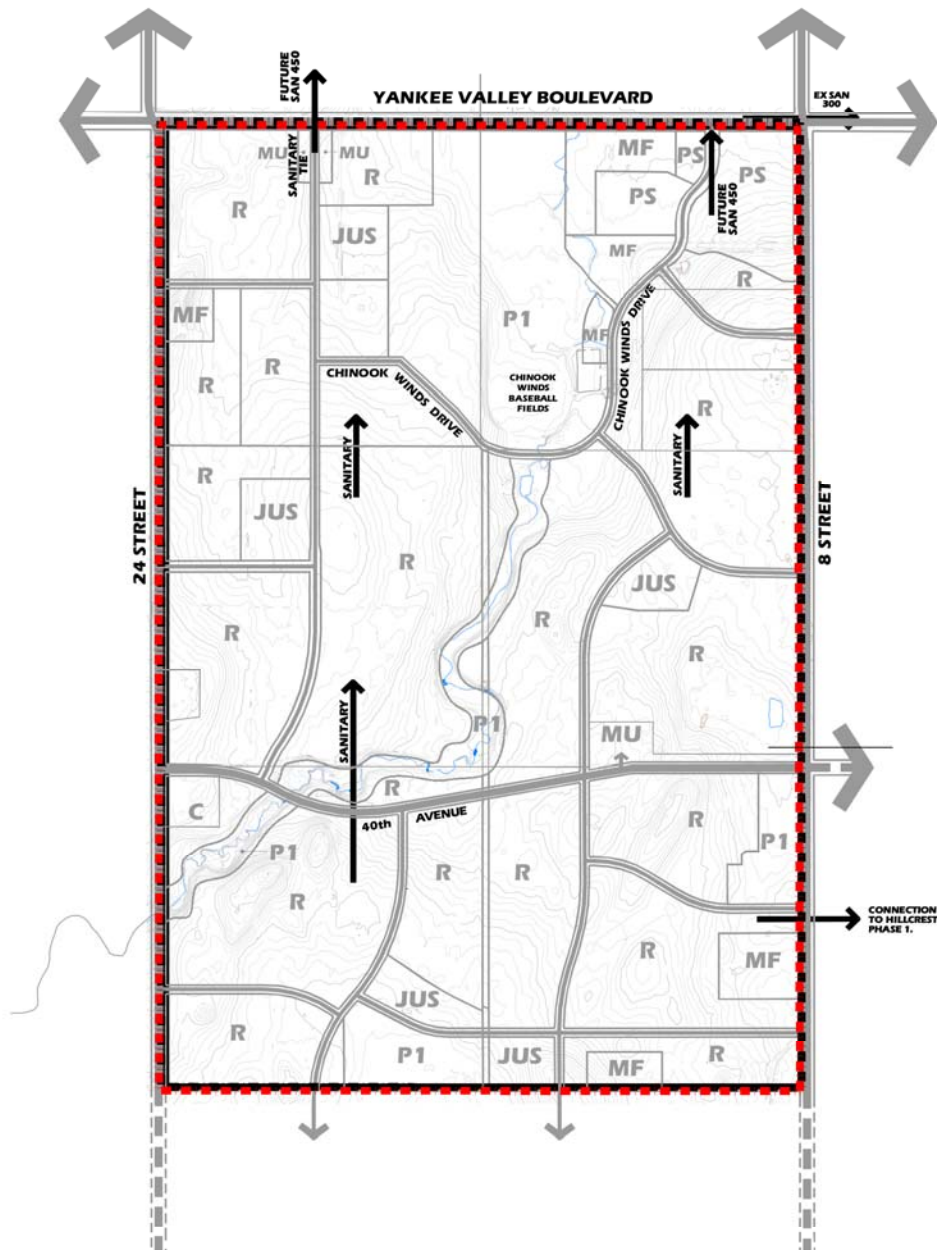
Policy 7.3.3: For the lands in the eastern sanitary trunk line, interim servicing strategies may be able to temporarily use existing spare capacity in the sanitary trunk in the development to the north.

