STURGEON VALLEY SOUTH PLANNING AREA 1

NEIGHBOURHOOD AREA STRUCTURE PLAN



Prepared for: Sturgeon Valley South Planning Area 1

Ownership Group

Presented by: Select Engineering Consultants Ltd.

Date: March 21, 2025

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1.0 Introduction

1.1 Executive Summary

The Sturgeon Valley South Planning Area 1 Neighborhood Area Structure Plan (NASP) is a guidance document for future development. The land use concept provides a general overview of future land uses and aims to achieve the vision of a well-connected and fully serviced community that honours the rural character and heritage of the area.

1.2 Purpose and Scope of the Plan

The purpose of this NASP is to establish a land use framework that provides direction for future development in Sturgeon Valley South Planning Area 1. The outlined objectives and planning policies follow the direction from higher order statutory plans, specifically utilizing the Sturgeon Valley South Area Structure Plan (ASP). This NASP will act as a guidance document for the development of Outline Plans within the area that are required for the review and approval of future neighbourhood development within Sturgeon Valley South.

1.3 Plan Area, Location, and Size

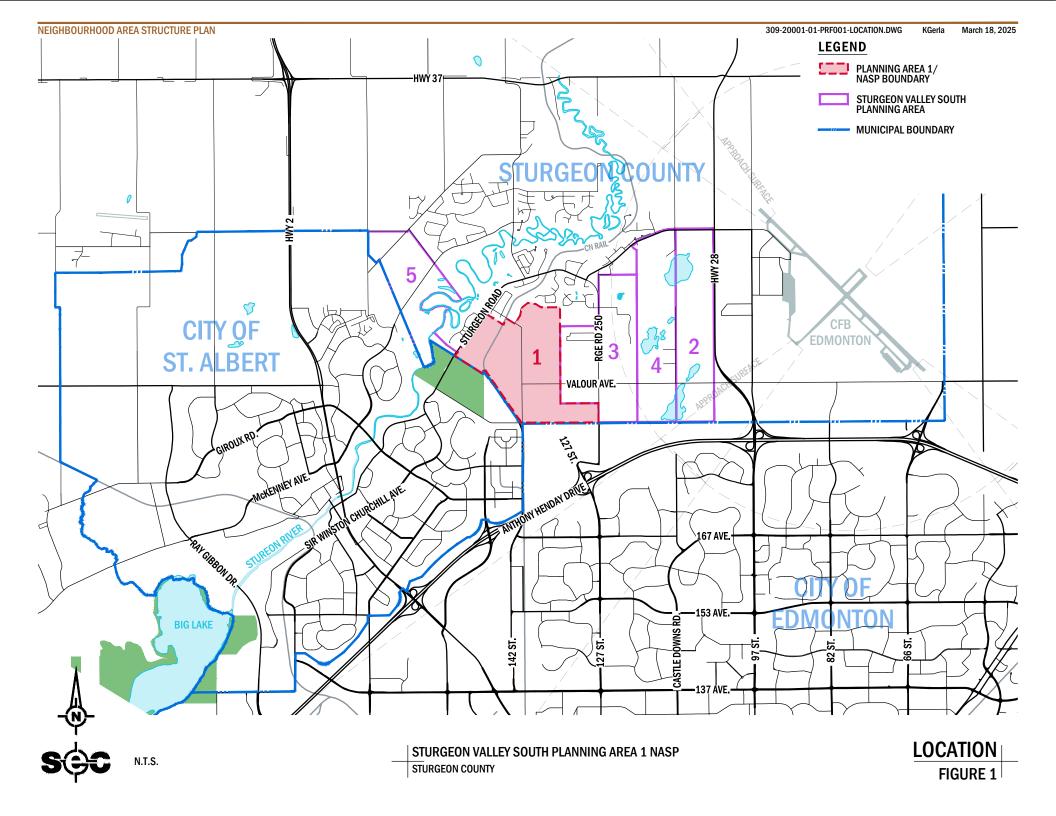
Sturgeon Valley South Planning Area 1 contains 402 ha of land located east of Sturgeon Road, borders the City of St. Albert on the southwest, City of Edmonton on the south, Sturgeon Valley Core to the northeast and undeveloped future Planning Area 3 to the east. See **Figure 1** for location and context of the plan area.

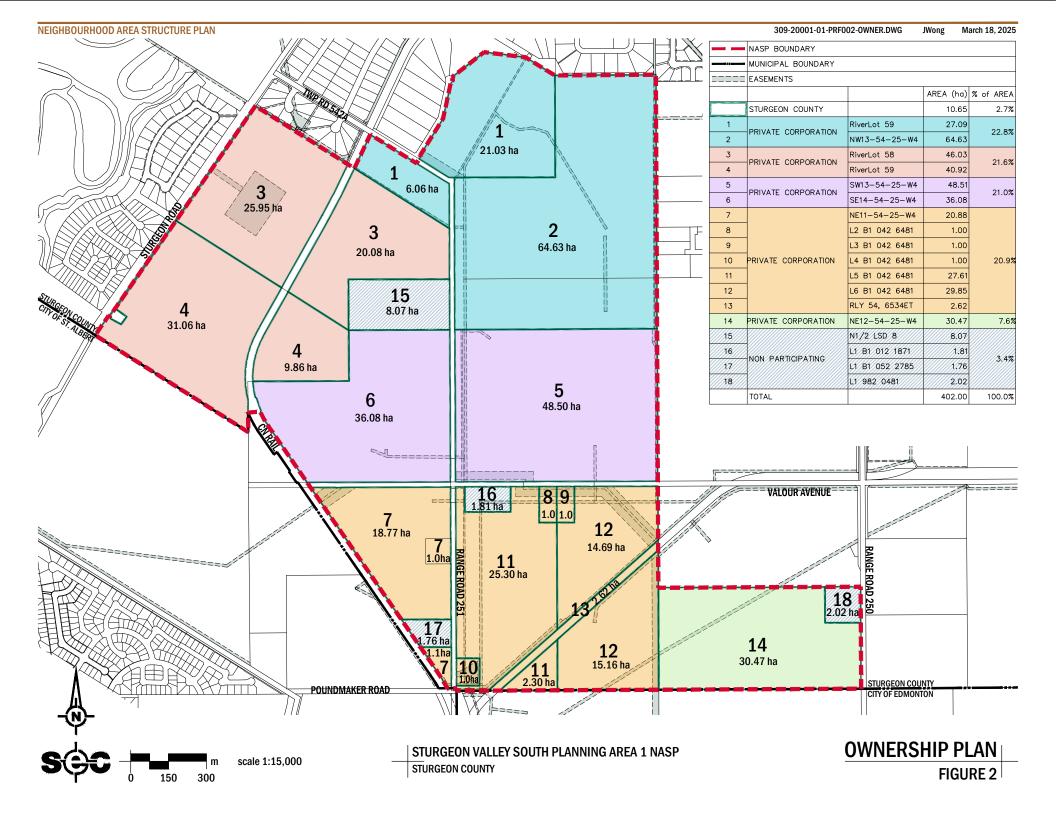
1.4 Plan History and Ownership

Sturgeon Valley South Planning Area 1 is the first area within Sturgeon Valley to be planned at the NASP level. This NASP has been prepared on behalf of Sturgeon Valley South Planning Area 1 ownership group, consisting of private landowners within the area. All participating landowners have been involved in the plan preparation process. Non-participating owners had opportunity to provide feedback and contribute to the planning of this NASP, through the public consultation process. Land ownership for the plan area is illustrated on **Figure 2** and is listed in **Table 1**.

Table 1: Land Ownership

No.	Legal Description	C of T	Titled Owner	Area in Plan (ha)
1	Riverlot 59	042 136 930	Private Corporate	27.09
2	NW13-54-25-W4	042136929	Private Corporate	64.63
3	Riverlot 58	152182420056	Private Corporate	46.03
4	Riverlot 59	042 136 930	Private Corporate	40.92
5	SW13-54-25-W4	042 136 929	Private Corporate	48.51
6	SE14-54-25-W4	042 493 181	Private Corporate	36.08
7	NE11-54-25-W4	052 216 875	Private Corporate	20.88
8	L2 B1 042 6481	042510581	Private Corporate	1.0
9	L3 B1 042 6481	042510581	Private Corporate	1.0
10	L4 B1 042 6481	042510581	Private Corporate	1.0
11	L5 B1 042 6481	042510581	Private Corporate	27.61
12	L6 B1 042 6481	042510581	Private Corporate	29.85
13	RLY 54, 6534ET	022 040 497	Private Corporate	2.62
14	NE12-54-25-W4	162043486	Private Corporate	30.47
15	N1/2 LSD 8	222 225 967	Private	8.07
16	L1 B1 012 1871	222 229 741	Private	1.81
17	L1 B1 052 2785	062133519	Private	1.76
18	L1 982 0481	242148734	Private	2.02
20	Gov. Road Allowance		Sturgeon County	10.65
	TOTAL			402.00





2.0 Planning Process

2.1 Public Consultation Process

The Sturgeon Valley South Planning Area 1 consultation process has been completed in accordance with Sturgeon County's NASP and Outline Plan (OP) terms of reference. All surrounding landowners and stakeholders affected by this NASP were notified in accordance with Sturgeon County's policies and application requirements for Neighbourhood Area Structure Plans.

2.2 Public Consultation Results

An initial public engagement was held in collaboration with the Sturgeon Valley South ASP in April of 2021. The engagement session was held online due to Covid regulations and discussed the highlights of the proposed plan.

A second public open house was held on February 4th, 2025, with approximately 100 people in attendance. 640 postcards were mailed to nearby Sturgeon County residents along with a newspaper advertisement and a temporary sign installed along Sturgeon Road. Public feedback gathered throughout the consultation process was summarized into a "What We Heard Report" and submitted to the County under separate cover.

3.0 Policy Context

3.1 Provincial Legislation and Planning Considerations

Planning in Alberta is governed by The Municipal Government Act (MGA) and the Alberta Land Use Stewardship Act (ALSA). The MGA legislation requires municipalities to establish an additional planning framework through the Municipal Development Plan and allows for council to adopt an Area Structure Plan (ASP). Policies, text, and mapping information contained within this Plan may be amended from time to time in order to remain current and up to date in response to broader or more specific issues affecting the neighbourhood. Any amendments to this report should be in alignment with Provincial legislation, the Edmonton Municipal Growth Plan, the Sturgeon County Municipal Development Plan, and the Sturgeon Valley South Area Structure Plan.

