THE CITY OF SPRUCE GROVE

BYLAW C-1348-24

WEST CENTRAL AREA STRUCTURE PLAN AMENDMENT - LEGACY RIDGE

WHEREAS, pursuant to the *Municipal Government Act*, RSA 2000 cM-26, a municipality may adopt and may amend an area structure plan;

AND WHEREAS, the City of Spruce Grove wishes to amend Bylaw C-1016-17, the West Central Area Structure Plan;

NOW THEREFORE, the Council for the City of Spruce Grove, duly assembled, hereby enacts as follows:

- 1. Bylaw C-1016-17, the West Central Area Structure Plan, be amended as outlined in Schedule 1 which is attached to and forms part of this Bylaw.
- 2. This amending bylaw shall be consolidated into Bylaw C-1016-17.

First Reading Carried

3. This bylaw shall come into force and effect when it receives third reading and is duly signed.

Thist Reading Carried	31 ebitary 2023
Public Hearing Held	10 March 2025
Second Reading Carried	10 March 2025
Third Reading Carried	10 March 2025
Date Signed	10 March 2025
	Mayor
	City Clerk

CITY OF SPRUCE GROVE

WEST CENTRAL

AREA STRUCTURE PLAN AMENDMENT

2025



SCHEDULE 1

Table of Contents

Table	of Conte	ents	ii
1.0	Introd	luction	1
	1.1	Purpose	1
	1.2	Amendment Location	1
	1.3	Statutory Plans	1
		1.3.1 Edmonton Metropolitan Region Growth Plan1.3.2 The Shape of Our Community: Municipal Development Plan	1 2
2.0	Propo	sed Amendment	3
	2.1	Land Use	4
		2.1.1 Residential2.1.2 Open Spaces2.1.3 Institutional2.1.4 Highway Commercial	4 5 6 6
	2.2	Transportation and Infrastructure	6 6
	2.3	Land Use Statistics	8
3.0	Amen	dment Rationale	
	3.1	Residential/Commercial/Institutional	
	3.2	Open Space	
	3.3	Servicing & Transportation	
List of	3.4 f Tables	Staging	11
	Table	1: Existing Land Use Statistics	8
	Table	2: Proposed Land Use Statistics	9
List of	f Figures		
	Figure	1: Approved Land Use Concept	12
	Figure	2: Proposed Land Use Concept	13
	Figure	3: Stormwater Management	14
	Figure	· 4: Sanitary Servicing	15
	Figure	5: Water Network	16

1.0 Introduction

1.1 Purpose

The purpose of this amendment is to revise Bylaw C-1016-17, the West Central Area Structure Plan (ASP), to update the development concept and related figures to create a more efficient and functional plan based on additional technical analysis and updated planning considerations.

1.2 Amendment Location

The proposed ASP amendment area in Spruce Grove affects the remaining undeveloped lands within the West Central Area Structure Plan located within the SE-5-53-27-W4M and SW-5-53-27-W4M. This site is located south of Spruce Ridge and the developing Copperhaven neighbourhood within the West ASP, north of Highway 16A, west of Jennifer Heil Way, and east of Range Road 275 (Boundary Road).

1.3 Statutory Plans

The amendment to the West Central Area Structure Plan has been completed in alignment with higher order statutory plans, meeting the density requirements and overall visions in these documents.

1.3.1 Edmonton Metropolitan Region Growth Plan

The Edmonton Metropolitan Region Growth Plan (EMRGP) came into effect in October 2017 and was amended in January 2020. This plan sets target densities for greenfield development as well as overall objectives and policies and land use for the Edmonton Metropolitan Region. The minimum target density is 35 du/nrha for greenfield residential development within the City of Spruce Grove.

Through this amendment, the overall ASP residential density changes slightly from 38.1 du/nrha to 39.4 du/nrha, continuing to meet and exceed density targets. Additional land use planned for town housing helps to meet the objectives within the plan by promoting a diverse range of housing options while continuing to be a complete community with opportunities to live, work, and play within the ASP plan area.



1.3.2 The Shape of Our Community: Municipal Development Plan

The City of Spruce Grove's Municipal Development Plan (MDP), The Shape of Our Community, was adopted on September 9, 2024. The MDP outlines a community vision and directs growth and change throughout the City. This proposed amendment continues to align with the future land uses outlined in Map 6 of the MDP and overall objectives, goals, and policies of the MDP.

Specifically, this amendment aligns with the Connection policies, by providing ample and equitably distributed amenity and open space within the community to meet residents needs and contribute to a high quality of life. This includes the retention of the identified environmentally significant natural area in the plan area. In addition, the housing variety created within the proposed amendment will provide more housing choice and a range of affordability within the neighbourhood.



2.0 Proposed Amendment

This amendment to the West Central (ASP) includes an update to the land use concept and land use statistics to reflect the following proposed changes to the plan:

- Change the alignment/intersection of Mcleod Ave and Range Road 275 to match the Range Road 275 Functional Study and ensure no conflicts with the Transmountain pipeline that intersects the plan area. This road alignment also requires reconfiguration of some of the adjacent residential land uses.
- Straighten the western north/south collector road to allow for grid style and efficient development.
- Reallocate the medium density housing that was previously on the collector road
 intersection on the east portion of the plan to provide row housing development along
 Mcleod Avenue. This provides street-oriented development in the plan area that provides
 an active urban residential streetscape across from commercial land uses.
- Adjust the shape of the central stormwater management facility and shift further east to meet servicing needs while allowing for more efficient and connected layout of residential uses.
- Add an additional storm pond to the western portion of the plan area to allow for cost
 effective servicing within the plan area and an efficient tie-in to adjacent neighbourhood
 servicing. This provides an additional amenity space for residents and can help to support
 the water balance of the adjacent Municipal Reserve natural treed area.
- Adjust school/park allocated on the eastern portion of the plan to fit into residential area
 redesign that was completed based on changes to road alignments. Resize the future
 school site in the eastern portion of the plan to align with required Municipal Reserve
 allocation requirements and overall plan MR considerations. Consultation with the School
 Board to determine needs along with a fit study have been completed to determine size
 requirements of the site.
- Reconfigure and expand the west park to integrate with the revised land uses and road layout.
- There is no identifiable need for institutional land use in the plan area. The institutional site has been removed from the plan and replaced with residential land uses to increase the opportunity for housing within the neighbourhood. There is an existing church located directly north within Copperhaven.

2.1 Land Use

2.1.1 Residential

This proposed amendment will continue to support a range of housing densities and building forms, providing choice for future homebuyers that fit a variety of lifestyles and budgets. The amendment creates additional housing forms through adding blocks of street-oriented rowhouse along collector roadways, providing an active streetscape and transitional density between the commercial and lower density residential areas of the plan. Five Mixed Medium to High density sites are planned, with four located south of Mcleod Avenue on the eastern and western sides of the neighbourhood, and one located north of Mcleod Avenue on the western side of the neighbourhood, that provide additional opportunity for diverse housing forms within the neighbourhood and synergy with the adjacent commercial land uses.

2.1.1.1 Low to Medium Density Residential

The changes to the collector road network of the plan allow for a more efficient and connected modified grid layout of local roads in the low to medium density areas. Low to medium density residential uses continue to be located north of McLeod Avenue, which provides separation from commercial uses. Permitted uses within the low-density district of the City's Land Use Bylaw allow for single detached, semi-detached, duplex and row house dwellings. Where low density housing forms are not contemplated within the current Land Use Bylaw, a Direct Control district could be created to provide opportunities for new and innovative housing designs, such as front-back semi-detached housing or shallower and narrower lots to keep up with trends and market demands. The proposed land use changes result in a change in low to medium density area from 33.4 ha to 26.4 ha. While this appears to be an overall decrease, to ensure accuracy the proposed statistics now include measured local road areas for the undeveloped areas in the circulation statistics. In previous versions of the ASP, the collector roads and local roads for the developed Legacy Park residential area were accounted for in the circulation statistics totaling 8% of the Gross Developable Area (GDA), however it appears that the local roads in the undeveloped residential areas were not accounted for and were grouped into the Low to Medium Density Residential land use area. Using area measurements, the overall Circulation land use increased by 7.2 ha in the proposed ASP statistics. Taking this into consideration, the proposed Low to Medium density land use areas remains comparable to approved Low to Medium density land use areas.

2.1.1.2 Medium to High Density Residential

The amendment proposes changes in location and size of the Mixed Medium to High density sites to work with the updated Mcleod Avenue alignment that curves north. Mixed Medium to High density land uses are located with access from collector roadways, providing convenient access to future transit routes and commercial uses. The plan proposes to distribute density throughout the neighbourhood by creating street-oriented row housing along the north side of McLeod Avenue and the west side of Copperhaven Drive. 3.5 ha of land is planned to be developed as street oriented row housing, and 5.4 ha is planned as Medium to High density sites. Five Medium to High Density sites are planned within the neighbourhood that provide opportunity for housing diversity, including the potential for multi-unit dwellings in close



proximity to amenities. The overall allocation of Medium to High density residential area in the plan changes from 9.2 ha to 8.9 ha. The projected density for street oriented housing is 44 dwelling units per net residential ha, and an average density of 90 dwelling units per net residential ha for the Medium to High Density residential sites. The identified density of 67.5 dwelling units per residential ha within the Medium to High Density Residential destination accounts for the variety of housing forms.

2.1.2 Open Spaces

Changes to the open space network include reallocation of MR dedication through changes to the size of parks and open spaces and the addition of a new Stormwater Management Facility. There is no change to the area (ha) provided as Municipal Reserve.

2.1.2.1 Park/Open Space

The reconfigured park in the west provides a programmable recreation space for future residents and is located near Medium to High density residential uses.

The approved school site has been reduced in size. Consultation with the Parkland School Board has been completed to determine site needs for the school site in the east. Based on being nearby community amenity space and striving for right sizing school sites that provide less maintenance cost while still providing the recreational amenity space required for students, an adjustment was made to the site to reduce the size from 5.2 ha to 3.7 ha. All the programming needs can be met within this proposed adjusted park space. The revised school/MR site can accommodate an efficiently designed school site, with room for a building pocket, parking and drop-off, field spaces, playgrounds, courtyards and trails required to service a K-9 school.

2.1.2.2 Stormwater Management Facilities

Two Stormwater Management Facilities (SWMF) were previously approved in the ASP area to accommodate the required stormwater drainage. Through more detailed engineering analysis and review of site grading, it was found that adding a third SWMF in the western portion of the plan would create efficiencies in costs for stormwater drainage and site grading. This also results in an additional amenity space that can be utilized for residents in the western portion of the plan and provides an integrated larger open space area and potential hydrologic support for the vitality of the adjacent retained natural tree stand.

The size of the proposed SWMF is 1.9 ha. The central SWMF is reduced by 1.1ha in size and reshaped for efficient capacity and local road layout. These changes result in a 0.7 ha increase in SWMF area and a decrease in the Low to Medium Density Residential.

Trails are planned around portions of the SWMF to allow for public access and enjoyment.

2.1.2.3 Natural Area

In the northern portion of the ASP area, the upland native forest stand that was noted to be an Environmentally Significant Area in the MDP will continue to be retained and dedicated as Municipal Reserve in this amendment. Additional MR has been proposed to provide strategic vistas and access to the Natural area from surrounding roads. This increases the size of the tree stand park from 5.2 ha to 6.0 ha. A trail system along the west and northeast edges of the tree



stand is proposed to connect people with nature and align with the MR plans to the West ASP to the north. Trail material, width and alignments will be reviewed through subdivision of the natural area in consultation with City staff. Following further study, revisions to the trail alignment, or internal trails may be requested by the City with no need to amend the ASP.

2.1.3 Institutional

No identified institutional use has been planned for the area. The currently approved Institutional area will be eliminated and the 1.6 ha area converted to Mixed Low to Medium Density Residential and other land uses such as SWMF allocation.

2.1.4 Highway Commercial

The Highway Commercial use has increased by 1.1 ha due to the realignment of Mcleod Avenue.

2.2 Transportation and Infrastructure

2.2.1 Roadway Network

The road network has been updated to realign McLeod Avenue to Range Road 275, based on the Functional Road Study completed and to ensure that there are no conflicts with the Trans Mountain pipeline that intersects with the plan area. Additionally, minor changes to north and south collectors have been proposed to straighten the road network and residential blocks which improves general connectivity and development efficiency.

The hierarchy of collectors and potential local roadways is intended to facilitate the efficient movement of vehicular traffic and provide connections to neighbouring land uses. Roadways will be designed to meet City of Spruce Grove engineering design standards.

Transit service can be accommodated along the collector roads. This meets the 400-meter maximum walking distance for all residents to transit service within the West Central plan area. Transit stop locations will be determined at the time of subdivision.

