

EAST PIONEER AREA STRUCTURE PLAN

Office Consolidation August 2024

East Pioneer Area Structure Plan Bylaw C-843-13 was adopted by Council on May 13, 2013.

This “Consolidated Edition” was published in August 2024, and incorporates all amendments and additions to Bylaw C-1241-23 as referenced below:

- Bylaw C-950-16 passed April 11, 2016, to re-designate a 1.58 ha site from Low to Medium Density Residential to Medium to High Density Residential to accommodate a senior housing site in the northwest plan area.*
- Bylaw C-952-16 passed May 9, 2016, to reconfigure the central Stormwater Management Facility, re-align a collector road, add a linear park space, and add a small park within the Fenwyck neighbourhood.*
- Bylaw C-1008-17 passed September 11, 2017, to re-designate a 1.0 ha site from Medium to High Density Residential to Commercial within the northwest corner of the Fenwyck neighbourhood.*
- Bylaw C-1066-19 passed January 20, 2020, to remove an urban village and add a proposed commercial area within the Easton neighbourhood.*
- Bylaw C-1152-21 passed June 14, 2021, for a new land use concept for the Special Study Area and the removal of the abutting Estate Residential land use area, to support an integrated commercial and entertainment area.*
- Bylaw C-1199-22 passed July 18, 2022, to remove the northeast stormwater management facility, adjust internal roadways, add a mixed-use commercial/residential site, and incorporate linear park connectivity throughout the Fenwyck Neighbourhood.*
- Bylaw C-1241-23 passed May 8, 2023, to accommodate a site for row housing units with approximately 66 units.*

All reasonable attempts were made to accurately reflect the original Bylaws, and except as noted within this paragraph, all text changes are referenced in the right margin and italicized.

This “Consolidated Edition” is intended for convenience only, and in case of uncertainty the reader is advised to consult the original Bylaws that are available at the City Clerk’s Office.

City of Spruce Grove
Planning and Development

CITY OF SPRUCE GROVE

BYLAW C-843-13

EAST PIONEER AREA STRUCTURE PLAN

WHEREAS, pursuant to the Municipal Government Act, R.S.A. 2000, c. M-26, including amendments, a municipality shall adopt Area Structure Plans;

AND WHEREAS, the City of Spruce Grove wishes to adopt Bylaw C-843-13, the East Pioneer Area Structure Plan;

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

1. That the East Pioneer Area Structure Plan, attached as SCHEDULE "A" be adopted.

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

First Reading Carried 25 February 2013

Public Hearing Held 25 March 2013

Second Reading Carried 08 April 2013

Third Reading Carried 13 May 2013

Date Signed 15 May 2013

Mayor

City Clerk

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1.0 Administration

1.1 Purpose

The purpose of the East Pioneer Area Structure Plan (ASP) is to establish a development and servicing framework for a residential neighbourhood approximately 277 hectares (ha) in size. The ASP specifies the following:

- The location, configuration, and area of residential, commercial, parks and open spaces, and public utility land uses;
- The anticipated density of residential development;
- The manner in which important natural features will be incorporated with the development concept;
- The pattern and alignment of the arterial and collector roadway and pedestrian walkway systems;
- To provide the required utility infrastructure concept, and
- The implementation and phasing of development.

1.2 Timeframe

Development within the ASP is expected to commence in 2013 and is estimated, at current absorption rates, to be complete within fifteen to twenty years.

1.3 Interpretation

All symbols, locations, and boundaries shown in the ASP figures shall be interpreted as conceptual unless otherwise specified in the document, or where they coincide with clearly recognizable physical or fixed features within the plan area.

For each subsection under Land Use Concept, a description of applicable land use strategies (e.g. Urban Design) and types (e.g. Residential) is provided for the plan followed by applicable objectives, policies, implementation, rationale, and technical summary.

A policy statement(s) containing shall is mandatory and must be implemented. Where a policy proves impractical or impossible, an applicant may apply to amend the plan. A policy statement(s) containing “should” is an advisory statement and indicates the preferred objective, policy and / or implementation strategy. If the “should” statement is not followed because it is impractical or impossible, the intent of the policy may be met through other agreed-upon means.

1.4 Monitoring

Policies, text, and mapping information contained within this document may be amended from time to time, by Council approved bylaw, in order to respond to and remain current with planning and development issues and trends affecting suburban development.

1.5 Amendments

Amendments to the ASP document involving policies, text or mapping shall be completed in accordance with the Municipal Government Act and all other applicable municipal bylaws, policies and procedures. Applicants shall supply all necessary technical and supporting studies, to the satisfaction of the City of Spruce Grove.

2.0 Existing Conditions

2.1 Location

The East Pioneer ASP comprises the lands generally located within the West ½ Section 1-53-27-W4, the East ½ Section 2-53-27-W4 and portions of the N.E. ¼ Section 35-52-27-W4 and the N.W. ¼ Section 36-52-27-W4. The total gross area for the NSP is approximately 253 hectares (625 ac) and is defined by the following boundaries (see **Figure 1.0 Location**):

Northern Boundary – Future extension of Grove Drive;

Western Boundary – Grove Meadows and Lakewood Neighbourhoods;

Eastern Boundary – Spruce Grove/Parkland County Municipal Boundary; and

Southern Boundary – Canadian National Railway / Parkland County Municipal Boundary.

The Pioneer Lands Area Structure Plan is located immediately north of the future Grove Drive, which is currently being developed for primarily residential purposes. The Grove Meadows and Lakewood neighbourhoods are essentially built out, except for some residential and commercial uses along the Highway 16A frontage.

The land east of the plan area within Parkland County is generally agricultural in nature, and is designated as a fringe area whereby limited agricultural uses are permitted. The Parkland County Municipal Development Plan also illustrates the potential outer ring road alignment along this area. Approximately 2.5 km from the eastern boundary, within Parkland County, is the Acheson Industrial area. Uses within Acheson Industrial include Industrial/Commercial, which refers to a variety of light to medium industrial uses as well as general commercial uses.

Lands to the south of the Canadian National Railway (CNR) are also within Parkland County and within the fringe zone

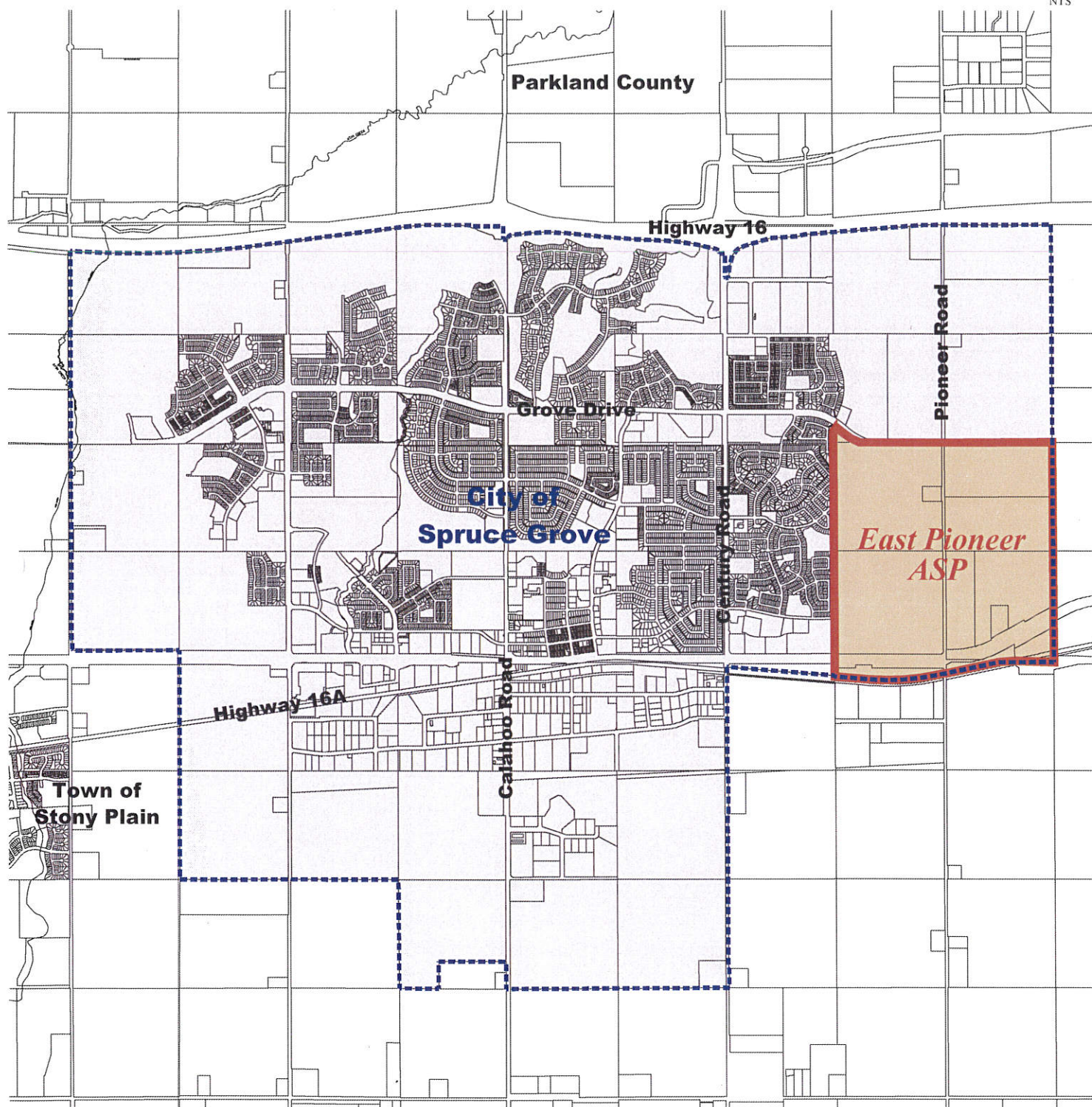
2.2 Background

The East Pioneer ASP was prepared in response to anticipated market demands in the City of Spruce Grove and in the Capital Region. Further information regarding land ownership and site context is outlined in **Table 1: Land Ownership**, **Figure 2: Land Ownership**, **Figure 3: Site Contours** and **Figure 4: Site Features**.



The preparation of the ASP has been guided by the existing City of Spruce Grove statutory plans and policies including *Your Bright Future*, *Transportation Master Plan*, *Land Use Bylaw*, *Parks and Open Space Master Plan* and the *Capital Region Growth Plan*. Conformance to these plans and policies is referenced in *Section 3*

Figure 1 - Location Plan

East Pioneer - Area Structure Plan



Legend

-  East Pioneer ASP Boundary
-  City of Spruce Grove Boundary

2.3 Land Ownership

The East Pioneer ASP was prepared on behalf of two private developers who own approximately 219 hectares (86%) of the land within the Plan area. The remaining lands are held by a number of non-participating landowners and the City of Spruce Grove. Current land ownership is described in Table 1: Land Ownership below and shown in Figure 2: Land Ownership.

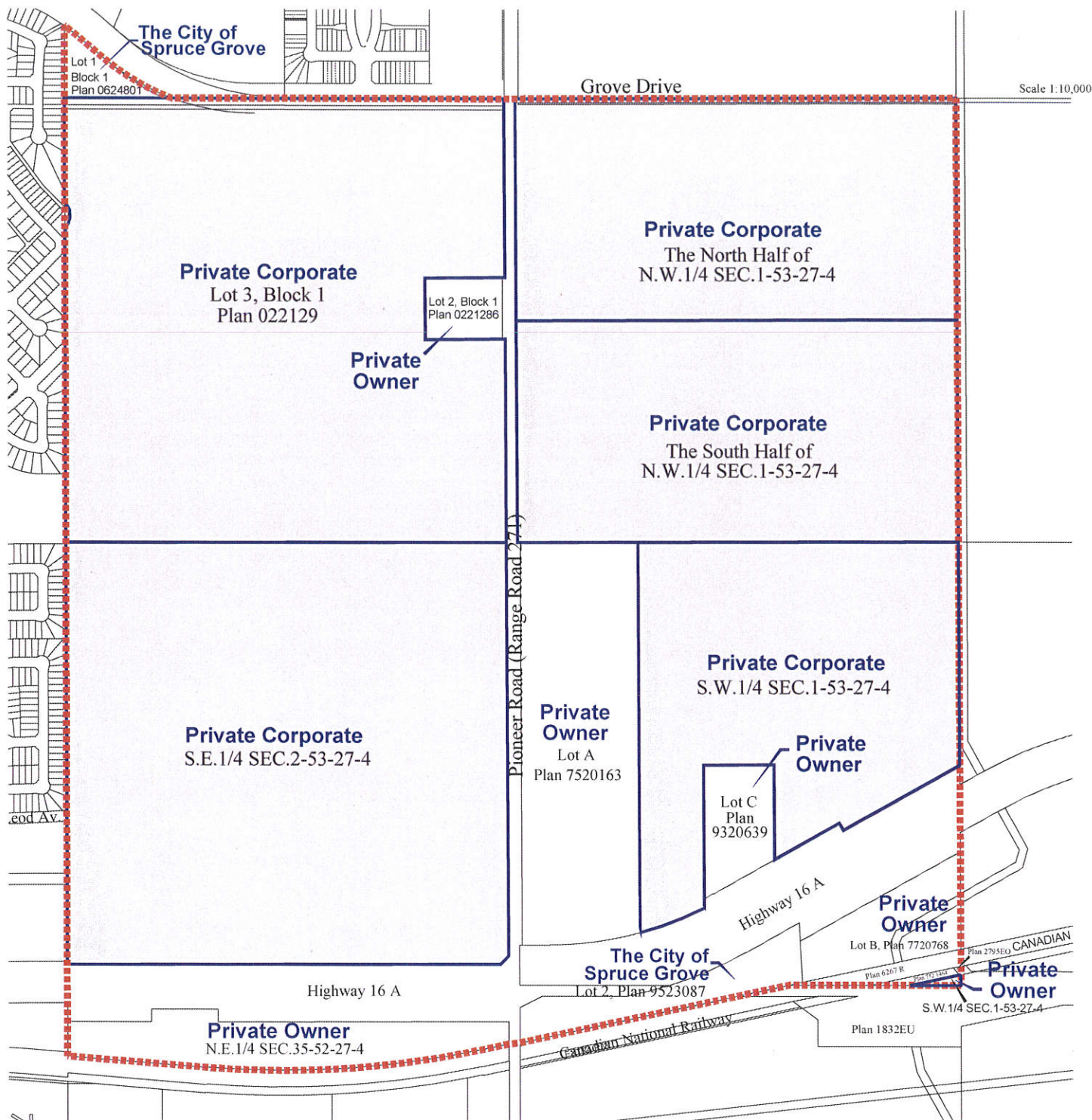
Table 1: Land Ownership

Editor
Note

Map Reference	Titled Owner	Legal Description	Titled Area	Participating
1.	<i>The City of Spruce Grove</i>	Lot 1, Block 1, Plan 062 4801	1.09 ha	N
2.	<i>Private Corporate Owners</i>	Lot 3, Block 1, Plan 022 1293	62.97 ha	Y
3.	<i>Private Non- Corporate Owners</i>	Lot 2, Block 1, Plan 022 1286	1.56 ha	N
4.	<i>Private Corporate Owners</i>	SE ¼ 2-53-27-W4	61.63 ha	Y
5.	<i>Private Non-Corporate Owners</i>	NE ¼ 35-52-27-W4	6.06 ha	N
6	<i>Private Non-Corporate Owners</i>	Lot 2, Plan 952 3087	3.22 ha	N
7	<i>Private Non-Corporate Owners</i>	Lot B, Plan 772 0768	3.68 ha	N
8	<i>Private Non-Corporate Owners</i>	Lot A, Plan 752 0163	15.7 ha	N
9	<i>Private Corporate Owners</i>	SW ¼ 1-53-27-W4	29.97 ha	Y
10	<i>Private Non-Corporate Owners</i>	Lot C, Plan 932 0639	2.66 ha	N
11	<i>Private Corporate Owners</i>	S½ NW ¼ 1-53-27-W4	32.4 ha	Y
12	<i>Private Corporate Owners</i>	N½ NW ¼ 1-53-27-W4	32.4 ha	Y
13	<i>Private Non-Corporate Owners</i>	SE ¼ 1-53-27-W4; SW ¼ 1- 53-27-W4	0.09 ha; 0.55 ha	N
		Total	253.9 ha	

Figure 2 - Land Ownership Plan

East Pioneer Area Structure Plan



3.0 Policy Context

Editor
Note

The ASP has been prepared with regard to the plans and policies in effect in the City of Spruce Grove and in the Alberta Capital Region.