3.2 Edmonton Metropolitan Region Board

The Edmonton Metropolitan Region Board (EMRB) was created in 2017 and consisted of 13 member municipalities, including Sturgeon County. As of March 31, 2025, the board has been dissolved, but the Growth Plan remains in place. The Edmonton Metropolitan Region Growth Plan (EMRGP) was adopted in 2017 and amended in 2020 and outlines a 30-year vision for growth in the region.

Sturgeon Valley is identified as a Special Study Area in the EMRGP with planning objectives and policies that are outlined in Appendix G: Negotiated Policies for the Sturgeon Valley Special Study Area (SVSSA). The NASP area falls within area B of this SVSSA and is subject to the specific planning objectives and policies outlined for this area in section 3.0 of Appendix G. Key policies include ensuring a graded/transient approach to development with a minimum overall residential density of 35 du/nrha. In addition, further policies and objectives outlined in Appendix G for Area B, such as the need for the regional transportation master plan to be followed for the extension of 127th street and the integration of greenspace and natural areas into the neighbourhood have been considered and adhered to in the development of the Sturgeon Valley South ASP and this NASP.

3.3 Sturgeon County Municipal Development Plan

The Sturgeon County Municipal Development Plan (MDP) sets the planning framework for future community growth in Sturgeon County over the next 30 years.

In the MDP, Sturgeon Valley is identified as Neighbourhood G, and Planning Area 1 is identified as Strategic Site B within Neighbourhood G. The vision for Neighbourhood G is to build a sustainable and complete community with placemaking principles and local distinctiveness embedded into the fabric of the neighbourhood.

The Planning Area 1 NASP complies with all the Sturgeon County MDP Neighbourhood policies for Site B as outlined below.

Sturgeon County MDP Neighbourhood G Site B Development Expectations	NASP Compliance
a. Build upon the character of the Sturgeon Valley Area through sensitive interfaces to adjacent planned and existing developments and land uses.	To facilitate sensitive transition from the existing country residential estates adjacent to the plan, transitional residential density targets for specific areas have been added at a lower maximum density than 20 units per hectare that is required in the approved ASP. Further, development that is immediately adjacent to existing residential is also be buffered by open space, trail, stormwater management facility or road right of way. To allow for gradual increase in average density as development gets closer to the existing municipalities of St. Albert and Edmonton, density increases to maximum 35 units in the central plan and then 40 units per net residential hectare in the south.
b. Capitalize on proximity to St. Albert by including active travel links to neighbouring St. Albert trails.	An integrated open space and trail system is planned throughout Planning Area 1 with a trail connection to River Lot 56 Natural Area in St. Albert, providing a key active transportation link to neighbouring St. Albert.
c. Celebrate the rural roots of the Sturgeon Valley through naturalized landscaping of ponds and trail corridors, and by providing connections to natural areas including the Sturgeon River	Road cross sections are planned with trees and natural landscaping along roadways. Additionally, landscaping using native species will occur along the edges of ponds and within parks, where appropriate. Trail connections through Planning Area 1 to River's Gate Neighbourhood and along 127 Street will provide connection to the Sturgeon River.
d. Developments are to account for and accommodate the existing and future expanding road network inclusive of the existing Sturgeon Road, existing Valour Avenue/Township Road 542, future 127th Street, and any other roads as identified by the County.	The planned road network for the area incorporates Sturgeon Road, Valour Avenue, and the future 127th street into the neighbourhood design, with planned upgrades and alignments in accordance with recommendations of the associated Traffic Impact Assessment (TIA)
e. Require new development in proximity to railway operations be appropriately located, designed, and buffered, thereby promoting public safety and mitigating adverse impacts from noise and vibration.	The Canadian National (CN) railway that runs through Planning Area 1 is appropriately buffered from residential development through residential setbacks, park spaces and a stormwater management facility in accordance with the Guidelines for Development in Proximity to Railway Operations



3.4 Area Structure Plan

The Our Future Valley: Sturgeon Valley South Area Structure Plan (ASP) was created in July 2021 and provides the planning framework for the development of 1,750 hectares of land in Sturgeon Valley within Sturgeon County. The ASP guides the creation of more detailed Neighbourhood Area Structure Plans. Planning Area 1 will be the first neighbourhood developed in this area.

The ASP identifies land in this Neighbourhood Area Structure Plan as Planning Area 1 and is highlighted as one of two strategic priority areas for planning. Key considerations identified in the ASP for future development include meeting the required minimum average densities and protecting future transportation corridors. The proposed NASP concept for this area meets the overall minimum density of 35 du/nrha and incorporates important transportation corridors, such as 127 street and Valour Avenue. In addition, relevant policies and objectives outlined in the ASP for transitional development, residential, commercial, agricultural, parks, schools, open spaces, and utility services have been incorporated into the planning for this neighbourhood. Appendix A provides a detailed table comparison between the ASP and NASP, demonstrating how the NASP meets the objectives and policies of the ASP.

3.5 Outline Plans

Outline Plans are local planning documents that provide more detailed information than what is required within Neighbourhood Area Structure Plans. For lands within Sturgeon Valley South ASP, Sturgeon County requires an Outline Plan be submitted by a developer prior to redistricting, subdivision, and development permit application approval and must include Design guidelines. Redistricting, subdivision, or development permit applications will be reviewed against the approved Outline Plans. The Outline Plans are not statutory documents, however approval is granted through Council resolution.

3.6 Sturgeon County Land Use Bylaw

Sturgeon County Land Use Bylaw, 1385/17, was adopted on July 10, 2017, with the purpose to regulate and control the use and development of land and buildings within Sturgeon County. The Land Use Bylaw was amended in 2023 to include Part 13, Sturgeon Valley South, which provides regulations that are applied to those lands identified as being part of the Sturgeon Valley South Area Structure Plan, which includes Planning Area 1.

All future subdivisions and development within Planning Area 1 will need to adhere to the regulations set out in Part 13 of the Land Use Bylaw.

4.0 Site Characteristics & Context

4.1 Existing Land Use

The lands within Planning Area 1 (**see Figure 3**) are predominantly agricultural, consisting mainly of cultivated farmland. Additionally, there is a mature treed area in the southwest plan area. A ravine with a creek exists in the northern portion of the plan area that will be designated as environmental reserve. There is one existing homestead located centrally in the plan with access from Valour Avenue.

A CN railway line intersects Planning Area 1 in the western portion of the plan area and forms the boundary of the NASP in the southwest. Also, in the southwest is a power substation with access from Range Road 251 that will remain in operation. Abandoned wells and pipelines have existed in the plan area from oil and gas exploration and production since the late 1970's. Along current Valour Avenue remains a partially dismantled former oil battery site. A municipal sanitary lift station exists in the western portion of the plan area along Sturgeon Road and currently services River's Gate neighbourhood.

4.2 Surrounding Land Uses

Sturgeon River is a major land feature that is located less than a kilometre away from the western portion of The NASP area. Planning Area 1 borders the Cities of St. Albert to the west and Edmonton to the south, with close proximity to a wide variety of services and amenities in the neighbouring municipalities. Sturgeon Valley Core is adjacent to Planning Area 1 in the northern portion of the plan with predominately country residential development. The Sturgeon Valley Golf Course is located to the northwest along Sturgeon Road and the Garrison military base is located to the east.

4.3 Existing Transportation Network

The road network for the area currently consists of a mix of gravel roads and paved arterial roads within rural cross sections. Range Road 251 runs north from City of Edmonton and is located centrally in the plan area then turns west toward the Sturgeon Golf and Country Club., and intersects with Township Road 542A, and then connects to Sturgeon Road. Valour Ave is an east/west roadway that extends from Highway 28 east of the plan area and terminates at Range Road 251.

4.4 Site Considerations and Constraints

Multiple technical studies and analysis have been completed and outline site considerations and constraints for Planning Area 1.

4.4.1 Historical Resources

Historical Resources Act approval with conditions was granted in November 2020.

There are no concerns in Planning Area 1 for paleontological resources, provincially designated historic resources, or historic structures. Additionally, there are no archaeological concerns with future development activity in 14-54-25-W4M, SW-13-54-25-W4M, and the southern half of NE-12-54-25.

NE-11-54-25 W4M, NW 12-54-25-W4M, and NW 13-T52-R25 W4M exhibit high potential to contain archaeological resources. These lands require additional detailed information to be provided in a Historical Resource application for review prior to any ground disturbance or development. Additionally, activities proposed for NE 11-T54-R25 W4M may affect traditional use sites of a historic resource nature and require development plans for all activities proposed for this area to be submitted for review by Alberta Culture, Multiculturalism and Status of Women.

4.4.2 Biophysical & Wetland Impact

A Biophysical Impact Assessment report was completed for Planning Area 1 by Green Plan in May 2021 and a Wetland Assessment and Impact Report was completed by Green Plan in September 2021. No Environmentally Significant Areas were noted within the plan area.

Approximately 89% of Planning Area 1 was identified as being previously disturbed/developed cropland. There is deciduous forest in the southwest portion of the plan area and within the watercourse in the north portion of the plan area, making up 9% of Planning Area 1.

The remaining 2% of the land area was described as wetlands and ephemerals, with no wetlands noted to be to be crown claimed. Wetland replacement/compensation is required prior to the disturbance of wetlands. To reduce the effects of limited denitrification, when appropriate, wetland soils can be incorporated into Stormwater management facilities.

Planning Area 1 is near many diverse habitat areas and has the potential to support many forms of wildlife. Mitigation measures to reduce any impact to wildlife are outlined in detail within the Biophysical report.

4.4.3 Environmental Site Assessments

Multiple phase 1 Environmental Site Assessments (ESA) were completed by CT & Associates Engineering Inc. Most of the plan area has historically been utilized as cultivated farmland with no environmental concerns. The historical review indicates that there was also oil exploration and production in the area since late 1970's with multiple abandoned oil well sites and pipelines going through the area. It is recommended that prior to development, the subsurface conditions at all former well sites be verified with a drilling, sampling, and chemical testing program, to confirm that there have been no impacts related to these facilities.

