

BYLAW 2598/D&P/18

**BEING A BYLAW OF THE TOWN OF STONY PLAIN IN THE PROVINCE OF ALBERTA
FOR THE PURPOSE OF ADOPTING THE TUSSIC AREA STRUCTURE PLAN AND
REPEALING THE SW ¼ SEC. 30-52-27-W4M OF THE SOUTHEAST AREA STRUCTURE
PLAN BYLAW 865**

WHEREAS Section 633(1) of the *Municipal Government Act*, RSA 2000, c. M-26 and amendments thereto enables Council to adopt by bylaw an area structure plan for the purpose of providing a framework for subsequent subdivision and development of an area of land;

AND WHEREAS Section 191 of the *Municipal Government Act*, RSA 2000, c. M-26 and amendments thereto enables Council to amend or repeal a bylaw;

NOW THEREFORE, the Council of the Town of Stony Plain in the Province of Alberta, pursuant to authority conferred upon it by the *Municipal Government Act*, RSA 2000, c. M-26 and amendments thereto enacts as follows:

1.0.0 Title

1.1.0 This bylaw may be cited as the "Tussic Area Structure Plan".

2.0.0 General

2.1.0 Any portion of bylaw 865 Southeast Area Structure Plan regarding SW ¼ Sec. 30-52-27- W4M is hereby repealed.


2.2.0 "Schedule A" attached hereto is hereby adopted as part of this bylaw.

3.0.0 Effectiveness and Review

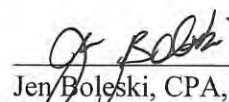
3.1.0 If any portion of this bylaw is declared invalid by a court of competent jurisdiction, then the invalid portion must be severed and the remainder of the bylaw is deemed valid.

3.0.0 This bylaw shall take full force and effect upon passage of third and final reading and signing in accordance with Section 213, *Municipal Government Act*, RSA 2000, c. M-26 and amendments thereto.

Read a first time this 9th day of October, 2018.



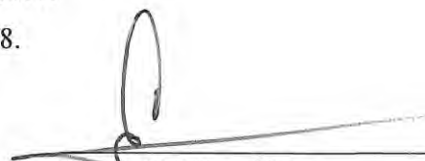
Mayor William Choy



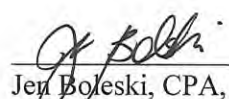
Jen Boleski, CPA, CA
General Manager, Corporate Services

Public Hearing held on the 10th day of December, 2018.

Read a second time this 10th day of December, 2018.



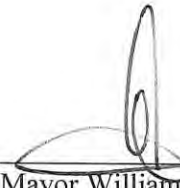
Mayor William Choy

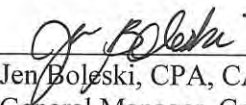


Jen Boleski, CPA, CA
General Manager, Corporate Services

Public Hearing held on the 23rd day of April, 2019.

Read a third time this 23rd day of April, 2019.



Mayor William Choy

Jen Boleski, CPA, CA
General Manager, Corporate Services

SCHEDULE “A”

Tussic Area Structure Plan



Tussic Area Structure Plan

Revised on January 16, 2019

Submitted by:



on behalf of:



Submitted to:



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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The *Tussic Area Structure Plan (Tussic ASP)* encompasses 129.5 hectares (320.0 acres) of land located at S ½ Section 30-52-27 W4M within the southeast part of the town of Stony Plain.

This Plan was created in accordance with Section 633 of the *Municipal Government Act* with the purpose to provide a planning framework for the orderly and effective development of the Tussic neighbourhood.

The origin of the chosen name, Tussic, can be traced back to the word “Tussock”, representing a unique landscape:

TUSSIC: derived from the word Tussock; a small hillock of grassy plant-like growth. Tussic is not a literal translation but embraces a modern, non-traditional name that pays homage to the land. This distinct name mirrors the Town’s trend in young home owners and embodies the evolutions of change and maturity with a modern spin.

The *Tussic ASP* in part replaces the *South East ASP* which was adopted by the Town of Stony Plain in 1983. The *South East ASP* is out dated and does not reflect today’s best planning practices in the design of a complete and sustainable neighbourhood.

The Tussic neighbourhood design builds upon the foundations and

policy directions found in the *Edmonton Metropolitan Regional Growth Plan (EMRGP)* and *Uniquely Stony Plain Municipal Development Plan*. These policy directions have been summarized and applied to the *Tussic ASP*.

We envision the Tussic neighbourhood to develop as a complete community that provides a wide range of housing choices, along with local convenience commercial services and other amenities that meet the day-to-day needs of residents to allow them to age in place. Transportation and infrastructure is designed not only to accommodate the private automobile but also public transit, pedestrians and cyclists. Walkability is of upmost importance with interconnected parks, open spaces, and trails to allow people to move within the Tussic neighbourhood as well as provide connectivity to adjacent neighbourhoods safely and comfortably year-round.

The Development Concept for the *Tussic ASP* also preserves and integrates the natural features of the site. The proposed realignment and enhancement of natural areas associated with Atim Creek will provide recreational opportunities and a natural amenity for residents while restoring the watercourse and riparian area to a more natural state (Refer to Objective 1 under *Environmental Management* in Chapter 3.0 VISION, GOALS AND OBJECTIVES).

As described in Section 4.0 DEVELOPMENT CONCEPT, the following are key features of the *Tussic ASP*:

- The *Tussic ASP* has been prepared in response to current and anticipated housing market demands of the town of Stony Plain. The ASP encourages development that provides a range of housing types; active and passive recreation opportunities; integration and enhancement of existing natural features; and an appropriately scaled neighbourhood commercial area. The proposed land uses have been planned to complement adjacent existing and planned developments. The *Tussic ASP* proposes residential land uses to accommodate a diversity of ages, income levels and family types.
- The ASP area is located north of Highway 628, between Golf Course Road and Veterans Boulevard, and is well connected with the town's transportation network, with excellent access to regional and provincial routes.
- In addition, the ASP area sensitively integrates the existing low-lying areas and wetlands, where feasible, as well as a re-aligned Atim Creek into a network of stormwater management facilities which serve as natural amenities for the community. These features are connected to the proposed school site, pocket parks and a portion of the existing mixedwood forest (natural park) to create an integrated open space system as a community amenity.
- The Development Concept provides a framework for the future development of lands within the ASP area. The internal roadway patterns and parcel orientations will be further delineated at the detail design stage; all future developments within the ASP area will be in general accordance with this Development Concept.
- As the development of the Tussic neighbourhood will take a number of years, it is important that flexibility be built into the ASP to easily adapt to changing market conditions, and development trends.

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Area Structure Plan (ASP) is to establish a framework to guide the future development of the lands located within the S ½ Sec. 30 52-27 W4M. The ASP area encompasses approximately 129.5 hectares (320.0 acres) within the southeast part of the town of Stony Plain.

This ASP will create a residential neighbourhood consisting of various dwelling-types, commercial uses and recreational areas. The proposed development will be integrated into the town of Stony Plain through connected roadways and multi-use paths. The ASP has been developed to be complementary to the existing and proposed surrounding land uses and sensitive to the natural landscape.

Redistricting applications for each phase of development within the ASP area will be submitted to redistrict the subject lands from their existing designations in the *Town of Stony Plain Land Use Bylaw* (LUB) to appropriate LUB districts. The Development Concept presented by this ASP will be refined through future subdivision applications for each phase of development.

1.2 Plan Area

As shown in *Figure 1.0 Location*, the ASP area includes all the lands within the S ½ Sec. 30 52-27 W4M. The ASP area is bounded by 79 Avenue (Highway 628) to the south, Golf Course Road to the west and Veterans Boulevard (Range Road 275) to the east.

There are five (5) approved ASPs within the vicinity of the ASP area:

1. The *South East Area Structure Plan* includes the lands north and west of the ASP area as well as the SW ¼ Sec. 30 52-27 W4M within the ASP area (through adoption of this ASP, the SW ¼ Sec. 30-52-27 W4M will be removed from the *South East ASP*);
2. The *South Creek Area Structure Plan* is located to the north of the SE ¼ Sec. 30 52-27 W4M;
3. The *Edgeland Area Structure Plan* is located to the northeast of the SE ¼ Sec. 30 52-27 W4M;
4. Southwest of the ASP is the *Lake Westerra Estates Area Structure Plan*; and
5. The *Country Plains Area Structure Plan*, located south of the SW ¼ Sec. 30 52-27 W4M.

1.3 Policies and Relevant Planning Documents

The *Tussic ASP* has been prepared within the context of existing statutory plans and other relevant policy documents. The following is a summary of the relevant planning documents which have been reviewed and referenced in the preparation of this plan:

1.3.1 Municipal Government Act

The requirements of the *Municipal Government Act (MGA)* (R.S.A 2000, c. M-26) have been adhered to in the preparation of the *Tussic ASP*. The MGA allows municipalities to adopt ASPs to provide a framework for the future subdivision and development of land. Section 633, 636, 638 and 692 of the MGA relate specifically to ASPs, stipulating that an ASP must describe the sequence of development, land uses, population densities, and location of transportation routes and utilities proposed to service the ASP area.

The MGA also provides interested members of the public and school boards an opportunity to participate in the planning process through the stipulation that an ASP must be adopted by Bylaw and a public hearing must be held. Moreover, the MGA requires the ASP to conform to the *Town of Stony Plain Municipal Development Plan (MDP)* and other approved statutory plans.

1.3.2 Alberta's Land Use Framework / Land Use Policies

Alberta's Land Use Policies was established in 1996 pursuant to section 622 of the *Municipal Government Act*. All municipalities are expected to implement these policies in the course of carrying out

their planning responsibilities. Since the establish of the Land Use Policies, the province has experienced rapid growth in population and economic activity. It is indicated in the Land-use Framework Final Report that *"Our current land management system, which served us well historically, risks being overwhelmed by the scope and pace of activity."*

Alberta's Land Use Framework (LUF) is a new approach to managing the province's land and natural resources. The purpose of the LUF is to manage growth and sustain Alberta's growing economy, while balancing this with the Province's social and environmental goals. The LUF was published in December 2008, and consists of seven (7) basic strategies for improving the decision making for land-use and development:

Strategy 1: Develop seven regional land-use plans based on seven new land-use regions.

Strategy 2: Create a Land-use Secretariat and establish a Regional Advisory Council for each region.

Strategy 3: Cumulative effects management will be used at the regional level to manage the impacts of development on land, water and air.

Strategy 4: Develop a strategy for conservation and stewardship on private and public lands.

Strategy 5: Promote efficient use of land to reduce the footprint of human activities on Alberta's landscape.

Strategy 6: Establish an information, monitoring and knowledge system to contribute to continuous improvement of land-use planning and decision making.

Strategy 7: Inclusion of aboriginal peoples in land-use planning.

Two of the seven regional plans have been approved to date. The ASP area falls within the North Saskatchewan Regional Plan, which is in the process of being prepared. The Land Use Framework's regional plans will be replacing the Land Use Policies as the plans are adopted.

1.3.3 Edmonton Metropolitan Region Growth Plan

The Edmonton Metropolitan Region Growth Plan (EMRGP) - Re-Imagine. Plan. Build. establishes a 50 Year Vision for the region. This sets a path for Stony Plain, to “grow in a responsible manner through compact and contiguous development.”

“Compact and contiguous development means planning for and developing lands in an adjacent, logical manner that minimizes the expansion of the Region’s development footprint. This type of development will help support viable multi-modal transportation options, facilitate a mode shift away from the private automobile, and also foster the creation of complete communities.” (EMRGP – Executive Summary, page x)

The *Tussic* ASP supports responsible growth as described by the EMRGP as: using land and resources efficiently for the benefit of current and future generations; ensuring growth is financially sustainable; optimizing public investment; maximizing the use of

existing and planned infrastructure and services over the long term; conserving the region’s agricultural land base for farmland to ensure long term viability and regional food security; and conserving the region’s natural assets for future generations.

To achieve responsible growth, the EMRGP includes six closely interrelated policy areas, each of which contains: guiding principles; objectives; and policies. A summary how this ASP supports the policy areas and guiding principles of the EMRGP is provided below.

Economic Competitiveness and Employment

The ASP promotes the guiding principle of global economic competitiveness and regional prosperity by supporting the objective of liveability and planning for the needs of a changing population and workforce. Planning for a diversity of housing in Stony Plain, as a complete community within commuting distance of employment areas in the town and region (including Edmonton, via planned regional transit), supports job growth and provision of services and amenities provided in the region.

Natural Living Systems

The ASP supports the guiding principle to protect natural living systems and environmental assets by advancing the objectives to:

conserve and restore natural living systems; protect regional watershed health, water quality and quantity; plan development to promote clean air, land and water and address climate change

impacts; and minimize and mitigate the impacts of regional growth on natural living systems. The creek realignment and retention of mixedwood forest components of the application are particularly important aspects of the ASP related to this guiding principle.

Communities and Housing

This ASP seeks to recognize and celebrate the diversity of communities and promote an excellent quality of life across the region by: supporting the growth of Stony Plain as a complete community which can accommodate people's daily needs for living at all ages; planning for a range of housing options to support a variety of lifestyle options, income levels and needs of all residents through diversifying the housing stock with more compact development.

Integration of Land Use and Infrastructure

Development in Tussic will achieve compact growth that optimizes infrastructure investment. This supports the guiding principle of the EMRGP. Development will establish a compact and contiguous development pattern to accommodate employment and population growth, in a compact form as provided for by the EMRGP density requirements. Development at this density: minimizes expansion of the development footprint; supports a balanced mix of uses in the town and region; supports provision of housing for a range of incomes, life stages and physical abilities, linked to jobs, services and other opportunities and connected to future local and intermunicipal transit facilities and active transportation infrastructure.

Transportation Systems

This application supports the guiding principle to ensure effective regional mobility by: taking advantage of the existing and planned investment in the regional transportation system (Highway 628); developing in accordance with the EMRGP density requirements to support a mode shift to transit, high occupancy vehicles and active transportation modes as viable alternatives to private automobile travel throughout the region; recognizing the potential of responsible growth in Stony Plain to take advantage of the facilities and services that are being planned and developed to provide competitive alternatives to single occupant automobile transportation (e.g. future regional transit extension to Stony Plain and the western extension of Edmonton's LRT network); and by integrating transportation and land use planning to provide safe, comfortable and reliable travel for pedestrians and cyclists and providing non-motorized linkages adjacent neighbourhoods and recreational destinations.

Agriculture

This ASP supports the wise management of prime agricultural resources, as the guiding principle for this policy area – helping to conserve an adequate supply of prime agricultural lands to provide a secure local food source for future generations – though intensification of growth in urban areas to conserve land for agricultural purposes as long as possible, recognizing that the lands will urbanize over time to accommodate growth.

Extensive discussion of the benefits and rationale for achieving responsible growth (as directed by the six policy areas and guiding principles and their related objectives and policies) is provided in the EMRGP. This ASP supports the advancement of the EMRGP plan and Stony Plain's contribution as a committed regional member.

1.3.4 Uniquely Stony Plain: Municipal Development Plan (Bylaw 2489/D&P/13)

The *Uniquely Stony Plain: Municipal Development Plan* (MDP) was adopted to reflect the policies and objectives contained in the Land Use Framework (LUF) and EMRGP. The MDP provides a framework to support a complete, sustainable community and includes policies to guide development in support of this objective.

In the MDP, the western half of the ASP area is identified as *Area of New Residential Development* and the eastern half is identified as *Area for Future Urban Development*. According to the policies of the MDP, the *Area for Future Urban Development* is to be protected for future development, with no major buildings or services permitted. Concurrent with this ASP, an application to amend the MDP was submitted to designate the eastern half of the ASP area as an *Area of New Residential Development*.