A transportation access management plan may be required for Mcleod Avenue at the time of subdivision.

Figure 2 identifies the major trail alignments through the plan area. Depending on changes to local road patterns, trail connections not identified on Figure 2 may be required by the City to enhance pedestrian connectivity. These connections may be considered with future detailed subdivisions.

2.2.2 Servicing and Infrastructure

An additional Stormwater Management Facility (SWMF) will be constructed in the northwest portion of the plan area and flows from the western portion of the plan will be directed to this area. This SWMF will discharge at a controlled rate through the Copperhaven minor system located on Copperhaven Drive to the Copperhaven SWMF. A portion of the stormwater flows from the northwest portion of the neighbourhood will flow directly to the Interconnecting



Storm Trunk that connects the west SWMF to the Copperhaven neighbourhood. The remaining plan area storm flow will be directed to proposed east stormwater management facilities and beyond as per the approved ASP. Surface water within the upland native tree stand currently drains at grade to the north into future Copperhaven and will continue to do so. A drainage course for the tree stand will be identified in the West Area Structure Plan.

The overall sanitary and water servicing for the lands within this amendment remains consistent with the ASP and has been adjusted to align with the updated road network. Figures 4, 5, and 6, have been updated to illustrate the servicing concepts with the revised stormwater management system and transportation network. A small portion on the west side is proposed to discharge to Copperhaven neighbourhood along Copperhaven Drive as this area is too low to be serviced to the trunk on the east side of the trees.

The identified area for Public Utility Lots (PUL) has increased by 0.1 ha to accommodate an additional PUL adjacent the west park area and the updated PULs around the central SWMF.



2.3 Land Use Statistics

The approved Land Use Statistics are included as Table 1 and updates to these statistics that reflect the concept changes are presented in Table 2. The approved statistics for Roads (internal circulation) are significantly lower than the proposed circulation as the proposed statistics include local roads for non-developed residential areas, providing a more accurate representation of overall land use. The overall residential density of the ASP increased from 38.1 to 39.4 du/nrha.

Table 1: Existing Land Use Statistics

Land Use	Hectares	%
Gross Area	119.5	
Boundary Road Widening	1.2	
Jennifer Heil Way Road Widening	0.5	
Trans Mountain Oil Pipeline	0.6	
Northwestern Utilities Gas Pipeline	0.2	
Gross Developable Area	117.2	100%
Municipal Reserve	11.7	10.0%
Roads (internal Circulation)	9.1	7.8%
Stormwater Management Facilities	6.1	5.2%
Public Utility Lots	0.2	0.2%
Highway Commercial	45.6	38.9%
Institutional	1.6	1.4%
Total Non-Residential Area	74.4	63.0%
Net Residential Area (NRA)	42.6	37.0%

Residential Land Use, Dwelling Unit Count and Population

Land Use	Area (ha)	Units/ ha	Units	% of NRA	People/ Unit	Population
Mixed Low to Medium Density Residential	33.4	30	1003		2.8	2807
Mixed Medium to High Density Residential	9.2	67.5	618		2.2	1360
Total Residential	42.6		1621			4167

Population Density

2.8 person/unit person per net residential hectare Low/Medium

Medium/High Density 2.20 person/unit

Residential Density

Low/Medium 30 dwelling units per net residential hectare Medium/High Density 67.5 dwelling unit per net residential hectare

OVEALL RESIDENTIAL DENSITY 38.1 du/nrha



Table 2: Proposed Land Use Statistics

Land Use	Hectares	%
Gross Area	119.5	
Boundary Road Widening	1.2	
Jennifer Heil Way Road Widening	0.4	
Trans Mountain Oil Pipeline	0.6	
Northwestern Utilities Gas Pipeline	0.2	
Gross Developable Area	117.1	100%
Municipal Reserve	11.7	10.0%
Roads (internal Circulation)	16.3	14.0%
Stormwater Management Facilities	6.8	5.8%
Public Utility Lots	0.3	0.2%
Highway Commercial	46.7	39.9%
Institutional	0.00	0%
Total Non-Residential Area	81.9	69.9%
Net Residential Area (NRA)	35.2	30.1%

Residential Land Use, Dwelling Unit Count and Population

Residential Land Ose, Dwelling Offit Count and Population						
Land Use	Area (ha)	Units/ ha	Units	% of NRA	People/ Unit	Population
Mixed Low to Medium Density Residential	26.4	30	791	75%	2.8	2214
Mixed Medium to High Density Residential	8.9	67.5	599	25%	2.2	1319
Total Residential	35.2		1390			3533

Population Density

Low/Medium 2.8 person/unit person per net residential hectare

Medium/High Density 2.20 person/unit

Residential Density

30 dwelling units per net residential hectare Low/Medium Medium/High Density 67.5 dwelling unit per net residential hectare

OVERALL RESIDENTIAL DENSITY 39.4 du/nrha

3.0 Amendment Rationale

The West Central ASP was most recently amended by Council as Bylaw C-1334-24 in July 2024 to change a portion of the commercial area to Mixed Medium to High Density Residential. Previous approval was in March 2018 as Bylaw C-1016-17 with Legacy Park already built along the east boundary of the plan. While the newly approved residential have begun development activity in the west portion of the plan south of Mcleod Avenue, the remaining lands have not been developed. With new analysis on servicing, updated supporting information, and a move to more efficient grid pattern roadways to facilitate current housing products and needs, an amendment is required. The changes support the direction for compact, complete, and efficient development with appropriate densities as outlined in higher order statutory plans.

3.1 Residential/Commercial/Institutional

The plan continues to allow for the development of a mix of residential uses within the plan area to support a well-balanced neighbourhood with a variety of housing options available for residents. The changes allow for increased housing diversity with the addition of row housing that orients development to the street along Mcleod Avenue. The row housing also acts as a transitional building form from commercial to residential uses, and the associated laneways allow for abundant parking on the street. Some modifications to the Stormwater Management Facility and road network improve the low-density areas of the plan by allowing efficient grid or modified grid development. The plan amendment also considers the recent addition of Mixed Medium to High density residential sites south of existing residential in the eastern portion of the plan area. Mixed Medium to High density sites are appropriately distributed along the major transportation corridors so future residents have convenient access to transportation options and neighbourhood amenities.

These changes continue to support the original planning direction provided in the approved West Central ASP which highlights that development should consider physical and human made site constraints, land use compatibility, using a grid or modified grid where possible, fronting buildings onto local roadways, and the potential for buildings to front onto Collector roadways, Parks and Open Space.

The commercial area was planned to serve local and regional customers, and the amendment leaves the commercial area largely unchanged.

No identified need for the institutional site previously allocated in the plan has been found and this land use has been removed from the plan to allow additional residential uses to meet high demand for housing in Spruce Grove.



3.2 Open Space

Residential neighbourhoods dedicate MR as park space to provide recreational and natural space amenity for residents. An additional Stormwater Management Facility in the west provides more amenity space for residents to enjoy and is complementary to the retained natural area. The proposed western park site provides a public open space in an area with higher residential density for residents to enjoy recreation with many options for programming and gathering. This park space could also be used by commercial workers and visitors from the south.

The tree stand that is noted to be an Environmentally Significant Area in the MDP, has been maintained with increased Municipal Reserve planned in strategic locations to allow for vistas into the natural area and access for residents. A formal trail is planned to allow residents to enjoy the natural area in conjunction with access from the Stormwater Management Facility.

The planned school site is reduced in size, however it will continue to meet recreational needs and identified school needs within the area. A site that is appropriately sized for school activities creates less maintenance for open areas that are underutilized. A north/south trail is provided along the back of existing residential lots in Legacy Park to provide connection and minimize disruption to the existing residents. A trail continues to be planned to link the school site to the Fuhr South Park and TransAlta Tri-Leisure Centre to the north.

3.3 Servicing & Transportation

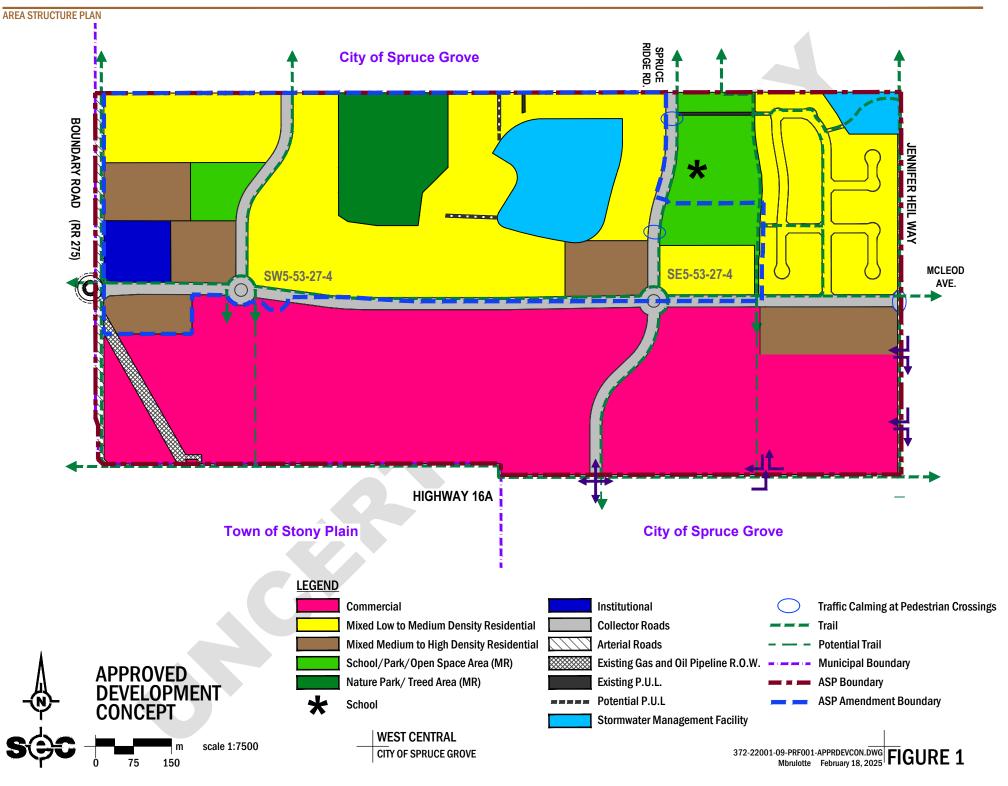
Through detailed engineering review, it was determined that an additional stormwater management facility would be beneficial for the area and the central stormwater facility could be updated to a smaller size and regular shape to facilitate efficient development of the surrounding lands.

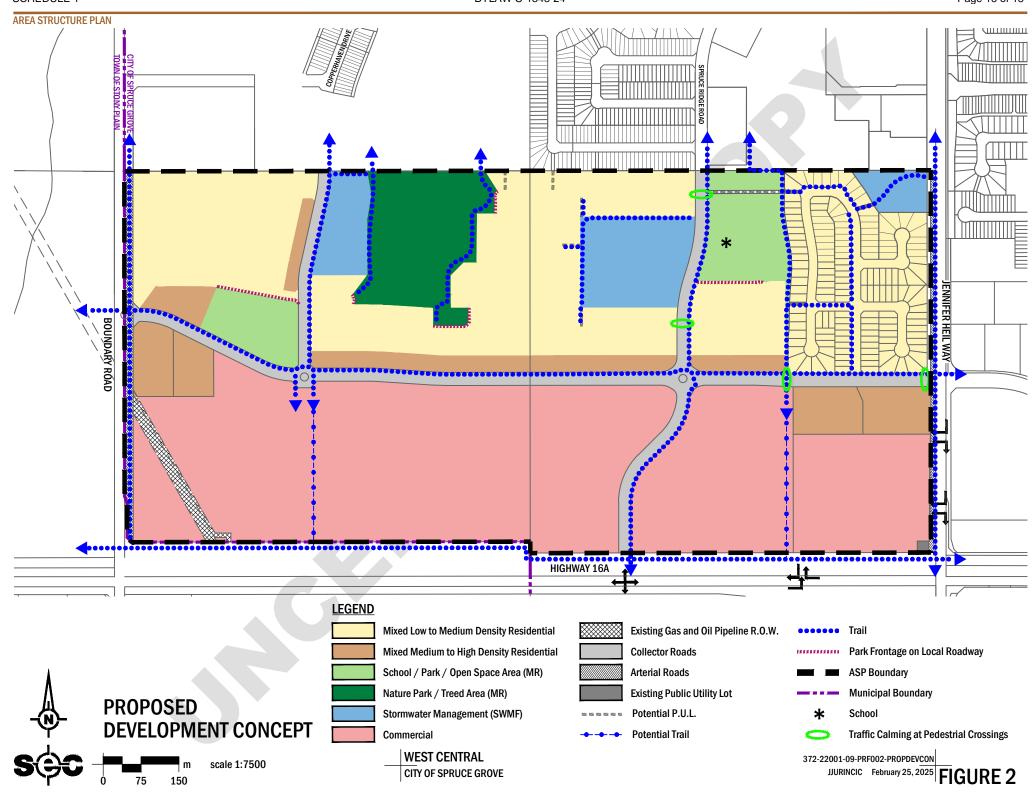
The proposed updates to the road networks support improved connectivity through a modified grid system while maintaining safety features such as the roundabouts to control speed and traffic flow. Revised roads align with the recent functional road study for Range Road 275 and servicing plans are updated to follow the road network.