4.4.4 Geotechnical

Geotechnical analysis has been performed on the land by CT & Associates Engineering Inc., J.R. Paine & Associates Ltd., and Sabatini Earth Technologies Inc. An additional letter addendum was provided by Alpha Adroit to confirm the previous geotechnical findings for River lot 59 and NW 13-54-25 W4 with additional analysis to be completed at the time of an Outline Plan. Based on the soil and groundwater conditions in Planning Area 1, the geotechnical conditions are considered favourable for the proposed development.

General soil specifications encountered were a superficial topsoil layer, and variable and interbedded layers of clay, silt, and sand throughout the planning area. For the southern portion of the plan, it was noted that challenges may arise regarding the soft to firm and wet to very wet soils that must be considered during design and construction, for residential footing foundations as well as underground servicing.

Over much of the site the groundwater was measured between 2.7 m and 7.6 m depth below the existing ground surface. With the potential for seasonal variations between 0.5-1.0m expected. Generally, groundwater was encountered at greater than 5.0 m depth., with a few areas of relatively shallow groundwater noted.

4.4.5 Risk Assessment

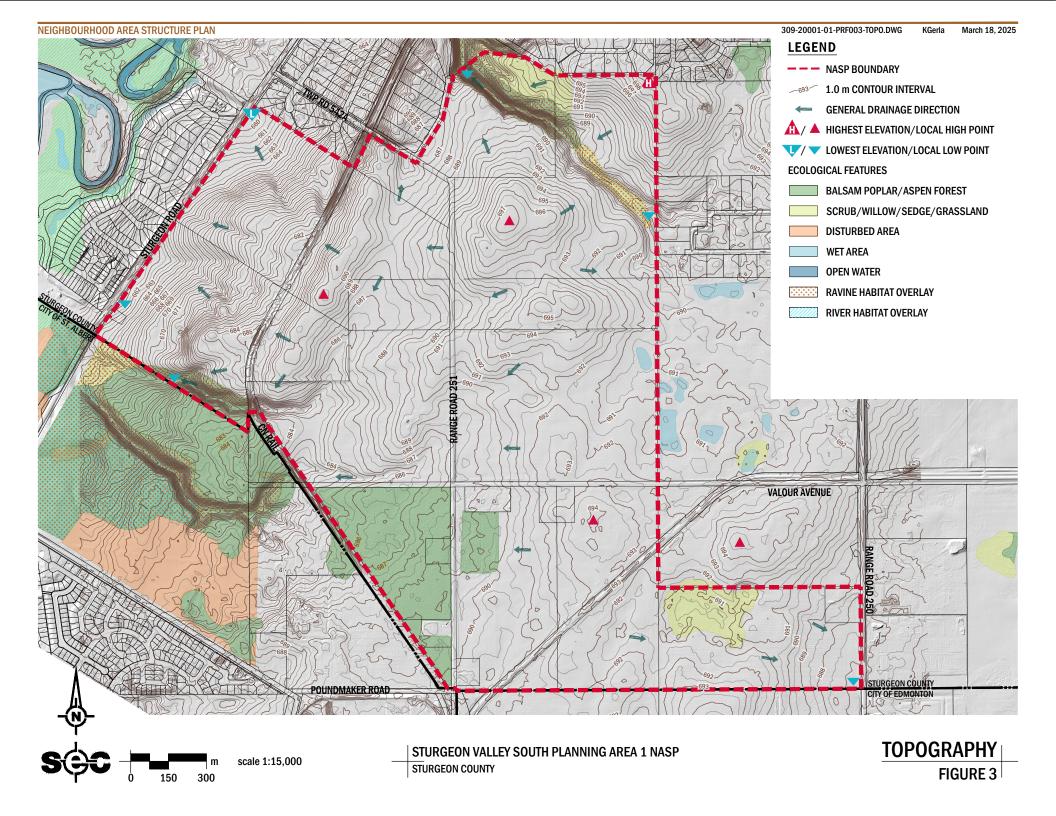
A quantitative risk assessment was completed by Bercha Group Limited in June 2024. The identified principal risk sources in Planning Area 1 were four ATCO gas pipelines and a single CN railway line. The results of the risk assessment indicate that risks are minimal and the only setback requirements were 8 m setback from the pipeline centerline for Sensitive Developments and a 30 m setback from the railway centerline for Sensitive Developments. The category of Sensitive Development includes land uses such as hospitals, childcare facilities, and aged care housing developments.

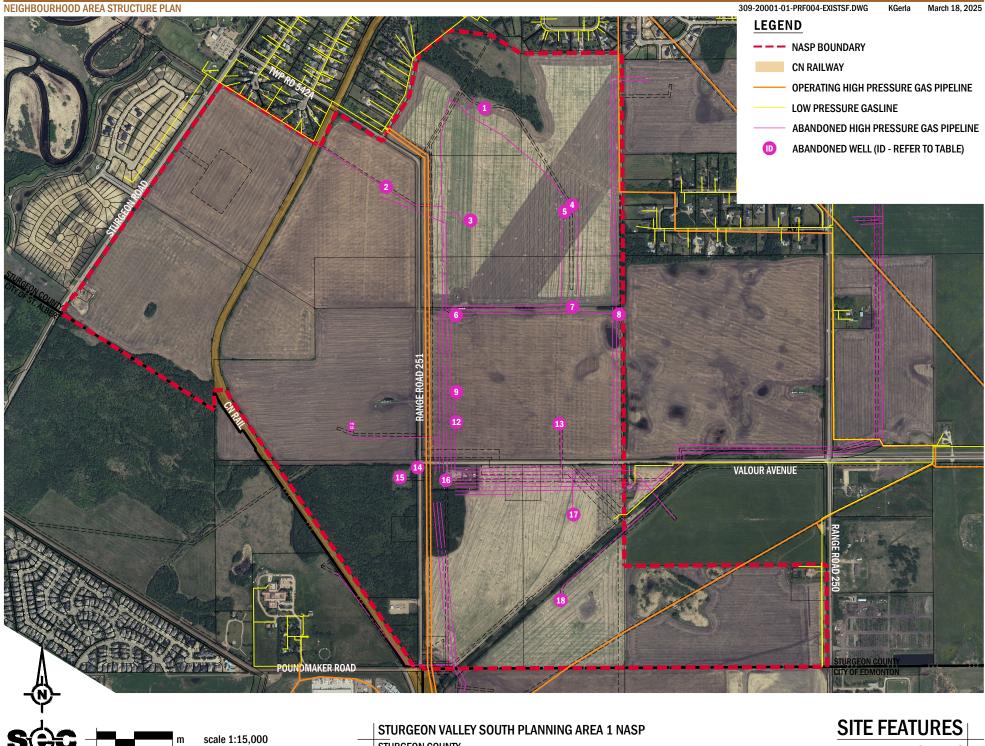
4.4.6 Oil and Gas

Oil exploration and production has been occurring in the area since the late 1970's. Existing oil and gas pipelines and abandoned wells have been incorporated into the Planning Area 1 as part of roadways, open space/green corridors, or future Public Utility Lots (see Figure 4). Prior to subdivision or development, applicants will need to confirm that requirements for abandoned wells prescribed by Alberta Energy Regulator (AER) in Directive 079 have been met, including well location confirmation, appropriate setbacks and communication responsibilities. The below table outlines the well status and ownership.

Table 2: Abandoned Wells

	Company Name	Well Licence #	Status	Type	Legal
1	Regco Petroleums Ltd.	0066973	Rec Certified	Crude Oil	NW-13-54-25-4
2	Canada Northwest Energy Ltd.	0067774	Rec Certified	Crude Oil	NE-14-54-25-4
3	Canada Northwest Energy Ltd.	0077419	Rec Certified	Crude Oil	NW-13-54-25-4
4	Canada Northwest Energy Ltd.	0066972	Rec Certified	Crude Oil	NW-13-54-25-4
5	Canada Northwest Energy Ltd.	0078886	Rec Certified	Crude Oil	NW-13-54-25-4
6	Regco Petroleums Ltd.	0066577	Rec Certified	Crude Oil	SW-13-54-25-4
7	Canada Northwest Energy Ltd.	0076608	Rec Certified	Crude Oil	SW-13-54-25-4
8	Canada Northwest Energy Ltd.	0070017	Rec Certified	Crude Oil	SW-13-54-25-4
9	Canada Northwest Energy Ltd.	0078456	Rec Certified	Crude Oil	SW-13-54-25-4
10	Canada Northwest Energy Ltd.	0150673	Rec Certified	Crude Oil	SE-14-54-25-4
11	Canada Northwest Energy Ltd.	0067990	Rec Certified	Gas	SE-14-54-25-4
12	Canada Northwest Energy Ltd.	0109577	Rec Certified	Crude Oil	SW-13-54-25-4
13	Canada Northwest Energy Ltd.	0066636	Rec Certified	Gas	SW-13-54-25-4
14	Imperial Oil Resources Limited	0002168T	Rec Exempt	N/A	NE-12-54-25-4
15	Canada Northwest Energy Ltd.	0115361	Rec Certified	Crude Oil	NE-11-54-25-4
16	Regco Petroleums Ltd	0065192	Rec Certified	Crude Oil	NW-12-54-25-4
17	Canada Northwest Energy Ltd.	0101250	Rec Certified	Crude Oil	NW-12-54-25-4
18	Canada Northwest Energy Ltd.	0069000	Rec Certified	Crude Oil	NW-12-54-25-4





5.0 Land Use Concept & Policies

5.1 Vision

The vision for Sturgeon Valley South Planning Area 1 focuses on a sustainable, attractive, and well-connected community for modern living that celebrates and reflects the rural heritage of Sturgeon County. The community enjoys opportunities for healthy living through using wide streets and public spaces that integrate naturalized landscaping with infrastructure promoting active modes of transportation. Development patterns take advantage of the rolling terrain of the area to provide views and vistas to nearby natural features. Planning for the area prioritizes connectivity for residents through multimodal forms of travel including active transportation options such as walking and biking, along with transit and private vehicles. As a complete community, Planning Area 1 provides access to local and convenient retail and services, as well as opportunities for recreation, education, and connection with friends and neighbours. Attractive commercial developments and public open space will provide local places to shop, play and socialize, helping to foster a community feel.