7.4 Proposed Stormwater Management

The Chinook Winds CASP identifies two key components of the stormwater drainage for the plan area: the existing drainage course and natural catchment boundary (see Figure 10).

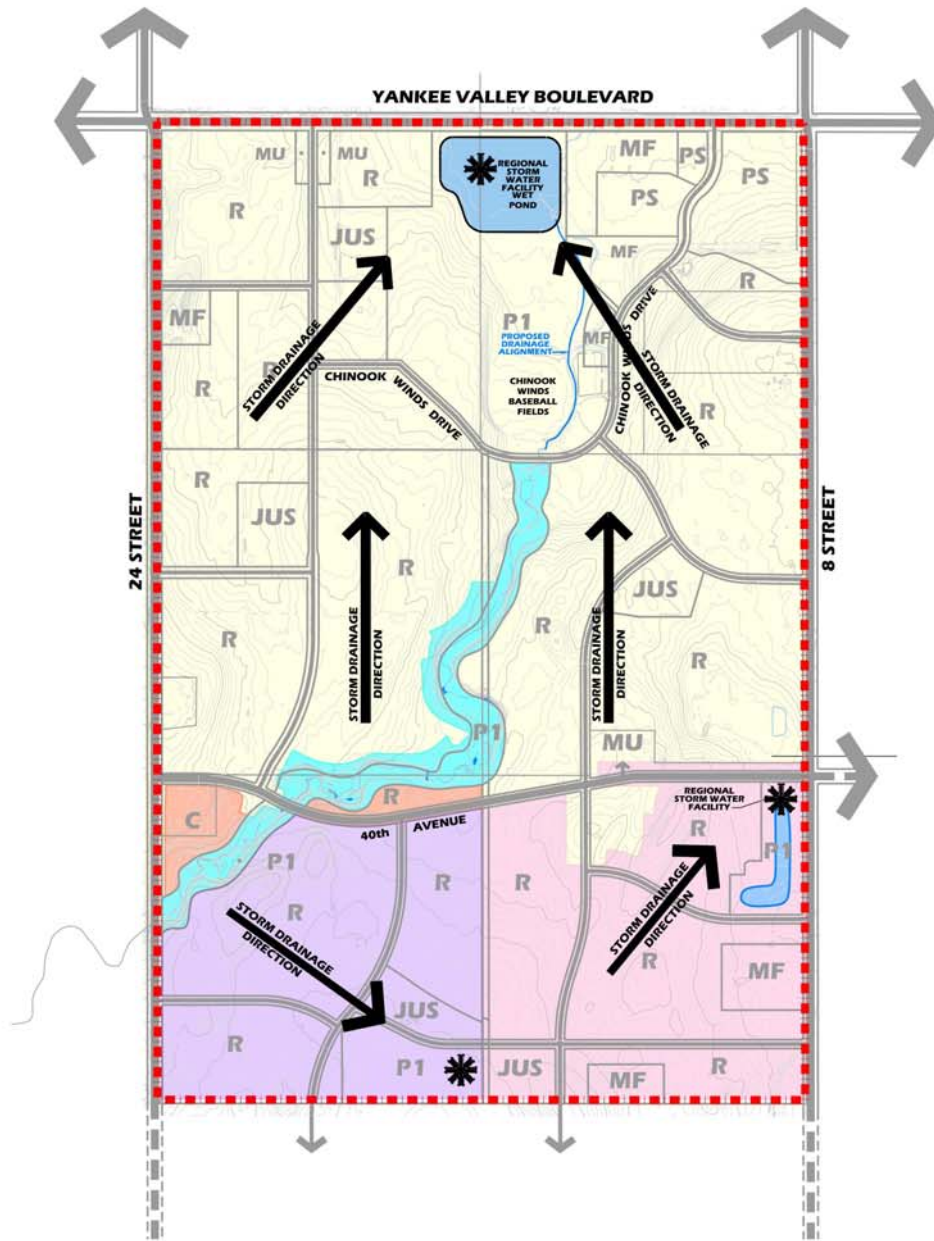
Existing Drainage Course

As stated previously, an existing natural drainage course known as “Dry Creek” meanders through the central portion of the plan area. This drainage course conveys seasonal water flows from south to north which enters the seasonal pond/wetland at the north boundary of the plan area adjacent to Yankee Valley Boulevard. Water from this feature flows north through the canals contained in the West Airdrie Area Structure Plan, through the Luxstone Park Estates Area Structure Plan, under the CPR railway, and ultimately discharges to Nose Creek. The pre-development condition peak flow in the drainage course has been estimated at 7 cubic metres per second.