This includes the City of Spruce Grove's statutory plans, policies and design principles which govern land development. These include the *Municipal Development Plan (MDP) Your Bright Future*, *Land Use Bylaw C-824-12*, the *Parks and Open Space Master Plan* and the *Capital Region Growth Plan*. Relevant policies and design principles are identified and summarized in the following sub-sections as they relate to the creation of the ASP.

Future applicants seeking amendments to the ASP or applying for rezoning, subdivisions or development permits are required to consult the actual documents for specific guidance on detailed requirements as they apply to particular properties.

The following documents provide important direction and a policy context for the ASP.

3.1 Your Bright Future: Municipal Development Plan 2010 – 2020

The *Municipal Development Plan (MDP)* was adopted in July 12, 2010 as Bylaw C-711-09, and is an important tool, bringing together economic, environmental and social elements and providing a community sustainability based framework to direct future growth and development from 2010 to 2030.

Numerous objectives contained within the MDP have been used in the preparation of this ASP, ensuring conformity with Council direction with respect to the development of these lands for residential, commercial and open space purposes. The relevant objectives include:

Section 4 Environmental Management	
<i>Objective 4.1.1</i>	Reduce the environmental impact the City and its residents have on natural systems by decreasing pollution and natural resource use.
<i>Objective 4.2.1</i>	Increase the use of green construction techniques and explore alternative development patterns to reduce the use of energy, water and land, and minimize waste.
<i>Objective 4.3.1</i>	Explore new, and increase the use of emerging, alternative infrastructure technologies that reduce energy, water, and land consumption and minimize waste.
<i>Objective 4.4.1</i>	Develop an integrated watershed management approach that will sustainably manage the impact of development on the watershed, conserve water use and improve water quality.
<i>Objective 4.5.1</i>	Protect and enhance the ecological integrity of the community's sustainable environmentally significant and natural areas.
Section 5 Form and Infrastructure	
<i>Objective 5.1.1</i>	Plan to accommodate 40,000 residents by 2044 through long-term growth management.
<i>Objective 5.1.2</i>	Direct development so it is contiguous and makes efficient use of land, infrastructure, transportation networks, and other community resources.
<i>Objective 5.1.3</i>	Base urban form around the parks and open space network.

<i>Objective 5.1.4</i>	Reinforce existing neighbourhood and community gathering places and create new ones in developing, future, and redeveloping areas, and where possible, in already developed areas.
<i>Objective 5.2.1</i>	Implement high standards for neighbourhood design and landscaping to enhance residents quality of life.

<i>Objective 5.2.2</i>	Increase housing options and residential densities across the community.
<i>Objective 5.2.4</i>	Implement innovative neighbourhood design strategies in developing and future neighbourhoods to increase housing densities and types while maintaining a high quality of life.
<i>Objective 5.5.1</i>	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.
<i>Objective 5.5.2</i>	Pursue a range of strategies to expand the parks and open space network.
<i>Objective 5.6.1</i>	Develop an efficient integrated multi-modal transportation system.
<i>Objective 5.6.2</i>	Provide reliable short and long-range transportation planning to accommodate the movement of people and goods within Spruce Grove and the surrounding region based on existing and future land use.
<i>Objective 5.6.3</i>	Expand and integrate public transit and other alternative and active transportation infrastructure and services.
<i>Objective 5.7.1</i>	Generate and continually update long-term infrastructure development, maintenance and replacement plans.

Section 6 Economic Development

<i>Objective 6.1.1</i>	Increase local employment opportunities and municipal revenues through attraction, diversification, growth and development of commercial and industrial businesses.
<i>Objective 6.2.1</i>	Continue to develop Spruce Grove as a regional service and commercial centre.
<i>Objective 6.2.2</i>	Provide opportunities for mixed use development to occur in the City Centre and for integrated land use development to occur in Gateway lands. <small>Bylaw C-1066-19</small>
<i>Objective 6.2.4</i>	Encourage the development of neighbourhood commercial uses as an integral component of city neighbourhoods.

Section 7 Community Life

<i>Objective 7.1.1</i>	Increase community and neighbourhood-level social capital.
<i>Objective 7.2.1</i>	Promote public health and wellness through community design.
<i>Objective 7.6.1</i>	Foster a diverse range of active and passive sports and recreation options for people of all ages and stages of life.
<i>Objective 7.8.1</i>	Increase rental or ownership options targeting households with an affordability problem capable of independent living and who earn less than the median income for their household type and not requiring ongoing subsidies.

Section 8 Regional Partnerships

<i>Objective 8.2.1</i>	Work with Parkland County and the Town of Stony Plain to facilitate an effective, rational and coordinated approach to land use, transportation and infrastructure planning and development in boundary-interface areas.
<i>Objective 8.3.1</i>	Work with other municipalities to plan for growth in the Capital Region based on an efficient and effective transportation system and an integrated approach to land use planning.

3.2 Parks & Open Spaces Master Plan

The City of Spruce Grove Parks and Open Space Master Plan was approved by Council in 2007. The Plan provides policy on open space, as well as a guide for its acquisition, development and use. The following policies were considered in the development of this Plan:

5.3 Open Space Nodes	<ol style="list-style-type: none"> 1. Vehicular access to Major Nodes shall ensure safe routes via collector road system to avoid increased traffic in residential neighbourhoods. 2. Connections with Spruce Groves regional pathway system shall be mandatory for all new Major Nodes 3. The acquisition of land for a Major Node may not be through dedication of MR and/or ER. The City is encouraged to seek alternate means for land acquisition and/or partnerships for funding to purchase.
5.4 Neighbourhood-scale Parks	<ol style="list-style-type: none"> 5. The location of the park space shall take advantage of and maximize the catchment area of the community. 6. The design of Neighbourhood / Community Park space shall comply with the City of Spruce Groves Engineering Standards.
5.5.3.A Natural or Semi-natural Green Spaces or Watercourses	<ol style="list-style-type: none"> 1. Natural processes in Spruce Grove shall be preserved to the greatest extent possible, and all natural systems (creeks, wetlands, woodlands) shall be integrated into new communities and/or parkland areas. 4. New development shall be required to include, in concept or area structure plans, a biophysical assessment of proposed developable lands identifying potential impacts on natural ecosystems, environmentally significant areas, habitat and other aesthetic qualities (i.e. viewshed).
5.5.3.C Parks, Gardens and Civic Spaces	<ol style="list-style-type: none"> 1. All downtown and commercial developments are required to contribute to the public realm of streets and squares, and provide appropriate streetscaping.
5.5.3.E Linear systems, Green Corridors, Paths and Streets	<ol style="list-style-type: none"> 2. Community level pathways should connect with Spruce Groves regional pathways, and/or other key destinations within the community, such as neighbourhood scale parks, schools, recreational facilities, and commercial areas. 3. The regional pathway connections should be routed along the edges of ESAs or into locations with less sensitivity to the natural ecology to minimize the impact on the natural space and to minimize desire lines.

3.3 Capital Region Growth Plan

I. Protect the Environment and Resources	
A. Preserve and Protect the Environment	Policy (i) Any development which may cause detrimental effects such as erosion or pollution to lakes, rivers, water bodies and shorelines shall be prohibited unless appropriate mitigative measures are implemented.
II. Minimize Regional Footprint:	
A. Identify, Protect and Prioritize Lands for Regional Infrastructure	Policy (i) Ensure that lands identified for regional infrastructure such as energy transmission, highways, municipal infrastructure, transit and related facilities are protected from incompatible development.
	Policy (ii) The Province and the municipalities shall continue to identify lands that will be used for regional infrastructure. Once identified, these lands shall be protected for the designated use in applicable plans

<p>B. Concentrate New Growth Within Priority Growth Areas</p> <p><i>[The East Pioneer ASP is located in Priority Growth Area A which sets a density target of 25-30 units per net residential hectare.]</i></p>	Policy (i) Most new growth shall occur within priority growth areas.
	<p>Policy (ii) Priority shall be given to accommodating growth in major employment areas and in locations that meet at least three of the following four criteria:</p> <ul style="list-style-type: none"> • Existing and proposed multi-movement corridors, including transit nodes; • Adjacent to existing and proposed major employment areas; • Redevelopment and intensification opportunities within existing urban areas; • Locations that utilize existing infrastructure and servicing capacity or logical and efficiently extend that infrastructure.
	Policy (v) Priority growth areas shall incorporate intensive forms of development that significantly exceed existing development patterns.
D. Support Expansion of Medium and Higher Density Residential Housing Forms	Policy (i) New residential development shall provide a greater proportion of higher density residential units.
	Policy (iii) Greenfield developments shall make provision for a mixture of uses including a diversity of housing forms, community services, local retail and employment opportunities.
	Policy (iv) Transit accessibility must be included in the design of all new developments.
III. Strengthen Communities:	
B. Support Healthy Communities	Policy (ii) Improve accessibility to community services by providing sidewalks, bicycle trails to encourage walking and cycling and locate these services within proximity to transit, where possible.
C. Support Public Transit	Policy (i) Provide a mix of higher intensity land uses along transit corridors, at nodes, and employment centres.
	Policy (iii) New developments shall be designed for connectivity and accessibility to transit facilities.
D. Support Innovative and Affordable Housing Options	Policy (ii) All residential developments shall provide a greater variety of housing types.
IV. Increase Transportation Choice:	
A. Integrate Transportation Systems with Land Use	Policy (iii) Design transportation infrastructure to support multiple modes of transport.
	Policy (iv) Support development of inclusive communities to reduce the need for travel.
B. Support the Expansion of Transit Service in Various Forms	Policy (i) Expand and extend the level
	Policy (iv) Support multi-modal transportation options by providing multi-use streets sufficient to accommodate bicyclists
V. Ensure Efficient Provision of Services:	
A. Design Integrated Physical Infrastructure within the Region	Policy (ii) Identify and protect corridors for transportation, transit and infrastructure requirements.

3.4 Site Context

Topography

The topography of the lands within the Plan area is generally flat with slight undulations (see Figure 3: Site Contours). Elevations through the plan area vary from approximately 679 m in the northeast to approximately 699.5 m in the southwest of the plan boundary, with localized variations throughout. A surface drainage channel exists in the central/north-west portion of the plan area, draining east towards Pioneer Road, through a culvert and north/north-east. All surface drainage generally flows east-northeast to the Big Lake drainage basin. Figure 4: Site Features illustrates the majority the significant features present in the Plan area.

Natural Areas and Ecological Resources

The City of Spruce Grove has identified two Environmentally Significant Areas within and adjacent to the plan area, designated in Your Bright Future as Area H and Area I, and illustrated on **Figure 4: Site Features**.

A detailed Biophysical Assessment was completed by Stantec Consulting Ltd. (Environmental Services) in support of the ASP, and which has, in part, guided the preparation of this plan. The assessment was conducted for the S.E. ¼ Section 2-53-24-W4M and portions of the W. ½ Section 1-53-27-W4M for lands totalling approximately 156 ha. The biophysical assessment categorized each of the various habitat types present within or adjacent to the plan area as either agricultural, ravine, forested or fen complex.

Agricultural land comprises the majority of land in the plan area; however, it is of low ecological value as the land has been negatively impacted by long term cattle grazing and unsustainable stalking rates (Stantec Consulting Ltd,

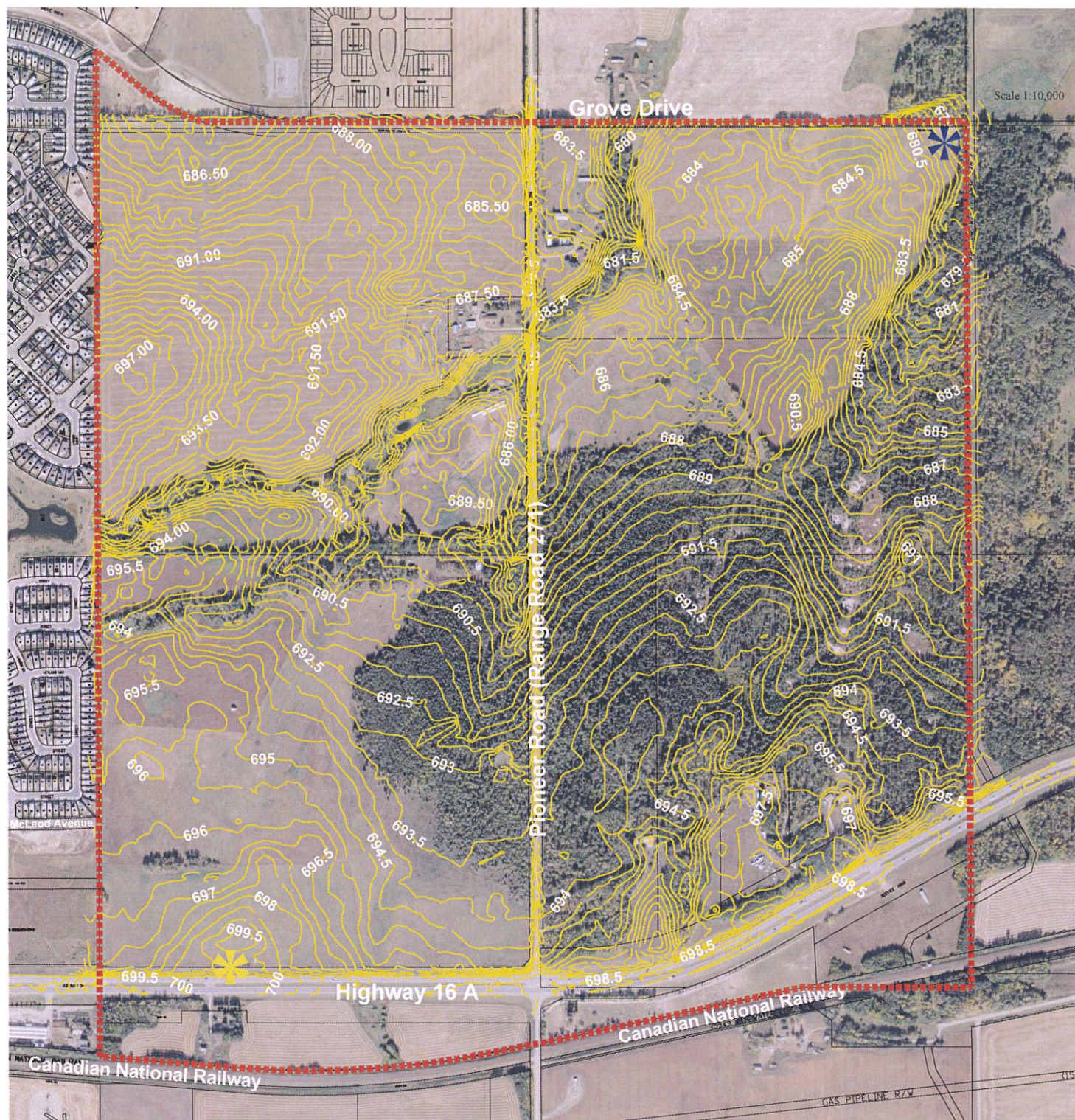
Spruce Grove Biophysical at Hwy 16A and Pioneer Road, November 2010, Page 4.1). The large contiguous forested area east of Pioneer Road and the smaller forested extension to the west of Pioneer Road are currently sustainable and will continue so if local hydrology is maintained. Both areas contain a mosaic of mature deciduous, coniferous and mixed wood forested patches with younger areas containing a higher level of regeneration.

A shallow, intermittently forested ravine traverses the northern portion of the ASP area, from the west to east/north- east. The ravine contains a drainage channel which is considered part of the drainage system for the Big Lake watershed and is subject to the Big Lake Stormwater Management Plan and will be addressed at the detailed design stage.

A large, weakly patterned fen complex is nested within the forested area east of Pioneer Road. Although this area has been disturbed by clear cutting in the past, it is currently thought to be sustainable and has the potential to contain a very complex assortment of flora and fauna. Further investigation of the eastern portion of Area I was conducted to delineate wetland areas (Stantec Consulting Ltd., Delineation of a Fen Located within SE ¼ 2-53-27-W4M (portions), Plan 752 0163, Lot C and Plan 932 0693, Spruce Grove, Alberta). The fen areas are shown in Figure 4: Site Features. It is recommended that pre-treated storm water be directed into the transitional lowland areas surrounding the fen at pre-disturbance levels. Groundwater flows should also be maintained using appropriate engineering controls.