The applicable policies of the MDP, and a description of the ways in which this ASP supports these policies, is summarized below:

MDP Policies	Reasoning/Description
<p>2.3.c <i>New neighbourhoods should be complete, resilient and able to adapt to change, with a mix of appropriate uses and a diversity of housing.</i></p>	<p>A mix of housing types and densities sizes is planned for the ASP area to accommodate a range of demographics and incomes. Transitions in land use type and housing density provide a clear and coherent urban form. High and medium density residential development is planned with easy access to major road networks and natural and park space amenities. This development will accommodate the growing demand for higher density multiple unit housing and will be developed to a high standard of urban design.</p>
<p>2.3.e <i>New development should include an integrated and connected system of natural features, open spaces, parks, corridors, trails and stormwater ponds.</i></p>	<p>The multi-use trail system within the ASP area will be integrated with the Town's existing and proposed multi-use trail system, providing a connected and expanded, town-wide, system.</p> <p>Within the ASP area, the multi-use trails will connect residents to recreational areas including natural amenities, parks, open spaces and the stormwater management facilities.</p>
<p>2.3.f <i>New areas should have their own exceptional character, sense of place and a functional, high quality accessible public realm.</i></p>	<p>By preserving Atim Creek and a portion of the existing mixed wood area, and by creating a trail system which connects these features, the ASP provides for accessible recreation and active transportation opportunities. These natural features provide a unique character to the neighbourhood.</p> <p>Furthermore, the ASP encourages complete street designs wherever possible to create a high-quality pedestrian experience while providing adequate neighbourhood access and making the best use of land.</p>

MDP Policies	Reasoning/Description
<p>2.5.c. <i>Parks and open spaces will meet local needs through a hierarchy of dispersed parks, according to their varying recreational purposes and corresponding sizes.</i></p>	<p>A hierarchy of park and open spaces are dispersed throughout the ASP area including a large school park site, numerous pocket parks within each residential quadrant, a natural area park – preserving a portion of the existing mixed wood forest and the open space corridor adjacent to Atim Creek. These dispersed open spaces, combined with the open spaces provided within SWMFs, will be interconnected by the multi-use trail and sidewalk network and accessible to all areas within the ASP.</p>
<p>2.5.d. <i>The Town will work with School Boards to determine the need for future school sites and how reserves should be apportioned between parks and schools.</i></p>	<p>The public and separate school boards were consulted through development of the ASP and the 10% of the gross developable area (GDA) dedication for MR includes a school site as well as other types of park spaces.</p>
<p>2.5.f. <i>At the time of subdivision, the Town will require dedication of at least 10% municipal reserve in residential areas. In other areas, such as the industrial districts, the Town may take cash-in-lieu or a combination of municipal reserve and cash-in-lieu.</i></p>	<p>Municipal reserve (MR) dedication planned for the ASP area will comprise 10.0% of GDA. In addition, stormwater management facilities (SWMFs) will comprise over 7% of the GDA and will be connected with the open space network by a multi-use trail network to all parts of the ASP area (and to the town wide multi-use trail network).</p>
<p>2.5.g. <i>The location of municipal reserves will be guided by optimum siting for schools and recreation purposes and not the location of stormwater management facilities or other constrained lands, such as pipelines or utility areas.</i></p>	<p>The school park has been located centrally to the ASP to provide for local accessibility, while also being located with direct access to the collector roadway network to ensure traffic associated with school activity can be accommodated while minimizing neighbourhood impacts.</p> <p>The natural area park space has been allocated to protect a significant portion of the existing mixed wood forest as a community amenity and to retain ecological services provided by this natural feature.</p> <p>Pocket park spaces have been located centrally to the various residential areas within the ASP to provide residents with nearby access to passive park spaces.</p>

MDP Policies	Reasoning/Description
<p>4.1.a. <i>The Town will design a transportation system that is based on a philosophy of an interconnected system of ‘complete streets,’ which integrates and serves all users — including drivers, transit users, bicyclists, rollerbladers and pedestrians — and those who use scooters, wheelchairs and strollers.</i></p>	<p>A hierarchy of arterial, collector and local roadways is proposed to provide efficient, safe and attractive access to development within the ASP area.</p> <p>At the detailed design stage, the numbers and widths of travel lanes as well as sidewalks, pathways and other street elements (such as boulevards and on-street parking) will be determined in consultation with the Town to provide for “complete streets”.</p> <p>Complete street design will also consider the integration of the street and multi-use pathway network within the ASP and surrounding neighbourhood areas.</p>
<p>4.2.c <i>To expand the range of alternative modes within the overall transportation system, the Town will consider other modes of active transportation (such as rollerblading and cross-country skiing), which are used occasionally, seasonally or regularly.</i></p>	<p>All roadways will be built to the Town’s Municipal Development Standards which include sidewalks for local and collector roads, and multi-use trails and sidewalks for arterial roadways to facilitate walking and cycling.</p> <p>The trail system, which will be developed adjacent to the SWMFs and within the MR areas, will function as an enhancement to the sidewalk system, providing additional connectivity to the Town’s multi-use trail network. This trail system will also provide varied and attractive options for walking, cycling, and other forms of active transportation.</p>

MDP Policies	Reasoning/Description
<p>4.5.b <i>The Town will use a balanced approach, using low-impact development principles in the management of stormwater, by encouraging and supporting measures and activities that reduce stormwater runoff, improve water quality, promote evapotranspiration (the return of water from the earth's surface back to the atmosphere) and infiltration and reduce erosion.</i></p>	<p>The stormwater management system for the ASP area, as described in <i>Section 6.1.3 – Stormwater Management</i>, will control stormwater runoff and outflow to pre-development levels while reducing the risk of soil erosion and flooding. Where feasible, the stormwater management system has been designed to incorporate existing natural features and wet areas by respecting the existing drainage patterns in the ASP area. The Conceptual Storm Servicing Plan for the ASP area will treat stormwater to minimize discharge of nutrients or suspended sediments.</p>
<p>4.5.c <i>The design of stormwater management facilities will enhance the natural function and visual landscape.</i></p>	<p>The SWMFs within the ASP area will take advantage of the existing site drainage pattern, including Atim Creek and wetlands, providing opportunities to enhance these naturally occurring features.</p>
<p>5.3.a <i>So that all interests can be addressed in decision-making, the Town will provide a variety of engagement processes, both formal and informal, to reach representation from everyone in the community, including residents, businesses and the development industry.</i></p>	<p>A public open house was held, prior to first reading of the ASP Bylaw by Council, to provide community members and stakeholders an opportunity to provide their feedback on the ASP. Following the first reading of the ASP Bylaw by Council, a public hearing provided an additional opportunity for residents and other stakeholders to provide their input to Council regarding the ASP Bylaw. Comments and concerns provided at the public open house and public hearing have been addressed in this ASP.</p>
<p>6.1.f <i>Built form and neighbourhood design should positively contribute to the environment and encourage local biodiversity, by incorporating natural elements and features.</i></p>	<p>The topography and natural features of the ASP area will be maintained and enhanced, where feasible, through dedication of environmental reserves to reduce site disturbance. The existing Atim Creek has been historically altered by various human activities. One of the development objectives of the ASP is to restore and naturalize portions of Atim Creek through a partial realignment and incorporation as part of the open space network for the ASP area.</p>

MDP Policies	Reasoning/Description
6.2.c <i>The Town will require the protection, enhancement and conservation of hazardous or environmentally significant areas—including wetlands, watercourses, water bodies and their associated riparian areas—through appropriate techniques, such as environmental reserve dedication and conservation easements, donations and bequests.</i>	The Development Concept for ASP sensitively integrates the natural features of the site. Wherever possible, significant wetlands, as identified through the Desktop Biophysical Site Assessment, will be preserved and integrated into the stormwater management system for the ASP area. As previously indicated, portions of the existing – altered – Atim Creek will be realigned, enhanced and incorporated into the open space network, where feasible, as a combination of municipal and environmental reserve. Additionally, a portion of the centrally located mixed wood forest will be preserved and integrated into an interconnected trail network within the ASP area.
6.2.d <i>An environmental review shall be provided by the land developer or landowner to support an area structure plan, redistricting or a subdivision application when one or more of the following occurs: potential wildlife corridor; ecological function, including wetlands; habitat for significant species; home to rare floral; or area of scientific interest.</i>	A Desktop Biophysical Site Assessment (BSA) has been completed to inform the ASP. Recommendations of the BSA have been considered through the preparation of the land use concept and servicing strategy for the ASP.
6.2.e <i>The Town will require that future parks and trails be designated during the neighbourhood planning process.</i>	The <i>Tussic</i> ASP identifies lands to be designated for parks and trails at the districting and subdivision stage.
6.2.f <i>The Town will require that new area structure plans and subdivision applications connect municipal and environmental reserves throughout the ASP area and adjacent developments or municipalities.</i>	The open space network (consisting of municipal reserve, environmental reserve and public utility Lots) proposed for the <i>Tussic</i> ASP is planned to be interconnected to all parts of the ASP area and adjacent areas by a system of trails and sidewalks. The Atim Creek corridor provides another opportunity to interconnect the <i>Tussic</i> ASP open space network to adjacent lands.

MDP Policies	Reasoning/Description
<p>6.2.d <i>The Town will require that new area structure plans and subdivision applications be designed to incorporate and enhance environmentally significant lands, by keeping pre-existing woodlots and vegetation intact, planting complementary native and non-invasive plant species and increasing tree plantings, while still providing for recreational opportunities, parks and open spaces.</i></p>	<p>A portion of the existing mixedwood forest within the <i>Tussic ASP</i> area has been identified for incorporation into the open space network as a natural municipal reserve park. Atim Creek is also proposed to be realigned and incorporated into the open space network (as environmental reserve) with complementary planting of native and non-invasive plant species and trees. Recreational opportunities in these natural spaces is provided through the interconnected multi-use trail network planned for the ASP area.</p>
<p>6.5.b. <i>To create new neighbourhoods that are complete and resilient, the following principles should be applied:</i></p> <p>6.5.b.i. <i>a variety of appropriate uses, including housing, institutions, parks and local commercial facilities should be encouraged;</i></p> <p>6.5.b.ii. <i>a diversity of housing types (single-detached and semidetached/duplex, modular homes, townhomes, apartments and other forms, such as secondary suites or garage suites) for different households, income levels and lifestyles should be integrated into each neighbourhood; and</i></p> <p>6.5.b.iii. <i>residential development should be supported by services and amenities, with higher levels of public amenity in areas with higher density.</i></p>	<p>While planned as a primarily residential neighbourhood, Tussic will be a complete community which includes supportive institutional (school), parks (active, passive and natural areas) and local commercial uses.</p> <p>The <i>Tussic ASP</i> provides opportunity for a range of residential housing development to accommodate a variety of ages, incomes and family types.</p>

MDP Policies	Reasoning/Description
<p>6.5.c. <i>The Town may consider locations for higher density, multi-unit development outside of the downtown core, provided the following criteria are met:</i></p> <p>6.5.c.i. <i>located adjacent to collector and arterial roadways, provided the development can effectively buffer residents from traffic noise and visual impacts through appropriate urban design and landscaping;</i></p> <p>6.5.c.ii. <i>proximity to employment centres, shopping and other community amenities;</i></p> <p>6.5.c.iii. <i>higher density housing forms, particularly apartments, should be adjacent to park developments or linear open spaces;</i></p> <p>6.5.c.iv. <i>potential impact of additional traffic on the surrounding neighbourhood is addressed; and</i></p> <p>6.5.c.v. <i>effective urban design relationship to the surroundings.</i></p>	<p>Higher density housing forms in Tussic are planned primarily at the intersections of arterial and collector roadways and located to minimize drawing traffic deeper into the neighbourhood units. Urban design and landscaping at the development stage will respond to potential noise and visual impacts associated with each site's location.</p> <p>Higher density housing in Tussic is supported by the variety of parks and open spaces dispersed throughout the neighbourhood and interconnected by the multi-use trail and sidewalk network.</p> <p>An appropriate transition from higher to lower density housing forms in Tussic has been provided for in the ASP.</p>

MDP Policies	Reasoning/Description
<p>6.5.d. <i>To promote healthy lifestyles and interpersonal relationships by means of a compact, walkable neighbourhood, the following should be incorporated:</i></p> <p>6.5.d.i. <i>a sustainable density that makes efficient use of land;</i></p> <p>6.5.d.ii. <i>viable commercial services and amenities that are located within walking distance;</i></p> <p>6.5.d.iii. <i>school sites that are convenient for students in the neighbourhood; and</i></p> <p>6.5.d.iv. <i>a safe, pedestrian-friendly system.</i></p>	<p>Land uses planned for the <i>Tussic ASP</i> are based on anticipated market requirements and incorporate a variety of residential housing densities and forms which make efficient use of land while responding to residential preferences and demand.</p> <p>Supportive commercial and institutional (school) uses are planned to serve the future residents of Tussic, which will provide some employment opportunity within the neighbourhood. Additional employment opportunities, shopping and other amenities in the downtown area are approximately 5-10 minutes driving, or 10-15 minutes cycling, distance from Tussic.</p> <p>Opportunities for commercial development have been identified on the west and south sides of Tussic that provide retail and service uses within walking distance of a significant portion of the neighbourhood, as well as residents in the High Park neighbourhood.</p> <p>A school site is planned central to the <i>Tussic ASP</i> area, providing convenient access for students within the neighbourhood. It is also well connected to the arterial and collector roadway network to provide efficient vehicular access while minimizing traffic shortcutting through the residential areas.</p> <p>Combined with the multi-use trail network within the open space system, sidewalks will be provided for in accordance with the Town of Stony Plain Engineering standards to ensure safe, pedestrian-friendly, access is provided in Tussic.</p>

MDP Policies	Reasoning/Description
<p>6.5.e. <i>To provide interconnectedness throughout the neighbourhood and to connect neighbourhoods to each other, neighbourhood design should include:</i></p> <p>6.5.e.i. <i>safe, convenient access;</i></p> <p>6.5.e.ii. <i>a fine-grained, modified grid pattern that allows for short trips and to disperse congestion;</i></p> <p>6.5.e.iii. <i>continuous connections;</i></p> <p>6.5.e.iv. <i>multi-use trails;</i></p> <p>6.5.e.v. <i>a balanced model, supportive of walking and cycling; and</i></p> <p>6.5.e.vi. <i>transit-supportive development, by locating density in relation to potential transit routes.</i></p>	<p>Safe and convenient access within Tussic and to adjacent neighbourhoods will be provided through provision of roadways, sidewalks and multi-use trails designed and constructed in accordance with the Town's Engineering Standards and / or approved by the Town.</p> <p>A modified grid pattern of local roadways is anticipated to be designed within the context of the continuous connections provided by the collector roadway network and the natural features of the site (the realigned Atim Creek and the conserved mixedwood forest area).</p> <p>Direct connections for non-motorized transportation will be provided by an interconnected network of multi-use trails and sidewalks. A hierarchy of local, collector and arterial roadways will support efficient vehicular access while supporting safety by minimizing short-cutting.</p> <p>The location of higher density residential uses closer to neighbourhood entrances and adjacent to arterial and collector roadways is supportive of future transit.</p>
<p>6.5.f. <i>To ensure that residential development is in harmony with nature, design must:</i></p> <p>6.5.f.i. <i>integrate natural features, such as watercourses, to interconnect with nature and provide for biodiversity;</i></p> <p>6.5.f.ii. <i>include an integrated and connected system of open spaces, parks, corridors, trails and stormwater management features that are developed to maximize amenity; and</i></p> <p>6.5.f.iii. <i>optimize the potential for long-term tree canopy by maintaining existing tree stands where possible and a program of new planting.</i></p>	<p>Through the development of Tussic, portions of the existing Atim Creek – which has been significantly impacted by agricultural activities – are proposed to be sensitively altered or realigned. These alterations provide an opportunity to enhance and create a more natural creek channel, supporting biodiversity while also mitigating against flood impacts.</p> <p>A portion of the existing mixedwood forest within Tussic is proposed to be preserved as a natural area park (MR) space.</p> <p>Both Atim Creek and the mixedwood forest will form significant components of the interconnected network of open spaces in Tussic, establishing biological corridors within the developed context.</p>

MDP Policies	Reasoning/Description
<p>6.5.g. <i>To create unique areas with their own exceptional character and sense of place that fosters community identity and pride:</i></p> <p>6.5.g.i. <i>area structure plans should include design guidelines for built form and quality of the public realm, embracing the opportunity for a four-season lifestyle;</i></p> <p>6.5.g.ii. <i>area structure plans should include sites for future schools, developed in consultation with the Town and School Boards;</i></p> <p>6.5.g.iii. <i>neighbourhoods should be organized with a focus on vibrant community/village ‘heart;’ and</i></p> <p>6.5.g.iv. <i>community amenities should be located to help in “place-making,” creating community identity and fostering social interaction</i></p>	<p>As the timing of development in Tussic is anticipated to take place in the longer-term, design details will be deferred to the subdivision and development stages to respond to market preferences and conditions at the time of development. Development will be, at a minimum, in accordance with the Town’s standards and requirements that will support creation of character and sense of place, identity and pride within the neighbourhood.</p> <p>A centrally located school park site has been identified in Tussic in consultation with the Town and School Boards. The school site has been located and designed to be interconnected with the neighbourhood’s open space network – with multi-use trails providing opportunities for four-season recreation.</p> <p>The interconnected open space network, including the retained mixedwood forest area and realigned Atim Creek, forms one key element of the character of Tussic. In addition, a vibrant local commercial and higher density residential area in the western portion of Tussic is envisioned to form another character area as the ‘heart’ of the community.</p> <p>These character elements, connected to the larger Tussic neighbourhood and adjacent areas, will support “place-making” opportunities, foster community identity and provide opportunities for social interaction.</p>

1.3.5 Land Use Bylaw (LUB) 2576/LUO/17

The *Town of Stony Plain Land Use Bylaw* (LUB) defines the districts for all lands within the town of Stony Plain. Currently, the undeveloped lands within the ASP area and the self-storage area in the southeast portion of the ASP area are districted FD – Future

Development District. This district is intended to reserve areas within the town which are rural in character until required for urban purposes. Two parcels located in the southwest corner of the ASP area are districted as R8 – High Density Residential District and are developed for low-rise apartments.

In addition to identifying the land use districts, the LUB identifies a flood risk area adjacent to Atim Creek that includes a portion of the ASP area. The LUB states: “...the development Authority may require a study to determine the location of flood risk areas and fold fringe areas.” As part of the preparation of this ASP, the 1:100-year floodplain (area as identified in the LUB) was considered during the preparation of a Desktop Biophysical Site Assessment. A Creek Re-Alignment Assessment was also prepared by Associated Engineering in March 2016, to analyse the preliminary realignment design of the creek and establish a conceptual channel design – with the intention of reducing the floodplain areas. The extent of the Atim Creek floodplain will be minimized through realignment of Atim Creek, without increasing hydraulic impacts on the existing properties and structures downstream. Based on the initial conceptual design model, the 1:100 year floodplain would be reduced to an average width of 15m (7.5m on each side of the creek). Please refer to *Section 3.4* for additional information in this regard.