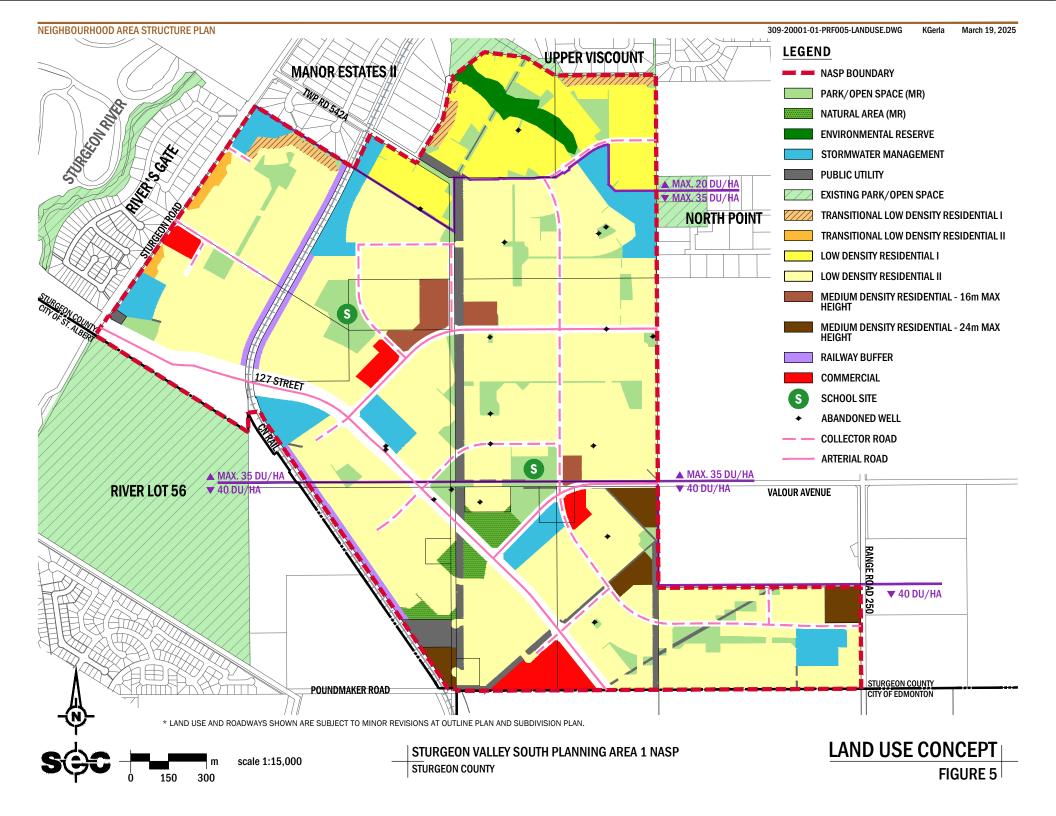
Development will recognize and celebrate the rural roots of the Sturgeon Valley through establishment of Design guidelines adopted through Outline Plans and implemented through the Land Use Bylaw.

5.2 Land Use Concept Overview

Home to a projected 18, 000 people, the development concept for Planning Area 1 provides a balanced mix of land uses to provide a complete community for residents to enjoy (**see Figure 5**). The land use concept integrates ample green space including environmental reserve, schools and parks, and storm ponds with a connected trail network and commercial destinations. Transitions in residential density are implemented near existing country residential areas throughout the plan. In general, higher density residential areas are planned to transition from the City of Edmonton boundary in the south, where planned densities are higher than in Sturgeon County and reduce as development proceeds northward towards existing residential.

Diverse housing choices will provide opportunity for residents in different stages of life and with varying needs to find appropriate housing so that they can stay within the community as needs change over time. An efficient road network will allow residents and visitors to easily access key destinations within and beyond the plan area by their travel mode of choice. Current agricultural land uses will continue to be supported until land is needed for the proposed development, while urban agriculture is encouraged as part of the future development.

Overall, the concept provides the mix of land uses and infrastructure to create a complete community, where residents have convenient access to employment, education, services, recreation and nature. Urban design features and landscaping will acknowledge the County's rural past within a unique modern environment that respects the existing country residential areas of the Sturgeon Valley.



5.3 Transitional Development

Sturgeon Valley Planning Area 1 is adjacent to the City of Edmonton to the south, the City of St. Albert to the west, as well as rural and country residential land uses in Sturgeon Valley Core to the north and River's Gate to the west. The compact urban housing development seen within the cities of Edmonton and St. Albert contrasts with the larger country residential parcels seen within Sturgeon Valley Core. Sturgeon Valley South Planning Area 1 will provide an interface between these areas, with well-defined sensitive transitions to existing residential land uses an important consideration for appropriate integration of new residents. To ensure compatible development adjacent to established residents, densities will vary throughout the plan area (see **Figure 6**), while still achieving the overall average density of 35 du/nrha as outlined in the Sturgeon Valley South Area Structure Plan. Consistent landscaping styles along roadways and parks will be encouraged throughout the plan area to provide an overall cohesiveness within Sturgeon Valley Planning Area 1 despite various transitions in density throughout the area.

Objective 1: Sturgeon Valley South Planning Area 1 will have variable density targets throughout the plan area to provide appropriate transitions to adjacent land uses while still meeting the overall density target for the plan area.

- Policy 1.1 Target residential densities for future development will be in accordance with **Figure**6, varying between maximum 10 du/nrha, maximum 15 du/nrha, maximum 20 du/nrha, maximum 35 du/nrha, and 40 du/nrha.
- Policy 1.2 Outline Plans within Sturgeon Valley South Planning Area 1 shall provide land use statistics that demonstrate adherence to the density targets outlined in **Figure 6**.

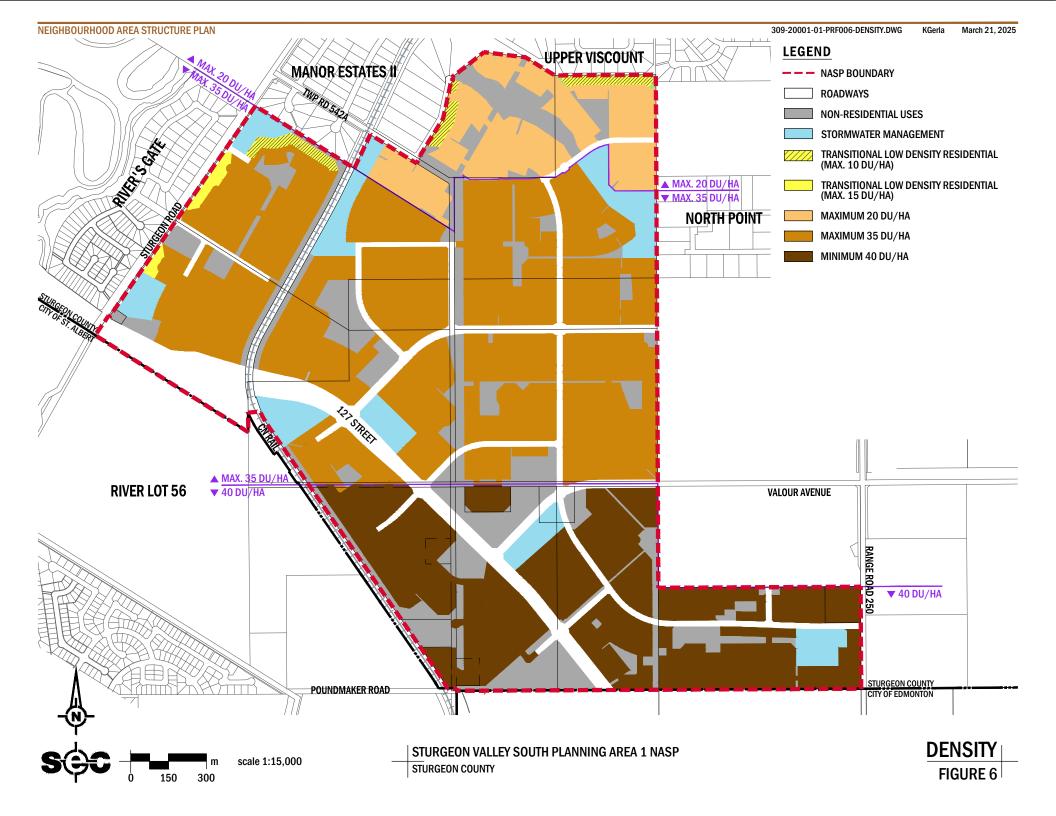
Implementation: The overall density for Planning Area 1 NASP meets the target density of 35 du/nrha. The maximum 10 units per hectare and 15 units per hectare residential land use categories are subsets of, and will be included as part of the overall average density calculations for, the 20 units per hectare and 35 units per hectare lands respectively, as shown in Figure 6.Land uses, as outlined on Figure 5, will provide compatible development to adjacent areas with compact development to border St. Albert and Edmonton, and lower density housing forms to border existing country residential within Sturgeon County. The 20 du/nrha area will allow for a variety of housing forms and size of lots, but will maintain an average density under the maximum 20 du/nrha. The central plan area with maximum 35 du/nrha will provide further transitional density towards the higher 40 du/nrha average density planned near the City of Edmonton boundary.

Objective 2: Sturgeon Valley South Planning Area 1 will have an overall cohesive identity throughout the plan area, to allow for seamless residential density transitions within the plan area and to bordering land uses.	
Policy 2.1	Consistent natural landscaping is encouraged along meridians and boulevards for roadways that extend between two different residential density areas
Policy 2.2	Greenway buffers, parks, and ponds with naturalized landscaping are encouraged where appropriate, to provide transitions between varying residential densities.
Policy 2.3	Consistent fencing styles for residential sub-areas is encouraged.

Implementation: Roadways, parks, and stormwater management facilities help to provide transitions between various residential densities utilized throughout the plan area. Additionally, naturalized landscaping and fencing can provide consistency throughout the plan area, so residential density transitions are minimized.