Figure 3 - Site Contours

East Pioneer Area Structure Plan

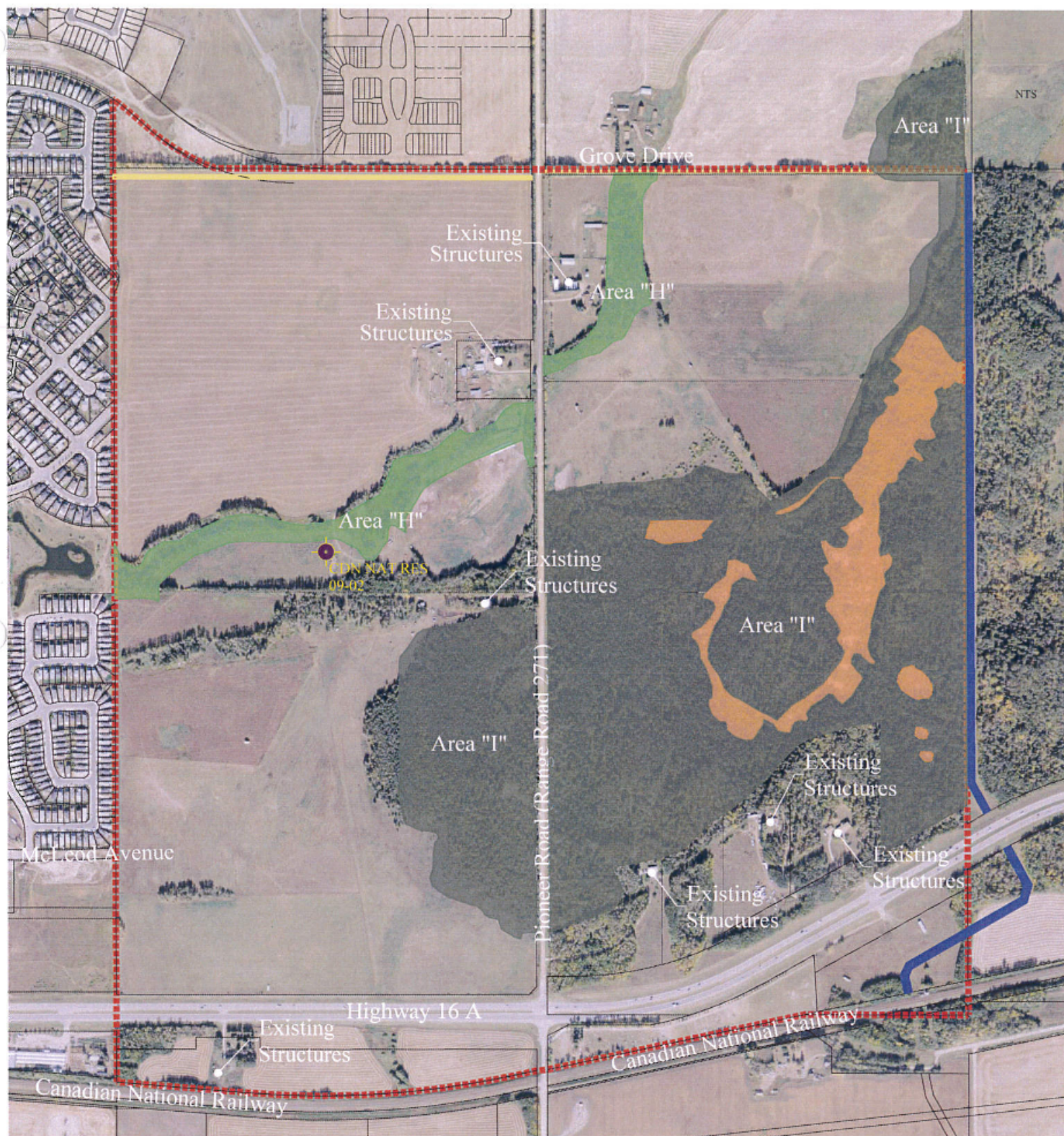


Legend

- Approximate Low Spot
- Approximate High Spot
- ASP Boundary

Figure 4 - Site Features

East Pioneer Area Structure Plan



Legend

- Environmentally Significant Area "H"
(As conceptually identified in the City of Spruce Grove Municipal Development Plan)
- Environmentally Significant Area "I"
(As conceptually identified in the City of Spruce Grove Municipal Development Plan)

- Fen Area
- Abandoned Wellhead Location
- Existing Structure

- Utility R/W
- Pipeline R/W
- ASP Boundary

Ecological Connectivity

The landscape surrounding the ASP area has been fragmented by agriculture for the past 50 years, with cultivation patterns remaining similar from year to year.

The environmentally significant areas identified act as major habitat nodes and are linked directly or indirectly to other natural features on the surrounding landscape. However, there are still significant barriers to movement that punctuate the landscape such as Highways 16 and 16A, rail crossings and urban development. In the case of the ASP area, it is likely that the quality of some of the connections is reduced by the presence of these barriers and therefore results in a declined use by species. Overall, the connectivity would be rated as good within the ASP area and to surrounding areas (Stantec Consulting Ltd, Spruce Grove Biophysical at Hwy 16A and Pioneer Road, November 2010, Page 3.6).

Conservation Areas

Many opportunities for conservation exist within the ASP area. The highest priority for conservation has been assigned to the ravine areas, located in the north-central and north-east portions of the plan area. Although the forested area is of a reasonable size, provides good wildlife habitat and promotes species diversity it is separated from the larger forested area to the east by Pioneer Road, which acts as a barrier to wildlife movement. The remainder of the lands within the plan area have been characterized as lower priority, representing moderate to low ecological value. The biophysical assessment recommends the retention of the ravine areas, retention of the forested area east of Pioneer Road and the maintenance of pre-disturbance drainage patterns within the plan area.

Hydrogeological Review

A hydrogeological review was conducted relating to the potential impacts of development within the ASP on groundwater resources in the area, in particular how the fen complex (east of Pioneer Road) relates to the fens of the Wagner Natural Area and what the potential effects of the proposed development are on the hydrogeology of the Wagner Natural Area.

The review concluded that the ASP area (and specifically the Environmentally Sensitive Area I), does not fall within the groundwater recharge area of the Wagner Natural Area and that reduced groundwater infiltration caused by urban development is not likely to directly affect groundwater flow to the Wagner Natural Area. A letter from the Wagner Natural Area Society was received in support of development proceeding west of Pioneer Road. The plan proponents and the City of Spruce Grove will continue to work with the Society concerning development west of Pioneer Road.

Recommendations provided through engineering studies will serve to mitigate potential impacts to Area I.

Existing Land Uses

The majority of the lands within the Plan area are currently used for agricultural purposes, and contain existing farmsteads and accessory buildings (2011). In the south-east corner of the ASP area, there are three existing residences, two with access directly onto Highway 16A, and one with access onto Pioneer Road. The remaining balance of the land in the east is forested.

Geotechnical Studies

Geotechnical studies have been conducted by participating landowners, and have been submitted under separate cover in support of this ASP.

Geotechnical studies for areas adjacent to the natural area found topsoil and mixed organic soils ranging from 30mm to 600mm in depth, underlain by clays which ranged from soft to stiff in terms of plasticity. Some test locations found sand or silt below the clay. The preliminary studies noted that certain locations may have relatively high groundwater levels and others with thicker layers of peat, or high plastic clay, which may affect construction and grading techniques. While predevelopment surface water flows into the fen area will be maintained, additional geotechnical and engineering work will examine subsurface water levels and provide recommendations to avoid subsurface dewatering.

Pipelines and Well Sites

The following table is a summary of Energy Resources and Conservation Board (ERCB) pipeline and oil well information available through the AbaData website. Research indicates one historic well site, finished drilling in February 1969, is located within the ASP area, west of Pioneer Road and north of Highway 16A, near the southerly boundary of Lot 3, Block 1, Plan 022 1293 (see **Figure 4: Site Features**). Any development in the vicinity of this well site shall comply with the applicable regulations and guidelines.

Table 2: Pipeline & Well Site Summary

Well License #	Licensee	Status	Notes
35659	Canadian Natural Resources Limited	Abandoned February 20, 1969	Located north of Hwy 16A and west of Pioneer Rd, southeast portion of Lot 1, Block 3, Plan 022 1293

4.0 Land Use, Transportation and Servicing

4.1 Vision

Bylaw C-1066-19
January 13, 2020

The East Pioneer ASP is a unique and lively community, focused on the preservation and integration of environmentally sensitive areas and ecological functions and enhancing aesthetic and recreational benefits for residents. A rich and diverse mix of residential uses, in conjunction with ample commercial and open space land uses creates a strong and cohesive development, representing a logical expansion of the City of Spruce Grove, in a manner which balances limited land resources with needed amenities and services.

4.2 Development Goals and Objectives

The East Pioneer ASP was prepared in accordance with the policies and principles identified in *The Municipal Development Plan (MDP) Your Bright Future* and other relevant municipal policy and statutory documents (see **Section 3.0 Planning Policy Context**). The overall goals of the ASP are to establish a neighbourhood that:

1. *Provides a unique neighbourhood identity with emphasis on public accessibility to Environmentally Significant Areas, connected park spaces, stormwater management facilities and commercial activities;*
2. *Establishes a variety of housing types and residential densities to meet consumer needs, encourage diversity and support multi-modal transportation integration;*
3. *Provides a walkable, attractive, safe and comfortable community for residents, with easily accessible recreation and natural area amenities and commercial developments;*
4. *–Deleted–*
5. *Preserves significant elements of Environmentally Significant Areas and integrates them into the neighbourhood;*
6. *Establishes strong connections with neighbouring communities to support area educational, recreational, municipal and commercial facilities;*
7. *Provides an efficient, integrated multi-modal transportation system that connects major inter- and intra- neighbourhood focal points; and*
8. *Provides efficient, contiguous and staged urban and infrastructure development.*

Bylaw C-1066-19,
January 13, 2020

The following section identifies and describes the development objectives for the East Pioneer ASP:

Green Development

1. Encourage naturalized landscaping on public and private lands to maximize environmental benefits and minimize costs associated with development and maintenance; and
2. Consider sustainable, alternative development standards in the design of the neighbourhood

Ecology

3. Conserve significant elements of Environmentally Significant Area H and Area I natural areas; and
4. Strengthen Spruce Groves ecological network.

Environment

5. Ensure urban development around abandoned well-sites adheres to the requirements of the Energy Resources Conservation Board and relevant City of Spruce Grove policy to minimize potential environmental hazards and disruption of future residential areas through careful neighbourhood design.

Historical Resources

6. Ensure that historical, archaeological and paleontological resources are identified and conserved, where applicable.

Urban Design

7. Ensure a compact urban form that uses the land resources responsibly and efficiently;
8. Design residential streets that are pedestrian friendly, safe, and form an integral and attractive component of the public realm;
9. Emphasize the Environmentally Significant Areas, park sites, and the stormwater management facilities as key focal points within the neighbourhood; and
10. Optimize view/vista potential of the Environmentally Significant Areas, park sites and develop stormwater management facilities which are visually and physically accessible and aesthetically pleasing.

Residential

11. Establish an overall residential density that meets or exceeds the Municipal Development Plan and the density targets set out by the Capital Region Growth Plan;
12. Provide a variety of housing types that serve a range of age groups, income levels and needs;
13. Locate higher density residential development with good access to arterial or collector roadways and in proximity to commercial opportunities; and
14. Establish affordable housing opportunities.

Commercial

15. Encourage commercial opportunities in proximity to Highway 16A and Pioneer Road, and increased residential densities;
16. Ensure a high degree of access and visibility for commercial sites; and
17. Minimize the impact of commercial development on adjacent land uses.

*Bylaw C-1066-19,
January 13, 2020*

18. ~~—Deleted—~~

Parks, Recreation Facilities and Schools

19. Accommodate City of Spruce Grove requirements for park and school sites within the neighbourhood.
20. Establish dispersed park spaces throughout the neighbourhood.
21. Design a connected and integrated open space system that encourages active transportation.

Transportation

- 22. Mitigate the impact of vehicle traffic associated with commercial and medium density residential development on lower density residential areas;
- 23. Consider future public transit service when planning roadway alignments and in roadway design; and
- 24. Promote pedestrian accessibility to Environmentally Significant areas, parks, open spaces, and amenities, and to promote active transportation.
- 25. Assess noise and mitigation requirements adjacent to highways.

Special Study Area

- 26. Recognize that the Special Study Area face constraints which may limit the development potential of those lands.

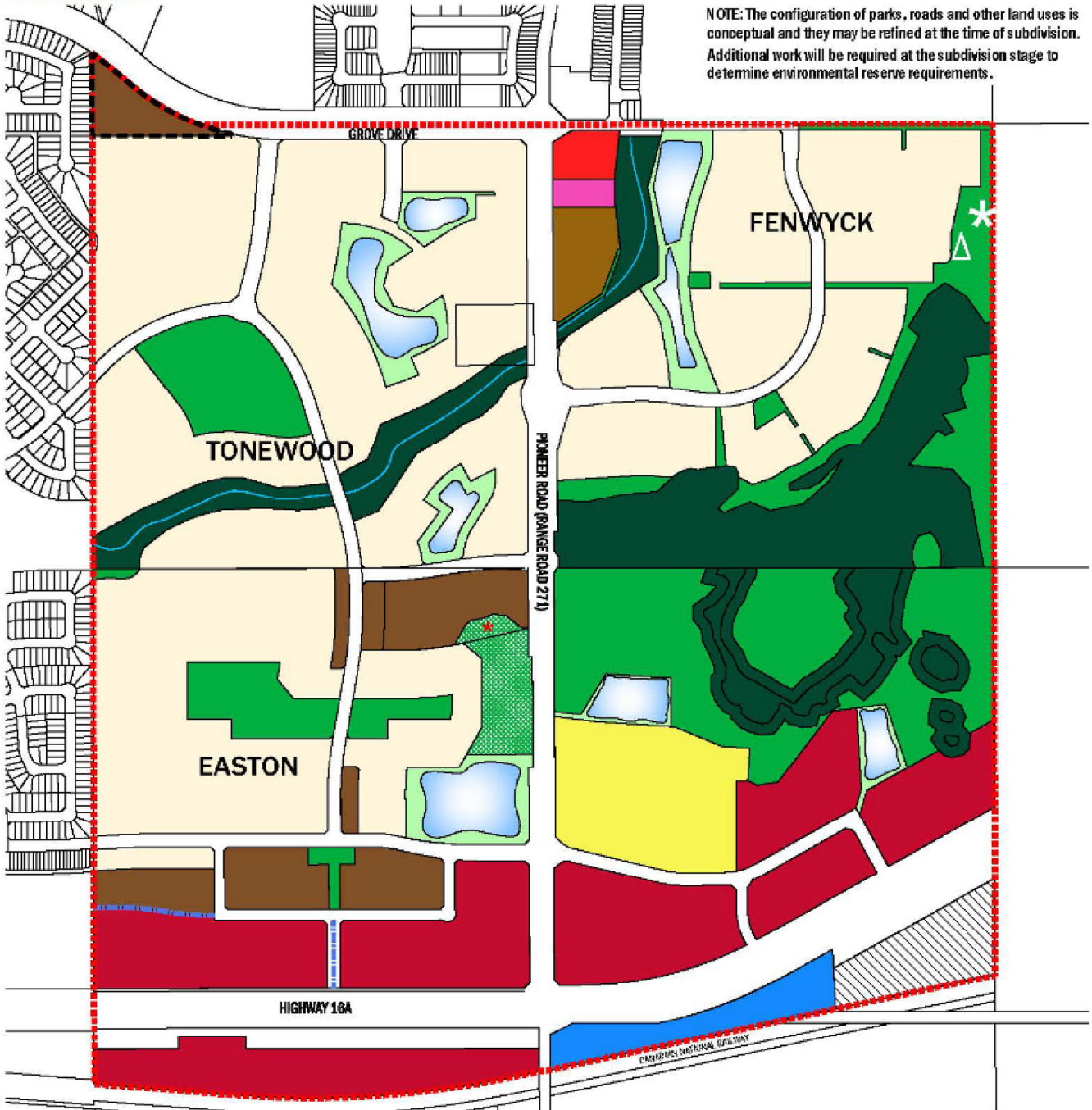
Infrastructure Servicing and Staging

- 27. Ensure that the neighbourhood serviced to a full urban standard.
- 28. Mitigate the Impact of Urban Development on Natural Area I east of Pioneer Road.