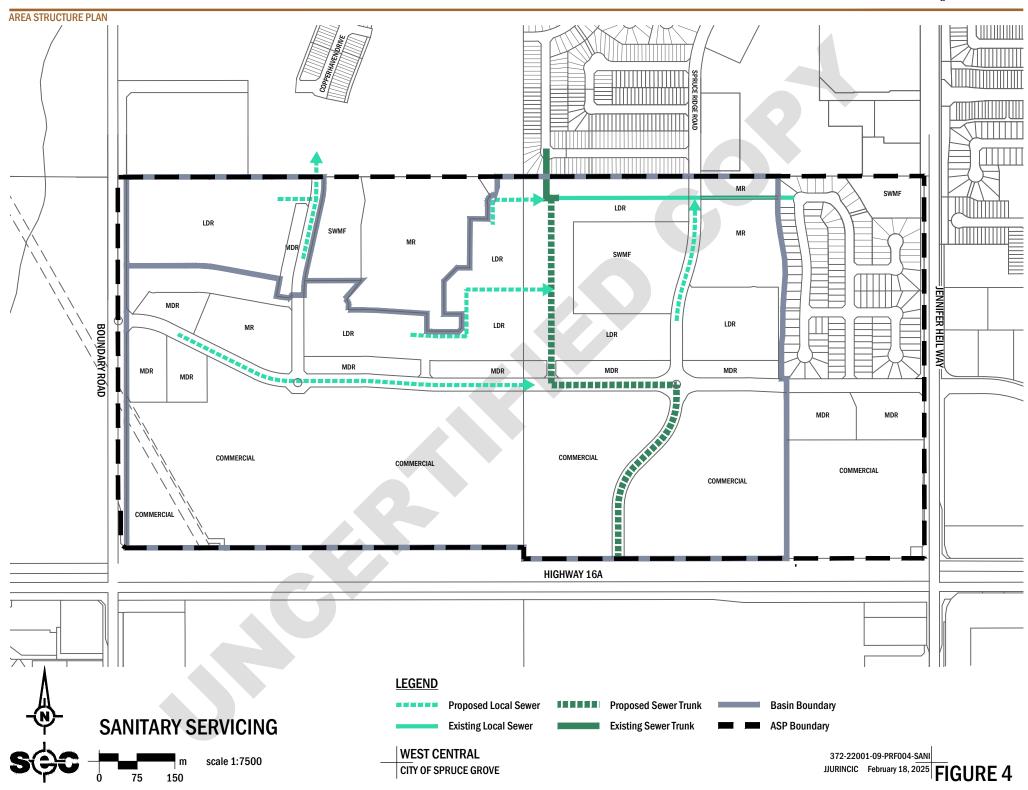
3.4 Staging

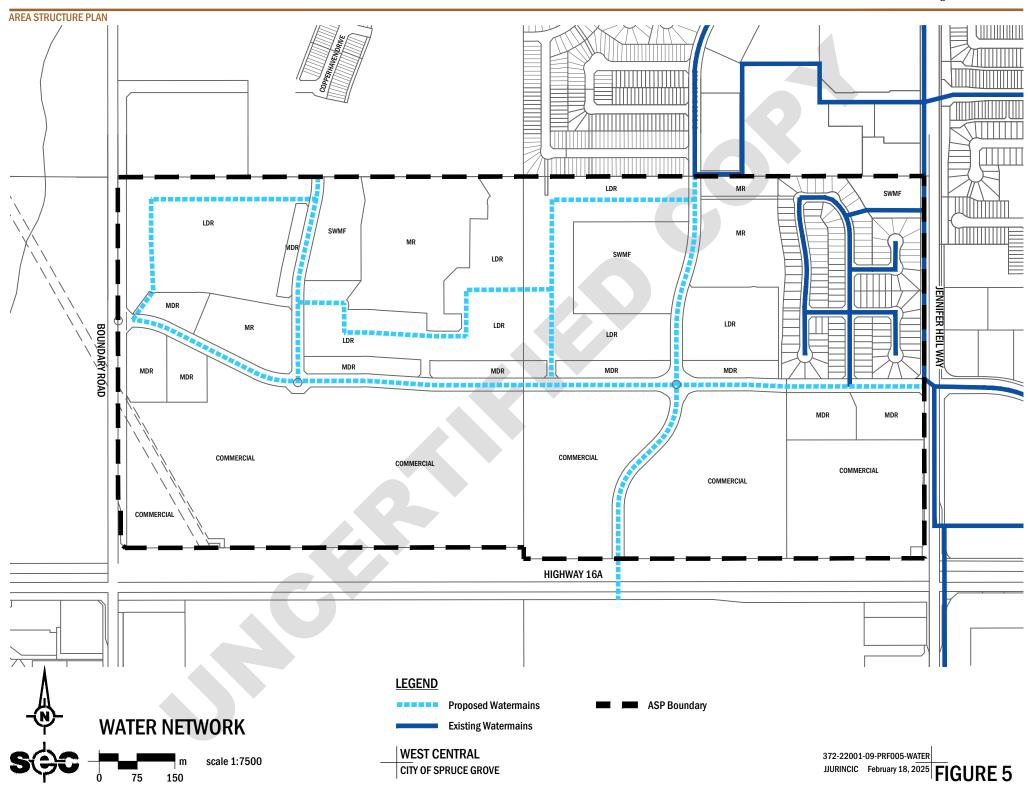
The proposed staging aligns with the current approved ASP with development extending contiguously from existing services and roadways in the east part of the plan towards the west.











THE CITY OF SPRUCE GROVE

BYLAW C-1334-24

WEST CENTRAL AREA STRUCTURE PLAN AMENDMENT - LEGACY PARK RESIDENTIAL ADDITION

WHEREAS, pursuant to the *Municipal Government Act*, RSA 2000 cM-26, a municipality may adopt and may amend an area structure plan;

AND WHEREAS, the City of Spruce Grove wishes to amend Bylaw C-1016-17, the West Central Area Structure Plan;

NOW THEREFORE, the Council for the City of Spruce Grove, duly assembled, hereby enacts as follows:

- 1. Bylaw C-1016-17, the West Central Area Structure Plan, be amended as outlined in Schedule 1 which is attached to and forms part of this Bylaw.
- 2. This amending bylaw shall be consolidated into Bylaw C-1016-17.
- 3. This bylaw shall come into force and effect when it receives third reading and is duly signed.

First Reading Carried	24 June 2022	+
Public Hearing	22 July 2024	
Second Reading Carried	22 July 2024	
Third Reading Carried	22 July 2024	
Date Signed	22 July 2024	
		Mayor
		City Clerk

WEST CENTRAL

AREA STRUCTURE PLAN AMENDMENT



Prepared for: Forum

Presented by: Select Engineering Consultants Ltd.

Date: June 10, 2024

RPT-0353-24002-8.5-WestCentralASP-240314

Table of Contents

Table	of Cont	tents	i
1.0	Intro	duction	2
	1.1	Purpose	2
	1.2	Amendment Location	
	1.3	Statutory Plans	
		1.3.1 Edmonton Metropolitan Region Growth Plan1.3.2 Your Bright Future: Municipal Development Plan 2010 – 2020	2 2
2.0	Prop	osed Amendment	3
	2.1	Land Use	3
	2.2	Residential 2.1.2 Commercial Transportation and Infrastructure	3 3 4
	2.3	2.2.1 Roadway Network 2.2.2 Servicing and Infrastructure Land Use Statistics	4 4 5
3.0	Amer	ndment Rationale	7
	3.1 3.2	Residential/Commercial/InstitutionalServicing & Transportation	7
List o	f Tables		
	Table	e 1: Approved Land Use Statistics	5
		2: Proposed Land Use Statistics	
List o	f Figure:	s	
	Figure	e 1: Approved Land Use Concept	8
	Figure	e 2: Proposed Land Use Concept	Q

1.0 Introduction

1.1 Purpose

The purpose of this amendment is to revise Bylaw C-1016-17, the West Central Area Structure Plan (ASP), to update the development concept, related figures, and text to allow for a portion of the commercial site on the southeast corner to be redistricted to allow for a Mixed Medium to High Density residential development that is complementary to the adjacent commercial use.

1.2 Amendment Location

The proposed amendment to the West Central ASP in Spruce Grove is for the area of land legally described as Plan 212 1546, Block 5, Lot 2. The amendment impacts 2.56 ha of the northern portion of this site. This site is located north of Highway 16A, west of Jennifer Heil Way, and south of McLeod Avenue.

1.3 Statutory Plans

The amendment to the West Central Area Structure Plan has been completed in alignment with higher order statutory plans, meeting the neighbourhood density requirements and overall visions in these documents.

1.3.1 Edmonton Metropolitan Region Growth Plan

The Edmonton Metropolitan Region Growth Plan (EMRGP) came into effect in October 2017 and was amended in January 2020. This plan sets target densities for greenfield development as well as overall objectives and policies and land use for the Edmonton Metropolitan Region. The minimum target density is 35 du/nrha for Minimum Greenfield Residential Density within the City of Spruce Grove.

Through this amendment, the overall ASP residential density increases slightly from 36 du/nrha to 38 du/nrha, continuing to meet and exceed higher density targets. In addition, the Medium to High Density Residential site helps to increase housing diversity and supply within the plan area aligning with the Communities and Housing goals.

1.3.2 Your Bright Future: Municipal Development Plan 2010 – 2020

The City of Spruce Grove's Municipal Development Plan (MDP) 2010-2020, Bylaw C-960-16, was adopted on July 12, 2010 and consolidated in May 2016. The MDP outlines a community vision and directs growth and change throughout the City. This amendment continues to provide alignment to Section 5, Form and infrastructure, of the MDP, with the change in use continuing to promote a compact, safe, and efficient community that will offer a variety of housing types and development layouts. The addition of the Mixed Medium to High Density residential development will allow for increased housing option and residential density for the community. An MDP amendment has been submitted to align the future land uses outlined in Figure 8 with the additional residential land use. Commercial will remain the major land use adjacent to Highway 16A, with the additional residential providing a transition to the residential land use in Legacy Park to the north.

2.0 Proposed Amendment

This amendment to the West Central (ASP) includes an update to the land use concept, land use statistics and report text to reflect the following proposed changes to the plan:

• Change the land use for 2.56 ha of the commercial site in the southeast portion of the plan area from Commercial to Mixed Medium to High Density Residential.

Text updates include the addition of the below text:

4.3.2 Mixed Medium to High Density Residential

One Mixed Medium to High Density Residential site, totaling 2.56 ha, in the east portion of the Plan area. The site is located to the south of Mcleod Avenue and provides a transition from commercial to low density residential to the north. This Mixed Medium to High Density Residential site may develop as row house or apartment housing up to six stories in height.

2.1 Land Use

2.1.1 Residential

This amendment continues to promote a range of housing densities, allowing for a variety of housing types within the area to meet resident needs.

2.1.1.1 Medium to High Density Residential

The amendment proposes an additional Medium to High Density site in the southeast portion of the plan area. This site is located south of Mcleod Avenue, with access directly to this roadway, allowing residents to easily access potential transit options. The residential site is located adjacent to planned commercial, providing residents with nearby retail amenities and services, and provides a transition to the established residential in Legacy Park.

2.1.2 Commercial

Given the increased demand for housing, a small portion of this site will be reallocated for residential purposes, with the remainder continuing to be dedicated for commercial needs for the neighbourhood. This reallocation of land use is minimal and continues to ensure that there will be a large amount of commercial fronting along Highway 16A that supports vehicle oriented commercial and employment as outlined in the MDP.

2.2 Transportation and Infrastructure

2.2.1 Roadway Network

No changes to the major road networks within the West Central ASP are planned.

One right-in and right-out access from Jennifer Heil Way is currently approved for the site in the West Central ASP. An additional right-in/right-out access has been proposed to align with the planned local road network and updated land uses to facilitate enhanced traffic flow and access opportunity. A Transportation Impact Assessment update has been completed which supports these updated access points from Jennifer Heil Way.