Transitional Development Example





5.4 Residential

Sturgeon Valley South Planning Area 1 will allow for a mix of residential land use designations and densities to promote housing choice to appeal to a diverse range of residents in different stages of life. This housing choice will contribute to building a complete community where residents can live within the same community as housing needs change over time, with the goal of building an intergenerational community with strong connections over time.

Mixed low-density housing will be the predominate form of residential development in Sturgeon Valley South Planning Area 1, with opportunities for single detached, semi-detached and row housing with laned access. Housing forms will generally reflect the established density targets in the Sturgeon Valley ASP as outlined in **Figure 5**. Medium density residential development will include both low-rise and medium-rise developments and may include row housing or apartments. Maximum height for medium density sites within the maximum 35 du/nrha area will be 16 m, and 24 m within the 40 du/nrha area.

Housing affordability, sustainability, and supply are current issues that are impacting the housing market, with the potential for housing trends to shift over time. As innovative and alternative housing options become available, opportunities to include them as part of Sturgeon Valley South Planning Area 1 may be explored in alignment with the density targets and Design guidelines established through Outline Plans and the Land Use Bylaw.

Design guidelines within Outline Plans will help establish the character of neighbourhoods with consideration of the rural roots of Sturgeon Valley. Additionally, potential for emerging development technologies creating a Smart Community and Low-Impact Development techniques will be considered and incorporated into Outline Plans to promote adaptive and sustainable development

	Objective 3: Provide a variety of residential housing choices that align with the varying density targets set for the area.	
Policy 3.1	A variety of housing forms shall be provided in accordance with the Land Use Bylaw, including single detached, semi-detached, duplex, and multi-unit housing of diverse sizes and ranges of affordability.	
Policy 3.2	Residential housing forms shall be further described in Outline Plans based on achieving the overall target densities for future development as indicated in Figure 5 .	
Policy 3.3	Innovative and alternative housing forms that align with the Outline Plan density should be encouraged.	

Implementation: Outline Plans will further detail the housing types in neighbourhoods with the goal of providing housing choice within the required target density ranges. Housing choice will help ensure that the community appeals to a wide range of residents in various stages of life, providing an inclusive and diverse community.

	Objective 4: Design considerations will allow for attractive residential communities that reflect the natural history of the area while providing the necessary foundation for modern living.	
Policy 4.1	Design guidelines shall be submitted as part of Outline Plans and will provide design elements for public spaces, commercial areas, multi-family sites, public roadways, and neighbourhood entrances that create a sense of place and reflect the rural roots of the area.	
Policy 4.2	Smart Community concepts promoting innovative technologies are encouraged to be integrated into Outline Plan design guidelines where appropriate.	
Policy 4.3	Promote the creation of inviting and attractive public and semi-private spaces that enhance the natural environment and promote community use and social interaction.	

Implementation: Design guidelines within Outline Plans will provide direction for design elements that will help create a unique identity for the community and provide an attractive aesthetic, Design guidelines will reflect the rural character of Sturgeon Valley and surrounding area, while allowing for modern sustainable living.

5.5 Commercial Development

Commercial land uses are located along key transportation corridors within Sturgeon Valley South Planning Area 1 (**see Figure 5**). These sites are intended for small – medium scale commercial, meeting the daily commercial retail and service needs of residents in Planning Area 1. One site is located along Sturgeon Road, one along 127th street, and two others from future arterial roadways.

Commercial land uses are connected to the trail system within Planning Area 1 which will provide opportunities for walking and multiple modes of travel to access commercial services for residents. Incorporating employment opportunities into the neighbourhood helps to achieve complete communities, where residents can work, live, shop and play. Commercial sites will provide opportunities for gathering places for residents to meet, stop for coffee, access personal services, go to work, or shop. These places help build a sense of place for residents with the intention to create a vibrant and connected community with a local focus for neighbourhoods.

Objective 5: Provide flexible commercial and employment opportunities that supports the local economy and provide opportunities for residents to meet daily needs.	
Policy 5.1	Commercial sites shall generally be located nearby major roadways and neighbourhood entrances to allow for high visibility and easy access from multiple modes of transportation.
Policy 5.2	Local and boutique style businesses are encouraged to be developed within commercial sites in accordance with the Sturgeon County Land Use Bylaw.
Policy 5.3	Buildings in the commercial sites should primarily be small to medium scale in size.

Implementation: The Commercial sites within Planning Area 1 will primarily be small to medium scale, with the potential for larger businesses on larger sites where the Land Use Bylaw permits. Commercial sites are located along main routes that provide multi-modal transportation options providing safe and convenient access for residents and visitors. A variety of commercial/employment opportunities to serve local residents may be provided as retail, office, coffee shops, restaurants, and personal and professional services in the planned commercial areas.

Objective 6: Design considerations will allow for attractive commercial centres that reflect the natural history of the area while providing modern services and gathering places for residents		
Policy 6.1	Design guidelines shall be prepared as part of Outline Plans and will provide design elements for commercial sites that reflect rural roots of the area and incorporate winter design principles.	
Policy 6.2	Promote the creation of inviting and attractive commercial spaces that reflect the natural environment and promote social interaction.	
Policy 6.3	Commercial sites are encouraged to create indoor or outdoor spaces that allow for people to gather.	

Implementation: Design guidelines within Outline Plans will provide direction for design elements that will shape the commercial sites so that an attractive aesthetic is provided that allows for social interaction and integrates with the adjacent residential areas. The aesthetics will be reflective of the surrounding area while allowing for convenient retail and services for Sturgeon Valley residents and visitors.

5.6 Agriculture

Cultivated farmland has been the primary land use for Planning Area 1. As the area begins to develop, the established agricultural uses will continue to be supported until the time development proceeds as outlined in **Figure 5**. Additionally, to support future agriculture within the plan area, urban agriculture activities such as community gardens, fruit trees, private yard gardens, and greenhouses will be encouraged as part of established land uses within neighbourhoods.

the market d	Objective 7: To support agriculture by allowing productive use of agricultural lands until the market determines the lands are needed for development and by encouraging future urban agriculture to be integrated into land uses.		
Policy 7.1	Existing agricultural lands within Planning Area 1 should remain as agricultural until development is approved by Sturgeon County.		
Policy 7.2	Outline Plans shall stage development with consideration for agriculture uses so that farming can continue within the plan area until the time that the land is needed for future development.		
Policy 7.3	Design guidelines in Outline Plans shall consider urban agricultural opportunities as part of landscaping and programming options in commercial and open spaces.		

Implementation: Agricultural lands will be encouraged in Planning Area 1 until approval to move forward with development has been received from Sturgeon County. Outline Plans will consider impact of development on agricultural operations and incorporate this into neighbourhood staging. Planning Area 1 has multiple commercial and open space sites which could incorporate agricultural elements, and this will be further explored in Outline Plans.

5.7 Parks, School, Open Space and Environmental Reserve

Parks and Stormwater Management Facilities are dispersed throughout the plan area to create an extensive open space network that residents can easily access (**See Figure 7**). The open space land uses are connected to each other through a network of shared use paths, on-street sidewalks, walkways, and greenway corridors. This linked open space network provides ecological connectivity for the area and provides opportunity for healthy living where residents can easily stay active and connected to nature. Naturalized landscaping will be utilized within the open space network to create a healthy natural habitat and a consistent aesthetic throughout the plan area that requires low maintenance standards.

One significant natural area has been maintained in the northeast portion of the plan and will be dedicated as Environmental Reserve. In addition, two wooded areas of the plan will be integrated into the park system with viewpoints along the future extension of 127 Street, creating a natural aesthetic for travelers along the corridor. Schools, parks, tree stands, and greenways shown in **Figure 7** will be dedicated as Municipal Reserve. As outlined in the Municipal Government Act (MGA), this will occur at the time of subdivision, with each landowner required to provide 10% Municipal Reserve as land, cash or a combination of both. The CN railway that crosses through Planning Area 1 and along the southwest boundary of the NASP is integrated with naturalized buffers. A 23m vegetated buffer is provided between the railway right of way and residential land uses in accordance with Guidelines for Development in Proximity to Railway Operations. This area is not considered developable and therefore does not require dedication of Municipal Reserve.

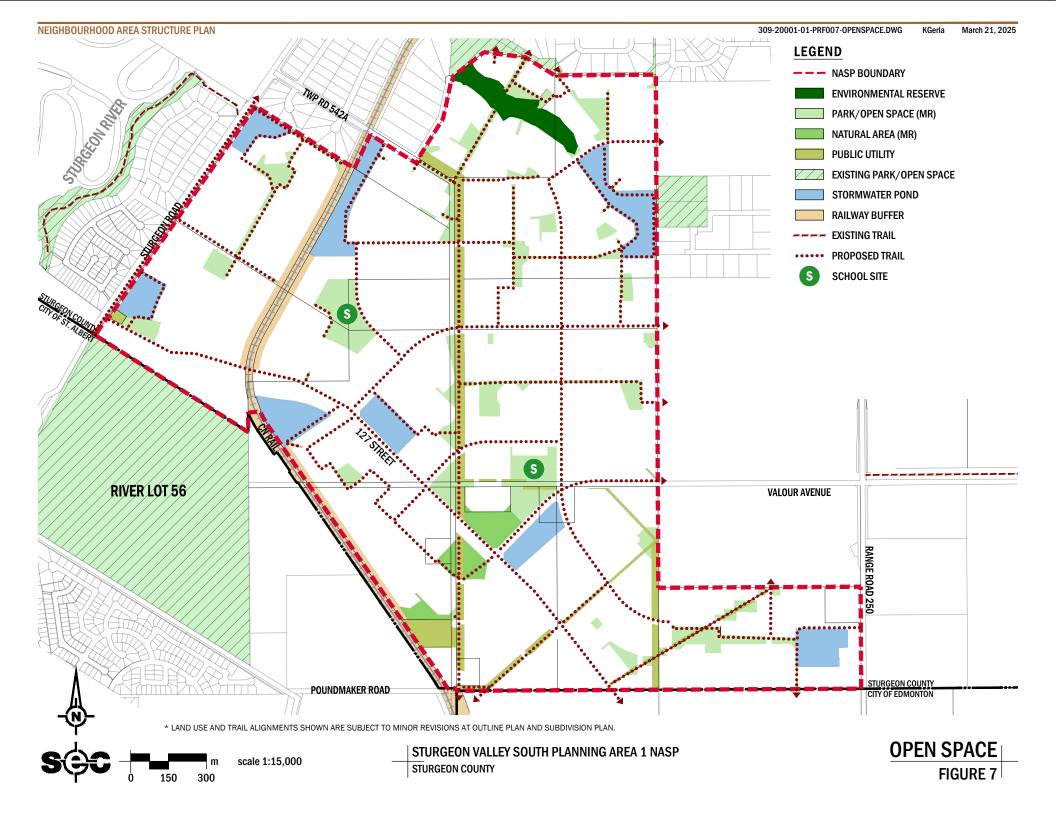
Two large park sites for potential schools are planned at central locations to provide education and recreation opportunities within the plan area. The location and distribution of the proposed school sites within the plan allow for convenient access by most residents within the plan. Additionally, at the time of this report, there are existing nearby County schools with capacity for students from this area. Both planned school sites are integrated with the trail network for the area and allow for safe and convenient access by multiple modes of transportation.