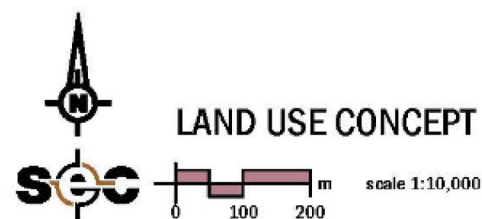
4.3 Land Use Concept & Statistics

The following pages contain the overall Land Use Concept (**Figure 5: Land Use Concept**) for the neighbourhood, as well as the associated land use and population statistics.

AREA STRUCTURE PLAN



* Easton Natural Area configuration may be further refined at the subdivision stage, and further study may be required to delineate any areas to be dedicated as ER, MR, Non-Credit MR or Conservation Reserve.



LEGEND

	Low to Medium Density Residential		Environmental Reserve
	Medium to High Density Residential		Special Study Area
	Commercial		Entertainment District
	Mixed Use		Local Road Frontage
	Institutional		Potential Wetland
	Park / Open Space		Potential Private Collector
	Stormwater Management Facility		ASP Boundary
	Easton Natural Area		Amendment Boundary

EAST PIONEER
SPRUCE GROVE

207-22008-03-PRF005.DWG
Koatway February 10, 2023

FIGURE 5

Table 2: Land Use Statistics

Land Use	Hectares	%
Gross Area	277.44	
Drainage Channel (Environmental Reserve)	7.78	
Natural Area (Environmental Reserve)*	22.78	
Easton Natural Area **	2.43	
Gross Developable Area	244.45	100.0%
Commercial***	32.40	13.3%
Mixed-Use (25%)	0.14	0.1%
Entertainment District	7.20	2.9%
Parkland, Recreation, School, Natural Area		
Parks and Open Space	34.47	14.1%
Transportation		
Highway 16 and CNR	16.54	6.8%
Arterial Roadways	10.17	4.2%
Collector Road	13.09	5.4%
Local Circulation	38.25	15.6%
Infrastructure & Servicing		
Stormwater Management	14.93	6.1%
Institutional / Other		
Special Study Area	3.66	1.5%
Institutional (Existing Cemetery)	3.28	1.3%
Total Non-Residential Area	174.13	71.2%
Net Residential Area (NRA)	70.32	28.8%

***Commercial area includes land currently under review

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	55.64	30.0	1,669	62.57%	2.8	4,673
Mixed Medium to High Density Residential	13.27	67.5	896	33.58%	2.2	1,970
Mixed-Use (75%)	0.41	67.5	28	1.04%	2.2	60
Entertainment District	1.00	75.0	75	2.81%	2.2	165
Total Residential	70.32		2,668	100.0%		6,868

Gross Population Density 28 persons per gross developable hectare

Net Population Density 98 person per net residential hectare

Net Unit Density 38 units per net residential hectare

Student Generation

Elementary 712

Junior High 356

Senior High 356

Total Student Population 1,424

* Environmental Reserve to be determined at the time of subdivision. Further study may be required to delineate the area dedicated as ER.

** Lands dedicated as part of the Easton Natural Area will be exempt from offsite development levies, municipal reserve contribution, and other development contributions.

4.4 East Pioneer Area Structure Plan Policy

4.4.1 Green Development

The three foundations of sustainability economy, society and ecology should be considered in decision making regarding land use and building form.

Objective (1) Encourage naturalized landscaping on public and private lands to maximize environmental benefits and minimize costs associated with development and maintenance.	
Policy	Implementation
(a) Landscaping of the park and open space network should include native plant material.	<ul style="list-style-type: none">• Design open space areas to incorporate native and adapted plant species, where appropriate, to reduce the need for irrigation and the use of pesticides or fertilizers.• Specific species for landscaping will be determined through discussions between the developer and City administration at the time of review of landscaping plans and as part of engineering drawing review.
Rationale: Using native plant materials promotes a healthier natural ecosystem that over time will integrate with the surrounding landscape and seamlessly connect with the existing ecology of the area. Native or naturalized species are often drought resistant and require less maintenance.	

Objective (2) Consider sustainable, alternative development standards in the design of the neighbourhood.	
Policy	Implementation
(a) Implement site planning and building construction methods that utilize a low impact design philosophy, reducing the use of materials and energy, and reducing waste wherever possible. This could include, but is not limited to: energy efficient lighting, grey water reuse, rainwater capture, building techniques and technologies, and alternative road construction standards.	<ul style="list-style-type: none">• Any alternative development standards shall be reviewed and potentially approved by the City of Spruce Grove.• All building forms should consider using green building evaluation tools under programs such as LEED, Built Green, R-2000 or other applicable programs and technologies available at time of construction. Other energy reducing initiatives, such as solar-ready, xeriscaping, green roofs, and rainwater harvesting shall be encouraged.
Rationale: Many aspects of sustainability can be addressed with the design of the neighbourhood and at the site specific building level. This plan encourages consultations with the City and affected agencies to explore the use of alternative development standards (i.e. consideration of servicing techniques or infrastructure provision that differs from current City standards) as one way of achieving sustainability. Allowing for flexibility between developers, homebuilders and the City in regulating the introduction and implementation of alternative designs, techniques and technologies that support ecological processes, cost effectiveness and environmental stewardship in the development of the neighbourhood will contribute to green development.	

4.4.2 Ecology

This ASP ensures that significant portions of Environmentally Significant Area H and Area I are maintained and protected. Attention is paid to ecological linkages between natural areas, stormwater facilities, parks and the ravine. Public access to the ravine and natural areas will be provided via pedestrian connections, parks or roadways.

Objective (3) Conserve significant elements of Environmentally Significant Area H and Area I.		
Policy		Implementation
(a)	<p>Integrate sustainable portions of Environmentally Significant Area H and Area I through the use of one or several of the following mechanisms:</p> <ul style="list-style-type: none"> • dedication of environmental reserves or municipal reserves at the subdivision stage; • purchase of lands by the City based on market value; • land/property exchange with other City owned properties; or • other mutually acceptable arrangements. 	<p>Figure 5: Land Use Concept illustrates the location and configuration of the conserved natural areas.</p> <p>The City of Spruce Grove and the affected landowners shall enter into discussions and negotiations regarding timely dedication or purchase of portions the natural area.</p> <p>In cases where the City and the landowner are unable to reach an agreement, an amendment to the ASP Bylaw may be initiated by the landowner to re-designate the relevant portions of the natural area for urban development uses.</p> <p>Dedication of Environmental Reserve will be made at the time of subdivision. Additional studies may be required to delineate the area to be dedicated as ER needed to retain and protect the fen area within Area I.</p>
(b)	<p>Work with landowners, the City of Spruce Grove and Alberta Environment to protect surface water and groundwater flow which supports Environmentally Sensitive Areas.</p>	<p>In order to sustain the Environmentally Sensitive Area I east of Pioneer Road, the stormwater management system, site grading scheme and construction techniques shall be designed to continue providing the area with pre-development groundwater recharge flows and to eliminate the potential for ground dewatering.</p>
(c)	<p>A Biophysical Assessment shall be completed for retained Environmentally Sensitive Areas.</p>	<p>A Biophysical Assessment has been completed in support of the ASP and provides direction for the maintenance of the natural areas.</p>
<p>Rationale: Environmentally Sensitive Areas H and I are important ecological resources for the City of Spruce Grove. Conserved natural areas add to the diversity and vitality of urban areas and help create a sense of place. While recreation may be accommodated to a limited degree, the conservation of the natural areas will take precedence.</p> <p>A significant portion of the area identified within the plan area will be conserved as per the recommendations of the Biophysical Assessment (BA), the hydrogeological review, fen delineation report, the Municipal Development Plan, the Parks and Open Spaces Master Plan and other City strategic policies and guidelines. Development of surrounding lands shall ensure protection of the natural areas during construction, maintain pre-disturbance drainage patterns and ensure any alterations to the hydrologic regime will not negatively impact up/down stream users.</p> <p>A hydrogeological assessment completed in support of the ASP concludes that the plan area does not fall within the groundwater recharge area of the Wagner Natural Area and that reduced groundwater infiltration caused by urban development is not likely to directly affect groundwater flow to the Wagner Natural Area.</p> <p>Specific recommendations with regard to maintaining predevelopment flow to the natural area I, east of Pioneer Road, will be provided in the Neighbourhood Design Report, submitted under separate cover.</p>		

Objective (4) Strengthen Spruce Groves ecological network	
Policy	Implementation
(a) Maintain or enhance the ecological network within and through the neighbourhood by maintaining or establishing linkages between natural areas and other open spaces (e.g. parks and SWMFs).	Figure 6: Active Transportation Network and Open Spaces Plan illustrates the linkages between the natural areas, park space, walkways, and stormwater ponds.
Rationale: The integration of environmentally sensitive areas into the ASP will provide opportunities for surface water quality enhancement and retention of wildlife and plant biodiversity, as well as providing a natural feature as a neighbourhood focal point for public enjoyment and education.	

4.4.3 Environment

To ensure that lands within the East Pioneer ASP are suitable for development, landowners should investigate and assess potential environmental concerns.

Objective (5) Ensure urban development around abandoned well-sites adheres to the requirements of the Energy Resources Conservation Board and relevant City of Spruce Grove policy to minimize potential environmental hazards and disruption of future residential areas through careful neighbourhood design.	
Policy	Implementation
(a) Development around abandoned well sites shall be in accordance with ERCB requirements	<ul style="list-style-type: none"> • Figure 4: Site Features illustrates the approximate location of an abandoned well site. Exact well locations and setback requirements will be determined prior to subdivision approval. • Consideration for appropriate land uses around well sites will be determined at the rezoning stage.
Rationale: Policies relating to existing and abandoned oil and gas uses will ensure conscientious residential development around oil and gas well sites at all stages of the plan implementation and construction process while minimizing potential disturbances to the area's future residents. Urban development in the vicinity of all resource well sites will be planned in accordance with ERCB guidelines for development around abandoned wells.	

4.4.4 Historical Resources

Development within the ASP should have regard for the preservation of historical, archaeological and paleontological resources.

Objective (6) Ensure that historical, archaeological and paleontological resources are identified and conserved, where applicable	
Policy	Implementation
(a) All historical, archaeological and paleontological discoveries shall be reported.	Any discoveries encountered during activities associated with the proposed development must be reported to Alberta Culture, Historic Resources Management Branch.

4.4.5 Urban Design

Compact development is a key component in land conservation. Compact communities contribute to infrastructure efficiency, walkability, and transportation efficiency. Higher density residential uses such as multi-unit buildings are essential in order to create sufficient population densities, and can result in a more efficient, walkable and liveable community.

The locations of higher density housing sites are strategically designed and configured in relation to key focal points such as parks and commercial sites, near or adjacent to collector and/or arterial roadways and pedestrian corridors. In addition, special attention should be given to the development of high quality building designs, with architectural treatments that positively contribute to a human-scale public realm and to a community identity that is harmonious and attractive.

Objective (7) Ensure a compact urban form that uses the land resources responsibly and efficiently	
Policy	Implementation
<p>(a) The neighbourhood shall provide increased densities to make more efficient use of land, reduce vehicle dependency and develop better connections for pedestrians and cyclists.</p>	<p>Figure 5: Land Use Concept and Table 3: Land Use & Population Statistics illustrate the overall layout and density for the ASP which exceeds:</p> <ul style="list-style-type: none"> Spruce Grove density and housing mix requirements (25-30 du/net residential ha with a minimum of 30% Level 2 housing); the minimum density target of the Capital Region Growth Plan (25-30 du/net residential ha).
<p>Rationale: The ASP provides multiple opportunities for increased residential densities at appropriate locations along higher capacity roads-providing an overall density of 32 du/net residential hectare. Increasing residential densities, in general, results in a more efficient use of land, municipal infrastructure and facilities. Locating commercial and recreation amenities within walking distance of compact residential development encourages residents to walk or cycle to a destination point, reducing the use of automobiles for daily tasks.</p>	

Bylaw C-1066-

Objective (8) Design residential streets that are pedestrian friendly, safe, and form an integral and attractive component of the public realm.	
Policy	Implementation
<p>(a) Promote street-oriented housing along collector roadways to create a pedestrian-friendly built form.</p>	<p>The specific type and location of street-oriented residential uses will be determined at the rezoning stage.</p>
<p>(b) Ground-oriented residential lots shall not have direct access to collector roadways without prior approval from the City of Spruce Grove.</p>	<p>The orientation of residential lots along collector roadways and the location of alleys will be determined at the subdivision stage.</p> <p>Where it is infeasible to provide lane access, such as in the northeast quadrant, where a small residential area is bounded by park, public utility lot and a collector roadway, direct access may be allowed.</p>
<p>(c) Streets that are major pedestrian routes (i.e. collector and arterial roads) should feature treed boulevards, minimal driveway interruptions and wider sidewalks where appropriate.</p>	<p>The design of roadways will be implemented at the detailed design stage, to the satisfaction of the City of Spruce Grove.</p>

Rationale: Designing attractive residential streetscapes by using similar or compatible housing forms and zoning designations provides a comfortable physical environment and creates a consistent mass and scale. Orientation of buildings towards public areas (i.e. streets, parks and SWMFs) also plays an important part of creating interesting and varied streetscapes and increases a sense of resident awareness of neighbourhood activities and safety (eyes on the street).

Street-oriented housing will be developed primarily along collector roadways and will provide active and inviting streetscapes with buildings typically featuring doorways, porches and windows at ground level and smaller front yard setbacks to engage the pedestrian and support natural surveillance of the street. Standard zones within the Land Use Bylaw will be applied to facilitate the developments. Along busier roadways, vehicular access to street-oriented uses should be from an alley to minimize vehicular conflicts. Densities will vary dependent on the housing form.

At the detailed design stage the function of the roadway will dictate the appropriate cross-sections to be implemented (i.e. collector or local). To ensure pedestrian connectivity and safety is maintained along all primary pedestrian linkages, sidewalks should be separated from the main vehicular route by a treed boulevard, and where possible front drive access along higher volume roadways should be minimized to reduce vehicular and pedestrian conflict.

Objective (9) Emphasize the Environmentally Significant Areas, park sites, and the stormwater management facilities as key focal points within the neighbourhood.

Policy	Implementation
(a) Environmentally Significant areas, park sites, commercial areas, stormwater management facilities, and major pedestrian routes should be treated as focal points or community gathering places within the neighbourhood.	Figure 5: Land Use Concept shows the general location of parks, stormwater facilities, natural areas and commercial sites.
(b) Where appropriate, focal points should be emphasized through features such as architectural and landscape elements (e.g. ornamental lighting, benches, lighting, benches, signage, etc.) to produce a recognizable theme and identity.	Developments or neighbourhood sub-units should work collaboratively to encourage the establishment of a consistent theme.
<p>Rationale: Neighbourhood focal points create community destinations within the neighbourhood. Through careful design and site planning, the development of these focal points creates active spaces which are alive and utilized and promote community interaction. Neighbourhood focal points within the neighbourhood include the Environmentally Significant areas, park sites, and several stormwater management facilities. These provide key amenity spaces for local residents and add to the neighbourhoods attractiveness, character and image as a pedestrian-oriented community and promote social interaction between residents.</p> <p style="text-align: right;"><i>Bylaw C-1066-19, January 13, 2020</i></p>	

Objective (10) Optimize view/vista potential of the Environmentally Significant Areas, park sites and develop stormwater management facilities which are visually and physically accessible and aesthetically pleasing.	
Policy	Implementation
(a) Street frontage along abutting roadways should consider Environmentally Significant areas, parks and opportunities for maximizing views of the stormwater management facilities (SWMFs).	Subdivision design shall have regard for the provision of adequate street frontage abutting the natural areas, parks and SWMFs to maintain and enhance view and use opportunities.
(b) Parks and SWMFs shall be designed using crime prevention through environmental design (CPTED) principles, accessible through public lands and not land-locked by private development.	The location and configuration of SWMFs and parks are conceptually illustrated in Figure 5: Land Use Concept and will be refined prior to rezoning and/or subdivision.
(c) SWMFs should include native or naturalized species intended to provide habitat opportunities for wildlife and improve water quality.	SWMF landscaping shall be determined between the developer and City Administration at the time of review of landscaping plans and as part of engineering drawing review.
Rationale: The location and configuration of SWMFs and parks integrate these uses into the pedestrian network and provides vistas from abutting roadways. This will in turn will promote them as walking destinations, and provide passive recreation opportunities while enhancing their surveillance to prevent crime.	