2.2.2 Servicing and Infrastructure

The minor change in land use does not impact the overall servicing plan for the area. Servicing for the overall sanitary, water, and stormwater servicing for the lands within this amendment remains consistent with the ASP. Development for this portion of land is contiguous with current development and follows the proposed staging for the ASP, which is planned from east to west.

Page 5 of 10

2.3 Land Use Statistics

The approved Land Use Statistics are included as Table 1 and updates to these statistics that reflect the concept changes are presented in Table 2.

Table 1: Approved Land Use Statistics

Land Use	Hectares	%
Gross Area	119.5	70
Boundary Road Widening	1.20	
Jennifer Heil Way Road Widening	0.5	
Trans Mountain Oil Pipeline	0.6	
Northwestern Utilities Gas Pipeline	0.20	
Gross Developable Area	117.2	
Municipal Reserve	11.7	10
Roads (internal Circulation)	9.10	8
Stormwater Management Facilities	6.10	5
Public Utility Lots (Existing)	0.12	0
Public Utility Lots (Potential)	0.10	0
Highway Commercial	48.2	41
Institutional	1.6	1
Total Non-Residential Area	76.92	65
Net Residential Area (NRA)	40.00	35

Residential Land Use, Dwelling Unit Count and Population

Land Use	Area (ha)	Units/ ha	Units	% of NRA	People/ Unit	Population
Mixed Low to Medium Density Residential	33.4	30	1003		2.8	2, 807
Mixed Medium to High Density Residential	6.6	67.5	448		2.2	983
Total Residential	40.0	36.2	1,451			3, 790

Population Density

Low/Medium 2.8 person/unit Medium/High Density 2.20 person/unit

Residential Density

Low/Medium 30 dwelling units per net residential hectare Medium/High Density 67.5 dwelling unit per net residential hectare

Total residential density for the Plan area is 36 du/nrha



Table 2: Proposed Land Use Statistics

Land Use	Hectares	%
Gross Area	119.50	
Boundary Road Widening	1.20	
Jennifer Heil Way Road Widening	0.50	
Trans Mountain Oil Pipeline	0.60	
Northwestern Utilities Gas Pipeline	0.20	
Gross Developable Area	117.2	100%
Municipal Reserve	11.7	10.0%
Roads (internal Circulation)	9.10	7.8%
Stormwater Management Facilities	6.80	5.2%
Public Utility Lots	0.22	0.2%
Highway Commercial	45.64	38.9%
Institutional	1.60	1.4%
Total Non-Residential Area	74.36	63%
Net Residential Area (NRA)	42.56	37%

Residential Land Use, Dwelling Unit Count and Population

Land Use	Area (ha)	Units/ ha	Units	% of NRA	People/ Unit	Population
Mixed Low to Medium Density Residential	33.40	30	1003		2.8	2807
Mixed Medium to High Density Residential	9.16	67.5	618		2.2	1360
Total Residential	42.56		1621			4167

Population Density

Low/Medium 2.8 person/unit Medium/High Density 2.20 person/unit

Residential Density

30 dwelling units per net residential hectare Low/Medium Medium/High Density 67.5 dwelling unit per net residential hectare

Total residential density for the Plan area is 38 du/nrha

3.0 Amendment Rationale

The West Central ASP was last approved in March 2018 with Legacy Park already built in the area. Additional development has not occurred and demands for housing have continued to increase since that time.

3.1 Residential/Commercial

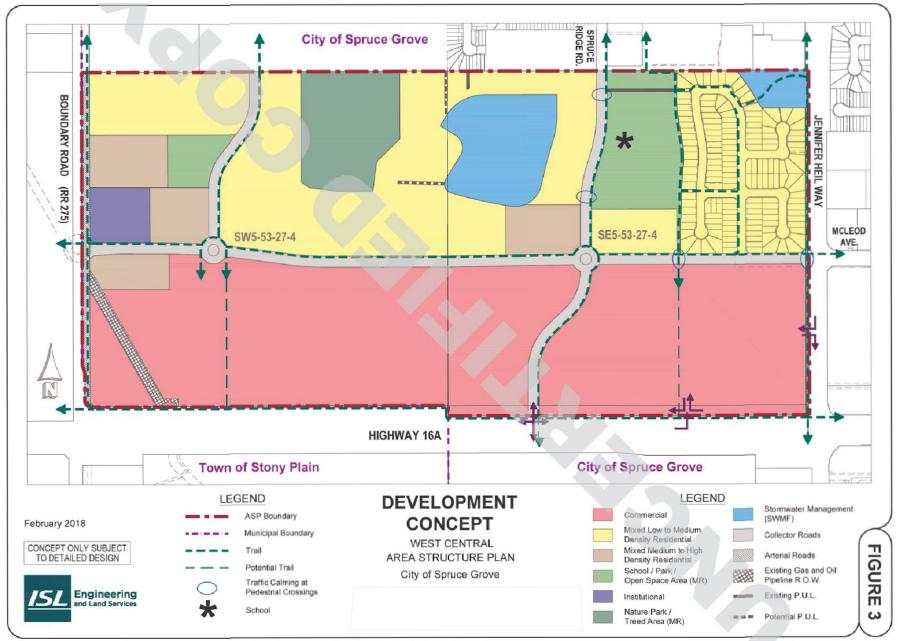
The proposed changes allow for increased housing supply and diversity with the addition of a Mixed Medium to High Density site along the southeast portion of Mcleod Avenue. This allows for the development of apartment and/or townhouse units up to six stories in height that are compatible and supportive of the planned commercial site to the south and are separated from existing residential houses in Legacy Park by the McLeod Avenue road right-of-way. This connection to the planned commercial site allows residents to access services easily by their transportation method of choice. This change of a small portion of the land to additional residential provides variety and opportunity for housing that can help meet people's housing needs for different stages of life.

The majority of the site will continue to remain commercial and will act as a buffer from highway noise with frontage between the highway and residential development. The commercial area is planned to serve local and regional markets and the amendment leaves sufficient commercial area within the overall plan.

3.2 Servicing & Transportation

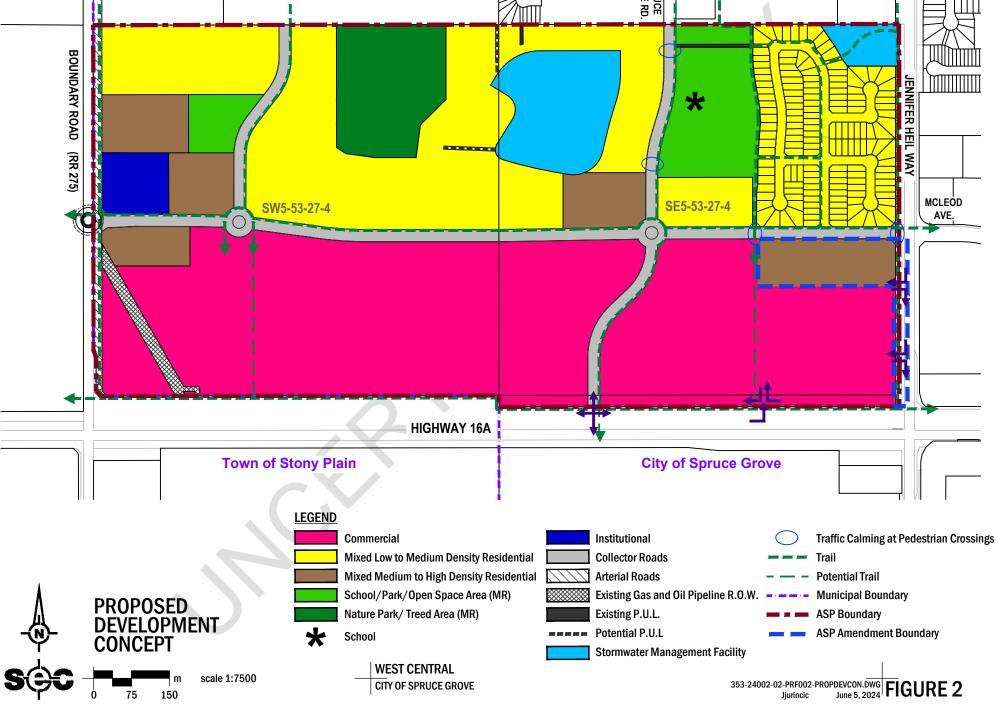
With the minor change in land use, the planned servicing will continue to meet the land use needs and no additional changes are required to be updated in the ASP amendment. The commercial in the area will continue to be accessed from Highway 16A, Jennifer Heil Way, and a north-south collector to the west of the site. The Mixed Medium to High Density Residential site access will be from Mcleod Avenue and Jenifer Heil Way. Adding an additional right turn in and right out increases access to the area and is supported by the transportation analysis completed by ISL.

AREA STRUCTURE PLAN





APPROVED
DEVELOPMENT CONCEPT



THE CITY OF SPRUCE GROVE

BYLAW C-1016-17

WEST CENTRAL AREA STRUCTURE PLAN

WHEREAS, pursuant to the Municipal Government Act, R.S.A. 2000, c. M-26, including amendments, a municipality may adopt and amend an area structure plan;

AND WHEREAS, the City of Spruce Grove wishes to replace Bylaw C-215-93, the Regional Centre Lands Area Structure Plan Bylaw, and amendments thereto, with the West Central Area Structure Plan.

NOW THEREFORE, the Council for the City of Spruce Grove, duly assembled, hereby enacts as follows:

- 1. This bylaw is called "West Central Area Structure Plan".
- 2. That the West Central Area Structure Plan, as outlined in Schedule 1 is attached to and forms part of this bylaw.
- 3. That Bylaws C-215-93, C-489-03 and C-610-06 are hereby repealed.

This bylaw shall come into force and effect when it receives third reading and is duly signed.

First Reading Carried 14 November 2017

Public Hearing Held 12 March 2018

Second Reading Carried 12 March 2018

Third Reading Carried 12 March 2018

Date Signed 15 March 2018

Mayor		
City Clerk		



Inspiring sustainable thinking





City of Spruce Grove

Schedule 1-West Central Area Structure Plan (C-1016-17)

February 2018



ISL Engineering and Land Services Ltd. is an award-winning full-service consulting firm dedicated to working with all levels of government and the private sector to deliver planning and design solutions for transportation, water, and land projects.











Table of Contents

1.1 Background	1
2.0 Development Context	2
2.1 Plan Area	2
2.2 Plan Boundaries and Access	2
2.3 Topography	2
2.4 Soils and Geotechnical	2
2.5 Vegetation and Wetlands	2
2.6 Existing Land Uses2.7 Pipeline Corridors	3 3
2.8 Land Ownership	4
2.9 Historical Resources	4
2.10 Adjacent Land Uses	4
3.0 Policy and Regulatory Context	5
3.1 Policy Conformance	7
4.0 Development Concept	13
4.1 Development Objectives	13
4.2 Planning Concept	13
4.3 Residential	13
4.4 Commercial	14
4.5 Parks and Open Space System	15
4.6 Institutional 4.7 Transportation Network	17 17
4.8 Land Use Statistics	18
5.0 Servicing	19
5.1 Shallow Utilities	20
6.0 Sequencing of Development and Implementation	21
TABLES	
Table 2.1: Land Ownership	4
Table 4.1: Student Population Analysis	
Fools 4.2: Lond Lies and Deputation Statistics	40





FIGURES		following page
Figure 1:	Context Plan	
Figure 2:	Existing Conditions	
Figure 3:	Development Concept	14
Figure 4:	Stormwater Management Concept	20
Figure 5:	Stormwater Servicing Concept	20
Figure 6:	Water Network Concept	20







This West Central Area Structure Plan (ASP) repeals Bylaw No. C-215-93 (Regional Centre Lands ASP) and the two amending bylaws, Bylaw No. C-610-06 (the West Central ASP Amendment) and Bylaw No. C-489-03 (the West Central ASP). This ASP includes the land use, transportation and servicing policies and concepts for the Plan area.

This ASP has been prepared by ISL Engineering and Land Services Ltd. on behalf of the landowner.

1.1 Background

In 2004, City Council approved Bylaw No. C-489-03, the West Central ASP, which superseded the 1993 Regional Centre ASP. This version of the West Central ASP was updated to reflect the land use designations and transportation network alignments of the City's Municipal Development Plan (MDP).

In 2006, City Council approved Bylaw No. C-610-06 to amend the West Central ASP. The amendment consisted of a revised development concept and associated text amendments. The revised concept added a medium density residential site, relocated park/open space areas, realigned pedestrian linkages, removed a mixed use area, and added the residential lots within the Legacy Park subdivision.