	Objective 8: Provide an integrated, safe and well-connected open space network with appropriate civic facilities for residents to enjoy	
Policy 8.1	Open spaces should be dispersed throughout Planning Area 1 to ensure equitable access to greenspace for all residents.	
Policy 8.2	Provide a connected multipurpose trail system that links open space areas within Planning Area 1 and future planning areas.	
Policy 8.3	Consider the joint use of parks and school sites with other community facilities, such as libraries, community leagues and recreation facilities.	
Policy 8.4	Open space design and programming should integrate Crime prevention Through Environmental Design (CPTED) principles for safe access.	

Implementation: There are multiple open spaces planned for different purposes and sizes that are dispersed throughout Planning Area 1 and will be linked through the trail network that provides opportunity for multiple modes of transportation. Design guidelines in future Outline Plans should include CPTED principles for park design. Future park programming will consider best use of space to meet community needs.

Objective 9: Provide naturalized landscaping in open spaces for minimal maintenance, healthy habitats, and aesthetically cohesive open spaces.				
Policy 9.1	Design guidelines shall be completed as part of Outline Plans and will provide design elements for open spaces that reflect the natural and rural heritage of the area and incorporate naturalized landscaping.			
Policy 9.2	Landscaping should incorporate plant species native to Alberta where feasible.			
Policy 9.3	Landscaping in parks and along stormwater ponds shall be primarily naturalized and designed for minimal maintenance.			
Policy 9.4	Low Impact Development (LID) features, such as rain gardens, bioswales, and constructed wetlands, are encouraged within neighbourhood design to reduce the need for pipe systems, and to increase naturalized vegetation and permeable surfaces.			
Policy 9.5	Foster opportunities for wildlife habitat and naturalized spaces that encourage biodiversity.			
Policy 9.6	Priority natural areas shall be kept through the dedication of Environmental Reserve (ER), Municipal Reserve (MR) or Conservation Reserve (CR).			

Implementation: Design guidelines within Outline Plans will provide direction for design elements that will shape the public open space sites so that an attractive aesthetic is provided that allows for healthy habitats with minimal maintenance. One natural area made of deciduous forest and a water course is located in the northwest area of the plan and will be retained as ER. Several treed areas are being kept as Municipal Reserve as identified in **Figure 5**. Low Impact Development (LID) can be considered where feasible in future development as technologies, standards, and policies evolve to reduce stormwater run-off and create additional ecological habitat.



5.8 Transportation

Planning Area 1 transportation network consists of internal roadways that will connect to the existing and planned roadway networks in adjacent municipalities and current and future planning areas. A hierarchy of major arterial, arterial, collector and local roadways is intended to facilitate the efficient and safe movement of multimodal traffic, including vehicles, transit, bicycles and walking. There are strong north-south and east-west links throughout Planning Area 1 to allow efficient movement both within the planning area and to external networks (see Figure 8).

127th Street is a major arterial connector through the City of Edmonton to Anthony Henday Drive freeway and will ultimately provide a key linkage west past Sturgeon Road to the City of St. Albert. Arterial roadways will facilitate traffic connection to commercial land uses and future planning areas. The collector roadways provide efficient and convenient access to residential and commercial areas, while local roadways accommodate lower traffic volumes which will link to collector and arterial roadways and provide convenient access throughout neighbourhoods. Enhanced locals that restrict parking on one side and allow two traffic lanes, may be used strategically to ensure adequate traffic flow. Roadways will be designed and constructed in accordance with Sturgeon County's municipal guidelines and standards. As technology advances and there are shifts in transportation options, the opportunity to incorporate low impact development and smart community infrastructure within the transportation network should be considered. The road networks will allow safe and efficient movement of traffic throughout Planning Area 1.

A connected active transportation network of sidewalks, shared use paths, and trails has been planned throughout Planning Area 1 and will provide links to community gathering points within the area, as well as to adjacent land uses outside the NASP area. The active transportation routes will be integrated within the road network, along with additional green corridor connections that will be provided to link residents to key services, open space, and amenities throughout Planning Area 1. The network of multi-modal transportation provides the foundation for active lifestyles with the potential to help build a climate resilient neighbourhood.

A *Transportation Impact Assessment* (TIA) for the area was completed by Bunt & Associates Engineering Ltd. This TIA was completed to confirm transportation infrastructure requirements for the Sturgeon Valley South Planning Area 1, including 127th Street. Based on the trip generation and traffic volumes, Bunt concluded that the traffic network as planned can accommodate the traffic anticipated for Sturgeon Valley Planning Area 1, with the need for the 127th street ultimate four-lane divided arterial and Sturgeon Road upgrades within a 20-year horizon. An initial connection of the first two lanes of 127th street is anticipated within 5 years of this NASP approval. This will create a convenient connection to the Anthony Henday freeway for existing and future residents.

Objective 10: Provide a safe and efficient transportation network in Planning Area 1 that
ties into the surrounding road network, with consideration of the existing railway corridor
and future transportation options.

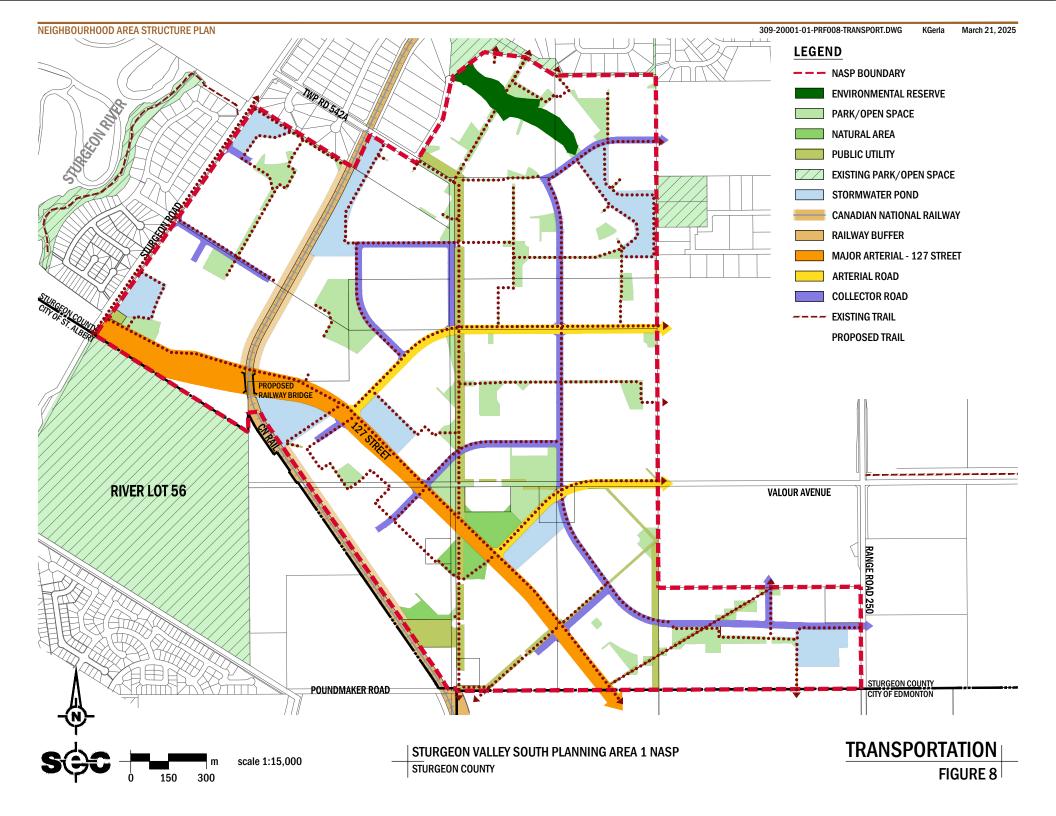
Policy 10.1	A well-integrated system of arterial, collector, and local roadways shall be established for vehicular and multi-modal circulation within Planning Area 1.
Policy 10.2	Traffic calming techniques shall be used in accordance with County standards to strategically reduce automobile speeds, minimize shortcutting, increase safety of active users, and improve the streetscape.

Objective 10: Provide a safe and efficient transportation network in Planning Area 1 that ties into the surrounding road network, with consideration of the existing railway corridor and future transportation options.				
Policy 10.3	Provision for public transit infrastructure shall be included in detailed design where appropriate, in consultation with Sturgeon County policy and in accordance with Edmonton Metropolitan Region policy.			
Policy 10.4	Emergency and Protective Services will use the well integrated roadway network and emergency accesses and shall have multiple entry and exits in each neighbourhood within Planning Area 1.			
Policy 10.5	Any railway crossings within Planning Area 1 shall obtain the approval of the appropriate railway operator with design completed in accordance with railway standards.			
Policy 10.6	Appropriate building setbacks, noise attenuation, and safety buffers from the railway line shall be implemented.			
Policy 10.7	The detailed design and construction for the 127 street railway crossing and power easement shall be done in consultation with the appropriate utility and railway entities.			
Policy 10.8	Electric Vehicle charging stations or other alternative green energy transportation infrastructure are encouraged to be incorporated into the site design for commercial areas and public land uses in accordance with the Sturgeon County Land Use Bylaw to support a green transportation network and emerging technologies.			