Applications to redistrict the lands within the ASP area will be submitted for each phase of development to reflect the land use designations proposed in this ASP.

1.3.6 Adjacent Planning Areas

Development in the adjacent areas are guided by previously approved ASPs. As shown in *Figure 2.0 Planned Context*, these ASP areas include the *South East ASP (Bylaw 2519)*, *South Creek ASP (Bylaw 2275)* and *Country Plans Estates ASP (Bylaw 2034)*, located to the south, west and north of the ASP area. In addition, two other

ASPs, the *Edgeland ASP (Bylaw 2540)* and *Lake Westerra Estates ASP (Bylaw 2290)*, are located to the northeast and southwest of the ASP area. All these approved ASPs provide guidance for land uses, roads, vehicular and pedestrian linkages to developments in the adjacent planning areas.

South East ASP (Bylaw 2519)

The lands within SW ¼ Sec. 30-50-27 W4M are located within the *South East ASP*. This ASP was adopted by the Town of Stony Plain in 1983. Since the approval of *South East ASP*, high level policies such as *Stony Plain Municipal Development Plan* and *Edmonton Metropolitan Regional Growth Plan* have been amended. Given this condition, the *South East ASP* is out of date and does not reflect current policies. To bring it up to day and to align it with the current policies, the Town of Stony Plain will prepare a bylaw to repeal a portion of the *South East ASP*. The portion being repealed, as shown in *Figure 2.0*, becomes a part of the ASP area. An amendment to remove SW ¼ Sec. 30-50-27 W4M from the *South East ASP* has been submitted concurrent with this ASP.

The South East ASP anticipates primarily residential development to the north and west of the *Tussic ASP* area. As shown in *Figure 2.0* two collector roadway linkages are proposed in the ASP area to connect with Highridge Way to the west of the ASP area and Harvest Drive to the north of the ASP area. These potential linkages are integrated into the *Tussic ASP's* roadway network and development concept.

As shown in *Figure 5.0 Existing and Surrounding Land Use*, an existing multi-use trail runs along the south edge of the *South East*

ASP and connects to the ASP area. This multi-use trail continues running north along the west boundary of the ASP area. A pedestrian crossing on Golf Course Road connects the existing multi-use trail with Highridge Way.

South Creek ASP (Bylaw 2275)

The lands within SE ¼ Sec. 30-50-27 W4M are located immediately south of the *South Creek ASP*, adopted by the Town of Stony Plain in 2006. This ASP proposes a logical extension of the primarily residential land uses and servicing from the South Creek area.

The South Creek ASP anticipates South Creek Drive, a collector roadway, to intersect the new arterial roadway along the north boundary of the ASP area. This potential linkage is integrated into the *Tussic ASP's* collector roadway network and development concept (*Figure 2.0*).

Country Plains Estates ASP (Bylaw 2034)

The lands within SW ¼ Sec. 30-50-27 W4M are located immediately north of the *Country Plains Estates ASP*. Adopted by the Town in 1998, this ASP proposes a primarily residential neighbourhood with parks and institutional uses south of Highway 628. A potential collector roadway linkage bisecting the south boundary of the ASP area is proposed to intersect with Highway 628 and align with the east boundary of *Country Plains Estates ASP*, as shown in *Figure 2.0*.

A collector roadway linkage located at the north of the existing storage unit business (Boundary RV and Auto storage Ltd.) is proposed to connect to Veterans Boulevard. The land to the east

and southeast of the ASP area are currently used for agriculture purpose with a farmstead located near the ASP area. There is no area structure plan approved at the east of the ASP area at the time of preparing this ASP.

Edgeland ASP (Bylaw 2540)

The lands within NW ¼ Sec. 29-53-27 W4M are located to the northeast of this ASP area, east of *South Creek ASP* area and Veterans Boulevard. The *Edgeland ASP* area is primarily occupied by low density residential uses. A portion of the lands facing onto Veterans Boulevard are designated to accommodate commercial uses and medium to higher density residential developments. Development of the *Edgeland ASP* area has not begun.

Lake Westerra Estates ASP (Bylaw 2290)

The lands within SE ¼ Sec. 24-52-28 W4M and SW ¼ Sec. 24-52-28 W4M are located to the southwest corner of the ASP area, west of *Country Plains ASP* area and Golf Course Road. The *Lake Westerra Estates ASP* area is primarily occupied by low to medium density residential uses. The majority of its park and natural area are located on the north and east portion of the ASP area, facing onto Golf Course Road and Highway 628. The area has not been fully built out yet.

1.3.7 Parks and Open Spaces Master Plan

The purpose of the *Parks and Open Spaces Master Plan* is to guide acquisition, development and management of parks, open spaces and outdoor recreation amenities to meet the needs for the community.

The parks and open spaces planned within the ASP area support the goals and objectives of the *Parks and Open Spaces Master Plan* (which align with the Town's MDP policy guidance as described above). These objectives are as follows:

1. *Protect and enhance the quality, integrity and sustainability of the environment.*
2. *Accommodate the outdoor recreation needs of the community as the population expands and evolves.*
3. *Provide a connected and accessible trail system that links parks, recreation/community centres, schools and key destinations.*
4. *Strengthen the involvement and attachment of residents to the community.*
5. *Provide high quality experiences and opportunities to retain existing and attract future residents to the community.*
6. *Provide a diverse range of facilities to meet community needs as efficiently as possible.*

1.3.8 Town of Stony Plain 2005 Trails Master Plan

The Town of Stony Plain's *2005 Trails Master Plan* created a comprehensive, interconnected, recreational trail system to serve existing and newly developing areas within the town. The *Tussic ASP* area falls within the Eastern Trail Section bounded by Highway 16A to the north, Highway 628 to the south and Golf Course Road to the west. There is a proposed multi-use trail running along Golf Course Road and further connecting to the existing trail system to the north, which has already been constructed. In addition, proposed multi-use trails run through the *Tussic ASP* area, cross Atim Creek and extend to the *South East ASP* area, *South Creek ASP* area.

As shown in *Figure 8.0 Parks and Open Space*, an integrated walkway system is created with interconnected parks, open spaces, natural areas, trails and sidewalks. Building upon the Master Plan, the multi-use trails proposed in the Tussic neighbourhood aim to enhance connectivity among various uses within the ASP area, to adjacent neighbourhoods and to the Town's existing and proposed trail system. The proposed multi-use trail is evenly distributed in the ASP area to ensure that each residential unit will be within a 500 meter distance to an open space. This proposed multi-use trail system will allow pedestrians and cyclists to move within the Tussic neighbourhood as well as to the Town's trail system safely and comfortably year-round.

2.0 SITE CONTEXT AND DEVELOPMENT CONSIDERATIONS

2.1 Topography and Vegetation

As shown in *Figure 3.0 Existing Conditions*, the ASP area consists of gently rolling terrain that generally slopes toward Atim Creek, which runs north to south through the centre of the ASP area. Areas of higher elevation lie to the west and east boundaries of the ASP area.

The site is predominantly used for agricultural purposes with much of the natural vegetation having been removed or disturbed. There are two clusters of trees located centrally in the western portion of the ASP area.

2.2 Soils

A Geotechnical Investigation was completed for the ASP area in 2016 by J.R. Paine & Associates Ltd.

In general, the soil conditions at this site consisted of surficial topsoil, underlain by silty sand, underlain by a lacustrine silty clay material. In all the testholes, a surficial topsoil was the first soil encountered and typically extended to between approximately 300mm and 600mm. Deeper topsoil thicknesses of up to 1700 millimetres were noted in testholes associated with local low-lying areas. In areas of deeper organic deposits, associated with low-lying areas, the organic materials varied to peat and marl.

2.3 Environmental Site Assessment

A *Phase I Environmental Site Assessment (ESA)* was completed for the ASP area by Associated Engineering Alberta Ltd. in August 2015. The ESA indicated very low potential of any significant soil, vapour, and/or groundwater contamination related to past or current activities.

The ESA also stated that the potential environmental risk from neighbouring properties' past and present land uses are considered low. No further assessments were recommended.

2.4 Wetland Assessment Impact Report

A *Wetland Assessment Impact Report (WAIR)* was completed by Associated Engineering Alberta Ltd. in June 2016. The WAIR identified 13 existing wetlands that will be impacted by development and are subject to compensation under the *Water Act*.

The WAIR identified two types of wetlands within the ASP area including wooded swamp and marsh. These types of wetlands within the ASP area vary in permanence from temporary to seasonal to semi-permanent. All 13 wetlands are also classified by the WAIR as Class C.

The WAIR indicates the ASP area contains 2.7ha (6.8ac) of wetlands and an application for Water Act approval for their removal will be submitted to the Province prior to development.

2.5 Historical Land Use

According to the historical records documented in *Phase I ESA*, the eastern portion of the ASP area was cleared for agricultural purposes in 1926 and has been under continuous cultivation since then. The approximately 8.0ha (19.8ac) of land at the southeast corner of the ASP area has been subdivided to accommodate the development of a storage unit business. The western portion of the ASP area was cleared for agricultural purposes in 1898. An existing multi-unit residential development, Cedar Brae, is located at the southwest corner of the ASP area. Cedar Brae was subdivided by Parkland County as an acreage for the Kennedys and then developed as an apartment site afterwards. With a total of 113 units in approximately 1.0 hectare of land, Cedar Brae is a high density residential development.

A Historical Resources Application was submitted to Alberta Culture and Tourism and *Historical Resources Act* clearance was provided in December 2015.

2.6 Existing Utilities and Pipelines

As shown on *Figure 4.0 Plan Area*, there are registered utility rights-of-way and right-of-way easements within the ASP area.

Two gas pipelines owned by ATCO run north-south and west-east within the western portion of the ASP area and are registered as right-of-way easements.

There are existing overhead powerlines located within the road

rights-of-way along the east, south and west boundaries of the ASP area.

There are also existing utilities (including natural gas, water, sewer, and power) servicing the existing residential development at the southwestern corner of the ASP area and the existing RV storage site located at the southeastern corner of the ASP area.

2.7 Adjacent Lands and Surrounding Development

As shown in *Figure 5.0 Existing Surrounding Land Uses*, the lands north of the west half of the ASP area are currently vacant except for an existing farmstead located adjacent to the northwest corner of the ASP area. Atim Creek bisects the quarter section to the north of the east half of the ASP area. In this area, east of Atim Creek, there is an existing farmstead surrounded by a planted field and, west of Atim Creek, the land has been designated for residential development. The lands to the east and southeast of the ASP area are currently used for agricultural purposes with a farmstead located near the southeast corner of the ASP area. West of the ASP area is the High Park, a low density residential neighbourhood, and an existing farmstead. An east-west bound roadway, Highridge Way, runs through High Park and connects to Golf Course Road.

There are residential acreages, farmstead and agricultural uses south of Highway 628. As an urban arterial roadway, Highway 628 is a wide enough separating distance to function as a buffer to mitigate potential impacts associated with the future development in the ASP area to the neighbours in the area. Therefore, there is no negative

impact to the residential acreages and farmstead south of Highway 628.

Stony Plain's multi-use trail network exists throughout *South East ASP, Lake Westerra Estates ASP* and wider areas. As shown in *Figure 5.0*, an existing trail runs along the south edge of *South East ASP* and connects to the ASP area. This trail continues running towards north along the west boundary of the ASP area and further merges with Stony Plain's multi-use trail network. There is a pedestrian crossing on Golf Course Road connecting the trail to Highridge Way. No multi-use trail exists in the lands south of the ASP area at the time of preparing this ASP.

2.8 Road Caveats

As shown on *Figure 4.0 Plan Area*, road caveats were registered with Alberta Transportation for potential road widening within the ASP area.

Along the southern boundary of the ASP area there is a total of four documents registered for the Highway 628 widening (ultimately a 6-lane highway) and service road agreement purposes. The registered documents are listed as follows:

- Registered Document 122 067 968
- Registered Document 122 063 321
- Registered Document 122 063 337
- Registered Document 062 321 587

According to the drawings included in the above listed documents, the widening requirements range from 11.53 metres up to 30 metres and then back down to 10.38 metres in width from east to west on the west portion of the ASP area. This land was acquired via caveat for the improvements to the intersection at Golf Course Road as well as for legal access to the west half of the quarter section.

The road caveat (Registered Document 062 321 587) was registered on the east quarter section of the ASP area. According to the drawing in the registered document, this land is 30 metres wide and did not extend to the west portion.

2.9 Agricultural Impact Assessment

An Agricultural Impact Assessment (AIA) report for the eastern quarter of the ASP area was completed by ParioPlan in 2018 to support the Town of Stony Plain's regional evaluation framework application to the Edmonton Metropolitan Region Board (EMRB).

The AIA identified the ASP area as a logical and efficient location to accommodate urban growth in Stony Plain. It is also stated in the AIA that the development of the Tussic neighbourhood will contribute to slowing the outward growth of urban neighbourhoods into the primarily agricultural land in Parkland County.

3.0 VISION, GOALS, AND OBJECTIVES

This section of the *Tussic ASP* outlines the vision, goals and objectives that shaped the Development Concept described in *Section 4.0 DEVELOPMENT CONCEPT*.

3.1 Our Vision

*We envision the Tussic neighbourhood to develop as **a complete community** that provides a **wide range of housing choices** along with **shopping and other amenities and services that meet the daily needs of residents** to allow them to age in place. Transportation and infrastructure is designed not only to **accommodate the private automobile but also public transit, pedestrians and cyclists**. **Walkability** is of utmost importance with **interconnected parks, open spaces, and trails** to allow people to move within the Tussic neighbourhood as well as **provide connectivity to adjacent neighbourhoods safely and comfortably year round**.*

3.2 Goals and Objectives

Urban Design

Goal: Design the Tussic neighbourhood to provide a good quality of life for its residents.

Objectives:

1. Build a complete and attractive neighbourhood that provides a range of housing choices, recreational opportunities, and shopping and other amenities to meet the daily needs of its residents.
2. Include an integrated system to connect trails and sidewalks with open spaces, parks, natural areas, and stormwater ponds to encourage walkability and wellness.
3. Design an interconnected transportation system that can accommodate vehicles, transit, pedestrians, cyclists and other active modes of transportation.
4. Preserve and enhance natural features and employ environmentally sustainable practices.
5. Placemaking is an important consideration in the design of the Tussic neighbourhood to ensure that the neighbourhood has its own exceptional character, with Atim Creek being an important regional feature and functional high quality public realm.
6. Maintain sufficient flexibility in the *Tussic ASP* to be able to respond to changing market conditions, trends and need for resiliency.
7. Apply *Crime Prevention Through Environmental Design* (CPTED) principles at the detailed design stage.

Residential Development

Goal: Provide for a diversity of housing types to accommodate different lifestyles, economic levels and special needs.

Objectives:

1. Achieve a minimum residential density of 35 dwelling units per net residential hectare in order to comply with the Edmonton Metropolitan Region Growth Plan (EMRGP) density targets.
2. Provide a wide range of housing choices including single detached, semi-detached dwellings, multi-unit residential including town housing and low-rise apartments, accommodating a range of ages, tenure, family types and income levels.
3. Locate multi-unit housing near collector and arterial roadways to provide easy access to amenities as well as provide transition in height and density to lower density development.
4. Provide for a range of residential densities, innovative housing types (e.g. garage suites, lane housing, zero lot line development) and alternative site and building designs (e.g. shallow lots) that will contribute to the overall diversity, sustainability and affordability within the neighbourhood.

Commercial Development

Goal: Provide for Commercial development in the Tussic neighbourhood that will meet the day to day needs of residents within and near the ASP area.

Objectives:

1. Locate two local convenience commercial development sites at the western and southern accesses of the ASP area to accommodate both retail and service uses, to serve the day-to-day needs of the residents within and near the ASP area.
2. The commercial area will also provide local economic development and employment opportunities.

Environmental Management

Goal: Be responsible stewards of the environment by protecting and integrating natural watercourses and natural areas and employing environmentally sustainable practices.

Objectives:

1. Preserve the mixedwood forest as a natural area park (MR) and integrate it within the planned park and open space network for the neighbourhood.
2. Enhance Atim Creek through realignment of the creek channel and restoration of riparian area, where feasible.
3. Provide a stormwater management system that supports Low-Impact Design and Best Management Practices that integrates with the realignment of Atim Creek into the Tussic neighbourhood design.
4. Provide a stormwater management system that meets the requirements of the Town and Province related to the water quality and treatment discharge.

Transportation and Infrastructure

Goal: Plan and Develop a transportation network and infrastructure in an efficient, economic and environmentally friendly manner to accommodate transit, cycling, and promote walkability.