Since 2006, new regional and municipal plans, and new municipal policies, regulations, guidelines, studies and conditions have been approved, prepared or emerged and warrant an update to the ASP. This ASP considers or includes the following:

- the Capital Region Growth Plan (2010);
- the City of Spruce Grove MDP (C-960-16);
- the City of Spruce Grove's requirements for ASPs, including Corporate Policy 7000;
- the City of Spruce Grove's Land Use Bylaw (C-824-12);
- the recommendations of a new Transportation Impact Assessment (2017) and an Environmental Impact Assessment (2017) for the ASP lands;
- the addition of a new school/park site and a new park;
- a realignment of the trail network;
- a larger stormwater management facility and new alignments for sanitary, water and stormwater services;
- new alignments for the two north/south collector roads;
- a shift of Highway 16A all-directional access eastward to align with the intersection identified on the south side of Highway 16A in the Shiloh ASP; and
- Highway 16A surplus right-of-way lands.

islengineering.com February 2018 | Page 1



2.0 **Development Context**

21 Plan Area

The lands in this ASP comprise the south half of Section 5, Township 53, Range 27 west of the 4th Meridian. The total area of these lands is 119.5 ha.

Plan Boundaries and Access 2.2

Boundaries of the Plan area are shown on Figure 1 - Context Plan and include:

- to the south, Highway 16A;
- to the east, Jennifer Heil Way;
- to the west, Range Road 275 (Boundary Road); and
- to the north, the north half of the Section 5-53-27-W4M.

The ASP lands will be accessible from Jennifer Heil Way on the east, Boundary Road on the west, future Copperhaven Drive and Spruce Ridge Road from the West Area Structure Plan area to the north, and Highway 16A from the south.

2.3 **Topography**

Figure 2 – Existing Conditions presents the topography, and natural and man-made features of the Plan area. The topography of the Plan area is gently undulating, and typical of lands in many parts of the City. It generally falls from the south to the north, some 10 metres or approximately 1%.

Soils and Geotechnical 2.4

J.R. Paine & Associates Ltd. conducted a geotechnical investigation of the Plan area in 2008. 26 test holes were drilled to assess soil and groundwater conditions, and conditions for site grading, residential and commercial construction, installation of surface and underground utilities, and the construction of stormwater management facilities. The general soil stratigraphy of the Plan area consists of topsoil overlying lacustrine clays and silts. The investigation concludes that these soil conditions are generally suitable for urban development, and contains guidelines for construction, including: the provision of weeping tile lines for all dwellings; and geotechnical investigations for each commercial site.

Vegetation and Wetlands

As a result of past agricultural practices most of the mature vegetation within the Plan area has been eliminated.

An upland native forest stand located in the northern portion of the Plan area is identified as a locally significant environmental site in the MDP. The stand will be retained in its natural form to the extent feasible. An Environmental Impact Assessment (EIA) assessing the stands viability and boundary was first prepared in 2003 (by IBI Group) and accepted by the City as part of Bylaw No. C-489-03.

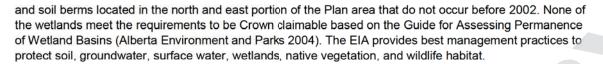
ISL prepared a desktop EIA for the Plan area in July 2017. The EIA includes a description of the biophysical features of the Plan area (excluding the Legacy Park subdivision), results of a site reconnaissance visit conducted on July 6, 2017, potential impacts, and recommendations for mitigation. The site reconnaissance identified an abundance of dead trees that have high habitat value to wildlife within the upland native forest stand located in SW5-53-27-4, six wetland features including one wetland complex, as shown on Figure 2.



j:\14900\14970_west_central_asp_and_lub_amendments\02_cadd\20_drafting\203_dwg\asp\figure_1_context_plan.dwg

j:\14900\14970_west_central_asp_and_lub_amendments\02_cadd\20_drafting\203_dwg\asp\figure_2_existing_conditions dwg





The EIA also recommends the following: a forest stand hazard assessment be completed; and a development setback adjacent to the forest stand be established.

2.6 Existing Land Uses

Most of the lands in the Plan area are currently being used for agricultural purposes.

The northeast corner of the property has been developed for residential use including a stormwater management facility and single-family residential units.

2.7 Pipeline Corridors

An existing 18-metre wide Trans Mountain Pipeline right-of-way (registered Plan 3625 HW) passes diagonally through the southwest portion of the SW 5-53-27-W4M within the Plan area. This existing 610 mm (24 in) pipeline transports liquid product such as blended crude bitumen, crude oil, and synthetic crude oil. A new pipeline right-of-way for a 914 mm (36 in) pipeline is proposed by Trans Mountain Pipeline to locate parallel to the east side of the existing Trans Mountain Pipeline right-of-way. The ultimate alignment of this new pipeline right-of-way is subject to further discussion with the surface landowner. There is also a 5-metre wide ATCO Pipeline's (originally Northwestern Utilities) right-of-way (registered Plan 9223214) that transitions to a 9-metre wide right-of-way (Instrument 922 340 633). Both AbaData and ATCO Pipelines confirm no physical pipeline is present within this right-of-way. There are no buildings proposed within the existing pipeline rights-of-way. Building setback requirements from the boundary of any pipeline right(s)-of-way shall be in accordance with the City of Spruce Grove Land Use Bylaw and current Alberta Energy Regulator (AER) policy.

ATCO Pipelines has registered interests on title for the SW 5-53-27-W4M for low pressure gas distribution through instruments:

- 922 133 059 Utility Right of Way
- 922 386 069 Partial Discharge of Utility Right of Way 922 133 059
- 922 398 439 Utility Right of Way
- 932 034 257 Partial Discharge of Utility Right of Way 922 398 439

ATCO Pipelines has advised that they will work with the landowner to delineate right-of-way requirements at the time of subdivision.

Three abandoned wells are located within adjacent road rights-of-way. One is located within Boundary Road, and the remaining two are located within Jennifer Heil Way and at the northwest corner of Highway 16A and Jennifer Heil Way. The wells were drilled in 1951 and 1953 and were abandoned a day after they were drilled. These were likely exploratory wells and appear to have never been in production. As per the November 1, 2012 amendment to the Subdivision and Development Regulation and Directive 079: Subsurface Development in Proximity to Abandoned Wells from the Alberta Energy Regulator, the well sites should be reviewed at the time of subdivision or development and setbacks provided, if necessary.



2.8 **Land Ownership**

The majority of undeveloped lands within the Plan area are owned by Wind Dancer Properties Ltd., who is currently the registered and beneficial owner. The City of Spruce Grove owns 1.81 ha along Highway 16A, which is land that was previously held by the Province for road widening. The Plan area land ownership breakdown is presented below:

Table 2.1: Land Ownership

Land Ownership	Area (Hectares)	Percent
Wind Dancer Properties	106.22	88.9
Legacy Park Subdivision	11.37	9.5
City of Spruce Grove	1.81	1.5
Total Area*	119.5	100.0%

^{*} Note: Total area and percent calculation is rounded.

2.9 **Historical Resources**

An assessment by Alberta Culture was previously carried out. There are no historical resources that may affect development of these lands.

2.10 Adjacent Land Uses

Lands directly to the east of the ASP have been developed for residential and commercial/retail use. Lands to the north accommodate residential and commercial development, the Fuhr Sports Park, TransAlta Tri-Leisure Centre, and a church. Lands to the south, across Highway 16A accommodate a visitor information centre, Spruce Grove Rotary Park, and a future RCMP detachment. The lands to the west remain in agricultural use.







3.0 Policy and Regulatory Context

The West Central Area Structure Plan has been prepared in the context of applicable regional and municipal goals, objectives and policies governing the Plan area and with existing, adjacent plans.

Capital Region Growth Plan (2010)

The Capital Region Board (CRB) includes 24 member municipalities, including the City of Spruce Grove. The key land use policy document of the Board is the 2010 Capital Region Growth Plan (CRGP).

In October 2016, the Capital Region Board approved the Edmonton Metropolitan Region Growth Plan (EMRGP) as the new policy document to guide decisions in the region. The EMRGP represents a substantial update of the 2010 CRGP, which will remain in effect until EMRGP approval by the Government of Alberta. There is no specific timeline for that approval. This ASP has been prepared to align with the CRGP and the EMRGP, including the conceptual boundaries of Priority Growth Area (PGA) "A". The residential density target assigned to PGA "A" is 25 – 30 dwelling units per net residential hectare (du/NRha). The West Central ASP meets the CRGP requirement, and the EMRGP minimum greenfield residential density of 35 du/NRha assigned to Spruce Grove, as it is currently planned for a density of 36.2 du/NRha.

City of Spruce Grove Municipal Development Plan - Your Bright Future (Bylaw C-960-16)

The Spruce Grove Municipal Development Plan (MDP), approved in 2010, sets out the goals, objectives and policies to guide the future development of the City. The primary objective of the MDP is to provide a framework to direct growth and change in Spruce Grove to 2020 in a way that conforms to the City's interpretation of community sustainability. The concepts of balance and adaptability underlie this framework.

The proposed West Central ASP, as identified in Section 3.1, is consistent with the goals, objectives and policies of the MDP.

City of Spruce Grove Land Use Bylaw (Bylaw C-824-12)

The City's Land Use Bylaw, approved in 2013, controls development of the lands within the West Central ASP. These lands are currently designated UR – Urban Reserve District, R1 – Mixed Low to Medium Density Residential District, and P1 – Parks and Recreation District.

A change from the UR District to residential, commercial, and institutional districts will be required in advance of development.

City of Spruce Grove Transportation Master Plan

The 2012 Transportation Master Plan (TMP) presents a model for a safe, innovative, and sustainable transportation network, and provides a guide for future development. The TMP shows road patterns at various population horizons, and serves as a basis for preparing long-term Capital Plans for funding and construction of recommended improvements.

This ASP conforms to the TMP and provides arterial and collector roads, and arterial, collector and local trails in accordance with the TMP.



City of Spruce Grove Parks and Open Space Master Plan

The Parks and Open Space Master Plan (March 2007) provides a comprehensive plan for parks and open space in Spruce Grove. The Plan focuses on the principles of ecological integrity, livability, and creating a positive image and character of the City, and includes goals, objectives and policies designed to achieve these principles. The ASP responds to the goals, objectives and policies of the Plan and the City's requirements by identifying:

- A 5.2 ha upland native forest stand as a Major Open Space Node;
- A 4.0 ha K-9 school site;
- A 1.29 ha passive park/gathering space;
- A 1.24 ha outdoor sport and recreation field;
- An east/west pedestrian trail along the north side of Highway 16A; and
- An east/west pedestrian trail along the north side of McLeod Avenue.

City of Spruce Grove Highway 16A Corridor Enhancement Study

This 2001 Study provides a framework for developing a consistent and recognizable appearance through the Highway 16A corridor, and places an emphasis on landscaping, amenities, recreation, and general aesthetics. The corridor is envisioned as primarily including highway commercial development, and emphasizing vehicular-oriented resident and visitor traffic.

The West Central ASP is within the boundaries of the Study, and is aligned with its recommendations by including policy to meet the Study's landscaping, amenities, recreation, and general aesthetics goals.

City of Spruce Grove Affordable Housing Policy Study

This 2008 Study includes a review of the local housing market and provides recommendations for a municipal housing strategy. The Study's recommendations include, but are not limited to: the construction of 26 affordable rental units and four Habitat for Humanity homes; increasing densities and housing choice in new neighbourhoods; and updates to the LUB to allow more affordable housing.

The West Central ASP recognizes the importance of the Study, and identifies that developers may engage the City in discussion about demonstration projects and incentives, and designates a portion of the Plan area for mixed low to medium density residential housing and mixed medium to high density residential housing.

Adjacent Area Structure Plans

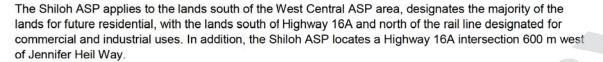
Three Area Structure Plans within Spruce Grove are adjacent to the West Central Area Structure Plan (ASP). They are the West ASP (Bylaw C-979-16), Heritage Estates ASP (Bylaw C-852-13) and Shiloh ASP (Bylaw C-915-15).

The West ASP applies to the lands north of the West Central ASP area, accommodates three schools, a mixture of residential, commercial and recreational uses, and provides roadway (future Copperhaven Drive and Spruce Ridge Road) and trail alignments that will connect to the West Central ASP area.

The Heritage Estates ASP is located to the east of the West Central ASP, accommodates residential and commercial uses, and includes a trail network and collector roadway (McLeod Avenue) that link to the West Central ASP.