Implementation: Planning Area 1 roadways will adhere to the General Municipal Servicing Standards (GMSS) established for Sturgeon County, creating a functional and efficient hierarchy of arterial and collector roadways as outlined in **Figure 8.** Future local roadways will tie into this established network with details determined during subdivision and detailed design. The details for transit infrastructure, traffic calming measures, railway crossings, emergency access, and green infrastructure will also be determined at later development stages based on integration with the established roadway systems within this NASP. 127 Street is anticipated to use an underpass to cross the existing railway.

Objective 11: Create an active transportation network that is functional, attractive and safe.				
Policy 11.1	A network of hard-surfaced shared use paths and walkways shall provide multimodal active transportation access to key destinations within Planning Area 1, including commercial areas, schools, and open spaces.			
Policy 11.2	Trails / shared use paths shall connect to existing and future planned trail networks in adjacent planning areas and municipalities.			
Policy 11.3	Landscaping along active transportation routes shall be naturalized to provide attractive routes with cohesive aesthetics for Planning Area 1.			
Policy 11.4	Design of roadway crossings should consider minimizing crossing distances for active transportation and maximizing visibility.			

Implementation: A trail/active transportation network is outlined in **Figure 7**, that connects key land uses within the plan area and provides connection to adjacent land uses. Outline Plans with further detail landscaping and roadway crossings.



5.9 Land Use Statistics

Table 3: Land Use Statistics

Land Uses		На		%	
GROSS AREA		402.00			
Environmental Reserve		4.43			
Arterial Road		8.21			
127 th Street Roadway		22.16			-
Canadian Railway/buffer		8.19			
Existing Utility Right of Way		12.92			-
Sub total		55.91			
GROSS DEVELOPABLE AREA		346.09		100.0%	-
OTHER LAND USES	•				
School Park/Municipal Reserve		34.84		10.1%	_
Stormwater Management Facility	•	24.52		7.1%	
PUL/ Walkways		0.51		0.1%	-
Circulation	·	83.10		24.0%	
Commercial	8.17 2.4%		2.4%	_	
TOTAL – OTHER LAND USES (NON- RESIDENTIAL AREA)		151.14		43.7%	
TOTAL - RESIDENTIAL AREA		194.95		56.3%	
Residential	На	%	Units	%	Population
ransitional Low Density Residential I	4.01	1.2%	40	0.6%	126
ransitional Low Density Residential II	1.58	0.5%	23	0.3%	72
Low Density Residential I	21.38	6.2%	452	6.3%	1,195
Low Density Residential II	155.76	45.0%	4,672	68.5%	13,028
Medium Density Residential (max 16m)	5.34	1.5%	587	10.1%	1,722
Medium Density Residential (max 14m)	6.88	2.0%	963	14.2%	2,407
SUB TOTAL- RESIDENTIAL	194.95	56.3%	6,737	100.0%	18,418

Density: 35 du/nrha

Residential Type	Residential Density	Population Density
Transitional Low Density Residential I	10 units / hectare	3.16 persons/unit
Transitional Low Density Residential II	15 units / hectare	3.16 persons/unit
Low Density Residential I	20 units / hectare	2.8 persons/unit
Low Density Residential II	30 units / hectare	2.8 persons/unit
Medium Density Residential (Max 16m height)	120 units / hectare	2.5 persons/unit
Medium Density Residential (Max 24m height)	140 units / hectare	2.5 persons/unit



6.0 Engineering Servicing & Utilities

6.1 Water

Development of the overall water distribution system for Planning Area 1 was guided by the Sturgeon County Infrastructure Master Plan and is planned in accordance with Sturgeon County engineering standards. The water network provides a cost-effective plan to provide sufficient water supply for Planning Area 1 (see Figure 9).

The Allin Ridge Pump House & Reservoir is proposed to service Planning Area 1. The reservoir is located east of Range Road 250. The Sturgeon Valley South watermain extension is proposed off the Allin Ridge Reservoir to run south on Range Road 250 and east through NE-13-54-25-W4M to service Planning Area 1. The watermain extension through Planning Area 1 to just short of the CN Railway is to be completed by the County.

Details of the water distribution system are outlined in the Engineering Design Brief.

6.2 Sanitary Servicing

Development of the overall sanitary servicing for Planning Area 1 was guided by the Sturgeon County Infrastructure Master Plan and is planned in accordance with Sturgeon County engineering standards. The planned sanitary servicing provides a cost-effective plan to meet the sanitary servicing needs for Planning Area 1 (see Figure 10).

Basin 1, located south of Valour Avenue, north of the CN Railway, and east of the future 127 Street corridor drains to Valour Avenue through gravity trunk sewers and connects to the Alberta Capital Region Wastewater Commission (ACRWC) St. Alberta Regional Trunk (START) system. Flow from the Start system discharges into the Northeast Regional Transmission System (NERTS) until it reaches the ACRWC treatment facility near Fort Saskatchewan.

Basin 2, located north of the City of Edmonton/Sturgeon County boundary, east of the future 127 Street corridor, and west of Range Road 250 is proposed to drain through gravity trunk sewers to a proposed lift station off Range Road 250. Flow from the lift station is conveyed to the ACRWC's START system via forcemain and taken to the ACRWC treatment facility through the NERTS line.

Flow from the rest of Planning Area 1 (Basins 3, 4, 5, and 6) are conveyed through gravity trunk sewers to the River's Gate Lift Station along Sturgeon Road. A forcemain is proposed from the River's Gate Lift Station that connects to the ACRWC START system at Valour Avenue, discharges into the NERTS trunk sewer, and conveys flow to the ACRWC treatment facility. Details of the sanitary servicing system are outlined in the Engineering Design Brief.

6.3 Stormwater Servicing

Development of stormwater management for Planning Area 1 was guided by the Sturgeon Valley Stormwater Master Plan dated April 2024 and is planned in accordance with Sturgeon County engineering standards. The planned stormwater servicing provides a cost-effective plan to meet the stormwater servicing needs for Planning Area 1 (see Figure 11).

Stormwater from Basin 1, located north of the City of Edmonton/Sturgeon County boundary, east of the future 127 Street corridor, and west of Range Road 250 drains to onsite SWMF 1. Flow from SWMF 1 is proposed to be directed east towards MWB3 per the Sturgeon Valley Stormwater Master Plan which discharges into the existing northwest Anthony Henday Drive Pond 6.

Basin 4, located north of the future arterial road, west of the Planning Area 1 east boundary, and south of Upper Viscount Estates is proposed to drain to onsite SWMF 4. Flow from SWMF 4 outlets into the North Ravine that is situated between the existing residential developments of Sturgeon Heights and Upper Viscount Estates. The North Ravine conveys stormwater to Sturgeon River.

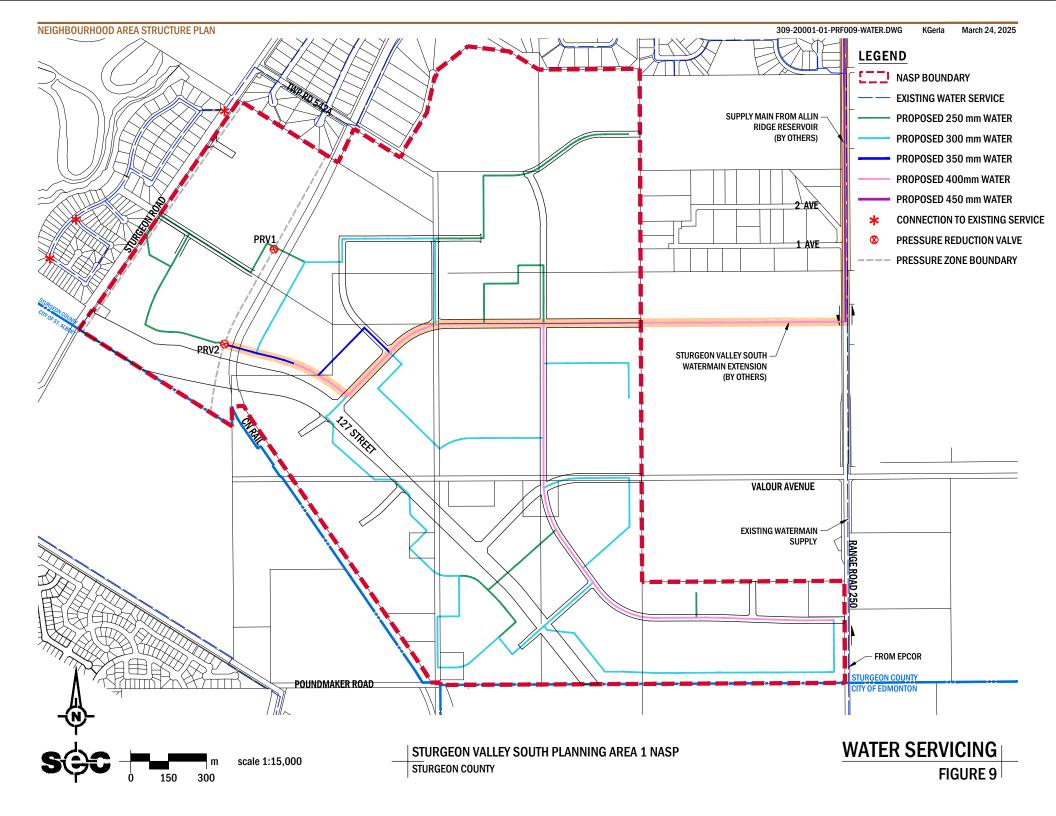
Basin 5, located on the east side of the CN Railway and south of Township Road 542A will drain to SWMF 5 which will interconnect to SWMF 7. Basin 7, located east of Sturgeon Road, west of the CN Railway, and south of Township Road 542A flows to onsite SWMF 9. Flow from SWMF 7 crosses Sturgeon Road and discharges into Sturgeon River via an interconnecting pipe system.