4.4.6 Residential

Approximately 40% of the gross development area is designated for residential purposes. The Plan provides for the following designations, generally consistent with the MDP:

- **Low to Medium Density Residential (Level 1)** This designation allows for the development of low to medium density residential uses, including single detached, semi-detached/duplex and street-oriented row housing, generally with an average density of 30 units per ha.

Semi-detached dwellings with both rear and front drive garage are being introduced to provide additional housing choice. These units will still share a property line; however, they will alternate from front and rear drive garages so that the units look like one larger house from the front.

The Low to Medium Density Residential areas have been adjusted where the stormwater management facilities have been removed or modified, resulting in a 1.43 ha increase in Low to Medium Density Residential.

- **Medium to High Density Residential (Level 2)** This designation allows for the development of a variety of medium to high density housing, generally averaging 67.5 units per ha. Typical housing forms include row housing (street-oriented or project style), stacked town housing or low-rise apartments.

A Direct Control District on Lot 4, Block 1, Plan 152 2888 will control the use of the site and to ensure building aesthetics are designed to sensitively interface with surrounding uses,. This site shall be developed to a maximum density of 70 units per hectare (i.e. approximately 111 units). More specifically the structures shall be a maximum of 3-storeys, not exceeding 12.0 meters in height, have site coverage of a maximum 57%, and shall maintain a minimum setback of 7.0 m from existing low density residential uses. The future development will be informed by the approved Medium to High Density residential use.

A 3.34 ha Medium to High Density Residential land use is added to the northeast corner of Easton adjacent to Pioneer Road and an additional 5.52 ha Medium to High Density Residential

Bylaw C-1199-22,
July 18, 2022

Bylaw C-1066-19,
January 13, 2020

May 8, 2023

area is added south of McLeod Avenue. 0.83 of Medium to High Density Residential has also been added along the north/south collector road.

A 0.55 ha Mixed Use site with residential (medium to high density) and main floor commercial has been added at the north end, north of the creek and east of Pioneer Road. Opportunities exist to allow for office space on either the main or second floor of the building. The residential density of the site will be identified as 67.5 units/ha with a 25 percent area reduction to accommodate the anticipated commercial uses. The 2.55 ha Medium to High Density site located in the northwest of the Fenwyck neighbourhood has been reduced by 0.55 ha to accommodate the addition of the Mixed Use site.

Bylaw C-1152-21,
June 14, 2021

The Entertainment District proposes the possibility for approximately 1.0 ha of new medium to high density residential dwellings. These residential units would be possible through apartment buildings at an approximately density of 75 du/ha and would include dedicated parking and access separate from the proposed Stadium and its associated developments.

Bylaw C-1199-22,
July 18, 2022

The ASP proposes an overall residential density of approximately 38 units per net residential hectare (28 persons per gross developable hectare). This density meets the targets set out in the Capital Region Growth Plan and the Municipal Development Plan

Providing a variety of housing types promotes the creation of well-balanced, diverse neighbourhoods comprised of people from a range of income and age groups, as well as various types and sizes of families.

The provision of affordable housing can contribute to the creation of a more complete and diverse community. By providing greater housing choice, the neighbourhood can support a range of demographic and socioeconomic groups, and can better accommodate lifecycle changes.

*Please see **Table 3: Land Use & Population Statistics** for up-to-date land use area, density and population information.*

Objective (11) Establish an overall residential density that meets or exceeds the Municipal Development Plan and the density targets set out by the Capital Region Growth Plan.	
Policy	Implementation
(a) The ASP shall apply residential land use designations to meet or exceed the Municipal Development Plan targets for provision of diverse housing types and increased residential densities for new neighbourhoods.	Table 3: Land Use & Population Statistics illustrates that 62% of units in the ASP are attributed to Level 1 housing (Low to Medium Density Housing) and 37% is attributed to Level 2 housing (Mixed Use and Medium to High Density Housing), achieving an overall net residential density of 33 units per hectare.
(b) The ASP shall meet or exceed the approved density target as set out by the Capital Region Growth Plan.	The ASP neighbourhood density meets the target CRB.
<p>Rationale: The ASP conforms to Councils direction under MDP Policy 5.2.4.1 whereby 30% of the housing to be provided will be Level 2 (Mixed Residential/Commercial or Medium to High Density), and provides for a net residential density of 25-30 units per hectare. In keeping with recent the shift towards residential intensification, this plan seeks to provide a choice of housing forms within the neighbourhood, and to generally make more efficient use of new suburban land. These densities will support future public transit, use infrastructure more effectively, provide a user base for community facilities, and encourage greater social mix.</p> <p>The City of Spruce Grove is located in the Capital Region Growth Plans Priority Growth Area A which sets a density target of 25 to 30 units per net residential hectare. The East Pioneer ASP achieves this target.</p>	

Objective (13) Locate higher density residential development with good access to higher capacity roadways, amenities and gathering places	
Policy	Implementation
(a) Higher density uses should be located along collector and arterial roadways, along potential future transit routes, and near amenity areas.	Figure 5: Land Use Concept will guide the development of medium and high density residential uses, which will be located near neighbourhood entrances, amenity areas, and along collector and arterial roadways.
Rationale: Location of higher density residential development along collector or arterial roads and within walking distance of commercial uses, near community focal points and open spaces creates a more compact, walkable, attractive, and liveable neighbourhood.	

Objective (14) Establish affordable housing opportunities	
Policy	Implementation
(a) Provide a wide variety of housing types with a range of price points.	Figure 5: Land Use Concept specifies the location of all residential land uses.
(b) Encourage the construction of secondary suites.	Secondary suites will be developed in accordance with the Land Use Bylaw.
Rationale: The East Pioneer ASP strives to address housing affordability through provision of a more intensive form of residential housing which: <ul style="list-style-type: none"> • maximizes land and servicing efficiencies, thereby reducing cost; • allows for a variety of lot sizes and housing forms providing the consumer the option to choose the housing form best suited to their situation; • improves walkability of the community thus reducing reliance on private automobiles; and This plan encourages the exploration of innovation whether it is developer-driven or City-driven. Secondary suites can provide an important potential source of affordable housing for singles and other small households, and create mortgage-helpers for the owner of the principal dwelling.	

4.4.7 Commercial

The East Pioneer ASP features one vehicle oriented commercial site, and a mixed use area including commercial land uses. The vehicle oriented commercial area is located along the south side of Highway 16A, abutting the Canadian National Rail line, and occupies an area of approximately 6.3 ha. This area is appropriate for commercial and service land uses of a vehicle-oriented nature, for a regional-scale catchment area. Prominent frontage along Highway 16A provides opportunities for highway access and high visibility. Connections with arterial and collector roadways will allow efficient access for traffic originating from within Spruce Grove. At the southeast corner at the intersection of Pioneer Road and Grove Drive, a 1.0 ha site is designated for commercial.

Bylaw C-1008-17,
Sept 11, 2017

An 11.37 ha commercial area is located immediately north of Highway 16A.

Bylaw C-1066-19,
January 13, 2020

New commercial lands uses are proposed in part of the western Special Study Area, through re-designation of removed Estate Residential land use, and in small expansion into surplus road right-of-way available abutting Highway 16A. These commercial lands are comprised of an Entertainment District and Highway Commercial uses, which together total approximately 20.9 hectares. An Entertainment District is defined to support development of a vibrant mixed-use sports entertainment area. The vision includes a high quality baseball stadium complex, with supportive commercial uses, other recreational focused uses, and the potential of some integrated residential apartments. This 7.2 ha area provides a major recreational oriented focal point.

Bylaw C-1152-21,
June 14, 2021

Highway commercial uses are proposed north of Highway 16A. These commercial lands are comprised of redesignated Special Study Area lands, the former Estate Residential lands, an addition from the Park/Open Space area, and some surplus highway. As this commercial area is adjacent to Highway 16A future development will be required to adhere to the higher development standards that include additional landscaping requirements and building considerations (i.e. minimum façade height and width, and architectural features such as multiple colours, complimentary finishes, and textures, articulating walls, canopies, and varying rooflines, etc.).

The approximately 2.5 ha of the expanded commercial lands from the Highway 16A road right-of-way shall be subject to City confirmation through a road closure process. The proposed 1.7 hectares of commercial lands from the boundary of Environmentally Significant Area “I” shall be confirmed through environmental and engineering analysis required prior to the lands being redistricted.

Objective (15) Encourage vehicle oriented commercial opportunities in proximity to Highway 16A.	
Policy	Implementation
(a) Commercial uses shall be located in proximity to residential areas major transportation corridors.	Figure 5: Land Use Concept illustrates the location and general configuration of the commercial areas, which will be implemented through appropriate sections of the Land Use Bylaw.
<p>Rationale: Locating commercial uses in proximity to higher residential densities results in a mutually beneficial arrangement between local residents who are able to access daily commercial services within walking distance, business owners who have an increased market share, and the larger community through reduced vehicular dependency.</p> <p>Prominent frontage along Highway 16A and from collector and arterial roadways are important components influencing the location of commercial sites as well as awareness of the commercial development for residents from surrounding communities.</p> <p>Access to the southern vehicle-oriented commercial site will be primarily from Highway 16A, at the discretion of the City of Spruce Grove.</p> <p>Further analysis of access locations for all commercial sites may be required at time of their development.</p>	

Objective (16) – Deleted –

Bylaw C-1066-19,
January 13, 2020

Objective (17) Minimize the impact of commercial development on adjacent land uses	
Policy	Implementation
(a) Activity areas (e.g. primary entrances) associated with commercial uses should be oriented towards arterial or collector roadways, away from residential uses.	Where possible, place medium density residential uses near commercial uses, and have regard for building placement and activity areas for commercial development under the applicable zone.

Bylaw C-1066-19,
January 13, 2020

<p>(b) Low density residential lots adjacent to commercial uses shall either back onto or flank commercial uses.</p>	<p>The application of appropriate setbacks, landscaping, buffering and design elements available under the Land Use Bylaw at the Development Permit stage. Use landscaping, fencing, screening, and architectural treatments to achieve a beneficial land use transition, to the satisfaction of the City.</p>
<p>Rationale: Impacts associated with commercial development should be minimized and carefully integrated with surrounding residential development through attention to site design (building placement, access locations), pedestrian connectivity, and appropriate transitioning.</p>	

Objective (17A): Promote safe and convenient access between residential and commercial uses.	
Policy	Implementation
<p>(a) Priority pedestrian crossing areas shall use an enhanced crossing feature, which may include, but is not limited to, curb extensions, raised crosswalks, coloured and textured pavement, signals, etc. to increase safety and visibility of pedestrians accessing the commercial area.</p>	<p>An appropriate crossing feature that achieves this policy is to be determined at time of subdivision design in accordance with the engineering standards or an innovative solution accepted by the City.</p>
<p>Rationale: Traffic Calming measures and pedestrian crossing aides will help reduce traffic speeds and prioritize pedestrian activity in the area. Encouraging use of nearby commercial by Easton residents will help to ensure the viability of the commercial uses and increase activity in the commercial area as a place to shop, work and socialize.</p>	

4.4.8 Deleted

Objective (18) – Deleted --	
Policy	Implementation

4.4.9 Parks, Recreation Facilities and Schools

Bylaw C-1066-19,
January 13, 2020

The ASP provides for a variety of park spaces and natural areas within the neighbourhood to ensure that open space is accessible to as much of the population as possible. Classification of these open space areas has been outlined based on the categories provided in the City of Spruce Grove Parks and Open Spaces Master Plan. The open spaces provided include several Environmentally Sensitive Areas (Type A), one school park (Type D) and one neighbourhood park (Type C)..

Four new parks/open spaces are identified:

Bylaw C-1066-19,
January 13, 2020

- A 2.81 ha Type C central park spaces to provide linear connections and programmable space;
- A 0.96 ha Type E linear park immediately east of the Type C park.
- A 0.42 ha Type E linear park to provide a direct pedestrian/bicycle connection for neighbourhood residents to the Easton commercial site.

- A walkway connection and extension of the natural area on the fringe of a ravine is provided as a 0.14 ha Type A park by municipal reserve in the northwest corner of Easton.

Bylaw C-952-16,
May 9, 2016

Five stormwater management facilities (SWMF) provide additional open space opportunities. The smaller park spaces are provided to park space for all neighbourhood residents, to ensure connectivity and views. **Figure 6: Active Transportation Network and Open Spaces Plan** shows the distribution of these facilities throughout the neighbourhood.

Bylaw C-1066-19,
January 13, 2020

A linear park has been provided along the north side of the environmental reserve drainage channel for a pedestrian trail until a point where the trail will cross the creek and head north into the Prescott neighbourhood. The boundary for the environmental reserve (drainage channel) in the NW Fenwyck area has been amended to match the survey that was agreed upon by the City in the summer of 2015. This has increased the environmental reserve by 0.50 ha.

Bylaw C-1066-19,
January 13, 2020

Any surplus municipal reserve from the residential portion of the Easton area may be deferred to property under the same ownership within the ASP area or collected as cash-in-lieu, at the discretion of the City in the endeavor of retaining the identified natural area east of Pioneer Road. Municipal reserve owing for the proposed commercial area will be provided as cash-in-lieu, or as a DRC on titles at the time of subdivision.

A 2.43 ha area is identified as the Easton Natural Area. A portion of the forested area within Easton Neighbourhood west of Pioneer Road uncovered soils with high levels of peat and are uneconomical for development. As a result an area of 2.11 ha is identified for retention and restoration as part of the Easton Natural Area.

Bylaw C-1066-19,
January 13, 2020

A Natural Area Restoration and Management Plan (NARMP) is required as part of any redistricting application for the identified Natural Area or bordering residential lands. The NARMP will define the conditions for re-naturalization of the lands, identify responsibilities, and provide recommendations for integration with the urban environment. The following items shall be defined within the NARMP:

- Responsibilities and timelines with respect to restoration and management goals and objectives,
- Methods of weed monitoring, control, and maintenance,
- Landscaping requirements including tree types and reforestation locations for tree planting,
- If required, buffer space shall be identified and included within the natural area to maintain access and protection between the re-established tree stand and private property, and
- Any maintenance or development on the natural area site will follow protocol as established in the NARMP.

The following items shall be considered for the servicing agreement associated with the Easton Natural Area at subdivision:

- Lands dedicated as part of the Easton Natural Area will be exempt from offsite development levies, municipal reserve contribution, and other development contributions,

- Developer will be responsible for protecting the integrity of the natural area during all subdivision related construction activities within or adjacent to the natural area during development of the Easton neighbourhood,
- The City will undertake responsibility for public awareness efforts and any interpretive signage within the natural area,
- Any trail construction and or lighting requirements within the identified natural area will be the responsibility of the City, and
- Any additional responsibilities of the developer and the municipality as negotiated at the time of subdivision.

The north portion of the Easton Natural Area, located within Lot 1, Block 1, Plan 182 2695, includes an area of undisturbed trees. This 0.32 ha area was reported to have peat depths greater than 40 cm and is identified as part of the Easton Natural Area on Figure 5. This area could be integrated with the reforestation area to the immediate south. Prior to development occurring on the subject parcel, additional studies may be required to determine which areas may be deemed undevelopable and if any areas may qualify for Environmental Reserve.

The exact area and configuration of the Easton Natural Area may be refined at the time of subdivision. Specific lot designations within the Easton Natural Area will be determined in accordance with the Municipal Government Act at the time of subdivision. Land that is identified as undevelopable or qualifies as environmental reserve will not be considered for credited municipal reserve dedication.

*Bylaw C-1152-21,
June 14, 2021*

The area's open space boundary has been reconfigured to match the edge of the area's two new stormwater management facilities and is further defined to accommodate a linear greenway park between these facilities. The SWMFs edges and the greenway park will incorporate naturalized plantings to provide a transition and environmental buffer from urban development, and providing active walking destinations and passive recreational spaces in the area. The areas designated as Park / Open Space in the Land Use Concept, except the linear greenway park, shall be provided by Environmental Reserve at subdivision.

The amended Environmentally Significant Area "I" boundary was determined through biophysical assessment, and other engineering review, for the SWMF within the former Special Study Area. This review supported the removal of approximately 5.31 hectares of wetlands in the west Special Study Area as being developable lands for the west SWMF, parts of the Entertainment District (ball stadium), and to accommodate area roads. This biophysical assessment provides strategies for the protection of the natural area interface, and these measures will be incorporated into the engineered design of the open spaces abutting areas preserved through Environmental Reserve dedication.

A further reduction of the Environmentally Significant Area "I" boundary may be possible to increase commercial land areas in the amendment area's southeast corner along Highway 16A. This reduction shall be based on thorough engineering and biophysical assessments at land redistricting for determining developable land boundaries of any additional commercial lands.