sanitary servicing and wastewater collection

FIGURE
9



stormwater mangagement

FIGURE
10

Natural Catchment Boundary

There is a high point in the terrain which acts as a divider for surface water flows. This catchment boundary runs generally due east-west near the southerly boundary of the plan area. Runoff from the lands to the north of the catchment boundary drains towards the existing drainage course and continues north into the seasonal pond/wetland. Runoff from the lands to the south of the catchment boundary runs south and then east towards 8th Street and ultimately discharges to Nose Creek near Highway 2.

On-site Stormwater Strategies

For the lands located north of the catchment boundary, all the site drainage is generally directed to the central existing drainage course. The development plan contained within this CASP identifies one two existing and one potential locations for storage facilities. The Prairie Springs storm pond is located along the north boundary and drains north under Yankee Valley Boulevard to the Canals. This storm pond is fully functional but must be expanded to accommodate future build out. The second facility, the South Windsong storm pond is located at the intersection of 8th Street and 40th Avenue. A third facility will be located within the SW quarter of the plan area, with the specific location determined at the Neighborhood Structure Plan stage. These facilities would attenuate urban runoff and discharge stormwater at the specified pre-development rate.

Stormwater Management Studies

Westhoff Engineering prepared, on behalf of the City of Airdrie, a Master Drainage Plan (MDP). This plan provides a regional assessment of drainage patterns and flow rates. In conjunction with the preparation of this document and the development approvals for the RVSD administration facility, Urban Systems Ltd. has commenced the preparation of a Staged Master Drainage Plan specific to the plan area. This CASP is a refinement to the catchment boundaries identified in the Westhoff regional MDP, as well as establishing general on-site stormwater strategies.

Prior to the approval of a Neighbourhood Structure Plan or land use redesignation within the plan area, the Staged MDP shall be completed for the NSP area. The Staged MDP will confirm release rates, confirm flows in the natural drainage course, and provide preliminary sizing requirements for stormwater management facilities. Since 'in-line' storage in the existing drainage course is proposed as one of the stormwater management strategies, the first Staged MDP for lands draining towards the drainage course must take into account land on both sides of the drainage course. Lands south of the catchment boundary will need to be reviewed with respect to the lands outside of the jurisdiction of the City of Airdrie.

Policy 7.4.1: Prior to Neighbourhood Structure Plan and/or land use redesignation approval, a Staged Master Drainage Plan shall be prepared for the affected lands.

Policy 7.4.2: The first Staged MDP for lands draining towards the drainage course must take into account land on both sides of the drainage course.

Policy 7.4.3: The first Staged MDP for lands draining towards the south must take into account land outside of the jurisdiction of the City of Airdrie.

Policy 7.4.5: Other stormwater management strategies for the plan area include the use of trapped lows.

7.5 Shallow Utilities

Shallow utilities can be provided through the extension of existing and planned future networks in the vicinity of the plan area. These networks will be extended throughout the plan area on a phase-by-phase basis as development progresses through the community.

Fortis, Atco, Shaw and Telus currently have facilities running adjacent to the plan area as well as urban services within the subdivisions of Prairie Springs and Windsong. Additionally, Kallisto Energy has pipeline right-of-ways and a lease site within the plan area.

8.0 IMPLEMENTATION

The following provisions of the CASP will provide the framework for the successful development of the community.

8.1 Development Cells

The Southwest Area CASP contains a significant amount of land which will form an integral part of Airdrie's future. However, this plan area has a number of natural and man-made features which leads to the plan area being divided into three distinct planning cells (see Figure 11). These cells are referred to as development stages which will form the basis for future planning, development approvals and construction.