Objectives:

1. Plan a hierarchy of arterial, collector and local roadways that facilitate efficient access, promote safety and discourage traffic shortcutting through providing flexibility in the ASP to implement a modified-grid local roadway network.
2. Adopt a 'complete streets' philosophy for street design which integrates and serves all modes of transportation – including drivers, transit users, cyclists, rollerbladers and pedestrians, and individuals with limited accessibility who use scooters, wheelchairs, etc.
3. Ensure flexibility in the ASP to provide for an interconnected road and path system that facilitates efficient provision of municipal services and maintenance at the detailed design stage.
4. Locate and design collector streets to plan for integration of a future public transit system.
5. Allow for traffic calming measures in roadway design to be established at the detailed design stage by ensuring flexibility in the ASP.
6. Provide an interconnected network of roadways, sidewalks and multi-use trails that facilitate connectivity, accessibility and movement by multiple modes to amenities and services for future residents in

Tussic neighbourhood, while also considering opportunities to connect to adjacent planned and developing neighbourhoods.

7. Promote efficient design of municipal infrastructure by providing flexibility in the ASP to ensure the Town of Stony Plain standards can be met at detailed design.

8. Additional access to highway 628 is contingent on the transfer by the Government of Alberta of the care and control of the portions of Highway 628 within the Town boundaries to the municipality.

Parks, Recreation and Community Services

Goal: To develop needed parks, open space, school sites and recreational facilities to satisfy the present and future needs of local residents.

Objectives:

1. Connect to, expand, and enhance the town's system of parks and open spaces, multi-use trails and recreational opportunities through development in Tussic.
2. Support a variety of park experiences including active and passive recreation and the enjoyment of nature through provision of an interconnected park and open space system.
3. At the time of subdivision, ensure that 10% of the developable lands are dedicated to the Town as municipal reserve (MR) through land dedication, deferred reserves or cash in-lieu-payments or a combination thereof.
4. Integrate reserve lands (MR and ER) with public utility lands

(stormwater management facilities) to augment the recreation experience provided through reserve dedication.

5. Plan for integration of commercial and public amenities into the neighbourhood, while locating these land uses with direct access to collector roadways and efficient connections to the arterial roadway network to minimize traffic issues and potential shortcutting.

Stakeholder Involvement

Goal: Work collaboratively with Council, Town Administration and other stakeholders in implementing the *Tussic ASP*.

Objectives:

1. Provide opportunities for residents to be informed and to comment on the ASP prior to the required Council public hearing.
2. Work closely and collaboratively with the Town Administration to identify opportunities and address issues throughout the ASP implementation process.
3. Consider the existing planning context and framework for any amendments to the ASP, supporting implementation of existing plans where feasible and amending existing plans where necessary to ensure consistency across the Town's planning documents.
4. Leverage the significant planning and development experience and expertise of the stakeholders in delivering a plan that will make a positive contribution to the Town.

4.0 DEVELOPMENT CONCEPT

4.1 Overview

The *Tussic ASP* has been prepared in response to current and anticipated housing market demands in the town of Stony Plain. The ASP encourages development that provides: a range of housing types; active and passive recreation opportunities; supportive institutional services; integration and enhancement of existing natural features; and appropriately scaled neighbourhood commercial amenity. The proposed land uses have been planned to complement adjacent existing and planned developments. As shown in *Figure 6.0 Development Concept*, the *Tussic ASP* proposes residential land uses to accommodate a diversity of ages, income levels and family types.

Located adjacent to Highway 628, between Golf Course and Veterans Boulevard, the ASP area is well connected with the town's transportation network, with strong access to regional and provincial routes.

In addition, the ASP area sensitively integrates the existing low-lying areas and wetlands, where feasible, as well as a realigned Atim Creek into a network of stormwater management facilities which serve as natural amenities for the community. These features are connected to the proposed school site, pocket parks and a retained portion of the existing mixedwood forest (natural park) to create an integrated open space system as a community amenity.

Figure 6.0 Development Concept provides a framework for the future development of lands within the ASP area. Although the internal roadway patterns and parcel orientations will be further delineated at the detailed design stage, all future developments within the ASP area shall be in general accordance with this Development Concept. The location and amount of environmental reserve (ER) and municipal reserve (MR) will be further refined at the subdivision application stage in accordance with the provisions of the *Municipal Government Act (MGA)*.

4.2 Residential

Table 1.0 - Land Use Statistics provides a summary land use areas, residential densities and projected population for the ASP area. As the development concept is general in nature, to respond to market demand over the course of development, the developer will work with the Town to ensure that overall residential densities are monitored through the redistricting and subdivision process. With each stage of development, the development program will be re-evaluated to ensure density requirements under the EMRGP will be met with the build-out of the ASP area.

As shown in *Figure 6.0 Development Concept*, the ASP area is planned primarily for a mix of low and medium density residential

uses. Low density residential (LDR) uses are anticipated to comprise approximately 46.87 ha (115.77 ac) or 42.5% of the gross developable area (GDA). LDR (single detached and semi-detached) is anticipated to be developed to a density of approximately 28 units/hectare (u/ha), and would be primarily located interior to the neighbourhood areas.

A significant multi-unit (town house and low-rise apartment) residential component is also anticipated in Tussic, to accommodate a wider range of housing choice. Approximately 8.27 ha (20.43 ac) or 7.5% of the GDA is planned for medium density residential (MDR) uses, such as town housing, at an approximate density of 45 u/ha. MDR development is planned near open space amenities and commercial and institutional services, providing accessibility and connectivity for future residents.

In addition, a specific medium density residential (MDR) site has been located adjacent to Cedar Brae as shown in *Figure 6.0 Development Concept*, to provide a gentle transition between the Cedar Brae apartments and the Low Density Residential areas. This specific MDR site is approximately 2.0 ha (4.94 ac) or 1.8% of the GDA.

Approximately 3.3 ha (8.15 ac) or 3.0 % of the GDA is planned for higher density residential (HDR) uses, such as low-rise apartments, which are anticipated to achieve a density of approximately 80 u/ha. The locations of the HDR areas are strategically planned to provide major road network access to ensure accessibility and support efficient movement of people within the ASP area. HDR uses are also planned near natural amenities and commercial and institutional services.

4.3 Commercial

Two commercial development sites are proposed in the ASP area to provide neighbourhood oriented commercial uses for future residents in Tussic. One site is located north of the collector road on the western portion of the ASP area and the other site is at the intersection of Highway 628 and a future collector road in the southern portion of the ASP area, as shown in *Figure 6.0 Development Concept*. The commercial sites will occupy approximately 2.18 ha (5.38 ac) or 2.0% of the GDA. These local commercial developments would primarily serve the day to day needs of residents within and near the ASP area. The locations also take advantage of exposure and access to Golf Course Road and Highway 628 to provide easy vehicular access supporting the viability of businesses. Some local employment opportunities for existing and future residents would be created with these commercial developments.

4.4 Parks, School and Open Space

Approximately 11.02 ha (27.22 ac) or 10.0% of the GDA is dedicated as a municipal reserve (MR). Of this, approximately 3.9ha (9.7ac) or 3.6% of the GDA is identified for the development of a potential future school site. As shown on *Figure 6.0 Development Concept*, the school site has been located centrally to the neighbourhood, at the north end of the proposed north-south collector connection to Highway 628, providing strong vehicular and non-motorized access and egress. The location of the school site also allows for

connectivity to the proposed trail network and interconnected open space system within the ASP area, presenting potential opportunity for nature education programming.

Approximately 3.31ha (8.18 ac) or 3.0% of the GDA has been identified for a natural area park (MR) space to allow for preservation of a portion of the existing mixedwood forest. This site will provide passive recreation opportunities for residents, through nature trail development, interconnected with other open spaces planned for the neighbourhood, supporting an appreciation of nature, preserving habitat and nature education programming opportunities.

Additional MR, up to 10% of GDA, will be provided at the redistricting and subdivision stages to establish multi-use trail development and neighbourhood parks. These additional MR spaces will provide opportunities to enhance the connectivity of residents to the open space network. Local park spaces will provide accessible passive and active recreation opportunities for residents.

A system of three stormwater management facilities has been identified within Tussic. These facilities will be dedicated as public utility lots (PUL) and occupy approximately 8.0 ha (19.76 ac) or 7.3% of the GDA. Interconnected with the park and open space system, through inclusion of multi-use trail alignments, these facilities will provide additional passive recreation opportunities for neighbourhood residents and provide additional variation in the recreation experience for trail users.

4.5 Atim Creek Realignment

Both the *Phase I Environmental Site Assessment* and *Desktop Biophysical and Wetland Assessment* identified evidence of historical human disturbance to the natural state of Atim Creek within the ASP area. The proposed realignment and enhancement of natural areas associated with Atim Creek will provide recreational opportunities for residents while restoring the watercourse and riparian area to a more natural state, to the extent feasible. The bed of Atim Creek and associated riparian area will be dedicated as environmental reserve (ER), the extents of which to be confirmed through detailed design for the realignment and alteration at the subdivision and development stage. For the ASP, conceptual design for the realignment and alteration of the creek has been completed and approximately 1.28 ha (3.16 ac) of land will be required as ER.

Communication regarding the proposed realignment has been initiated with Alberta Environment and Parks (AEP). The realization of Atim Creek realignment requires AEP to review and approve the realignment plan with supporting technical studies, assessments and supplementary information. The approval of the realigned Atim Creek will be required prior to any redistricting or subdivision as the *Tussic ASP* relies on this feature for its design.

4.6 Existing Development

Opportunity exists for the lands at the southeast corner of the ASP area, occupied at the time of writing by a storage unit business (Boundary RV and Auto Storage Ltd.), to be redeveloped

as residential or commercial and integrated with development planned for the ASP area. The development concept for Tussic has been strategically established with consideration of the potential for connections of roadway and servicing infrastructure to support eventual redevelopment of these lands. In the interim, visual buffering (fencing and landscaping within private property is anticipated to be provided where this existing development directly borders proposed residential development.

4.7 Transportation

Transportation and infrastructure in the ASP area is designed not only to accommodate vehicles but transit, pedestrians, cyclists and other active modes of transportation. A Transportation Impact Assessment (TIA) has been submitted separately for review and approval by the Town of Stony Plain. *Figure 7.0 Transportation Plan* identifies the proposed roadway network and multi-use trail within the ASP area.

The roadway network proposed includes a new arterial roadway running west-east along the north boundary of the ASP, and a network of collector roadways providing access to the new arterial, Veterans Boulevard, Highway 628, and Golf Course Road. A local roadway and lane network will be identified at the subdivision stage, which will provide access to the collector roadway network from individual lots.

Based upon communication with Alberta Transportation dated back to August 2016, there is a total of four road caveats registered with Alberta Transportation for the purpose of highway widening

and service road access. The lands acquired will accommodate improvements to the intersection at Golf Course Road, provide access to future developments and contribute to the realization of a complete community as envisioned in this ASP.

The following roadway network is proposed:

4.7.1 Arterial Roadways

The Town of Stony Plain has noted that they will accept, subject to final design approval, a four-lane undivided standard for the new arterial roadway between Golf Course Road and Veterans Boulevard. However, based on the TIA there may be opportunities to explore a non-standard cross-section using the complete streets philosophy for this arterial at the detailed design stage.

Veterans Boulevard is located along the east boundary of the ASP and is planned to be upgraded to a four-lane divided arterial roadway.

Golf Course Road may be upgraded in the future; however, a two-lane undivided arterial can support the development of the *Tussic ASP*.

Alberta Transportation has jurisdiction over Highway 628 which is located along the south boundary of the ASP. Based on the *Highway 628 Functional Planning Study*, Highway 628 is proposed to be a four-lane divided urban arterial roadway within Stony Plain.

4.7.2 Collector Roadways

The collector roadway network includes one primary collector that intersects the future east-west arterial in the eastern and western portions of the ASP area, looping south through the ASP area. In addition to the primary collector loop, three collector connections are proposed connecting the collector loop to Golf Course Road, Highway 628, and Veterans Boulevard.

All collector roadways will be developed as major collector roadways as per the *Town of Stony Plain's Municipal Development Standards*. The development of single/semi-detached units with front drive access should be restricted along collector roadways that carry daily volumes greater than 5,000 vehicles per day (vpd). This will be confirmed at the subdivision stage.

Additional access to Highway 628 will provide safe, convenient access to the regional road network as shown in *Figure 7.1 Transportation Overlay Pending Municipal Authority of Highway 628*. Requirements for such access will be determined at the detailed design and subdivision stage.

4.7.3 Local Roadways

A system of local roadways to provide access to individual residential lots will be identified at the subdivision stage and will be developed in accordance with the *Town of Stony Plain's Municipal Development Standards*.

4.7.4 Lanes

Most residential development located along collector roadways will be accessed via lanes at the rear of the lots. Exceptions include the multi-unit residential parcels which will be accessed via collector or local roadways. The minimum right-of-way width for lanes is 6m, as per the *Town of Stony Plain's Municipal Development Standards*.

4.7.5 Public Transit

Transportation and infrastructure in the ASP area is designed to integrate with Stony Plain's future public transit system in the area. The future public transit system will be accommodated along the proposed collector roadways to ensure that all uses are within 5 – 10 minute walking distance (at 400 to 800 metres).

4.7.6 Pedestrian Connectivity

As shown in *Figure 8.0 Parks and Open Space*, an existing multi-use trail runs along the south edge of *South East ASP* and connects to the ASP area. This trail continues running towards north along the west boundary of the ASP area and further merges with Stony Plain's eastern trail network. A pedestrian crossing on Golf Course Road connects the multi-use trail to Highridge Way.

Pedestrian sidewalks will be provided along the proposed collector roads and local roads as per the *Town of Stony Plain's Municipal Development Standards*. In addition, a multi-use trail system is proposed throughout the ASP area connecting future collector

roads, realigned Atim Creek, stormwater management facilities, parks and the school site within the ASP area. As shown in *Figure 8.0 Parks and Open Space*, the multi-use trail system will also extend to connect to the existing and proposed multi-use trail system along the Town's arterial roads and in the adjacent neighborhoods. Multi-use trails may replace sidewalks along certain collector roads to further integrate the overall trail system

4.7.7 Emergency Services

Through consultation with the Stony Plain Royal Canadian Mounted Police, the Stony Plain Fire Department and Alberta Health Services, it has been determined that there is no need for lands within the ASP area to accommodate additional emergency services facilities. Existing services within the town of Stony Plain are sufficient to provide for future development within the ASP area.

5.0 UTILITY SERVICES

5.1 Design Criteria

Sanitary servicing consists of all new sanitary collection facilities required to service the proposed development area as identified in the ASP. These facilities include the trunk sewer, local sewer mains and service pipes to each lot. Local sanitary sewer mains have been sized assuming they will be installed at the minimum grade for each diameter. The sizing of these mains is conceptual, and should be confirmed during detailed design stage.

Water servicing consists of all new water distribution facilities required to service the ASP area. Connections to offsite water mains are identified, however, potential additional pumping or storage requirements have not been considered.

5.1.1 Sanitary Sewer Servicing

Figure 9.0 Conceptual Sanitary Servicing Plan presents the sanitary collection system envisioned to service the ASP area. The collection system will consist of a network of various size gravity mains located generally along the proposed road network.

The sanitary servicing concept is based on providing sanitary service to the *Tussic ASP* development boundary. Most of the lands within the ASP area fall to the north as well as toward Atim Creek, located in the centre of the ASP lands. The gravity sewer mains are anticipated

to range in size from 200mm through 675mm in diameter.

The *Town of Stony Plain Sanitary Collection System Master Plan Update* (January 2008) indicates that the ASP area will be serviced with one major trunk running along the east central portion of the development area. This concept has been revised in that the trunk main will exit along the quarter section line within the centre of the development. This is not anticipated to have a negative effect on further trunk sewer extension to the south of the ASP area.

The existing developments in the southeast corner of the east quarter section has been included in the overall sewage generation for the area, to allow for potential future redevelopment. The existing development in the southwest corner of the west quarter section is currently serviced and has therefore not been included.

The sanitary servicing concept is fully described below:

Trunk Sewer

The ASP area will be serviced by a sanitary trunk sewer which will be 675mm in diameter at the north boundary of the development. Within the ASP area, the trunk sewer will reduce to 600mm in diameter and travel through the development to service additional lands to the south. The trunk main is envisioned to follow the collector roadway located in the east central portion of the development. Laterals will extend outward from the trunk main to

provide service to the local area.

Beyond the ASP area, the trunk sewer will need to be extended north to connect to the existing 900mm trunk main located along South Creek Drive.

West ASP Area

The ASP area located between Golf Course Road and Atim Creek can be serviced by a gravity sewer main flowing north along the future collector road and then east through local roadways to connect with the trunk sewer. The sanitary sewer routing will be further defined at the subdivision and design stages.

Limited interim sanitary servicing may be possible in the western portion of the ASP lands along Golf Course Road. Spare capacity within the existing collection system to the west may accommodate some initial development within the ASP lands, however, sewage must ultimately be redirected to new local sanitary mains within the *Tussic ASP*.

East ASP Area

The ASP area located between Veterans Boulevard and Atim Creek can be serviced via gravity mains discharging directly to the trunk sewer.

5.1.2 Water Distribution

Figure 10.0 Conceptual Water Servicing Plan presents the proposed water distribution system for the ASP. The distribution system is envisioned to consist of a network of watermains generally installed along the proposed roadway network.