A linear greenway park is intended to connect the area's two SWMFs, and it shall incorporate a pedestrian pathway as an extension of the City-wide pedestrian network and provide a 'buffer' for the preserved Environmentally Significant Areas "I" from urban development. It is understood that this

Park area shall not include wetlands (E.R.); will be a minimum of 6.0 metres in width considering any recommendations for appropriate buffer widths; be landscaped with native grass and tree species; and, have a minimum width for such pathways per City engineering standards. This Park area (i.e. Municipal Reserve) shall be fully determined upon future interface environmental studies required upon its redistricting and subdivision. Where no specific requirements or clear design recommendations are provided from existing studies, the City shall, with the goal of providing an environmental buffer between the natural area and the developed lands, require additional studies to determine adequate buffer treatments upon proposed redistricting or subdivision.

Additional linear greenways have been added to provide connectivity and will be dedicated as municipal reserve. The east/west linear greenway through the north central portion of the Fenwyck neighbourhood will have a minimum width of 11 m, the linear greenway continuing east from the Grove Drive terminus will be 10 m, and the north/south linear greenway along the eastern plan boundary will be provided with a 20 m width. The addition of these linear park features will add 1.02 ha to the Park/Open Space use.

Bylaw C-1199-22,
July 18, 2022

The Fenwyck contributions to two natural areas have now been defined and dedicated as either municipal or environmental reserve through the subdivision process. The changes include a 5.22 ha increase in Environmental Reserve and a related 5.76 ha decrease to Park/Open Space, and a related increase to the Low to Medium Density Residential to reflect the refinements to and legal registrations of lands within the natural areas.

Bylaw C-1199-22,
July 18, 2022

A small potential wetland area is located within the northeast corner of the larger natural area. An updated biophysical assessment will be required at the time of subdivision to determine if this area is a wetland and qualifies as environmental reserve and would also identify any required buffers. A symbol has been added to the Land Use Concept identifying this future requirement.

Objective (19) Accommodate City of Spruce Grove requirements for parks sites within the neighbourhood		
Policy	Implementation	
(a) Use the Parks and Open Spaces Master Plan as a guide to acquire and designate parks and open spaces in the ASP.	Figure 6: Active Transportation Network and Open Spaces Plan illustrates the location, configuration and category of parks and open space within the neighbourhood.	
(b) The ASP shall provide Municipal Reserves as land, cash in lieu of land, or a combination thereof, up to 10% of the gross developable area.	The City of Spruce Grove will determine the Municipal Reserve owing for the ASP, which shall be dedicated in full as land, money-in-lieu, or an acceptable combination thereof, at the time of subdivision.	
(c) Municipal Reserves in excess of 10% of the gross developable area required for conservation of Environmentally Sensitive Areas shall be acquired through one of the following: <ul style="list-style-type: none"> • purchase of these lands by the City based on market value; • land/property exchange with other City owned properties; or • other mutually acceptable arrangements. 	The City of Spruce Grove and the affected landowners shall enter into discussions and negotiations regarding timely dedication or purchase of Environmentally Sensitive Areas.	

Rationale: The ASP provides for the preservation of environmentally sensitive areas and well distributed parks and open spaces, ensuring accessibility to all residents to meet their natural, passive and active recreational needs. The ASP is well located in proximity to the Jubilee Park district park, located just to the northwest across Grove Drive. Major linkages from plan area to this park will provide residents with accessibility to formal recreation opportunities.

Objective (20) Establish dispersed park spaces throughout the neighbourhood		
Policy	Implementation	
(a)	Ensure a balanced spatial distribution of neighbourhood parks and open spaces. Every housing unit within the ASP boundary should be within a 500 m walking distance from a natural area or a park.	<p>Figure 6: Active Transportation Network and Open Spaces Plan will guide the location and configuration parks and open space within the neighbourhood.</p> <p>Bylaw C-1066-19, January 13, 2020</p>
<p>Rationale: The open spaces identified in the ASP conform to the City of Spruce Grove Parks and Open Spaces Master Plan, which provides for seven categories of natural and open spaces. Of these, three categories are provided for in the East Pioneer ASP Types A, C, D and E.</p> <p><u>Type A Natural & Semi-Natural Green Spaces and Watercourses</u></p> <p>The ASP designates several land uses for the preservation of environmentally sensitive areas. These areas have been identified as follows in the City of Spruce Grove MDP:</p> <ul style="list-style-type: none"> Area "H" - is a creek that flows out of a stormwater management facility in the Lakewood neighbourhood. The creek flows for at least part of the year and after significant precipitation and enters Atim Creek further upstream. <ul style="list-style-type: none"> Approximately 7.3 ha of land have been identified for the preservation of this creek area as drainage associated with this area is considered part of the drainage system for the Big Lake watershed. Delineation of these boundaries and dedication of land will be determined through the subdivision process. Area I is a regionally significant forest stand and fen located east of Pioneer Road. The delineation of Municipal Reserve boundaries and dedication of land will be studies through a fen delineation study and floodplain analysis, and will be determined through the subdivision process. Municipal reserve land above the 10% allotment will be acquired by the City of Spruce Grove or through other mutually agreeable means. <p>A walkway connection and extension of the natural area on the fringe of a ravine is provided as a 0.14 ha Type A park by municipal reserves in the northwest corner of Easton. This park will preserve the southern fringe of an existing natural area tree stand and provide a pedestrian connection to the Lakewood residential area and access to the creek natural area identified as Area 'H' in the ASP.</p> <p><u>Type C - Parks, Gardens and Civic Spaces</u></p> <p>The ASP identifies several dispersed neighbourhood park spaces in the northeast. All parks are located with frontage along either local or collector roadways and serve the various residential sub-areas to provide everyday opportunities for recreation, ensuring flexibility in site design, and sufficient access by pedestrians, cyclists, and automobiles.</p> <p>The facilities that are developed in the urban village area may accommodate passive recreation with the potential development of community facilities such as a skating ring, plazas or skate park. A small park site has been added to facilitate a playground in the central plan area.</p> <p>A 2.18 ha Type C central park space provides opportunities for both linear connections and programmable space. The park will include frontage and visibility from both the central collector and local roads, and will be developed with an off-street pedestrian/bicycle trail connection through to the proposed Easton Natural Area to the east.</p> <p><u>Type D - Outdoor Sport and Recreation Facilities</u></p> <p>One school park site has been located in the northwest portion of the plan area. This park is approximately 5.5 ha in area, and can accommodate a school building and associated passive and active recreation areas.</p> <p><u>Type E - Linear systems, Green Corridors, Paths and Streets</u></p> <p>A linear park has been provided along the north side of the environmental reserve channel for a pedestrian trail until a point where the trail will cross the creek and head north into the Prescott neighbourhood.</p>		

A 0.96 ha Type E linear park space is defined immediately east of the Type C park. This park will be developed as a linear park with frontage along both the central collector and local roads, providing for the continuation of the off-street pedestrian/bicycle trail connection through to the proposed Easton Natural Area.

Bylaw C-1066-19,
January 13, 2020

A 0.42 ha Type E linear park will provide a direct pedestrian/bicycle connection for neighbourhood residents to the Easton commercial site.

These linear corridors can be used for active transportation, and for passive recreation.

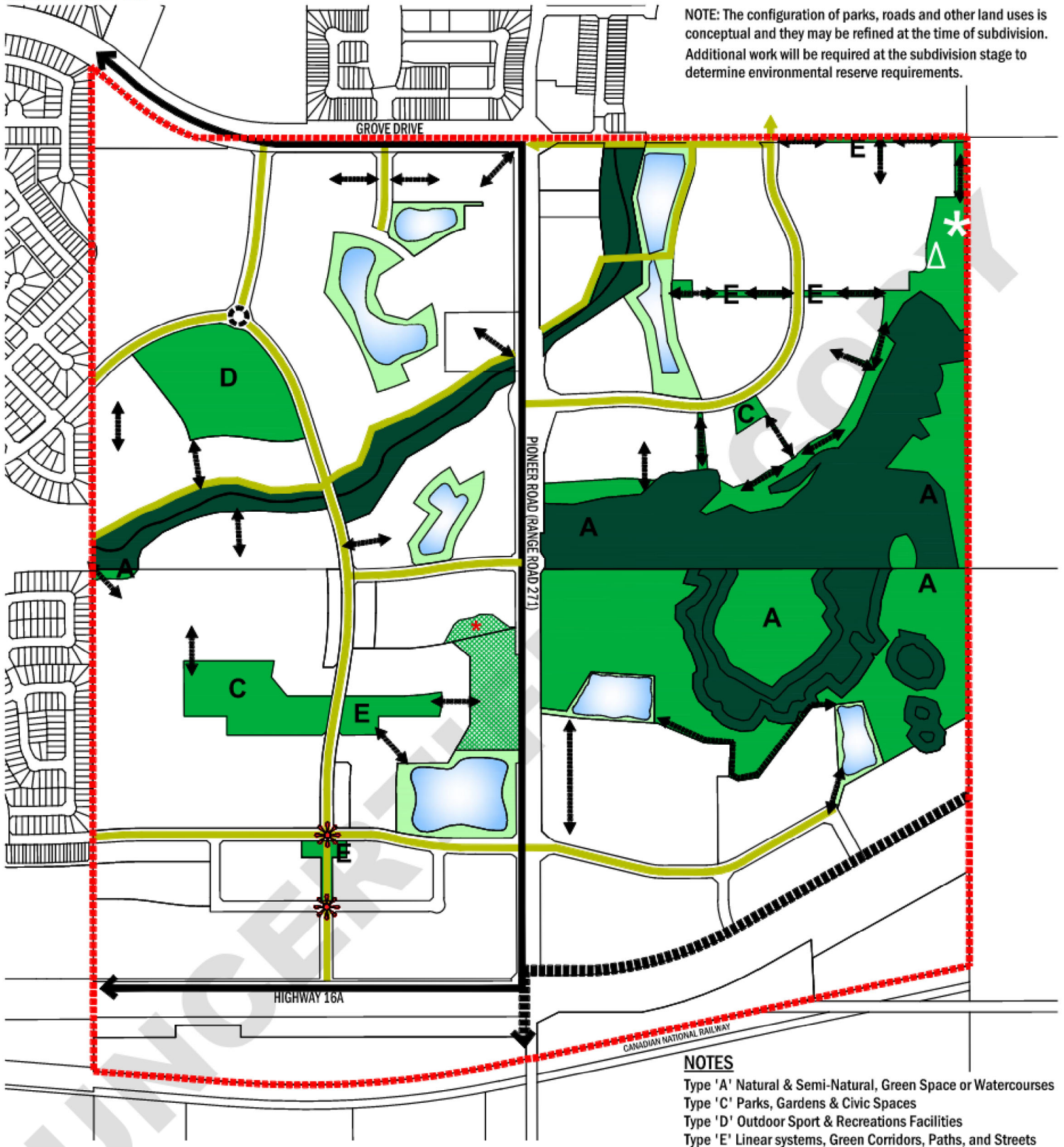
Objective (21) Design a connected and integrated open space system that encourages active transportation

Policy		Implementation
(a)	Ensure that all parks and open spaces are accessible by pedestrian and bicycle traffic, as well as visible and open to roadways.	Figure 6: Active Transportation Network and Open Spaces Plan should guide future application of neighbourhood parks, open spaces, and pedestrian connections.

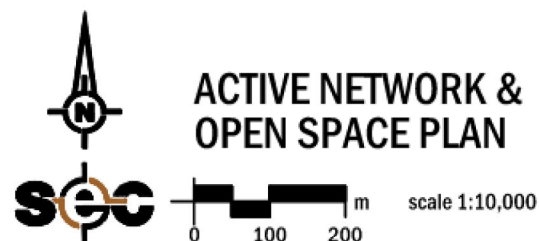
Rationale: The plan provides a well-connected and integrated network which accommodates multiple modes of transportation, with a focus on pedestrians and bicycles.

The two arterial roadways (Grove Drive and Pioneer Road) will include a multi-purpose trail on one side with a sidewalk on the opposite side. Opportunities for cyclists will be provided along these streets to provide inter- neighbourhood connectivity. Collector roadways within the plan area also provide opportunities for inclusion of a multi-purpose trail on one side, dependent on the roadway cross-section. Designated bicycle routes should be identified using appropriate signage and markings in order to minimize potential conflicts between vehicles, cyclists and pedestrians. Having a connected and integrated open space system allows residents the opportunity to choose alternative modes of transportation other than the single occupancy vehicle.

AREA STRUCTURE PLAN



* Easton Natural Area configuration may be further refined at the subdivision stage, and further study may be required to delineate any areas to be dedicated as ER, MR, Non-Credit MR or Conservation Reserve.



EAST PIONEER
SPRUCE GROVE

184-21010-01-PRF006.DWG
Jurinlc June 13, 2022

FIGURE 6

4.4.10 Transportation

The ASP proposes a range of transportation facilities in order to meet the needs of the neighbourhood. These facilities include accommodation of vehicular, pedestrian, future public transit and active transportation (see **Figure 7: Transportation Concept** and **Figure 6: Active Transportation Network and Open Spaces Plan**).

Bylaw C-1066-19,
January 13, 2020

Roadway Network

The transportation network has been designed to meet both the internal and external traffic flow requirements generated by the neighbourhood. A hierarchy of collector and local roadways is intended to facilitate the efficient movement of vehicular traffic. Roadways will be designed to meet City of Spruce Grove design standards. Roadway spacing has been, in some areas, reduced from City standards in order to avoid disturbing natural areas. The associated Transportation Impact Assessment shows that acceptable levels of service can be maintained throughout the plan area.

Arterial roadways located within and adjacent to the ASP which can accommodate the neighbourhoods major internal/external traffic flows, include Pioneer Road and the western portion of Grove Drive.

Collector roadways, which provide access and egress for neighbourhood sub-areas, are spaced at appropriate intervals along Pioneer Road to facilitate traffic progression (if traffic signals are required) and to ensure that sufficient distance is available to allow for right and left turn-bay development. Intersection spacing meets or exceeds TAC guidelines for minor arterials. The collector roadway network provides efficient and convenient access to residential areas, and prevents cut-through traffic in the neighbourhood, and enhances overall safety. This serves to further reinforce a local sense of place among residential sub-areas, reduce traffic volume and speeds, and establish a pedestrian-oriented streetscape.

Bylaw C-952-16,
May 9, 2016

The roadways have been updated based on registered information and confirmation of Pioneer Road right of way widths, increasing the arterial roads by 0.80 ha.

A collector loop south of future McLeod Avenue (with two connecting intersections with future McLeod Avenue) will provide access to both the Medium to High Density Residential areas and the north side of the commercial area. This road provide a key transition between the Easton commercial uses and residential uses. Alternative road cross-sections designed to assist with the transition and maintain functionality for user groups and the various modes of transportation may be considered at the time of subdivision.

Bylaw C-1066-19,
January 13, 2020

A short north/south collector is identified (within the commercial area) that connects Highway 16A to the collector loop that provides access into the commercial area from both Highway 16A and the residential areas to the north. This road may be considered as a private collector with a non-standard cross-section as an entrance feature into and through the commercial area. If this portion of the collector network is developed as a private roadway, as supported by a Traffic Impact Assessment (TIA), an access agreement or easement must be registered in favour of the City to ensure this connection is preserved. Any proposed non-standard cross-section roadways (public or private) may be considered and is subject to the approval of City Engineering.

A private collector road is proposed as an eastward extension of the existing private collector road in Century Crossing. This private collector may be developed with alternative non-standard cross sections designed specifically for the projected traffic, vehicle/pedestrian

Bylaw C-1066-19,
January 13, 2020

requirements, and anticipated parking standards, subject to the approval of City Engineering, as supported by a TIA. Delineation between the private and public collector roads may be accommodated through curb extensions or a change in pavement structure.

*Bylaw C-1152-21,
June 14, 2021*

An internal collector roadway has been added to service the east ASP area by connecting Pioneer Road to Highway 16A. Two access connections to Highway 16A are also proposed to provide multiple entry points.

With the removal of the northeast SWMF, the collector roadway through the Fenwyck neighbourhood has been realigned to better serve the area.

*Bylaw C-1199-22,
July 18, 2022*

Parking

Parking for vehicles will generally be provided off-street in conjunction with residential development.

Public Transit

The roadway network was designed and configured taking into consideration the expansion of transit service. Internal collector roadways will be developed to a suitable standard to accommodate transit service and provide readily accessible service to all areas of the neighbourhood.