Stage 1 of the CASP area comprises those lands located east of the north-south natural drainage course and north of the central east-west major road. This area is located the closest to urban development in adjacent communities. Stage 2 of the CASP area comprises those lands located west of the north-south natural drainage course. Stage 3 of the CASP area comprises those lands located south of the east-west major road link near the southern portion of the plan area.

Each of these three Stages will comprise planning units for the preparation of subsequent Neighbourhood Plans. A Neighbourhood Plan application may be prepared for all of a Stage area or for the portion under the control of the ownership making the application. If a landowner is preparing a Neighbourhood Plan application only for the portion of the Stage lands under their jurisdiction, a concept schematic drawing shall be provided for the remainder of the Stage area. This conceptual plan will show how the development within the neighbourhood plan area relates to the development potential on the remaining lands. The conceptual plan is not binding on the owners of those lands and will require a Neighbourhood Plan application at the time they are ready for development.

Each of the three stages may develop separate theming and neighbourhood names suited to that particular portion of land.

Policy 8.1.1: The plan area will be comprised of three development stages.

Policy 8.1.2: A Neighbourhood Plan application may be prepared for all of a Stage area or for the portion under the ownership control for a specific area.

Policy 8.1.3: If a Neighbourhood Plan application is only for the portion of the Stage lands, a concept schematic drawing shall be provided for the remainder of the Stage area.

Policy 8.1.4: Neighbourhood names shall be submitted for review by the Municipality.