Three ASPs outside the City of Spruce Grove are adjacent to the West Central ASP. The Fifth Meridian ASP (Bylaw 27-01) to the northwest is located in Parkland County and was approved prior to a recent annexation, and the South Business Park ASP Bylaw (1173) to the southwest, and the East Boundary ASP (Bylaw 2541) to the south are both located within the municipal boundaries of the Town of Stony Plain.

The Fifth Meridian ASP, located on the west side of Boundary Road, is primarily designated for agricultural uses, with small nodes designated for industrial, country residential and business/industrial uses. The lands in the east portion of the Plan area, and in closest proximity to the West Central ASP, are designated for parks, recreation, open space and natural areas.

The South Business Park ASP, located on the southwest corner of Highway 16A and Boundary Road, is primarily designated for residential and commercial uses. The lands in the northeast portion of the Plan area, and in closest proximity to the West Central ASP, are designated for commercial and residential uses and open space.

The East Boundary ASP, located on the southeast corner of Highway 16A and Boundary Road, designates lands primarily for residential uses. The lands in the north portion of the Plan area, and in closest proximity to the West Central ASP, are designated for commercial uses and a stormwater management facility, and natural area.

The West Central ASP includes land use designations that are compatible with the designations of adjacent ASPs, provides the necessary roadway and trail alignments that link to the West ASP and Heritage Estates ASP, and locates an all-directional intersection in accordance with the Shiloh ASP.

3.1 Policy Conformance

The West Central ASP complies with Figure 8 – Future Land Use and the provisions of the City of Spruce Grove Municipal Development Plan (MDP) – Your Bright Future approved in 2010. Figure 8 designates the ASP lands for residential, commercial and institutional development, and open space. The ASP mirrors this distribution of land uses and conforms to the following goals, objectives and policies of the MDP:

MDP Goal, Objective and/or Policy	ASP Policy Response
Goal 3 (and Policy 4.2.1.4) Spruce Grove shows environmental leadership through policy development and implementation.	The West Central ASP contains a substantial Municipal Reserve dedication to protect an upland native forest stand located in the northern portion of the Plan area. The stand will be retained as a natural area and dedicated as Municipal Reserve. In addition, a field assessment shall be undertaken by a qualified professional in advance of development to confirm the extent of the forest stand and to identify development setback requirements. Further, an Environmental Impact Assessment (July 2017) submitted to the City for the West Central ASP, considered impacts and recommended best management practices and mitigation strategies to sustain the tree stand.



MDP Goal, Objective and/or Policy	ASP Policy Response
Policy 4.2.1.3 Move toward development patterns that decrease	This ASP will be developed: In a contiguous manner;
car dependency including but not limited to:Preventing non-contiguous development;	To provide residential densities in accordance with the CRGP residential density target, Land Use Bylaw and market conditions;
 Increasing residential densities; Developing better connections for pedestrians and cycling; and Creating community or neighbourhood gathering places. 	To include pedestrian and cycling trails that are integrated into the City's network, link neighbourhoods and amenities (i.e. Fuhr Sports Park, TransAlta Tri-Leisure Centre), and are provided in accordance with the Transportation Master Plan and City's requirements; and
	 To locate gathering places (a school, two parks, a natural area and stormwater management facility) within the neighbourhood.
Policy 4.2.1.5 Orient new subdivision design and building construction to take maximum advantage of passive and active solar opportunities where appropriate.	At the time of subdivision consideration will be given to creating energy efficient design through methods that may include and are not limited to solar orientation for residential lots, a well-connected street network, and providing walkways to neighbourhood destinations and neighbourhood parks.
Policy 4.4.1.5 Work with developers, landowners and Alberta Environment to protect surface water and groundwater flows which supports environmentally significant areas affected by development within the City boundaries.	The existing upland native forest stand in the north-central portion of the ASP area is considered to be an environmentally significant area. Results of a site reconnaissance visit conducted on July 6, 2017 as part of the EIA (July 2017) prepared for the Plan area, found no evidence of wetland vegetation around the perimeter of the forest stand which supports this being an upland forest stand that is not reliant on overland flows to sustain it. Notwithstanding this, hydrogeological and biophysical studies shall be undertaken at the time of any development that requires the construction of the central stormwater management facility. These studies will provide an understanding of any change effect on overland and/or groundwater flows to the forest stand, and determine if off-site water is needed to maintain the forest stand. The results of these studies will be considered by the City, and if off-site water is necessary, this may be achieved through the following:
	Grading the back of lots adjacent to the forest stand so that runoff is directed towards the forest stand. This would direct a minimum of 15m of primary residential land bordering the forest stand to the stand. In addition, where topography allows, drain the entire lot to the forest stand via side yard swales.
	Feasible, non-mechanical, engineering options to the satisfaction of the City, to contribute to flows in addition to the above, if proven necessary by the hydrogeological and biophysical studies.



MDP Goal, Objective and/or Policy	ASP Policy Response
Objective 4.5.1 (and Policies 4.5.1.1 - 4.5.1.5) Protect and enhance the ecological integrity of the community's sustainable environmentally significant and natural areas.	The MDP identifies an upland native forest stand located in the northern portion of the Plan area as a locally significant environmental site. In accordance with the MDP this site has been delineated through an Environmental Impact Assessment, identified in the ASP as a nature park/treed area, and will be dedicated as Municipal Reserve.
Objective 5.1.1 (and Policies 5.1.1.1 and 5.1.1.2) Plan to accommodate 40,000 residents by 2044 through long-term growth management.	The ASP supports the stated objective and its urban form and infrastructure policies by creating a neighbourhood designed for livability, inclusiveness and sustainability. The ASP has also been prepared to: • Meet the residential density requirements of the Capital Region Growth Plan (2010) and the Edmonton Metropolitan Region Growth Plan approved by the Capital Region Board in 2016; • Reflect current regional and local conditions, as identified in Section 1.1 of this Plan; and • Accommodate a population of approximately 3,790 residents. The City's current population is 34,881 (2017 Municipal census). Land use and population statistics for the Plan area are presented in Table 3.
Objective 5.1.2 (and Policies 5.1.2.1 - 5.1.2.7) Direct development so it is contiguous and makes efficient use of land, infrastructure, transportation, networks and other community resources.	The ASP will be developed in a phased, contiguous manner to maintain lands in agricultural production until such time as they are needed for development, meet projected residential, commercial and institutional demands in a logical manner, including the provision of parks and open spaces and the extension of roads and utilities.
Objective 5.1.3, 5.5.1 and 5.5.2 (and Policies 5.1.3.1 - 5.1.3.5, 5.5.1.1 - 5.5.1.13, 5.5.2.1 - 5.5.2.7, 7.5.1.3, 7.6.1.1) Base urban form around the parks and open space network. Provide a range of parks and open spaces that meet the needs of all residents at different stages of life and offer passive and active opportunities.	Four open spaces of varying types and sizes are dispersed throughout the Plan area: • An upland native forest stand and stormwater management facility, or Type A Open Space, provide a passive open space/amenity feature in the central portion of the Plan area; • One park, or Type C Open Space, is located in the northwest portion of the Plan area and will serve as a passive park/gathering space for
Pursue a range of strategies to expand the parks and open space network.	 local residents. A second park, or Type D Open Space is located north of a future kindergarten to grade 9 school site in the northeast portion of the Plan area and will be active park space, programmed for outdoor sports and recreation fields to address the City's recreation requirements and benefit local residents. The Parkland School Division and City of Spruce Grove require a 4.0 ha site, for a future kindergarten to grade 9 school and associated playing fields and parking area. This Type D Open Space, provides a focal point in the east portion of the Plan area.



MDP Goal, Objective and/or Policy	ASP Policy Response
	 Each of the school/park/open space areas depicted on Figure 3 – Development Concept are linked to a trail network, or Type E Open Space, that provides north/south and east/west pedestrian and cycling routes. Access to the upland native forest stand will be determined at the time of subdivision.
Objective 5.1.4 (and Policies 5.1.2.1 - 5.1.2.7, 7.1.1.1 – 7.1.1.3) Reinforce existing neighbourhood and community gathering places and create new ones in developing, future, and redeveloping areas, and where possible, in already developed areas.	The Plan area includes park and open spaces, comprised of Type A, Type C, Type D, and Type E Open Space, providing a canvass for the creation of high quality gathering spaces and place making. The open spaces are located to provide recreation opportunities within a natural setting, a passive park/gathering space, and connections for pedestrians and cyclists. In addition, a main east/west trail provides a pedestrian and bicycle link from Stony Plain to the Fuhr Sports Park and TransAlta Tri-Leisure Centre.
Objective 5.2.1 (and Policies 5.2.1.1 - 5.2.1.6) Implement high standards for neighbourhood design and landscaping to enhance resident's quality of life.	The Plan area will provide a mix of residential types and densities in accordance with the City's Land Use Bylaw, encourage pedestrian and cycling by providing a trail network in accordance with the Transportation Master Plan, include commercial and institutional development along the trail network, ensure street connectivity throughout the Plan area and provide for pedestrian and cycling friendly neighbourhoods served by sidewalks within road rights-of-way. The trail network will allow a variety of positive experiences for residents by linking institutional lands, parks, open spaces and recreation facilities.
	The Area Structure Plan reinforces the role of streets to increase pedestrian connectivity across the Plan area through the provision of sidewalks within the public road rights-of-way. Streetscape design in the Mixed Low to Medium Density Residential areas should consider the following: • physical and human-made site constraints; • land use compatibility:
	 land use compatibility; using a grid or modified grid street network where possible; fronting buildings onto local roadways; and the potential for buildings to front onto collector roadways where feasible.





MDP Goal, Objective and/or Policy	ASP Policy Response
Objective 5.2.2 and 5.2.4 (and Policies 5.2.2.1 – 5.2.2.4, 5.2.4.1, 5.2.4.1 and 7.8.1.1) Increase housing options and residential densities across the community. Implement innovative neighbourhood design strategies in developing and future neighborhoods to increase housing densities and types while maintaining a high quality of life.	The ASP will provide a range of residential types and densities in accordance with the City's Land Use Bylaw. Although residential development densities may vary from site to site, the overall residential density within the Plan area (36.2 du/NRha) exceeds the 25 – 30 du/NRha Capital Region Growth Plan (2010) and the 35 du/NRha minimum greenfield residential density assigned to Spruce Grove in the Edmonton Metropolitan Region Growth Plan (2016). The ASP includes a mix of Level 1 and Level 2 housing, and provides a minimum of 30.8% of Level 2 housing in accordance with the City's MDP.
	Higher density housing will be located within close proximity to arterial and collector roadways, parks and trails, and contain sufficient area for on-site parking and provide amenity area in accordance with the City's Land Use Bylaw. In addition, 11.7 ha of parks and open space will be dedicated as Municipal Reserve in the Plan area to provide for the active and passive recreation needs of local residents.
Objective 5.6.1 (and Policies 5.6.1.1 - 5.6.1.6, 7.2.1.2 - 7.2.1.4) Develop an efficient integrated multi-modal transportation system.	The Plan area provides a vehicular, pedestrian and cycling network using road and utility rights-of-way, sidewalks and trails to connect residential and non-residential areas and create an efficient and integrated multi-modal transportation system. The trail network has been provided in consideration of the City's requirements, Transportation Master Plan and Parks and Open Space Master Plan.
Objective 5.7.1 (and Policies 5.7.1.1 – 5.7.1.5) Generate and continually update long-term infrastructure development, maintenance, and replacement plans.	All development within the Plan area shall retain stormwater within stormwater management facilities, and discharge at a post-development rate that does not exceed pre-development release rates. Developers developing within the Plan area will install municipal services in accordance with Figure 4 – Stormwater Management Concept, Figure 5 – Wastewater Servicing Concept, and Figure 6 – Water Network Concept. Utility systems shall be upgraded and extended in accordance with Spruce Grove's master servicing plans.
Objective 6.1.1 (and Policies 6.1.1.1 – 6.1.1.6 and 6.2.1.1, 7.4.1.1) Increase local employment opportunities and municipal revenues through attraction, diversification, growth, and development of commercial and industrial businesses.	The Plan area designates 48.2 ha for commercial purposes adjacent to Highway 16A to support a range of vehicle oriented commercial and retail services and opportunities. Development of the commercial area adjacent to Highway 16A shall have a unified, identifiable architectural theme. It is anticipated that design controls will be implemented through restrictive covenants.