Pedestrian and Bicycle Network

The neighbourhood will benefit from a high level of pedestrian connectivity. All local and collector roadways shall be developed with sidewalks, providing a general level of access throughout the neighbourhood. Bicycle traffic within the neighbourhood is designed to follow collector and local roadways. Bicycle routes will be integrated with greenways, multi-purpose trail corridors and walkways connecting internal and adjacent residential areas and amenities.

At the intersection of McLeod Avenue and the proposed linear park, a star indicates an important intersection for active travelers accessing the park and the linear walkway that leads to the commercial area. An additional priority pedestrian crossing has been added on the south end of the linear park.

*Bylaw C-1066-19,
January 13, 2020*

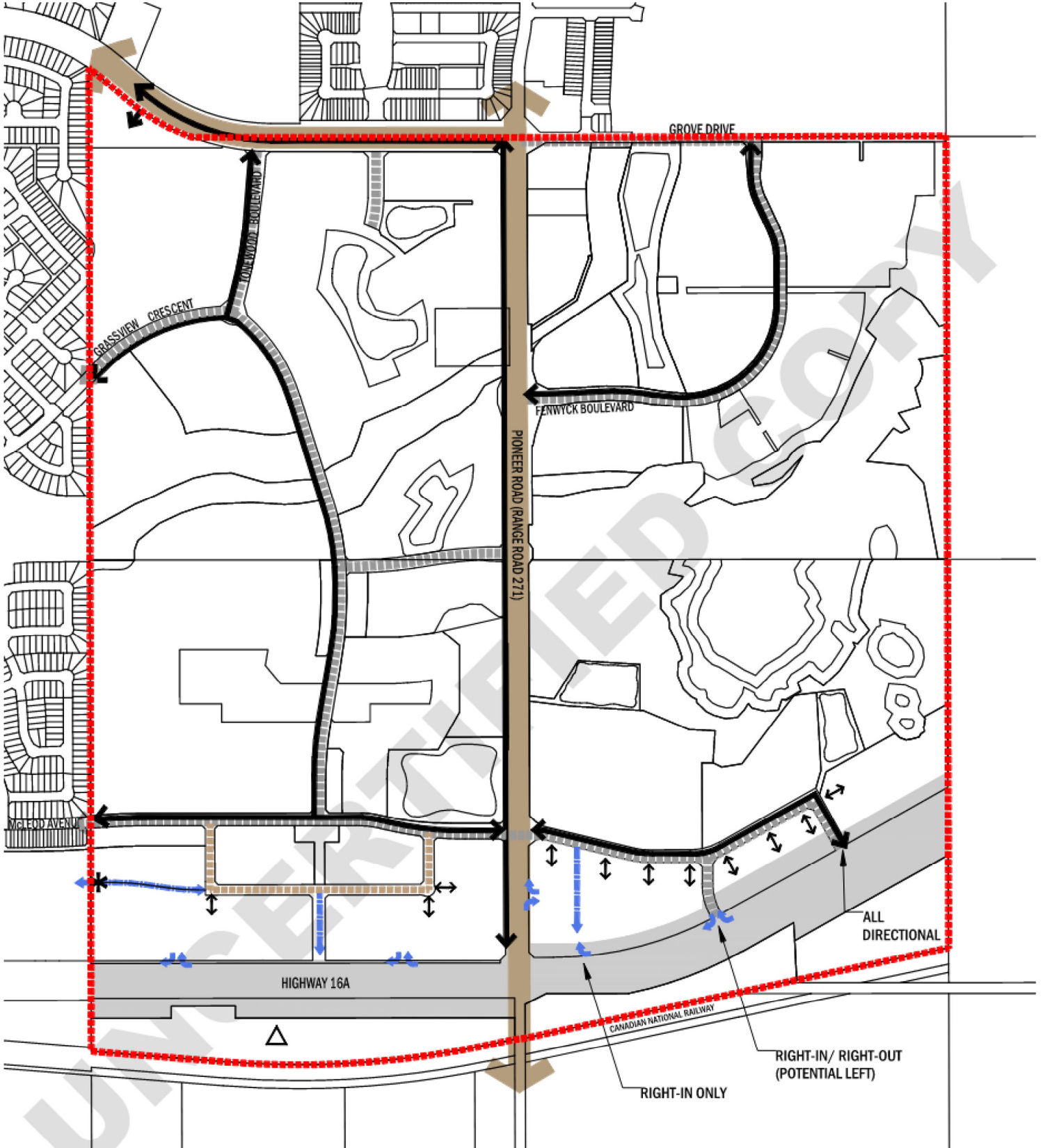
Objective (22) Mitigate the impact of vehicle traffic associated with commercial and medium density residential development on lower density residential areas		
Policy		Implementation
(a)	Locate higher density residential parcels to facilitate access from arterial or collector roadways to the greatest extent possible.	The City of Spruce Grove may review tentative plans of subdivision to ensure and higher density residential is accessed via abutting collector and arterial roadways and avoids access via local roadway fronted by low density residential development to the greatest extent possible.
(b)	Medium and high density residential development should avoid taking access via local roadways fronted by low density residential development.	
Rationale: Commercial developments or higher density residential developments are located adjacent to either a collector or arterial roadway within the plan area. Locating nodes of activity which generate higher vehicular traffic adjacent to roadways with higher capacities reduces potential conflicts between local residential traffic and traffic-generated by these higher intensity uses.		

Objective (23) Consider future public transit service when planning roadway alignments and in roadway design	
Policy	Implementation
(a) The design of the arterial and collector roadway system should support future transit service.	Roadway design will be approved by the City of Spruce Grove. Potential locations for a transit centre and transit hub are shown on Figure 7: Transportation Concept .
<p>Rationale: The City of Spruce Grove will develop a local transit network that provides transit stops within 400m walking distance of the majority of homes by 2040 along arterial and collector roadways, designed to accommodate future public transit service and are located within the plan area to maximize resident access to the system.</p> <p>The ASP anticipates that a transit centre will be developed as an urban style transit exchange, using multiple on-street facilities.</p> <p>The MDP has identified a possible regional transit hub and park and ride facility within the southern portion of the East Pioneer ASP area. It is anticipated that by 2020 a determination will be made as to the development of this facility.</p>	

Objective (24) Promote pedestrian accessibility to parks, open spaces, and amenities and to promote active transportation	
Policy	Implementation
(a) Minimize walking distances by creating a pedestrian oriented interconnected street network and providing walkways where roadway connection is not feasible.	Figure 7: will guide the future application of trail network. The City of Spruce Grove will have regard for the dedication of walkways to promote walkability and appropriate access to neighbourhood destinations including transit facilities.
<p>Rationale: Neighbourhoods designed with connectivity in mind supports the residents ability to walk to destinations, reducing the number of vehicle trips, promoting health, supporting neighbourhood interaction, and energy consumption. In the ASP, alternative forms of transport (walking, bicycling, etc.) are promoted via an array of linkages among roadway sidewalks, walkways, and multi-purpose trails providing an internal alternative pedestrian circulation system that is highly connected, direct and convenient. These linkages facilitate easy access for pedestrians and cyclists.</p> <p>Multi-purpose trails shall be clearly marked using appropriate signage and markings in order to minimize potential conflicts between vehicles, cyclists, and pedestrians in the neighbourhood. Multi-purpose trail connections extend beyond the boundaries of the ASP to link with existing neighbourhoods in Spruce Grove, allowing connectivity to outside destinations such as commercial and open space opportunities in other neighbourhoods and the Jubilee Park district park.</p>	

Objective (25) Assess noise and mitigation requirements adjacent to highways.	
Policy	Implementation
(a) Noise assessment s may be required for residential developments adjacent to Highway 16 A.	The City's Noise Policy will outline when a noise assessment will be required, and the types of mitigation measures that are needed.
<p>Rationale: Noise attenuation may be required where residential land uses are proposed adjacent to Highway 16 A. At the time this ASP was prepared, the City of Spruce Grove was preparing a Policy to address this issue.</p>	

AREA STRUCTURE PLAN



LEGEND

- | | | | |
|--|--------------------------------------|--|----------------------------------|
| | Collector Roadway | | Potential Private Roadway |
| | Potential Modified Collector Roadway | | Right-In/ Right-Out |
| | Arterial Roadway | | Potential Transit Corridor |
| | Highway Right-of-Way | | Potential Commercial Access |
| | Connection to Existing Roadway | | Park & Ride (Potential Location) |
| | ASP Boundary | | |



TRANSPORTATION NETWORK

scale 1:10,000
0 100 200 m

EAST PIONEER
SPRUCE GROVE

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FIGURE 7

4.4.11 Special Study Areas

One area has been designated as Special Study Area. Approximately 3.7 ha of land east of Pioneer Road and south of Highway 16A, as illustrated on Figure 5: Land Use Concept.

Bylaw C-1152-21,
June 14, 2021

In the interests of proceeding with development in the remainder of the ASP area, land uses have not been specified in the Special Study Area until further discussions between the City and landowners have occurred. Once appropriate land uses have been established and agreed upon, amendments to this ASP will be initiated to incorporate these uses.

Objective (27) Recognize that the Special Study Area face constraints which may limit the development potential of those lands.	
Policy	Implementation
(a) Development in the Special Study Area shall not proceed until applications to amend the ASP are approved by City Council.	An amendment to this ASP shall be required prior to any development in this area.
Rationale: This area is an existing titled parcel of approximately 3.7 ha which is physically isolated from the remainder of the ASP area. It is located east of Pioneer Road and is constrained between Highway 16A to the north and the CNR line to the south and as such has constraints to development. Access to this parcel is currently only from Highway 16A. As the ASP develops and vehicular traffic along Highway 16A increases, the City may look to removing this access route. As the site is constrained and cannot be accessed from the south (CNR rail) or the east, the only opportunity for access would be from the west through the cemetery lands. As the ASP develops, an amendment to the plan will be required to facilitate future development, if any, on these lands.	

Bylaw C-1152-21,
June 14, 2021

4.4.12 Infrastructure Servicing and Staging

The ASP will be a fully serviced neighbourhood designed and constructed in accordance with City servicing standards.

Stormwater Servicing

The topography within the site generally allows for drainage from the southwest to the northeast. A drainage channel runs through the northwest portion of the ASP and continues northeast through adjacent lands and contributes to the Big Lake drainage basin. The ASP area has an elevation of 699.5m at its highest point and 684m at the lowest part of the channel.

Seven stormwater management facilities (SWMF) are situated within the Plan area, with sufficient capacity for a 1:100 year storm event and maximum allowable discharge rates of 2.5L/s/ha. These facilities have been designed to function as constructed wetlands, and have been located based on natural drainage patterns and pre-development sub-basin drainage boundaries. With the development of the neighbourhood underway, more detailed engineering has been completed which determined that the northeast storm pond is not required and that the central storm pond could be resized to accommodate the drainage for the entire neighbourhood.

Bylaw C-1199-22,
July 18, 2022

Bylaw C-952-16,
May 9, 2016

Reconfiguration of a stormwater management facility has been brought forward to achieve a more linear facility to provide amenities for adjacent lots and to minimize public utility connections from the fen area. This has resulted in a 0.58 ha increase in the stormwater management facility for the plan area.

The Storm Servicing Concept for the ASP has been updated to include flow from approximately 136 ha of predevelopment area. These lands are outside the ASP (to the south) and are currently flowing north through a culvert beneath Highway 16A and are, on the interim, flowing into the Lakewood stormwater system. The City has requested that this flow be accommodated within the Easton neighbourhood. This stormwater is to be transmitted to the Pioneer Road minor system; retention is not required nor provided.

*Bylaw C-1066-19,
January 13, 2020*

The Easton SWMF has been relocated to the south to avoid areas with a high water table and excessive peat conditions, as identified in the hydrogeological assessment prepared by Stantec in 2017. In addition to the SWMF relocation, more detailed engineering calculations have determined that the Easton SWMF was oversized. The size of the Easton SWMF has been decreased by 0.15 ha, bringing the total area for SWMF within the ASP to 14.26 ha.

*Bylaw C-1066-19,
January 13, 2020*

Stormwater Management for the area consists of an additional two facilities, one sited in the area's northwest and the other in the southeast, with each sized at approximately 1.0 ha. The SWMFs will be designed to maintain the predevelopment rate of surface water flowing into the retained Environmentally Significant Natural Areas, ensure that development to the south does not impede groundwater flow to the fen, and ensure the boundary between development and natural areas protects sensitive areas. Landscape treatments and low impact development design techniques shall be incorporated to reduce impermeable materials.

*Bylaw C-1152-21,
June 14, 2021*

Through more detailed engineering analysis, it was found that a slightly enlarged central SWMF would have enough capacity to service the entire neighbourhood. This expanded central SWMF will allow for the elimination of the identified SWMF in the northeast Fenwyck neighbourhood and provide for additional residential development. The central SWMF will be expanded by 0.69 ha and the identified 2.35 ha northeast SWMF will be eliminated. These changes result in a 1.33 reduction in Stormwater Management Facilities and a corresponding increase in Mixed Low to Medium Density Residential.

*Bylaw C-1199-22,
July 18, 2022*

Figure 8: Storm Servicing Concept conceptually illustrates the location of storm servicing infrastructure required to service the ASP area.

Further details regarding the stormwater drainage system are provided in the engineering basin report submitted under separate cover.

Sanitary Servicing

Sanitary servicing will be provided through gravity sewers within the neighbourhood, which will connect to a large gravity trunk sewer to be constructed along Pioneer Road. The trunk will flow south to north and will connect to the Capital Region sanitary trunk sewer located north of Highway 16. Details regarding the sanitary drainage schemes are provided in the associated engineering basin report submitted under separate cover. Figure 9: Sanitary Servicing Concept conceptually illustrates the location of sanitary servicing infrastructure required to service the ASP area.

Water Servicing

Water servicing for the ASP will be extended from three existing locations adjacent the development areas.

Water servicing within the neighbourhood will be designed to provide peak hour demand flows, maximum day demand plus fire flows for various forms of residential and commercial development. Water looping will be provided in accordance with City of Spruce Grove requirements, and has been detailed in a Hydraulic Network Analysis (HNA) submitted in support of the plan. Figure 9: Sanitary Servicing Concept conceptually illustrates the location of water infrastructure required to service the ASP area.

Shallow Utilities

Shallow utilities including power, gas and telecommunications services are all located nearby and will be extended as needed.

Development Staging

Figure 11: Staging Concept illustrates the anticipated direction of development for the East Pioneer ASP. In general, development will proceed from the south (west of Pioneer Road and north of Highway 16A) and from the north (adjacent to Grove Drive). Future development will proceed in a manner that is logical, contiguous, and economical with respect to municipal servicing. Development of individual phases may vary from actual zoning and subdivision applications depending on market demands and the aspirations of respective developers. Should sufficient demand warrant or engineering design be made more efficient, portions of separate phases may be developed concurrently.