The proposed water servicing concept is based on providing water service to the ASP boundary, including domestic and fire flow provision throughout the system. The Town of Stony Plain Water Distribution Master Plan Update (January 2008) indicates that the ASP area will be serviced via seven connection points; two to the existing system (to the west of the proposed development) and five to future connections. The watermains are anticipated to range in size from 200mm through 350mm in diameter. The proposed watermain network will provide the design peak day flow plus the recommended fire flow capabilities within the Tussic development area. The watermain looping is especially recommended to significantly improve fire flow capabilities that may be required for a certain development stage.

Tie-ins to the Town's existing system are located on the west side of the ASP area along Golf Course road; on the northern side to a 300mm diameter watermain and on the south side to a 350mm diameter watermain. The future connections along the north, east and west boundaries will allow for ultimate looping and future expansion, and range from 300mm to 350mm in diameter.

The existing developments in the southeast corner of the east quarter section has been included in the overall demands for the area, to allow for potential future redevelopment. The existing development in the southwest corner of the west quarter section is currently serviced and has therefore not been included.

5.1.3 Stormwater Management

To service the future development area identified in the ASP, a series of SWMFs are proposed to be installed to provide water quality and quantity control before it is discharged to the existing natural streams (see *Figure 11.0 Conceptual Storm Servicing Plan*).

Alberta Environment's stormwater management guidelines require control of water quality in urban stormwater. According to the Alberta Environment Guidelines, wet ponds and stormwater wetlands typically remove 80-90% of the suspended solids and 40-60% of the suspended and dissolved nutrients in urban stormwater. Therefore, best management practice implies that wet facilities be used whenever possible.

The proposed wet ponds will be designed to accommodate the 1:100 year 24-hour storm event. A maximum pond release rate of 2.5 L/s/ha was adopted based on the *Services Master Plan Review Storm Drainage Master Plan* completed by Associated Engineering in 2008.

The northwest SWMF (3.5 ha) is proposed to discharge at a controlled release rate into the second SWMF (1.8 ha) which then discharges into the realigned Atim Creek. In addition, the east SWMF (2.6 ha) also discharges at a controlled rate into Atim Creek. These drainage paths are presented in *Figure 11.0 Conceptual Storm Servicing Plan*.

It was assumed that the Boundary RV & Auto Storage lot will control runoff through provision of its own on-site stormwater management with a controlled release rate. Controlled discharge from this lot will be allowed to flow through the east SWMF (2.6 ha) without storage.

5.1.4 Franchise Utilities

It is anticipated that power, natural gas, telephone and cable TV services will be provided through extension of the existing system.

5.2 Utility Servicing Standards

5.2.1 Costs of Development

The developer of land will bear the costs of development, through such mechanisms as off-site levies, bylaws and development agreements. This includes the provision of full services to the Town's standards, and in accordance with the Town's Master Plans and studies for infrastructure, having regard for long-term maintenance and expansion of infrastructure to new developments.

5.2.2 Low-Impact Development

The Town will use a balanced approach, using low-impact development principles in the management of stormwater, by encouraging and supporting measures and activities that reduce stormwater runoff, improve water quality, promote evapotranspiration (the return of water from the earth's surface back to the atmosphere) and infiltration and reduce erosion.

5.2.3 Design

The design of stormwater management facilities will enhance the natural function and visual landscape.

5.2.4 Joint Use

The Town will require joint-use of utility pipeline corridors, transportation corridors, transmission lines and other utility rights-of-way and structures of a compatible nature to minimize adverse visual, environmental or safety impacts and fragmentation of properties, unless the developer or applicant can prove that such co-location is impossible or unsafe.

6.0 PLAN IMPLEMENTATION

6.1 Development Staging

The development in the ASP area will occur in a number of phases but is based on various factors including infrastructure costs, market demands, as well as logical extension of sanitary collection (*Figure 9.0*) and water distribution system (*Figure 10.0*) according to servicing requirements that only can be determined at the detailed design stage. Therefore, the development lines and order shown in *Figure 12.0 Staging Plan* are conceptual and require subsequent detailed confirmation prior to any redistricting or subdivision. Additionally, each conceptual stage area as shown in *Figure 12.0* can be further broken into smaller stages based on lot inventories and marked demands. The intent of the Staging Plan is to describe the anticipated direction of growth and does not obligate any landowner to develop or not develop, provided that servicing is readily available. This is to ensure that the development of roads and deep services are handled in an efficient and cost effective manner.

The lands within the ASP area will be developed in general accordance with the staging plan shown on *Figure 12.0 Staging Plan*. The A's and B's in *Figure 12.0 Staging Plan* signify that development may commence concurrently or separately among the west and east quarter sections. Development of the initial stage will require extension of municipal servicing, collector roadway and stormwater management facility infrastructure, the extent of which will be determined in consultation with the Town.

6.2 Redistricting and Subdivision

Redistricting and subdivision applications will be prepared for each stage of development and will conform generally to the land uses described in this ASP. Guided by the Town of Stony Plain's MDP, redistricting and subdivision will also be required to adhere to the *Town of Stony Plain's Land Use Bylaw*.

Road caveats directly impact the development concept and need to be considered as the ASP gets built. There is a total of four road caveats registered with *Alberta Transportation* for the purpose of highway widening and service road access. *Alberta transportation* will need to be consulted during the development of the *Tussic ASP* to ensure each caveat is properly addressed as the ASP develops.

6.3 Provision of Roadways and Infrastructure

Provision of new roadways and services and/or upgrades to existing services required to accommodate new development in the ASP area will be established through the subdivision process.

Applications for subdivision will be submitted for each phase of development to the Town of Stony Plain for approval by the Town's Subdivision Authority. As a condition of subdivision approval, a development agreement between the developer and the Town of Stony Plain will be required. This development agreement will be

based on detailed engineering drawings that identify necessary roadway and servicing construction and/or updates to the existing roadways and services required to accommodate development, based on the future land uses and densities proposed in the subdivision application. They will also indicate responsibilities for constructing the required roadways and services.

Through the development agreement process, the developer and the Town of Stony Plain will establish who will be required to pay for and construct the roadways. The developer will work with the Town of Stony Plain to determine opportunities for recovery of a fair portion of any upfront costs from subsequent development which will utilize the new and/or upgraded roadways and services. To ensure the proposed new and/or upgraded roadways and services are completed as identified in the engineering drawings, the Town of Stony Plain will require security to be provided, the amount of which is determined based on the construction costs for roadways and services. This security will be returned to the developer following a warranty period, which is determined by the Town of Stony Plain and identified in the development agreement.

Upon signing and approval of the development agreement between the developer and the Town of Stony Plain, the subdivision application may be endorsed by the Subdivision Authority, allowing the subdivision plan to be registered with Land Titles to create the new lots. Road upgrades and construction of services can begin once the required security is provided to the Town as specified in the development agreement. Usually, the endorsement of the subdivision plan will occur after the Town accepts construction

completion certificate for the road upgrades and constructed services.

6.4 Staging Information and Requirements

6.4.1 Infrastructure Requirements

Development of the initial stage will require extension of municipal servicing, roadways and stormwater management facility infrastructure, the extent of which will be determined in consultation with the Town.

During the first stage of the development, a stormwater management facility will be required at one of the locations in general accordance with *Figure 11.0 Conceptual Storm Servicing Plan*. All stormwater management facilities will be designed in accordance with *Alberta Environment Standards and Guidelines*, as well as the *Town of Stony Plain Municipal Development Standards*. Approvals under the *Water Act* and *Environmental Protection and Enhancement Act* will be obtained for each of the facilities. Final size and location of all stormwater ponds will be determined at the detailed engineering and design stage associated with respective subdivision applications and development permit applications.

6.4.2 Off-Site Levy Requirements

The developer of the land will provide off-site levy contribution and required studies/ criteria complying with the *Town of Stony Plain's Off-Site Levy Bylaw* and *Servicing Master Plan*. Since the policies will

be amended from time to time, the detail of required studies/criteria will be determined prior to any redistricting or subdivision.

6.4.3 Soil Balance

The developer of the land will work with the Town to ensure that stripping and stockpiling of top soil is done in a responsible manner to mitigate potential impacts on adjacent neighbours. A soil management strategy will be prepared for each part of the development.

6.4.4 Soft Infrastructure

Soft infrastructure considerations in lieu of the new *Municipal Government Act* are not presently part of the Town's Off-Site Levy Bylaw but may be included in the future. Therefore, at the time of preparing this document no pertaining infrastructure has been required by the Town for the ASP area. This will be reassessed during the redistricting and subdivision of each development stage.

6.4.5 Hydraulic Network Analysis Report

A Hydraulic Network Analysis Report will be prepared in order to confirm the pipe size required for each part of the development. *Figure 10.0* shows the conceptual layout and pipe size of the water distribution system proposed for the ASP area.

6.4.6 Stormwater Management Report

A Stormwater Management Report will be prepared in order to confirm stormwater infrastructure design and requirements for each part of the development. *Figure 11.0 Conceptual Storm Servicing Plan* shows the conceptual layout of the stormwater system proposed for the ASP area.

6.4.5 Future Stages

A shadow concept will be required at each stage of development to provide an understanding of the details of subsequent stages. This will help inform decision making to ensure adequate water and sanitary servicing, stormwater management and road access points for emergency services are provided.

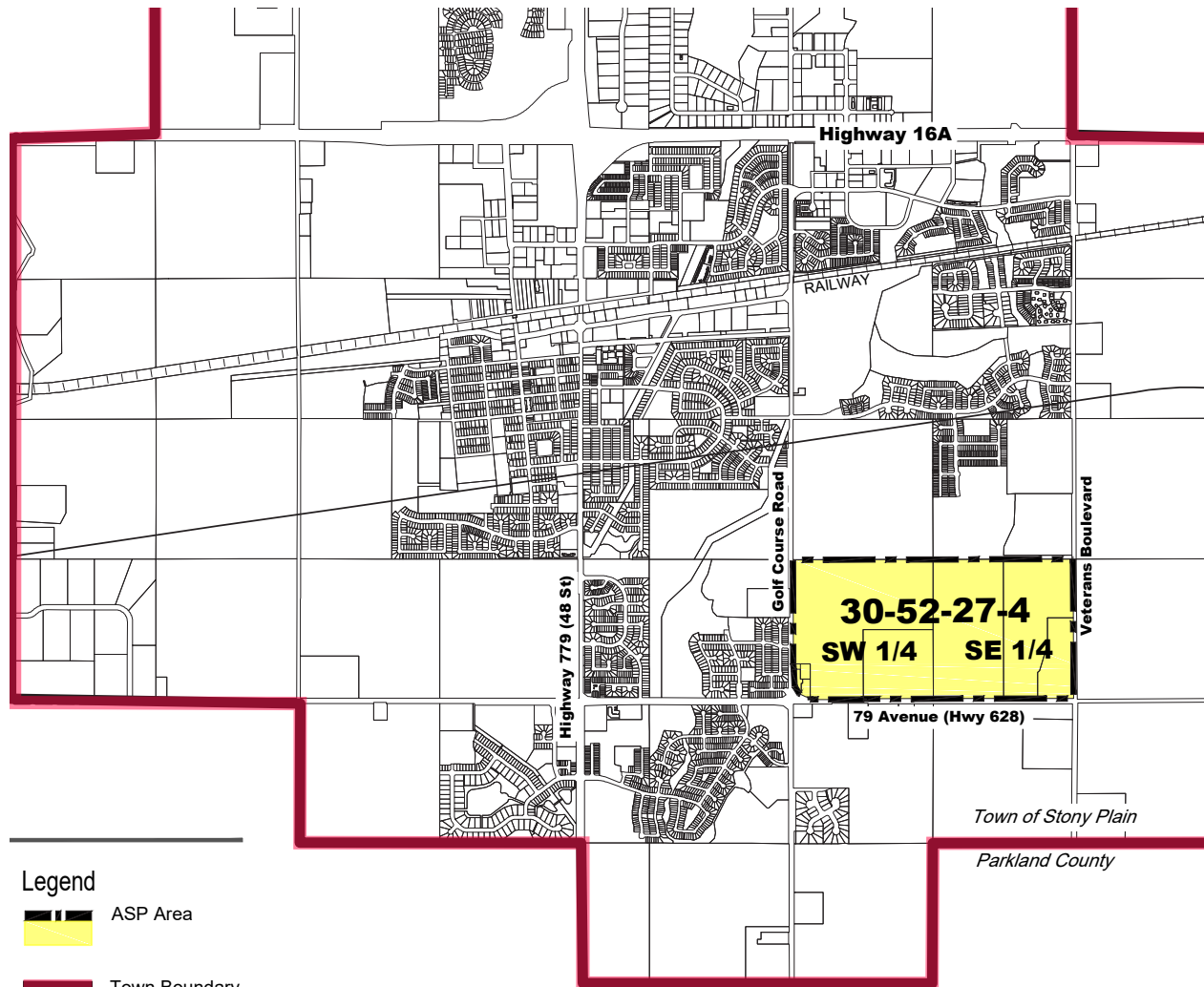
6.5 Atim Creek Realignment

The realization of Atim Creek realignment requires *Alberta Environment and Parks (AEP)* to review and approve the realignment plan with supporting technical studies, assessments and supplementary information. Required major permits include *Approval of Water Act* and *Disposition Approval of Public Lands Act*. Other permitting considerations may include *Fisheries Act*, *Fisheries and Oceans Canada (DFO) Project Review* and *Fisheries (Alberta) Act* and *Fish Research License* for fish rescue during construction. In addition, supplementary information and assessments, such as *Fish Habitat Assessment*, *Restoration Plan* or *Hydrologic Assessment*, may also be requested by AEP agencies as part of the application.

The next step will be to refine a Realignment Plan with required information and submit the Atim Creek Realignment applications for AEP's review and approval.

APPENDIX A - FIGURES

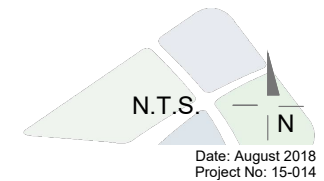
Figure 1.0	Location Map
Figure 2.0	Planned Context Map
Figure 3.0	Existing Conditions Map
Figure 4.0	Plan Area Map
Figure 5.0	Existing Surrounding Land Uses Map
Figure 6.0	Development Concept Map
Figure 7.0	Transportation Plan
Figure 7.1	Transportation Overlay Pending Municipal Authority of Highway 628
Figure 8.0	Parks and Open Space Map
Figure 9.0	Conceptual Sanitary Servicing Plan
Figure 10.0	Conceptual Water Servicing Plan
Figure 11.0	Conceptual Storm Servicing Plan
Figure 12.0	Staging Plan

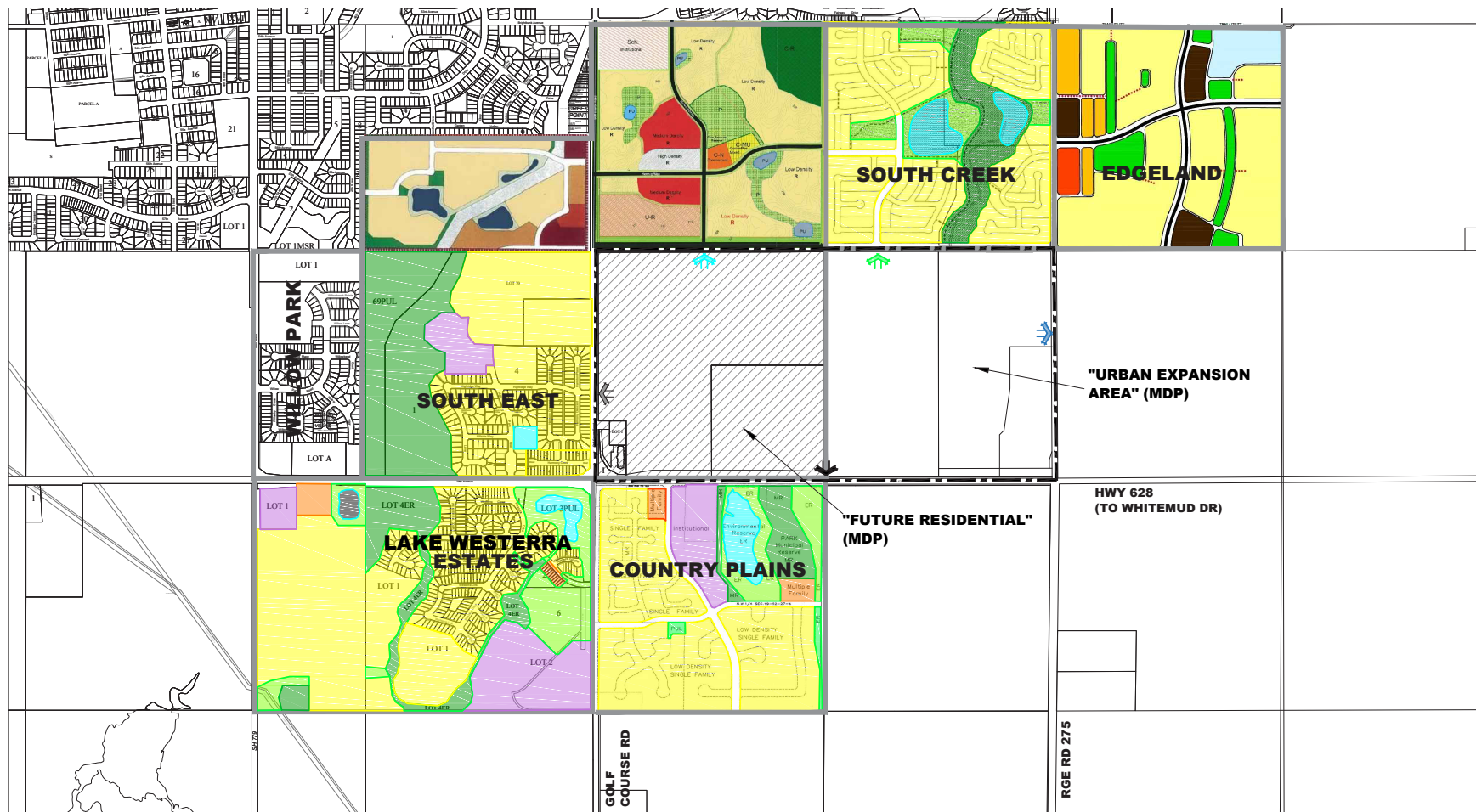


Legend

-  ASP Area
-  Town Boundary

Figure 1.0
Location
Tussic ASP
Stony Plain, Alberta





Legend

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Park/Open Space
- Institutional
- Stormwater Management Facility
- Park/Municipal Reserve