MDP Goal, Objective and/or Policy	ASP Policy Response
	In addition to the designated highway commercial area, the Plan area will accommodate potential commercial opportunities for home-based businesses within the designated Mixed Low to Medium Density Residential areas and the Mixed Medium to High Density Residential areas in accordance with the City's Land Use Bylaw.
Objective 6.2.1.2	At the time of development permit application consideration may be given to the following:
Pursue strategies to conserve land, water and energy, and to minimize waste in the development and operation of vehicle-oriented commercial areas.	 protecting and conserving water supplies and resources in a sustainable manner by: reaching cost-effective minimum leakage levels; minimising the amount of energy consumed in water supply; and using rainwater harvesting and dual potable and grey water recycling systems, where they are energy and cost-effective; utilizing innovative solutions and low impact development technologies to manage storm water on-site; and sharing utility corridors, and where appropriate make use of these corridors for open space and trails.
Objective 7.3.1.2 (Policies 7.3.1.1 – 7.3.1.5)	Site plans, prepared at the development permit stage, may consider CPTED principles and
Continue to provide a safe community.	universal design.
	Traffic calming principles, namely the inclusion of roundabouts on McLeod Avenue, have been applied to the Plan area.







4.1 Development Objectives

The primary objective of this ASP is to create a framework to accommodate residential, commercial, retail, institutional and open space development. The lands in the ASP will continue to meet the City's and region's long term needs in this regard.

4.2 Planning Concept

The development concept for the Plan area is presented in Figure 3 – Proposed Development Concept. The concept provides a supply of lands for retail and commercial use located adjacent to Highway 16A. Through specific provisions of the City's Land Use Bylaw and through developer administered architectural guidelines, an attractive development aesthetic will be achieved for the future commercial areas. The balance of the lands will be developed for residential, institutional, and park use.

There are multiple access points to the Plan area. The primary accesses are from Highway 16A from the south, Jennifer Heil Way from the east, and Boundary Road (Range Road 275) from the west. The Plan area's east/west collector road (McLeod Avenue) also separates the predominately residential land uses of the neighbourhood from the commercial land uses located in the southern portion of the Plan area. Two north/south collector roads link the Plan area to the West Area Structure Plan lands, located to the north.

The development concept has a strong pedestrian and bicycle orientation by providing north/south and east/west trails that link the Plan area to the Town of Stony Plain to the west, the Fuhr Sports Park and TransAlta Tri-Leisure Centre to the north, and adjacent residential areas, and future school site, and parks/open spaces. The open spaces include an upland native forest stand, an outdoor sport and recreation field, a passive park/gathering space, and stormwater management facilities.

Mixed low to medium density housing, and mixed medium to high density housing opportunities are located across the Plan area. The mixed medium to high density housing is designated in a context appropriate location, in proximity to the future commercial area, arterial and collector roads, and near parks.

An institutional area is proposed in the northwest portion of the Plan area.

4.3 Residential

The Plan area will accommodate development of a variety of housing types and mix of residential densities to provide housing options and create diverse streetscapes that include low, medium and high density residential housing forms. This mix promotes the creation of an inclusive, well-balanced neighbourhood, one which can accommodate a range of income levels and ages, various family sizes and potential for seniors housing, to meet the changing needs of local residents, and enable residents to remain within the same neighbourhood throughout their lifecycle. This mix of residential densities and housing options also supports development strategies that will promote more efficient use of developable land and infrastructure. Future development is encouraged to consider and integrate where feasible, opportunities in accordance with the City's Affordable Housing Policy Study.





4.3.1 Mixed Low to Medium Density Residential

Mixed Low to Medium Density housing will be located north of McLeod Avenue, and may accommodate single detached and duplex dwellings as permitted uses in accordance with the City's Land Use Bylaw. The design of the designated Mixed Low to Medium Residential development areas should consider the

- physical and human-made site constraints;
- land use compatibility;
- using a grid or modified grid street network where possible;
- fronting buildings onto local roadways; and
- the potential for buildings to front onto collector roadways where feasible.

These lands are adjacent to a future K- 9 school site, stormwater management facility, an upland native forest stand, and neighbourhood park. Each residential area will be connected to other uses within the Plan area and other neighbourhoods by the neighbourhood trail network.

4.3.2 Mixed Medium to High Density Residential

Three Mixed Medium to High-Density housing sites totalling 4.85 ha are located in the west portion of the Plan area. These sites will accommodate multi-unit dwellings, row housing developments, row housing/stacked row housing forms as permitted uses in accordance with the City's Land Use Bylaw. These lands are located north and south of McLeod Avenue, adjacent or within close proximity to Mixed Low to Medium Density housing, a passive park/gathering space, an institutional (church or school) site, and commercial/retail uses. From north to south this area will likely develop as row houses, and apartment housing and its design will be context appropriate, to attend to land use transition by moderating the use, height and density differences between adjacent low density (single detached and duplex housing) and higher density developments. The Mixed Medium to High Density Residential development in this area will attract a broad market base including lifestyle housing geared to adults and seniors. The proximity to the institutional uses suggests some form of lifestyle housing may be appropriate, i.e., seniors congregate care, or church community housing. Traditional multi-family development is also compatible. These lands will take access from Boundary Road and/or adjacent collector roadways.

A 1.76 ha Mixed Medium to High- Density Residential site in the central portion of the Plan area is located within proximity to Mixed Low to Medium Density Housing, a school site, park site, a stormwater management facility and commercial and retail uses, and adjacent to collector roadways. This Mixed Medium to High Density Residential site may develop as row houses or apartment housing and its design will be context appropriate to respond to the use, height and density differences of the adjacent single detached housing.

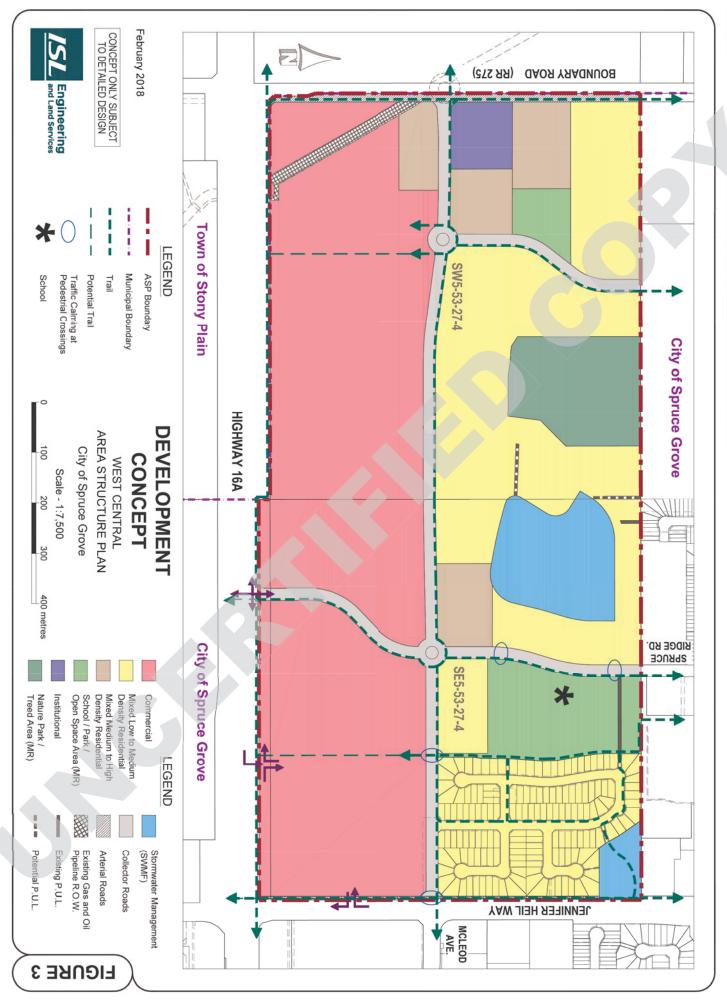
Commercial 4.4

Commercial development is planned for the southern portion of the Plan area, along Highway 16A to allow for the effective capture of local and regional retail markets. At the subdivision and development stage the City and the applicant shall have regard for the recommendations of the Highway 16A Corridor Enhancement Study, particularly as they relate to aesthetics, development standards, streetscaping, access and landscaping. Commercial development is classified by the following two policy areas.

4.4.1 Vehicular-Oriented Commercial

Lands encompassing 48.25 ha are intended to serve vehicular traffic adjacent to arterial roadways and highways, and development will be oriented to Highway 16A. Development will accommodate such highway commercial uses as identified in the City's (2012) Land Use Bylaw. A detailed geotechnical investigation should be prepared for each commercial site prior to development.



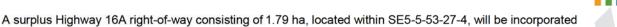


j:\14900\14970_west_central_asp_and_lub_amendments\02_cadd\20_drafting\203_dwg\asp\figure_3_proposed_development_concept.dwg

Schedule 1-West Central Area Structure Plan (C-1016-17)

City of Spruce Grove





The commercial area will serve local and regional markets and be accessible to pedestrians, cyclists and vehicles. The order of retail uses which can occur are in accordance with the City's (2012) Land Use Bylaw.

4.4.2 Home-Based Business

within the future commercial area.

The Plan area will accommodate potential opportunities for home-based businesses within the designated Mixed Low to Medium Density Residential areas and the Mixed Medium to High Density Residential areas in accordance with the City's Land Use Bylaw. A home-based business shall mitigate issues related to design, storage, and number of visits, in accordance with the City's Land Use Bylaw.

4.5 Parks and Open Space System

The *Municipal Government Act* (MGA) requires the provision of Municipal Reserve in the amount of 10% of the gross developable land area, less Environmental Reserve. Developable area within the West Central ASP is 117.2 ha and accordingly the development concept identifies 11.7 ha of land for Municipal Reserve. These lands will consist of four parks (a nature park/treed area, a K-9 school site, an active park space for outdoor sport and recreation fields, a passive park/gathering space), and a trail network.

Each school/ active park space shall be located on a prominent site within the Plan area, be well connected to the trail network, provided with road frontage, and located within close proximity to residential areas. Parks/open space areas may incorporate public art, aesthetic elements, and/or information plaques within gathering places, and may include widened sidewalks, and plazas.

Municipal Reserve requirements will be refined at the subdivision stage.

Natural Park

An existing upland native forest stand area comprising 5.2 ha is designated nature park/treed area adjacent to the north boundary, in the west portion of the Plan area. This nature park contains a large upland native forest stand and is identified in the MDP as having local environmental significance. The nature park/treed area will be retained as a natural area. Its configuration and parcel area will be determined by a natural area assessment of the forest stand at the time of subdivision. The nature park/treed area will increase the variety of park/open space amenities provided within the Plan area to benefit local and city wide residents. An Environmental Impact Assessment (EIA) (July 2017) prepared by ISL Engineering and Land Services (ISL) has been submitted in support of this biophysical feature. As part of the first residential subdivision within the SW 5-53-27-W4M, the City of Spruce Grove will require the following technical studies:

- A forest stand hazard assessment conducted in accordance with the recommendations of the 2017 EIA prepared by ISL. Only trees that pose a public safety threat should be removed, while those that contribute to the habitat feature shall be maintained.
- 2. A natural area assessment of the forest stand undertaken by a qualified professional (i.e., registered professional biologist) to the satisfaction of the City of Spruce Grove. The assessment should consider the following, in addition to the biophysical aspects of the forest stand:
 - · overall health of the forest stand;
 - property (public and private) safety;
 - fire safety and emergency access;
 - public access; and
 - options for accommodating access to the forest stand, which may include access from some portion(s) of land adjacent to the forest stand, within the forest stand, or a combination of both of these options.





The assessment shall also make recommendations regarding access to the forest stand and a development setback for permanent structures within private lots in the vicinity of the forest stand and permanent infrastructure.

School/Park Site

A 4.0 ha future school site to accommodate a Kindergarten to Grade 9 School is located in the east portion of the Plan area north of McLeod Avenue. The school site shall consist of a school building and associated playing fields and parking area. The site has frontage on a north/south collector roadway to enable adequate access for parking and drop-off, although walking is encouraged.

Table 4.1: Student Population Analysis

Student	Grades K-6	Grades 7-9	Grades 10-12	Total
Public	244	102	97	443
Catholic	131	55	53	239
Total	375	157	150	682

The student population analysis identifies a total of 682 students for the Plan area. Student population is based on 18% of total Plan area population. Of the 18%, 65% are anticipated to attend public school and 35% are anticipated to attend catholic school. Seventy-eight percent of the total public and catholic school students are anticipated to attend Kindergarten to Grade 9, while the remaining 22% are anticipated to attend Grade 10-12. These values are based on typical student generation statistics in the Capital Region. The projections do not include a review of the students outside of the Plan area, outside of the municipality's boundary or that may be bussed into the Plan area. The number of students should be monitored as development proceeds in the Plan area.

The City of Spruce Grove and Parkland School Division advise that a public Kindergarten to Grade 9 School is required within the Plan area.