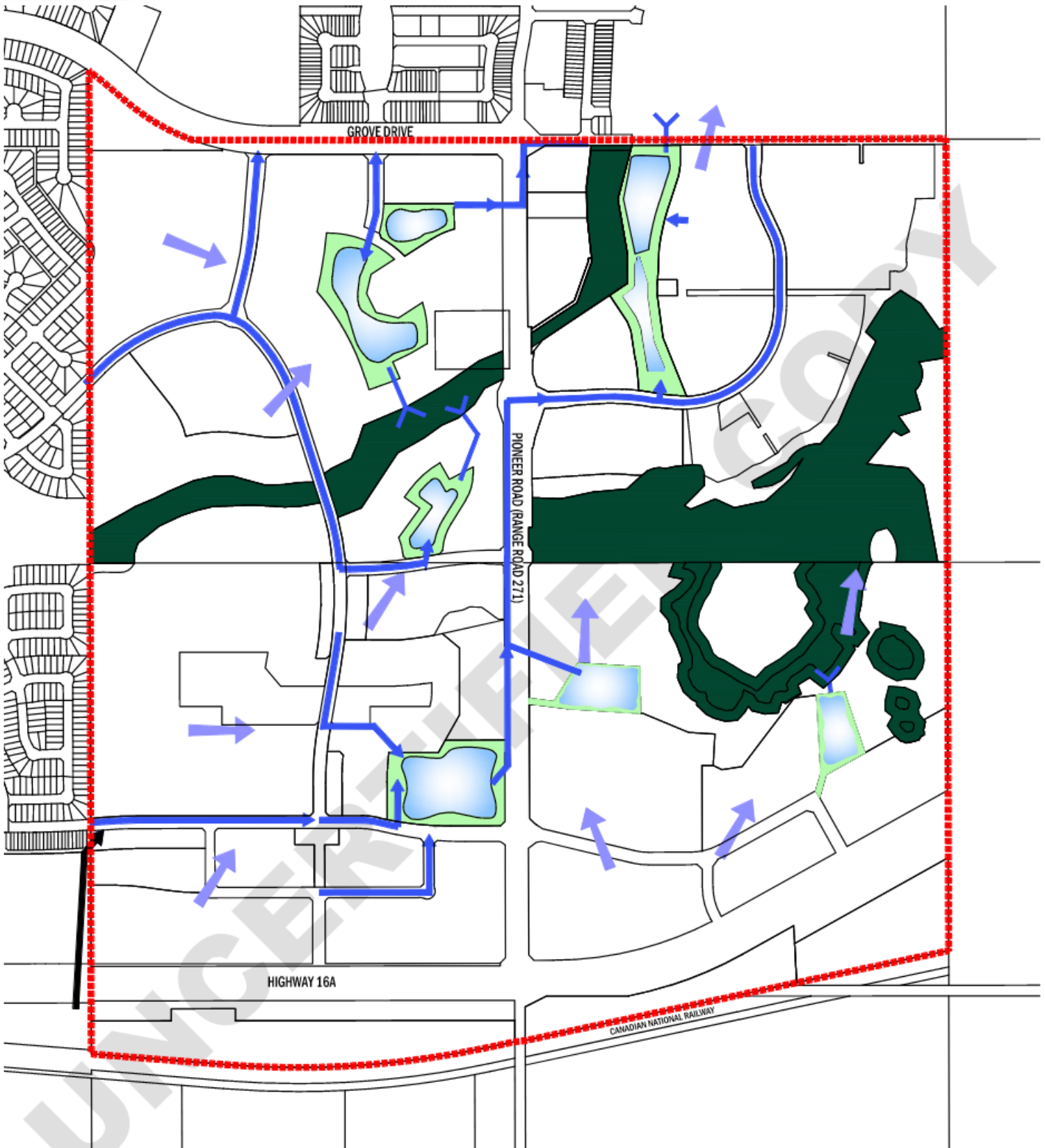
Objective (28) Ensure that the neighbourhood serviced to a full urban standard		
Policy	Implementation	
(a) Sanitary and stormwater servicing will be provided (a) in accordance with the approved engineering basin report.	Approval of engineering drawings and servicing agreements will be required prior to installation of sanitary and stormwater servicing.	
(b) Water servicing to the ASP area will be provided in accordance with the approved Hydraulic Network Analysis.	Approval of engineering drawings and servicing agreements will be required prior to installation of water servicing.	
(c) Shallow utilities will be extended into the plan area as required.	Installation of shallow utilities will be executed through servicing agreements.	

Objective (29) Mitigate the Impact of Urban Development on Natural Area I		
Policy	Implementation	

<p>(a) Maintain predevelopment surface water flow to the natural area.</p>	<p>The stormwater management system will be designed to maintain the predevelopment rate of surface water flowing into the portions of natural area I that are retained east of Pioneer Road.</p> <p>Additional details are provided in the engineering design report submitted under separate cover.</p>
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<p>(b) Ensure that development south of the fen area does not impede groundwater flow to the fen.</p>	<p>The area to the south of the fen is designated Commercial and Entertainment District.</p> <p><i>Bylaw C-1152-21, June 14, 2021</i></p>
<p>The stormwater system in the East ASP has been designed to ensure that the quantity and quality stormwater is as close to predevelopment conditions as possible.</p> <p><i>Bylaw C-1152-21, June 14, 2021</i></p>	

AREA STRUCTURE PLAN



LEGEND



Stormwater Management Facility

Environmental Reserve

Storm Sewer

Outfall



Direction of Existing Ground Flow



136 ha Predevelopment Flow



ASP Boundary



STORM
SERVICING CONCEPT

0 100 200 m

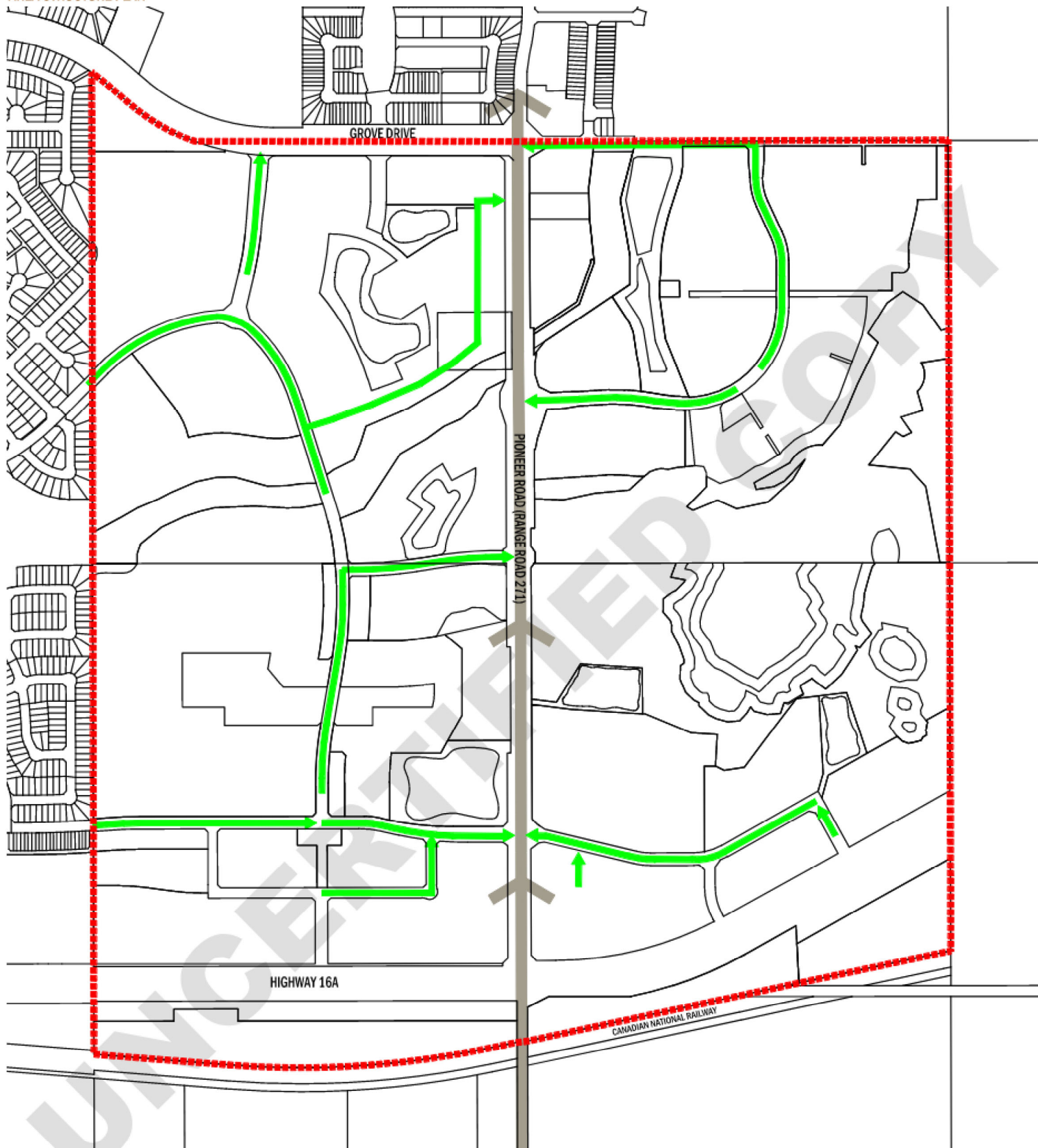
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EAST PIONEER
SPRUCE GROVE

184-21010-01-PRF008.DWG
Jjurinic June 13, 2022

FIGURE 8

AREA STRUCTURE PLAN



LEGEND

- Sanitary Sewer
- Sanitary Sewer Trunk
- - - - - ASP Boundary



**SANITARY
SERVICING CONCEPT**



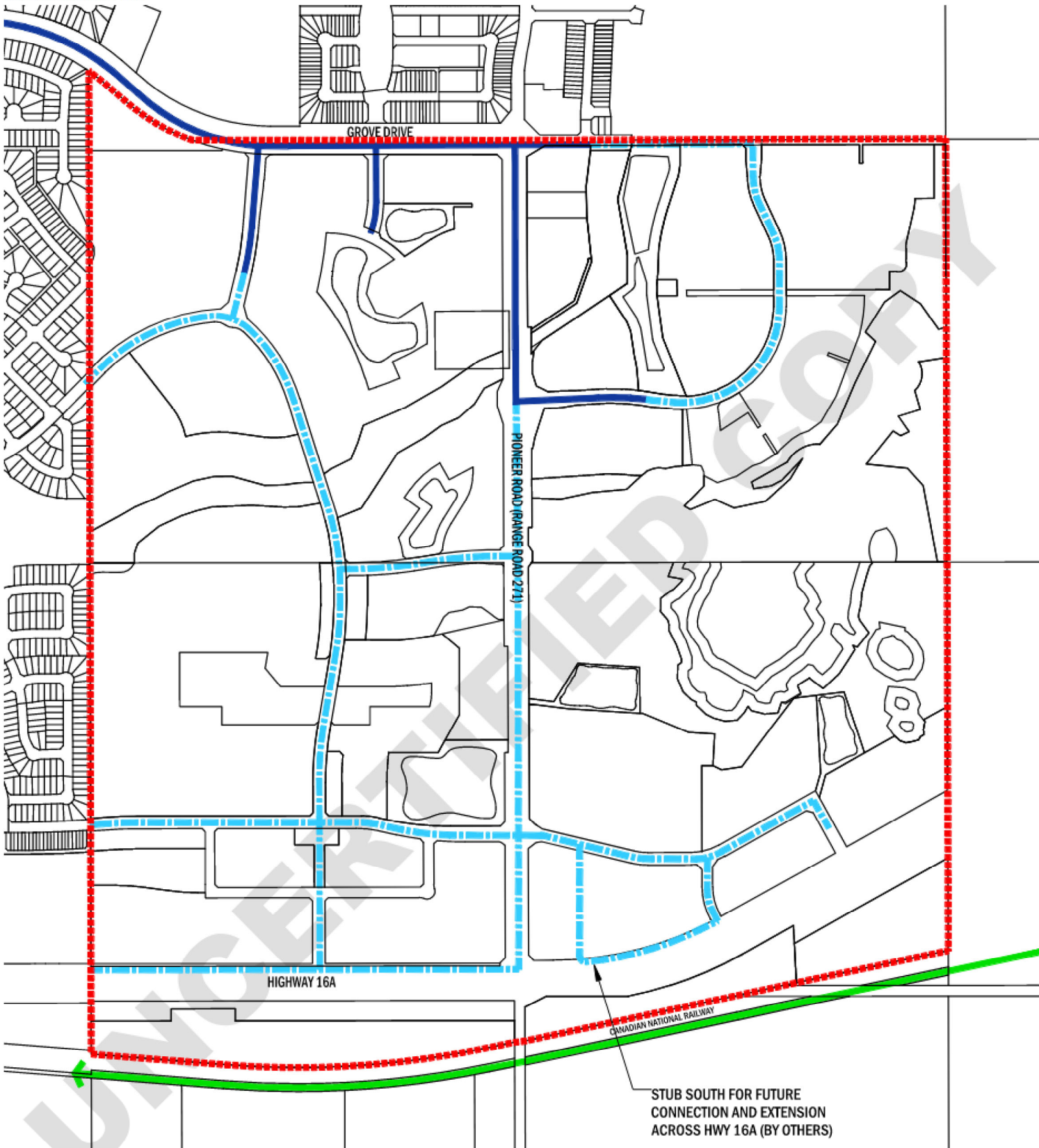
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**EAST PIONEER
SPRUCE GROVE**

184-21010-01-PRF009.DWG
Jjurinic June 13, 2022

FIGURE 9

AREA STRUCTURE PLAN



LEGEND

- Proposed Watermains
- Existing Watermains
- Regional Water Line
- ASP Boundary

EAST PIONEER
SPRUCE GROVE



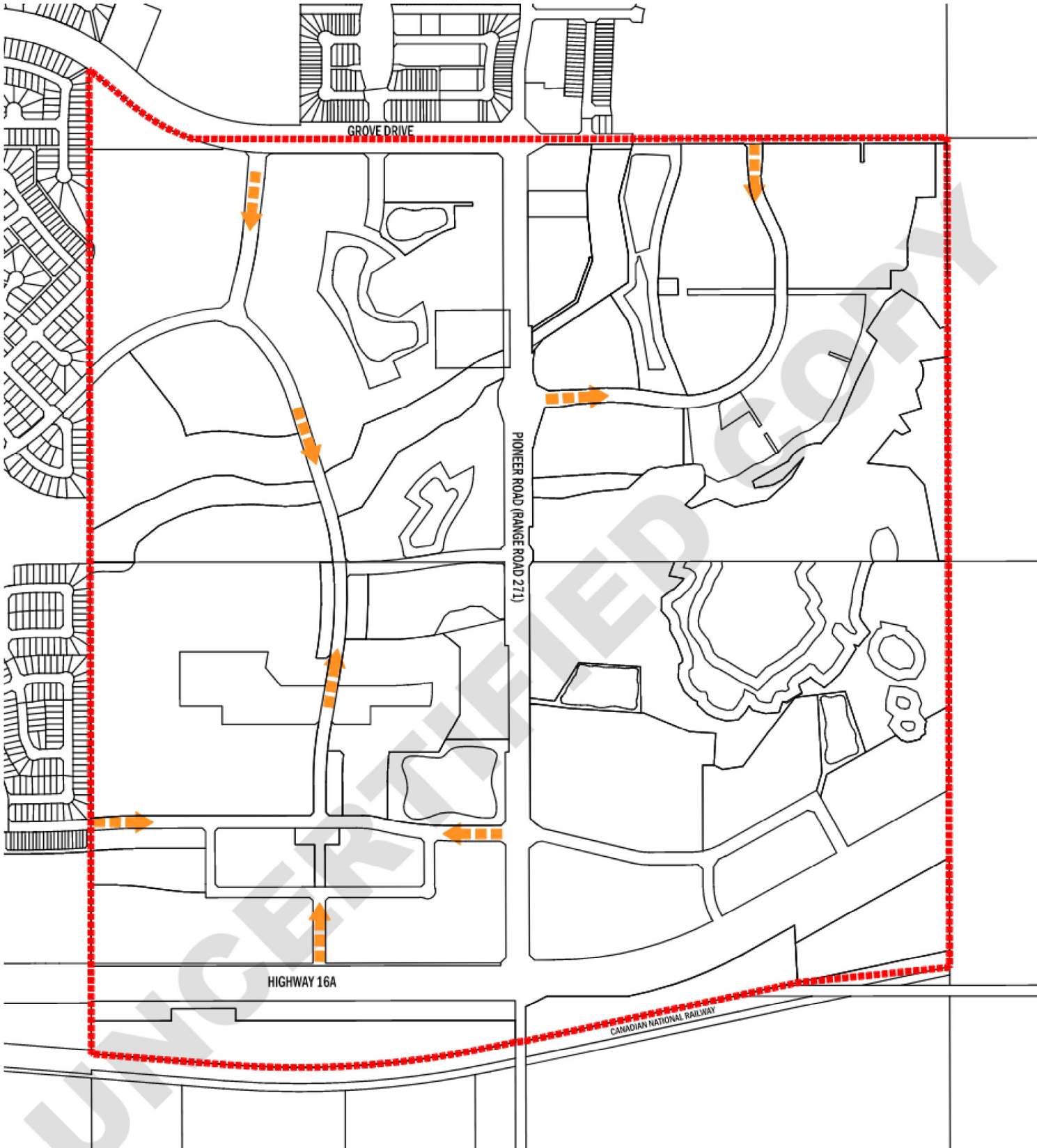
**WATER
SERVICING CONCEPT**

0 100 200 m scale 1:10,000



184-21010-01-PRF010.DWG
Jjurinic June 13, 2022

FIGURE 10

AREA STRUCTURE PLAN



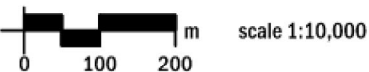
LEGEND

-  Staging Direction
-  ASP Boundary

EAST PIONEER
SPRUCE GROVE



STAGING CONCEPT



184-21010-01-PRF011.DWG
Jjurinic June 13, 2022

FIGURE 11