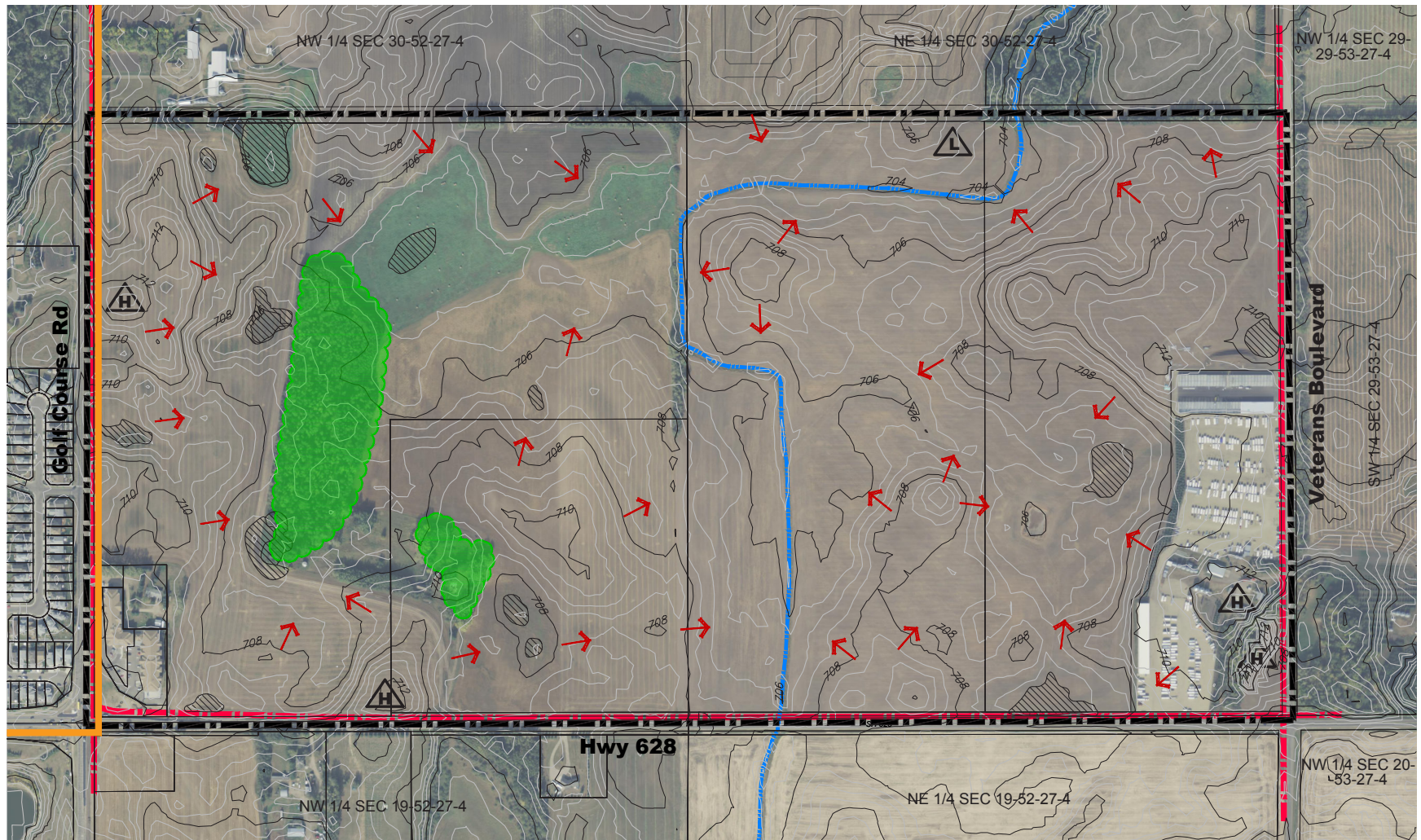
- Portion Repealed from South East ASP
- Tussic ASP Boundary
- Potential Collector Road Linkage to Veterans Boulevard
- Potential Collector Road Linkage to South Creek Drive
- Potential Collector Road Linkage to Harvest Drive
- Potential Collector Road Linkage to Highridge Way
- Potential Collector Road Linkage to South of HWY628



Figure 2.0
Planned Context
Stony Plain ASP Qualico
 Stony Plain, Alberta



Date: August 2018
 Project No: 15-014



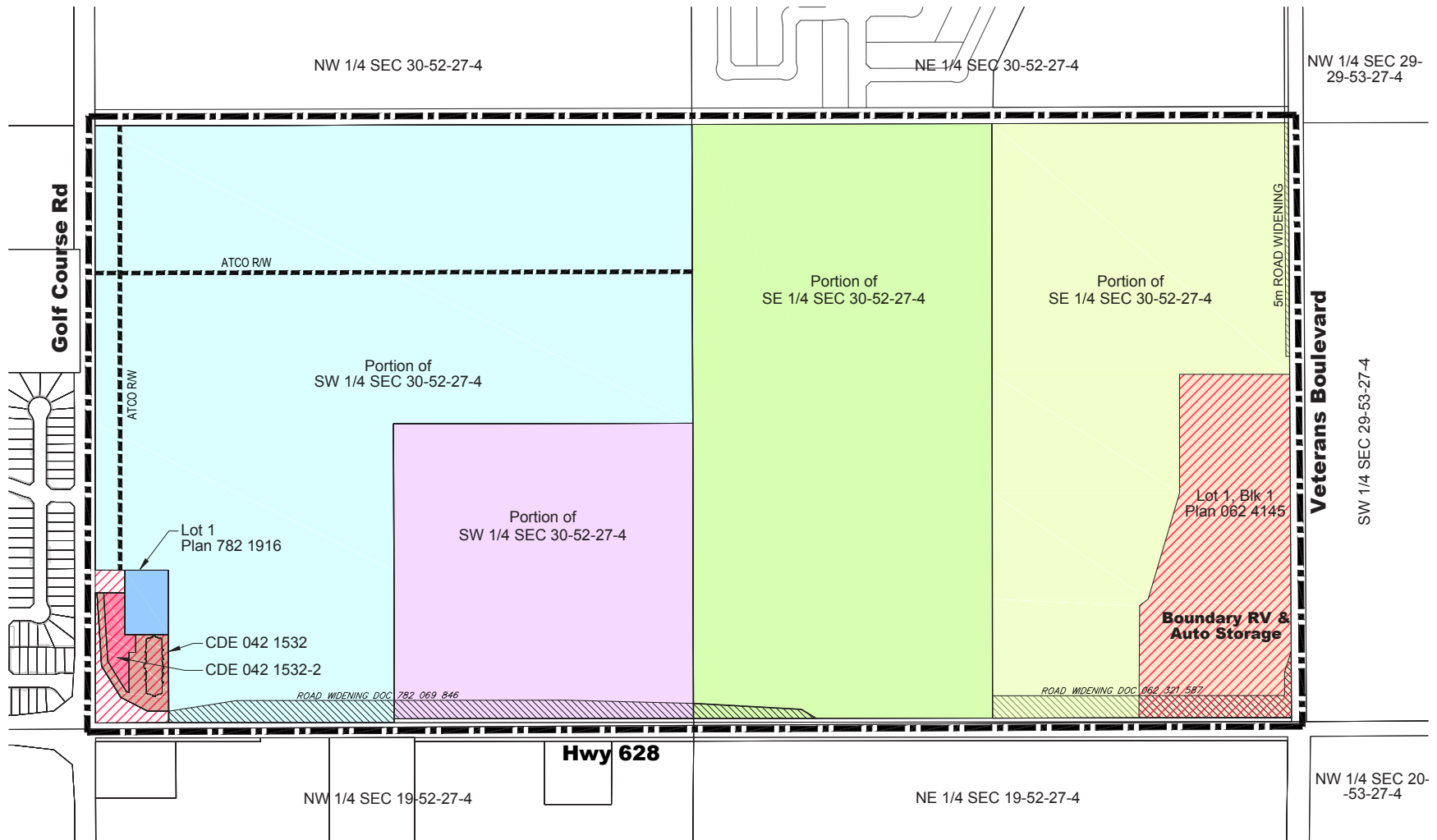
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- | | | | |
|--|----------------|--|--|
| | ASP Boundary | | Direction of Overland Drainage |
| | Low / Wet Area | | Major Contours (2.0m interval) |
| | High Point | | Minor Contours (0.5m interval) |
| | Low Point | | Town of Stony Plain Existing Multi-Use Trail |
| | Treed Area | | Overhead Power |
| | | | Existing Atim Creek |

Figure 3.0
Existing Conditions
Tussic ASP
 Stony Plain, Alberta



Date: August 2018
 Project No: 15-014



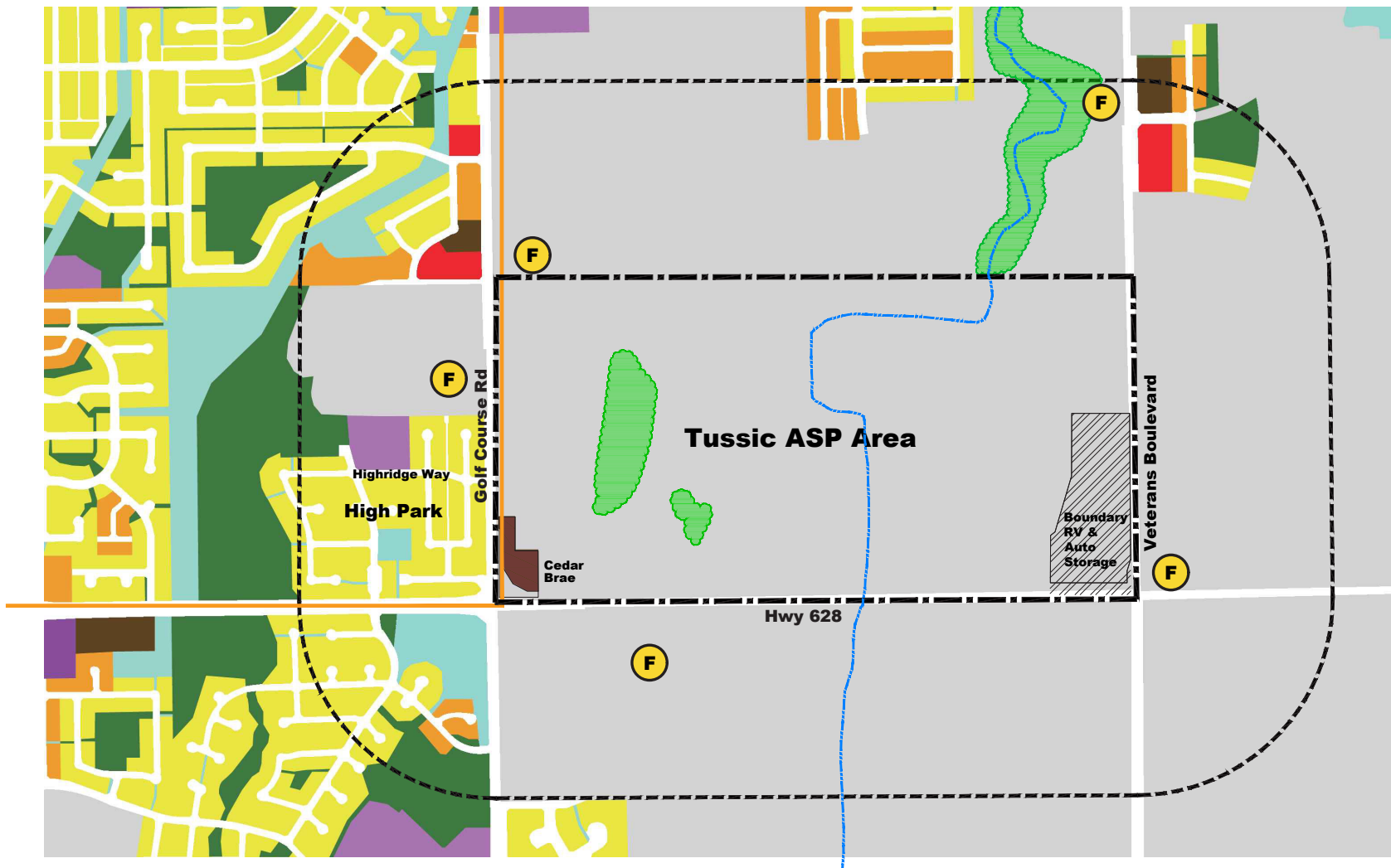
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	ASP Boundary		Portion SW $\frac{1}{4}$ Sec 30-52-27-4		Portion SE $\frac{1}{4}$ Sec 30-52-27-4
	Atco ROW		Portion SW $\frac{1}{4}$ Sec 30-52-27-4		Portion SE $\frac{1}{4}$ Sec 30-52-27-4
	Existing Building		Lot 1, Plan 782 1916		Lot 1, Blk 1, Plan 062 4145
	Road Widening		CDE 042 1532-2		
	Non Participating Lands		CDE 042 1532		

Figure 4.0
Plan Area
Tussic ASP
Stony Plain, Alberta



Date: August 2018
Project No: 15-014



Legend

- ASP Boundary
- 500 m surrounding ASP Boundary
- Existing Atim Creek
- Treed Area
- (F) Existing Farmstead

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Park/Open Space
- Park/Municipal Reserve

- Stormwater Management Facility
- Future Development
- Institutional
- Existing Boundary RV and Auto Storage Site
- Existing Multi-Use Trail

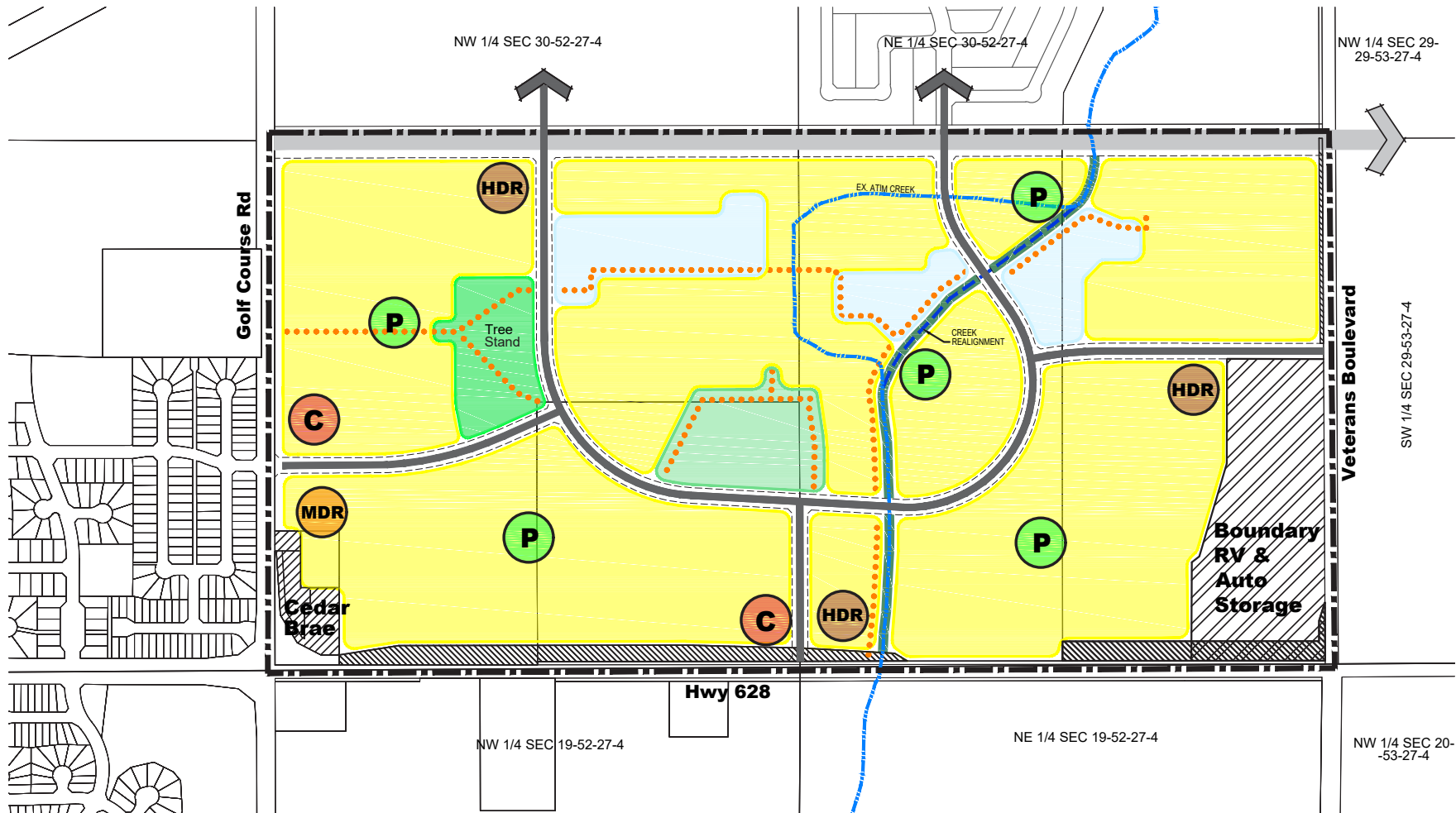
Existing and Surrounding Land Uses Map

Tussic ASP
Stony Plain, Alberta



Date: August 2018
Project No: 15-014





Legend

ASP Boundary	Environmental Reserve (ER)	Collector Road
Low to Medium Density Residential	Stormwater Management Facility / PUL	Aterial Road
Potential Medium Density Residential Location	Park / Open Space / Greenway (MR)	Road Widening
Potential High Density Residential Location	School (MR)	Existing Cedar Brae Site
Potential Commercial Location	Proposed Atim Creek Realignment	Existing Boundary RV and Storage Site
Potential Pocket Park Location	Existing Atim Creek	
	Proposed Multi-Use Trail	