Neighbourhood Parks

Two neighbourhood parks are located within the Plan area. A 1.24 ha park/open space area located north of the 4.0 ha future school site in the northeast portion of the Plan area is required to meet the City's identified recreational needs. The park will complement the adjacent Fuhr Sports Park and TransAlta Tri-Leisure Centre site to the north, and may be programmed to sports and recreation fields and a parking area. It will connect to other park space through the neighbourhood trail network. A north/south trail will be located along the east side of the park linking the future school site to the south, the Fuhr Sports Park uses and the TransAlta Tri-Leisure Centre to the north, and will provide separation between the park uses and the adjacent Legacy Park residential neighbourhood to the east.

A second 1.29 ha park/open space area is located in the northwest portion of the Plan area. This park space will function as a passive park/gathering place serving local residents in adjacent residential areas. This park will connect to the proposed trail network.

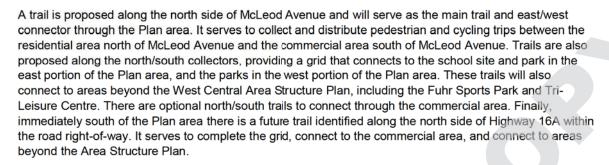
Trails

Parks, open spaces, and commercial areas will be connected via a pedestrian/open space trail network that will include utilization of designated trails and sidewalks within road rights-of-way. Sidewalks will accommodate pedestrians while trails will accommodate both cyclists and pedestrians.

Sidewalks will be provided within road rights of was as per the City's Engineering Standards and the City's 2012 Transportation Master Plan (Policy 4.3).







4.6 Institutional

A 1.6 ha site has been identified to accommodate uses which contribute to governance, culture, safety and health such as, but not limited to, a church, hospital or school uses within the northwestern portion of the Plan area. These lands will take access from Boundary Road and/or adjacent collector roadways.

4.7 Transportation Network

The proposed transportation network is graphically depicted on Figure 3 – Development Concept.

Highway 16A, on the Plan area's south boundary, is the major east/west arterial roadway carrying the majority of traffic through the City, and connecting to the Town of Stony Plain to the west, and Edmonton to the east. Two access points are proposed to the Plan area from Highway 16A, one is an all-directional access on a public road and the second is a right-in/right-out/left-in access serving the future commercial area as a private access. Jennifer Heil Way, an arterial roadway, borders the Plan area on the east and Boundary Road, a future arterial roadway, under the Town of Stony Plain's jurisdiction, borders the Plan area on the west. Boundary Road will ultimately connect to Grove Drive to the north. Roadway dedication for Jennifer Heil Way and Boundary Road will be provided at the time of subdivision.

Internal circulation consists of an east/west urban collector, the designated future McLeod Avenue extension through the Plan area. A portion of the proposed Atim Creek Storm Trunk, local sewer, and watermain will be located within this right-of-way and their installation will be timed with road construction. The McLeod Avenue collector connects via proposed roundabouts to two north/south collectors, the Spruce Ridge Road extension in the southeast quarter which links ultimately to Highway 16A to the south and to the West Area Structure Plan to the north. A portion of the proposed Atim Creek Storm Trunk, Boundary Trunk Extension, and watermain will be located within the Spruce Ridge Road collector right-of-way and their installation will be timed with road construction

At Boundary Road the intersection with McLeod Avenue may be controlled by a roundabout, based on preliminary analysis by the City's functional plan for Boundary Road/Grove Drive. The roundabouts on McLeod Avenue will help control speeds on the long straight portions of the collector road, as well as reduce the likelihood of a fatal or serious injury crash at each of these intersections. The other north/south collector serves the southwest quarter and provides a second connection to the Copperhaven development in the West Area Structure Plan to the north.

Bus routing is not known at this time. However, all collector roads in the Plan area are available for bus service.

A Transportation Impact Assessment (TIA) prepared (October 2017) by ISL for the Plan area supports the proposed development concept, identifies roadway improvements that should occur over time to support development, and recommends that the City consider a safe system approach at pedestrian crossings depicted on Figure 3 – Development Concept, to achieve a target speed of 30 km/h and use of raised crosswalks if necessary. Additional accesses to the Plan area along Highway 16A, Jennifer Heil Way and

Boundary Road will be provided in accordance with City standards, or as identified in a TIA completed at a subsequent development stage.

Land Use Statistics

The projected population for the Plan area is estimated at 3,790 persons at a maximum build out. The land use and population statistics for the ASP are presented below.

Land Use and Population Statistics Table 4.2:

Land Use	Area (ha.)	% of Gross Developable Area	
Titled Area	119.5		
Boundary Road Widening	1.2		
Jennifer Heil Way Road Widening	0.5		
Trans Mountain Oil Pipeline	0.6		
Northwestern Utilities Gas Pipeline	0.2		
Gross Developable Area	117.2		
Municipal Reserve	11.7	10	
Roads (Internal Circulation)	9.1	8	
Stormwater Management Facilities	6.1	5	
Public Utility Lots (Existing)	0.12	0	
Public Utility Lots (Potential)	0.10	0	
Subtotal Other Land Uses	27.1	23	
Highway Commercial	48.2	41	
Institutional	1.6	1	
Subtotal Commercial/Institutional	49.8	42	
Mixed Low to Medium Density Residential	33.4	29	
Mixed Medium and High Density Residential	6.6	6	
Subtotal Residential	40	35	
Housing Units/Population	Area (ha.)	Units ¹	Population
Mixed Low to Medium Density Residential	33.4	1,003	2,807
Mixed Medium to High Density Residential	6.6	448	983
Total	40.0	1,451²	3,790

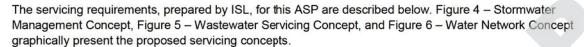
¹ Density calculations are based on 30 units/ha for Mixed Low to Medium Density Residential, and 67.5 units/ha for Mixed Medium to High Density Residential.

² Total residential density for the Plan area is 36.2 du/NRha. This density meets the CRGP density, and exceeds the EMRGP minimum greenfield residential density. The density is calculated by dividing the number of units by the area designated for residential development.









Stormwater Servicing

Stormwater servicing will be directed to either the existing Legacy Park Stormwater Management Facility (SWMF) or the proposed central SWMF. The existing Legacy Park SWMF has capacity for 8.7 ha of commercial development immediately south of the existing residential development. Stormwater for the remainder of the site will be directed to the central SWMF via a piped (minor) and overland (major) drainage system. The central SWMF will discharge at a controlled rate to an extension to the existing Atim Creek Storm Trunk within the Copperhaven development to the north. This trunk will be extended south through the ASP area and across Highway 16A to provide controlled discharge from future development within the Shiloh Area Structure Plan area. The servicing concept has flexibility and may be refined at the detailed design stage. The stormwater servicing concept is shown on Figure 4 – Proposed Stormwater Management Concept.

Wastewater Servicing

Wastewater servicing will be directed to the existing Boundary Trunk located immediately northwest of the proposed central stormwater management facility. The Boundary Trunk will be extended south through the Plan area and across Highway 16A to service the Shiloh Area Structure Plan area south of the highway. The proposed commercial development immediately south of the Legacy Park subdivision will be serviced through the existing sewer servicing Legacy Park. Local sewers in the western part of the Plan area will be directed to the existing Boundary Trunk, while sewers in the remainder of the Plan area will be directed to the proposed extension of Boundary Trunk. The servicing concept has flexibility and may be refined at the detailed design stage to divert a small low lying area west of the tree stand to the Copperhaven development in the West Area Structure Plan area to the north. The wastewater servicing concept is shown on Figure 5 – Proposed Wastewater Servicing Concept.

Water Distribution

Water will be supplied to the Plan area through an extension of the existing City of Spruce Grove Zone 1 water distribution system. Connection will be made to the existing mains on McLeod Avenue and on Spruce Ridge Road, and to the future main crossing Highway 16A approximately 600m west of Jennifer Heil Way. The internal water distribution system will comprise 300mm looping to provide adequate flows and pressures for Peak Hour Demand and for Maximum Day Demand plus fire flows. The connection across Highway 16A is required to provide commercial fire flows in the west portion of the Plan area. The water distribution system will supply water to the future developments north of the Plan area within Zone 2 via a pressure reducing valve. The water distribution concept is shown on Figure 6 – Proposed Water Network Concept.

At the time of development permit application consideration may be given to:

- protecting and conserving water supplies and resources in a sustainable manner by: reaching costeffective minimum leakage levels; minimising the amount of energy consumed in water supply; and
 using rainwater harvesting and dual potable and grey water recycling systems, where they are energy
 and cost-effective;
- utilizing innovative solutions and low impact development technologies to manage storm water on-site;
 and
- sharing utility corridors, and where appropriate make use of these corridors for open space and trails.



Shallow Utilities 5.1

Gas

Gas servicing exists along Jennifer Heil Way. This is a 273 mm steel main. Gas services have been extended into the first stage of development, Legacy Park.

Power

Along the south and east boundaries of the Plan area are 25,000 volt power cables; along the west Plan area boundary is a 14,400 volt cable. Servicing for the Plan area will be provided from these lines.

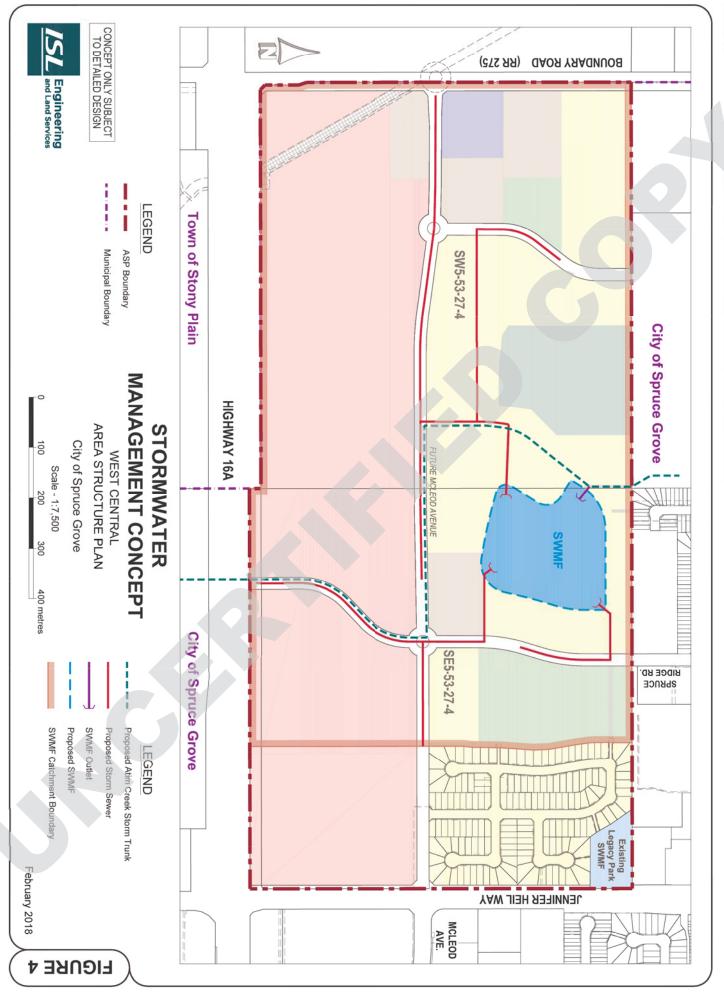
Cable

An existing Shaw Cable line exists on the south side of Highway 16A that connects Spruce Grove and Stony Plain. The Plan area will be serviced from this line.

Telus

Telus will service the Plan area from its main office. From there, cable will be laid to West Grove Drive and then south to Highway 16A. The service will continue to the Plan area to a centralized point where it will feed the entire Plan area.





j:\14900\14970_west_central_asp_and_lub_amendments\02_cadd\20_drafting\203_dwg\asp\figure_4_proposed_stormwater_management_concept.dwg

j:\\\14900\\14970_west_central_asp_and_lub_amendments\\\02_cadd\\\20_drafting\\\203_dwg\\\asp\\figure_5_proposed_wastewater_servicing_concept.dwg

j:\14900\14970_west_central_asp_and_lub_amendments\02_cadd\20_drafting\203_dwg\asp\figure_6_proposed_water_network_concept.dwg





6.0 Sequencing of Development and Implementation

This Area Structure Plan establishes a broad framework for the future subdivision and development of lands within the Plan area.

Development staging is based upon the principles of contiguous development and efficient access to existing utility services and road systems. Such contiguous development will help prevent premature fragmentation of land. It is anticipated that future stages of development will proceed east to west within the Plan area as servicing is extended. More detailed planning and studies, such as a Phase I ESA study, will be required in advance of redistricting and subdivision within the Plan area.