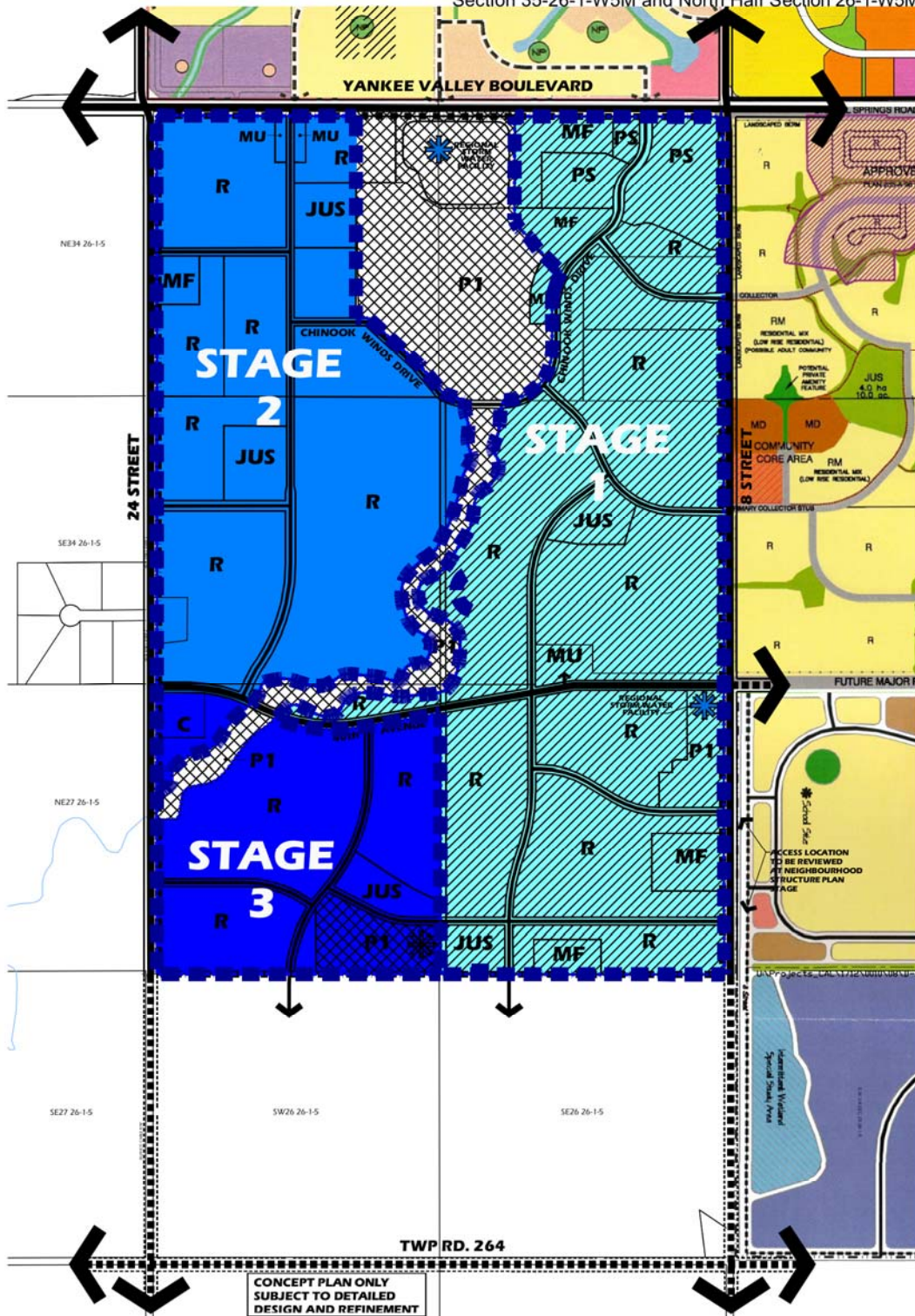
8.2 Future Study Area

~~Stage 3 of the plan area represents the most southerly portion of the plan area. These lands are located adjacent to, and immediately abutting, two quarter sections of land which are not within the jurisdiction of the City of Airdrie. The sanitary and storm servicing for Stage 3 lands are less certain as they must flow to the south and east.~~



Section 35-26-1-W5M and North Half Section 26-1-W5M

Scale
1:15,000



staging plan

FIGURE
11

~~Consequently, the~~ Stage 3 lands should be evaluated in more detail when the development timing becomes eminent. At that point in time, the subject lands can be planned cohesively in conjunction with the two quarter sections to the south or a more definitive edge condition can be established as an interface between the lands in two different jurisdictions.

Policy 8.2.1: As development becomes **imminent** for the Stage 3 area, the land use concept, servicing strategies and transportation network (and associated policies) contained within this CASP shall be reviewed prior to approval of a Neighbourhood Structure Plan for these lands.

8.3 Development Timing

The three stage approach provides a mechanism for proceeding with urbanization of the subject lands. Stages 1 and 2 of the plan area will be the locations for initial development, whereas Stage 3 lands will require an CASP review prior to development occurring on these lands as per the provisions of Section 8.2 of the CASP.

As Stages 1 and 2 are relatively independent from an infrastructure point of view, development could be underway in both areas at the same time. This will require provisions contained elsewhere in this CASP relating to the linkages between the two areas (i.e. stormwater management, road connections) to be addressed prior to land use approval.

Neighbourhood Structure Plans prepared for these stages need to take into account the status of regional transportation infrastructure. The lands contained within the NSP need to be reviewed with respect to the proposed generation of traffic from the area related to the status of regional transportation infrastructure at the time of approvals.

These three stages may be further divided into phases to coordinate with specific development programs.

A portion of the lands within the plan area affected by setback or right-of-way requirements related to a gas well and associated pipelines. These affected lands may be contained within a Neighbourhood Plan application. However, land use shall not be granted for the lands containing any such facilities or development setbacks until the gas extraction operations are completed and the facilities appropriately decommissioned.

Policy 8.3.1: Development may occur in both Stages 1 and 2 subject to the specific provisions contained in the CASP relating two linkages between the two areas.

Policy 8.3.2: With each Neighbourhood Structure Plan, a transportation assessment shall be undertaken with respect to effects of the proposed development on the regional road network.

Policy 8.3.3: Development timing for the lands within Stage 3 shall be subject to the provisions of Policy 8.2.1.

Policy 8.3.4: Lands directly affected by the gas extraction facilities may be contained within a Neighbourhood Plan, but shall not receive land use approval for those specifically affected lands until such facilities are decommissioned.