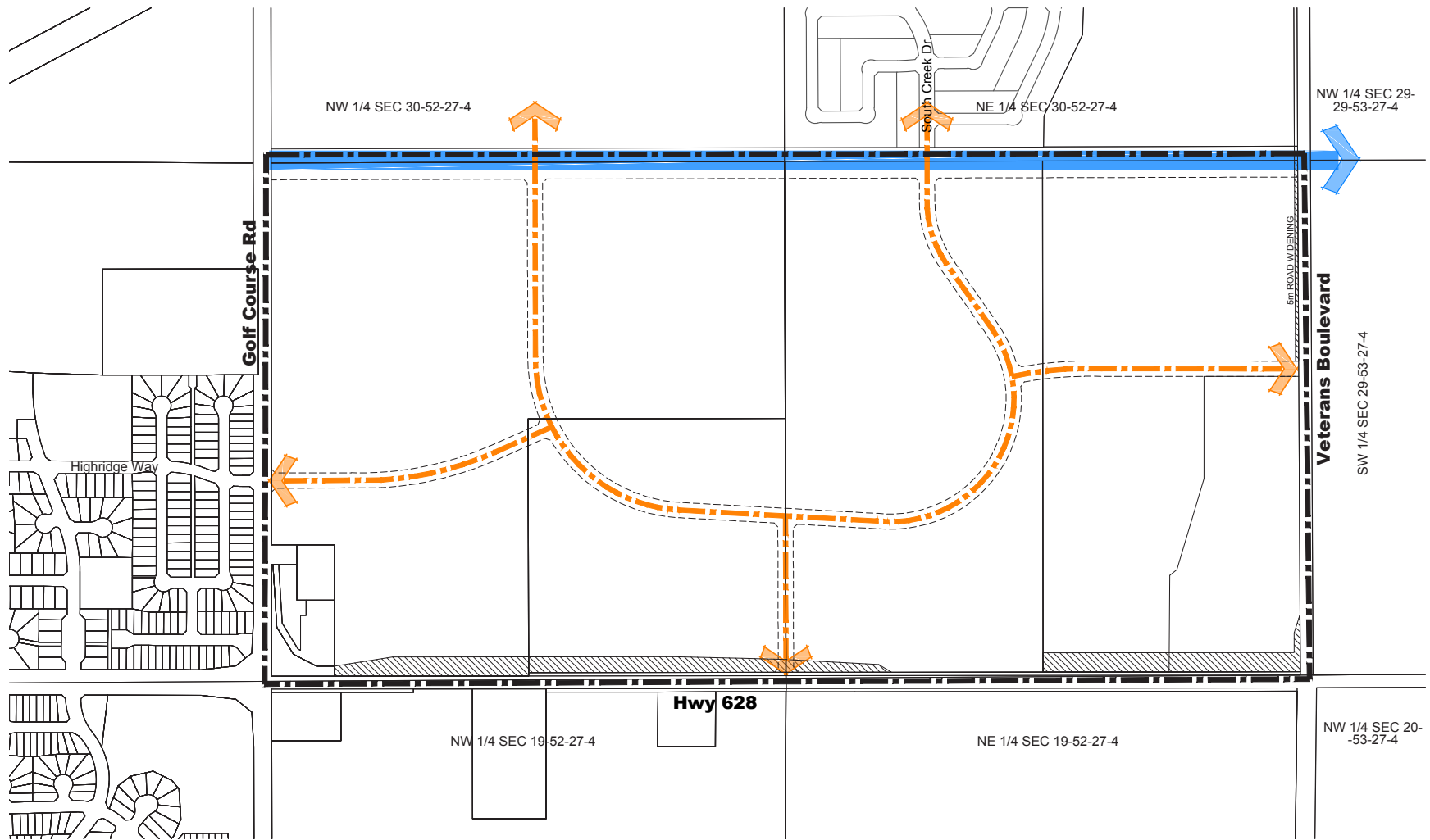
*Note: The Boundary RV and Auto Storage Site could be residential or commercial for future development



Figure 6.0
Development Concept
Tussic ASP
Stony Plain, Alberta



Date: January 2019
Project No: 15-014



Legend





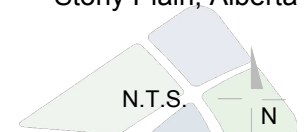
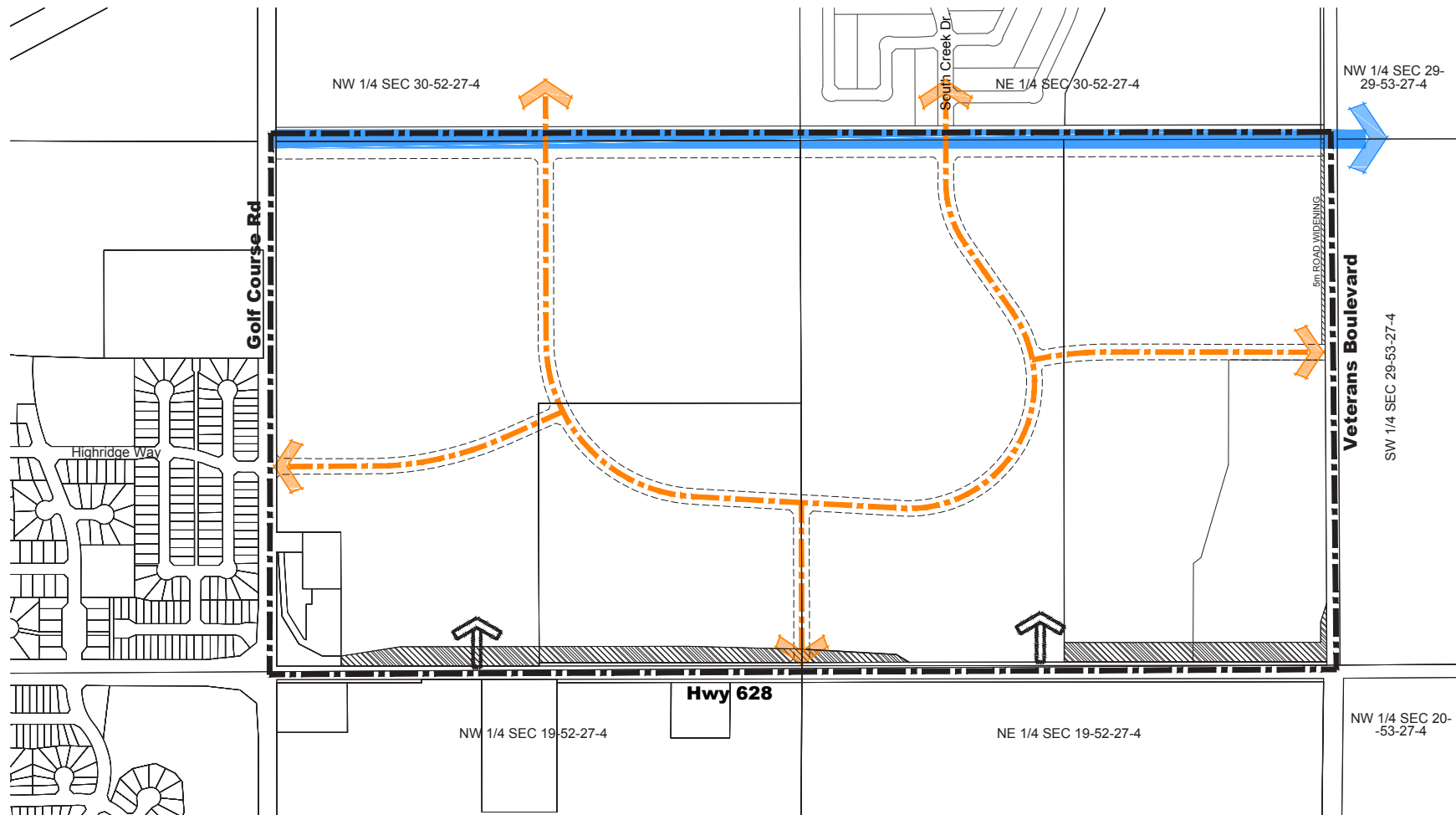
-  ASP Boundary
-  Aterial Road
-  Collector Road
-  Road Widening

Figure 7.0
Transportation Plan
Tussic ASP
 Stony Plain, Alberta



Date: August 2018
 Project No: 15-014



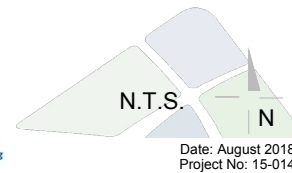
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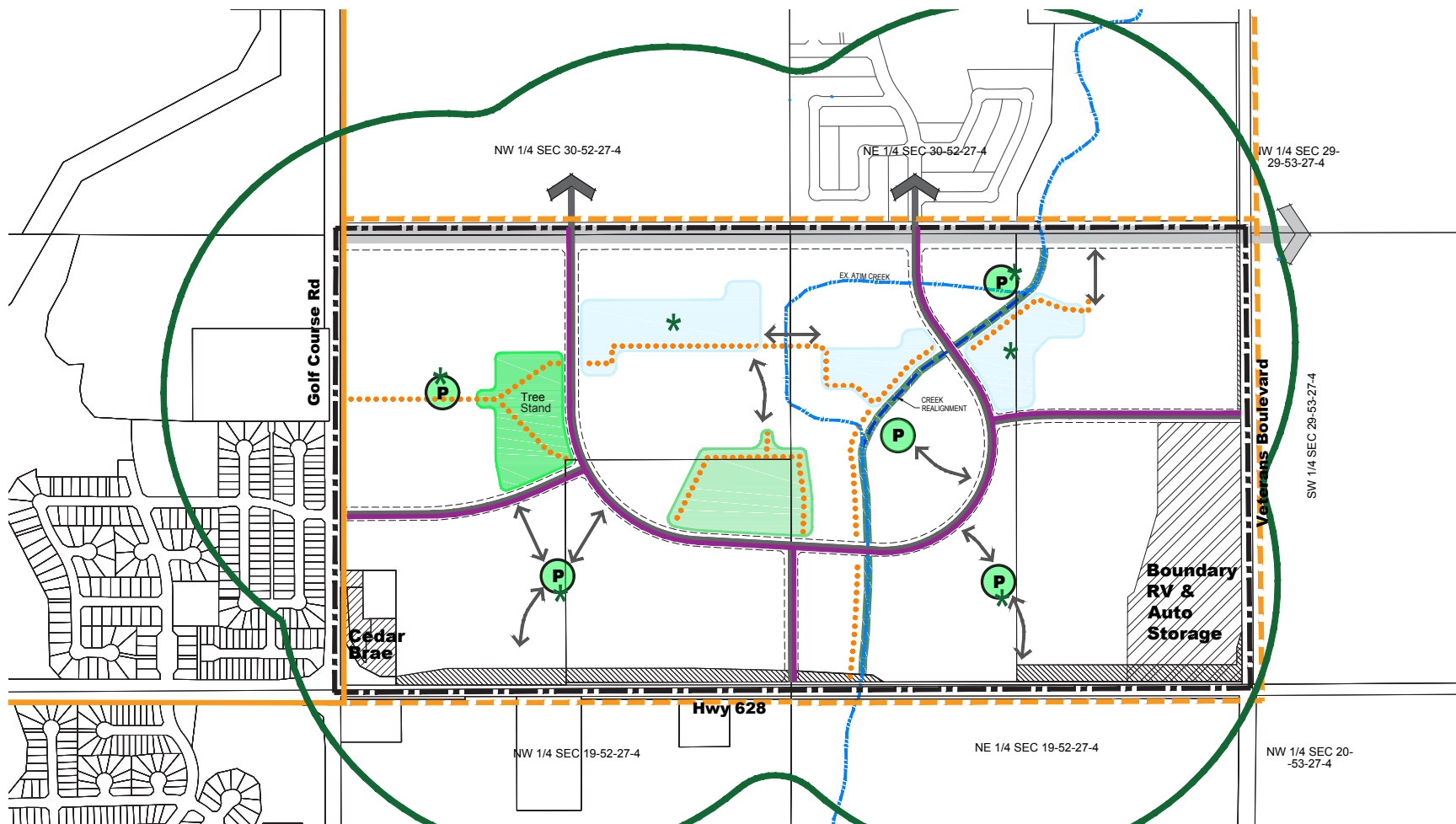
-  ASP Boundary
-  Arterial Road
-  Collector Road
-  Road Widening
-  Potential Future Secondary Access

* Note: Potential Future Secondary Access location is conceptual and, if warranted, may be subject to change at the detailed design stage.

Figure 7.1
Transportation Overlay Pending
Municipal Authority of Highway 628

Tussic ASP
Stony Plain, Alberta





Legend

- ASP Boundary
- Environmental Reserve (ER)
- Stormwater Management Facility / PUL
- Park / Open Space / Greenway (MR)
- School (MR)
- 500 m Distance
- * Centre of the 500 m Distance



Potential Pocket Park Location

- Collector Road
- Pedestrian Linkages
- Aterial Road
- Road Widening
- Existing Cedar Brae Site
- Existing Boundary RV and Storage Site

*Note: The Boundary RV and Auto Storage Site could be residential or commercial for future development

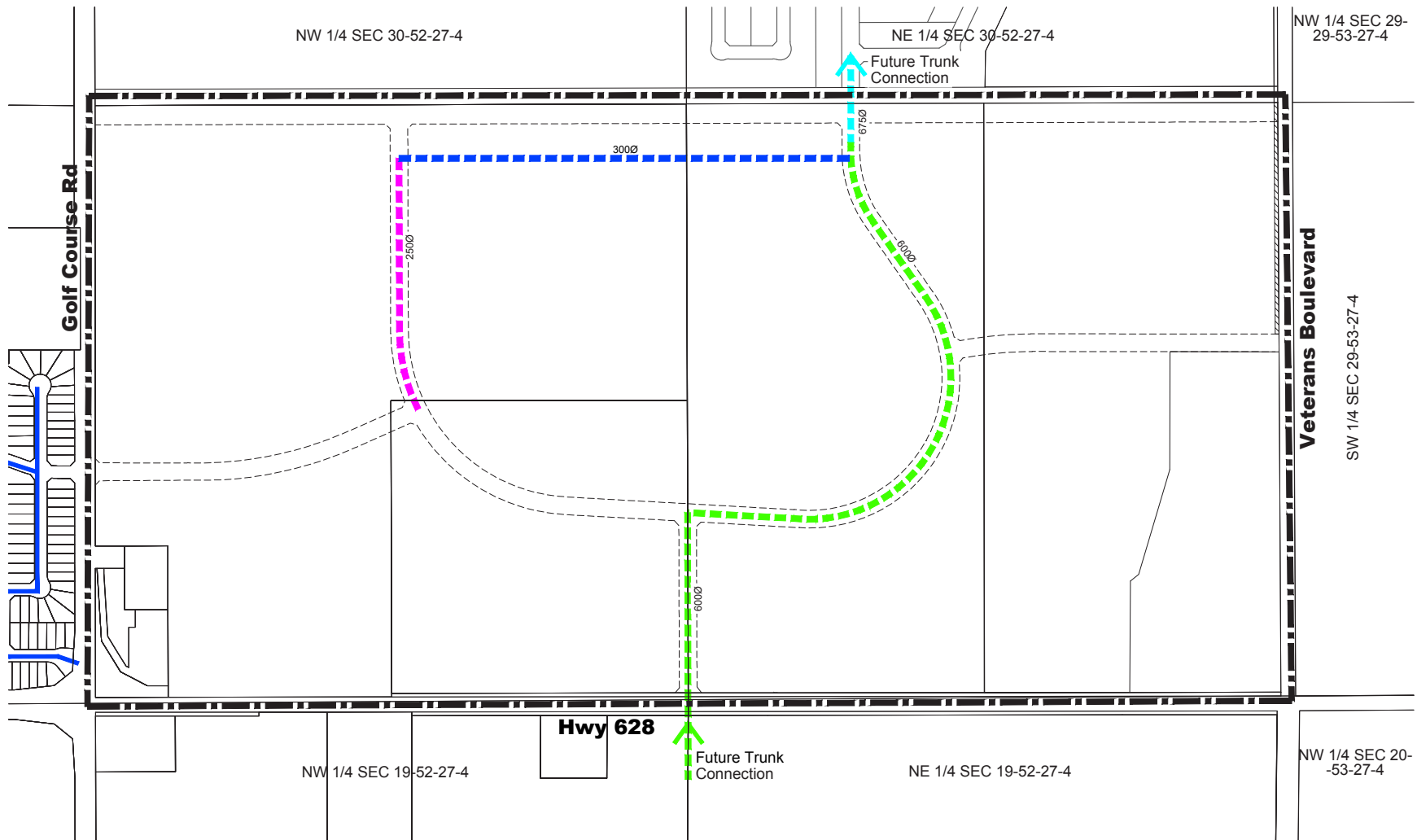
- Town of Stony Plain Existing Multi-Use Trail
- Town of Stony Plain Proposed Multi-Use Trail
- ... Proposed Multi-Use Trail
- Proposed Atim Creek Realignment
- Existing Atim Creek
- <--> Walkway Connection

Figure 8.0
Parks and Open Space

Tussic ASP
Stony Plain, Alberta



Date: August 2018
Project No: 15-014



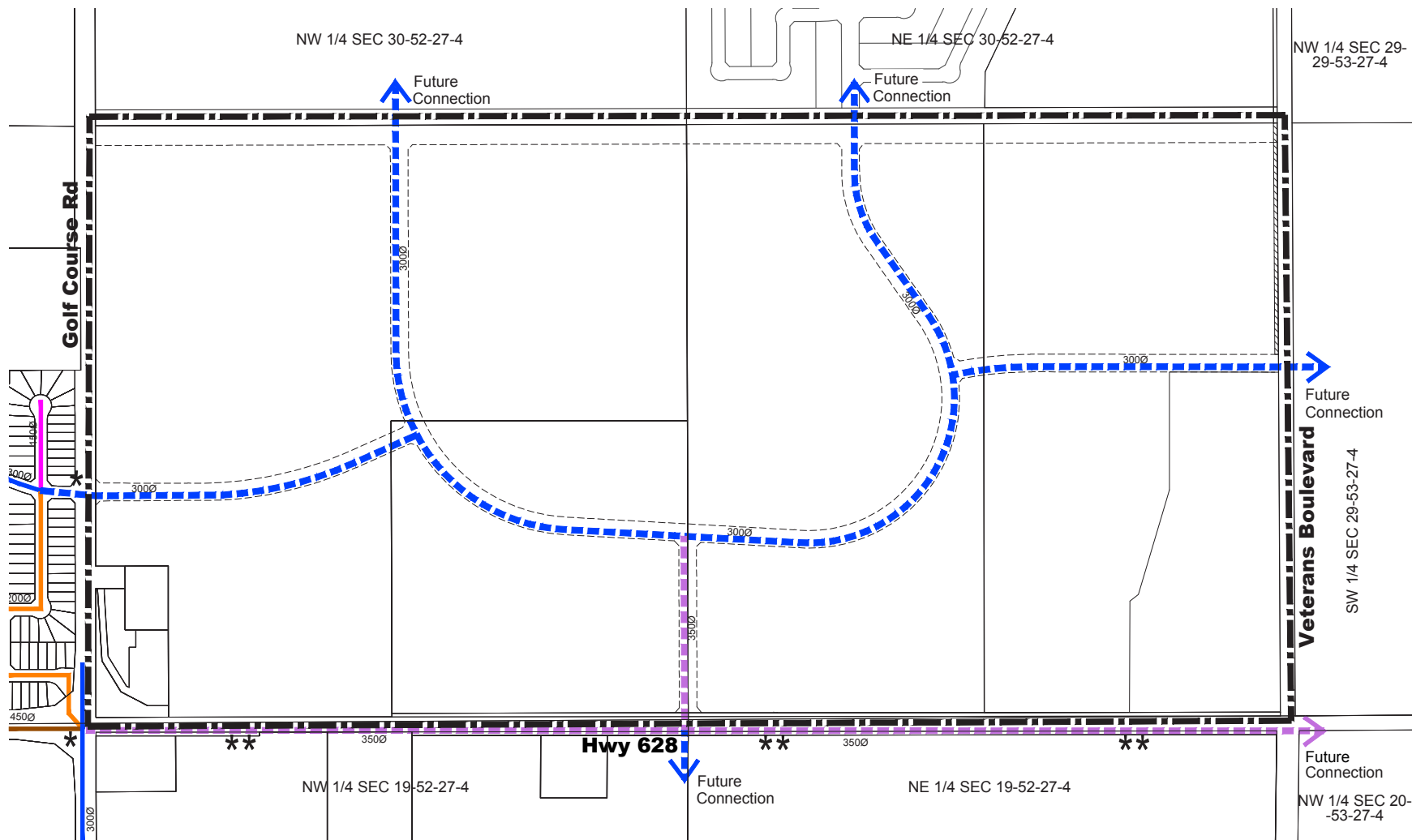
Legend

- ASP Boundary
- Existing 200mmØ Sanitary Sewer
- Proposed 250mmØ Sanitary Sewer
- Proposed 3000Ø Sanitary Sewer
- Proposed 6000Ø Sanitary Sewer
- Proposed 6750Ø Sanitary Sewer

*Based on the Town of Stony Plain
Sanitary Collection System - Master Plan Update
January, 2008

Figure 9.0
Conceptual Sanitary Servicing Plan
Tussic ASP
Stony Plain, Alberta





Legend

- ASP Boundary
- Existing 150mmØ Watermain
- Existing 200mmØ Watermain
- Existing 300mmØ Watermain
- Existing 450mmØ Watermain

- Proposed 300mmØ Watermain
- Proposed 350mmØ Watermain
- * Connect to Existing Distribution System
- ** Design as per the Town of Stony Plain Master Plan

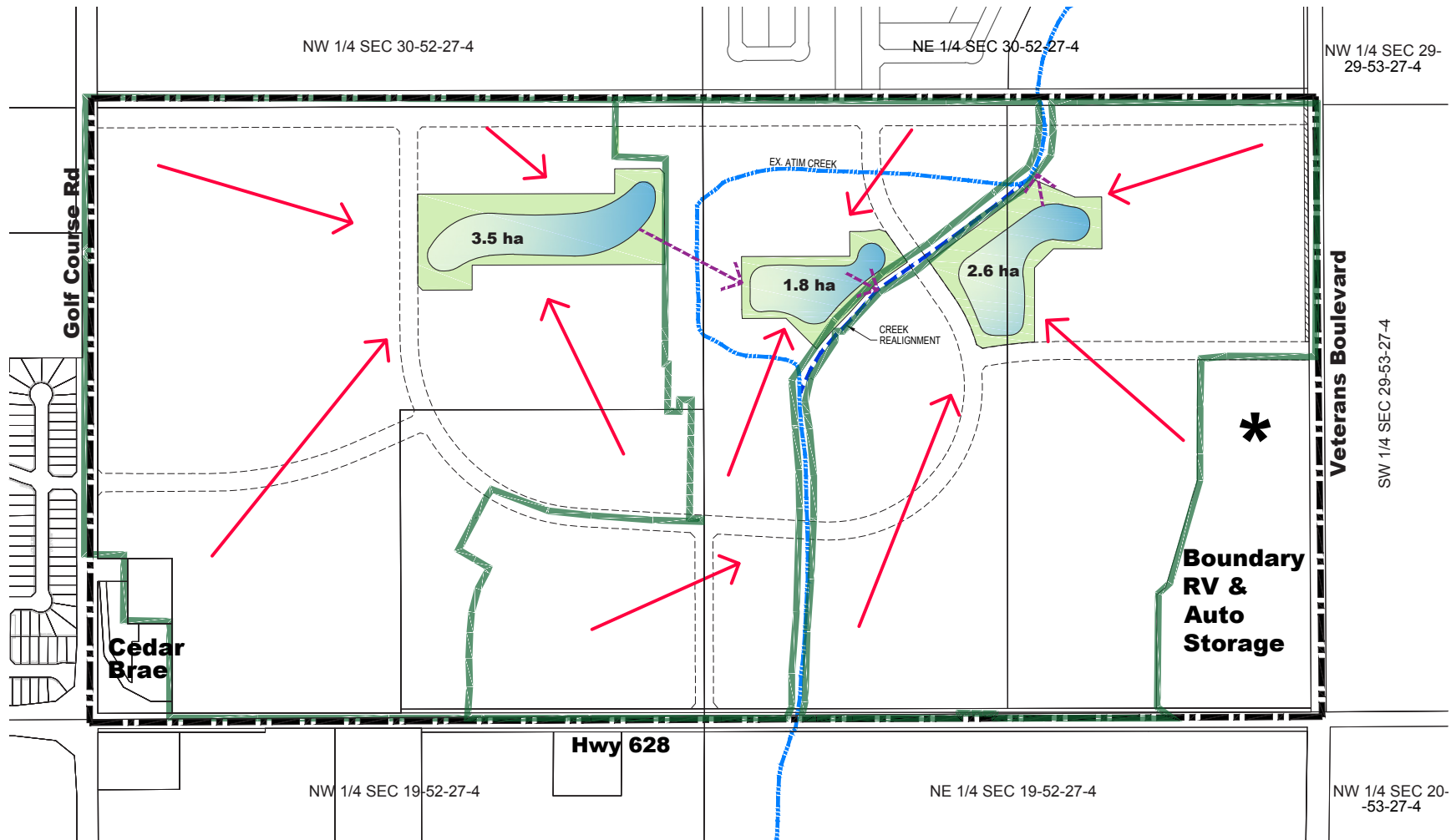
*Based on the Town of Stony Plain
Water Distribution System - Master Plan Update
January, 2008

Figure 10.0 Conceptual Water Servicing Plan

Tussic ASP
Stony Plain, Alberta



Date: August 2018
Project No: 15-014



Legend

- ASP Boundary
- Catchment Area
- Proposed Atim Creek Realignment
- Existing Atim Creek
- Proposed SWMF
- ➔ Direction of Flow
- ➔ Outfall to the Creek

* Boundary RV & Auto Storage is responsible for its stormwater management on site

Figure 11.0
Conceptual Storm Servicing Plan
Tussic ASP
 Stony Plain, Alberta



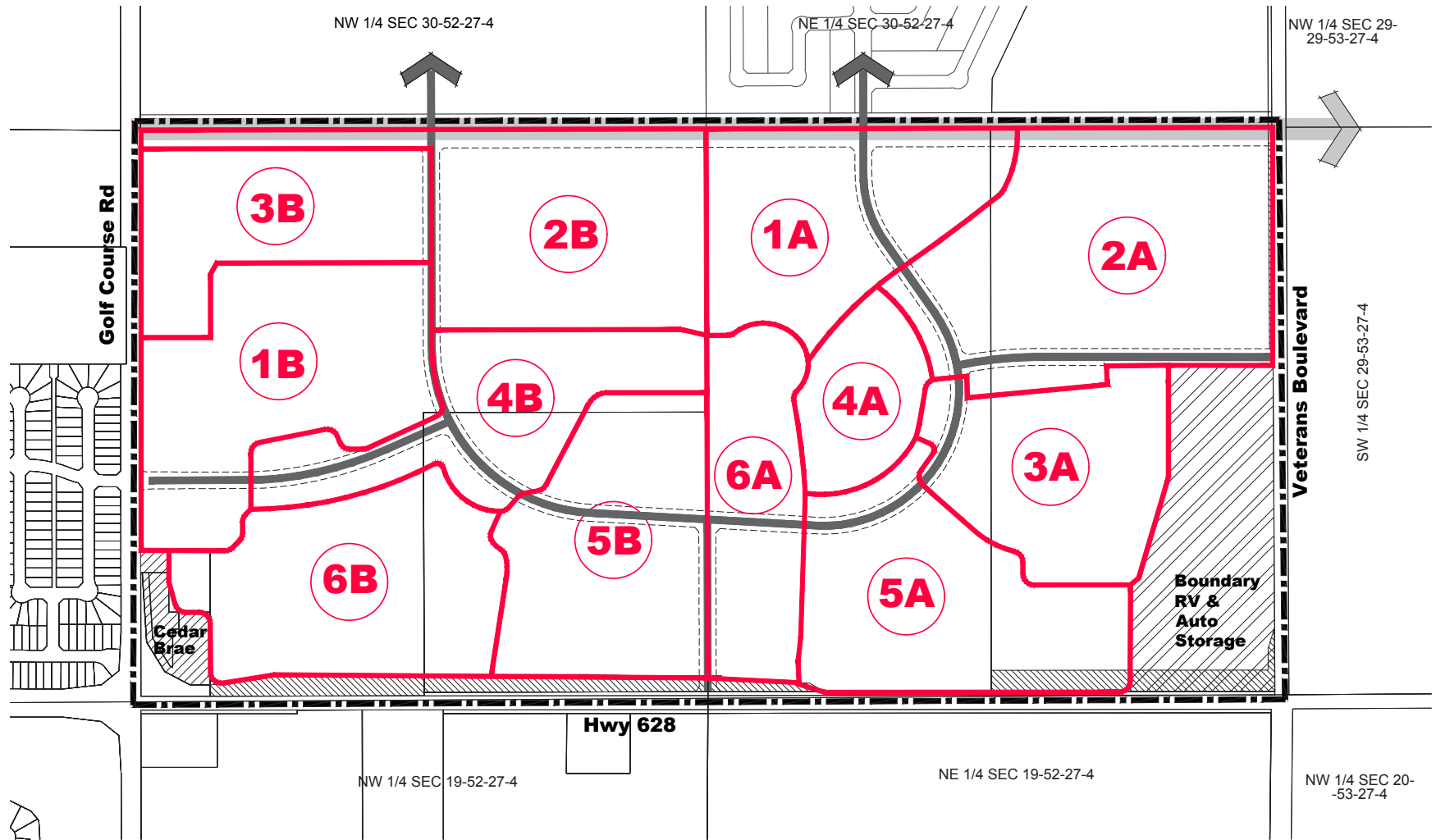


Figure 12.0
Staging Plan
Tussic ASP
Stony Plain, Alberta

APPENDIX B - STATISTICS

Table 1.0 Land Use and Population Statistics

Table 2.0 Student Generation Count

Table 1.0 Land Use and Population Statistics

	Hectares	% of GDA
GROSS AREA	128.63	
Arterial Road (including widening)	4.39	
Highway 628 (including widening)	4.39	
Environmental Reserve (ER)	1.28	
Existing High-Density Residential (Cedar Brae)*	1.00	
Existing Boundary RV & Auto Storage Ltd.**	7.40	
Total	18.46	
GROSS DEVELOPABLE AREA (GDA)	110.17	
Circulation	28.50	25.9%
Potential Commercial	2.18	2.0%
Parks/ School / Open Space / Greenway (MR)	11.02	10.0%
Stormwater Management Facilities / PUL	8.03	7.3%
Total Non-Residential Area	49.73	45.1%
Net Residential Area *	60.44	54.9%

RESIDENTIAL LAND USE AREA, DWELLING UNIT & POPULATION COUNT						
(Calculation of Total Residential includes the existing 113 units in a 1.0 hectare of Cedar Brae land with 2 persons/ unit)						
	Area (ha)	% of GDA	Units / ha	Units	Population	Persons/Unit
Low to Medium Density***	55.14	50.0%	28	1,685	5,054	3.0
Potential Medium Density Residential beside Cedar Brae	2.00	1.8%	45	90	216	2.4
Potential High Density Residential	3.30	3.0%	80	264	528	2.0
Total Residential*	61.44			2,152	6,024	

SUSTAINABILITY MEASURES

Population Per Net Hectare	98.04
Dwelling Units Per Net Residential Hectare (UPNRHA)*	35.02 ♦
Population(%) within 800 m of Public Transit	100%

Note:

♦ The Edmonton Metropolitan Region Growth Plan requires a minimum residential density of 35 dwelling units per net residential hectare.

* The existing High-Density Residential, Cedar Brae Development, is not included in the GDA. But it is included in the calculation of Total Residential Units and Population under UNIT & POPULATION COUNT and the calculation of UPNRHA under SUSTAINABILITY MEASURES.

** Existing Boundary RV & Auto Storage Ltd. Land could be residential or commercial for future development. It is not included in the GDA or the calculation of UPNRHA.

*** It is anticipated that, among the total area of 55.14 ha of Low to Medium Density, Low Density area (single detached and semi-detached) will occupy approximately 85% of the total area at a density of 28 u/ ha , while Medium Density area (town housing) will occupy approximately 15% of the total area at a density of 45 u/ ha.

Table 2.0 Student Generation Count

	K-6	Junior High	Senior High	Total Students
Public System	533	227	227	986
Separate System	287	122	122	531
Total Students	819	349	349	1517
Student Distribution	54%	23%	23%	100%
Public/Separate Ratio = 65/35				