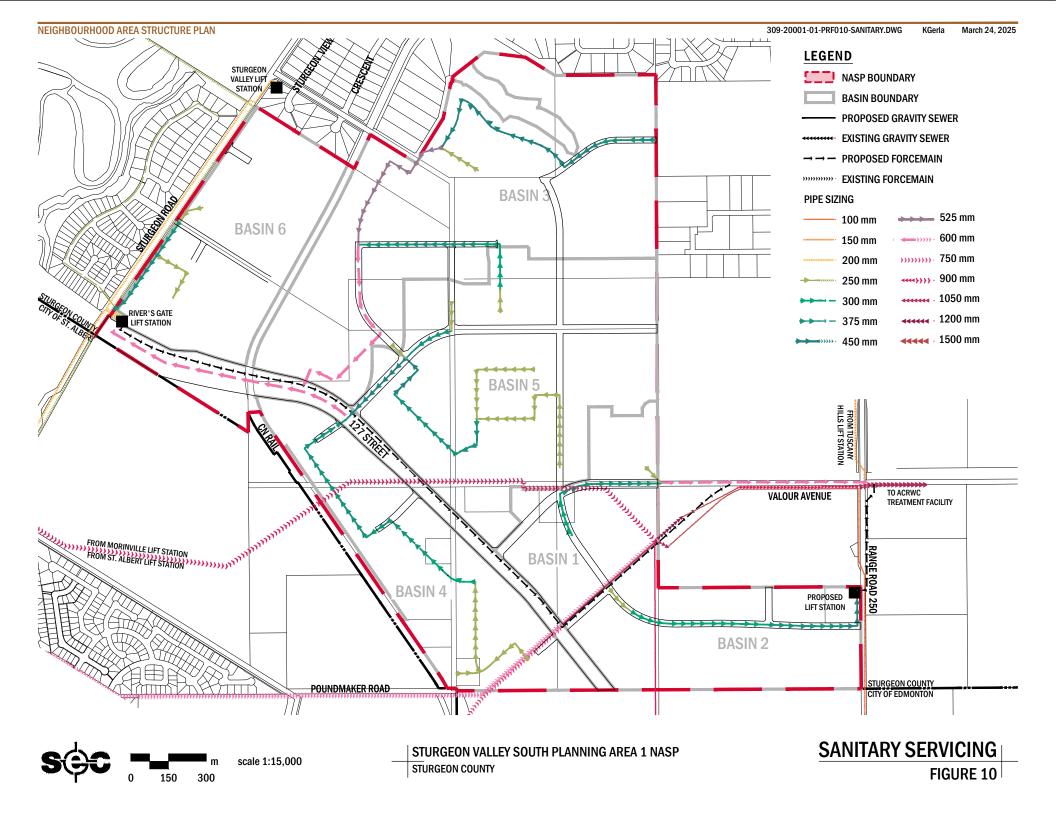
Stormwater from Basins 2, 3, and 6 drain to their respective onsite SWMFs. SWMFs 2 and 3 will interconnect into SWMF 6. Flow from SWMF 6 will be discharged through the existing tributary in River Lot 56 per the Sturgeon Valley Stormwater Master Plan.

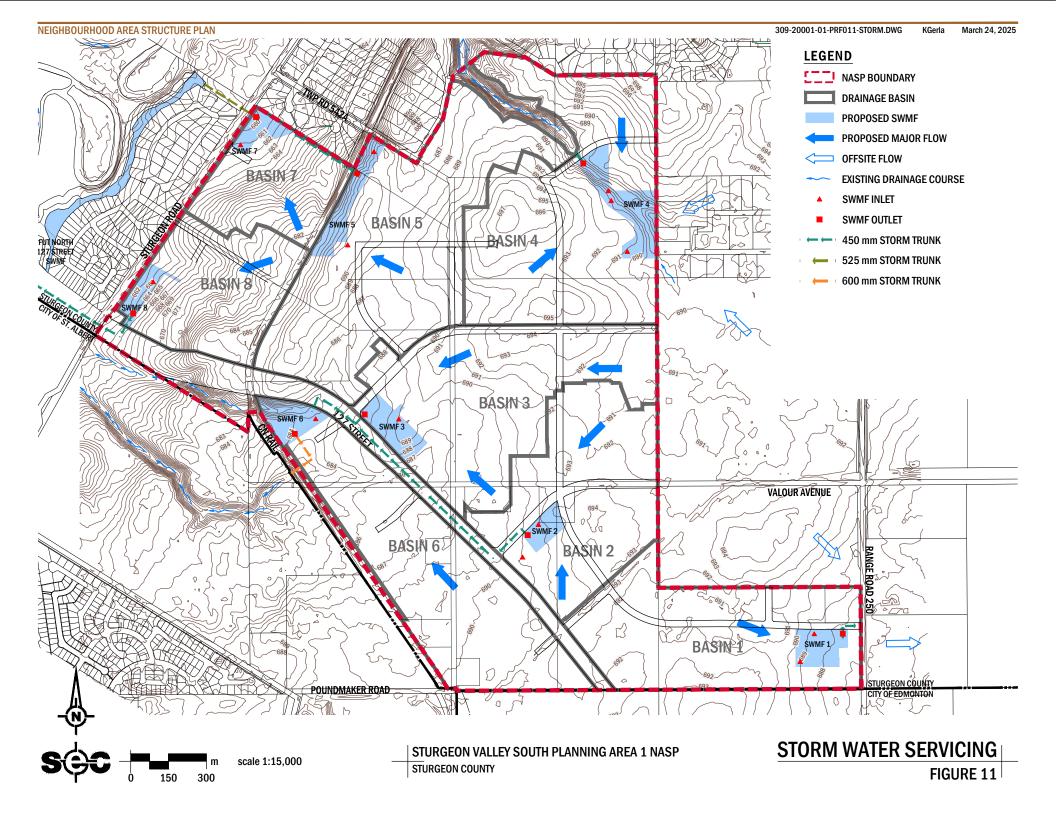
Basin 8 will flow to onsite SWMF 8 which drains via interconnecting storm trunks and connects to the proposed 127 Street drainage system. Drainage from 127 Street will be conveyed across Sturgeon Road and discharge into Sturgeon River via the 127 Street north SWMF. Details of the stormwater management system are outlined in the Engineering Design Brief.

6.4 Utilities

Telecommunications, gas and power services will be provided to residents and commercial sites throughout Planning Area 1 and the General Municipal Servicing Standards (GMSS) outline the requirements that will be met for utility provisions within either the road right of ways or four party utility easements.







7.0 Implementation

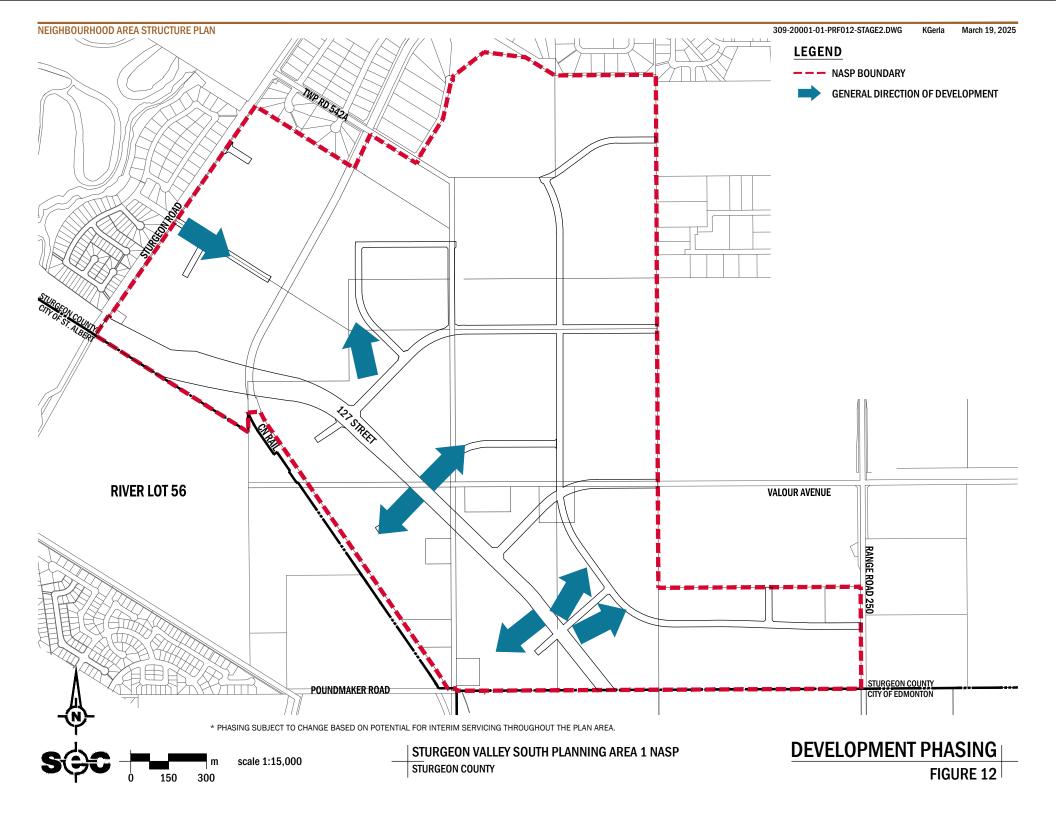
7.1 Phasing

Development of Planning Area 1 will occur over multiple stages. The time horizon for buildout of the plan area is anticipated to be 25-30 years. Development is planned to start along the extension of 127th Street and exiting Sturgeon Road in the south and west portions of the plan area (see Figure 12). The direction of phasing is conceptual and will be further determined by servicing requirements and market conditions which are subject to change. Changes to the phasing will not require an amendment to this NASP. More detailed phasing of sub-areas will be provided in Outline Plans.

7.2 Policy Coordination & Future Planning Requirements

Any future planning and development for Planning Area 1 shall follow the appropriate policy in higher order planning documents, including the Sturgeon County Municipal Development Plan and the Sturgeon Valley South Area Structure Plan. In addition, consideration should be made for alignment to other guiding Sturgeon County policy documents. Any major changes to plans for future land use must be pursued through the appropriate Neighbourhood Area Structure Plan Process outlined by Sturgeon County.

As part of the approval process for the NASP for Planning Area 1, adjoining municipalities have been provided the NASP for review and comment, including all relevant supporting documents. At the discretion of Sturgeon County, future amendments to this NASP may be provided to adjoining municipalities for review and comment prior to approval.



APPENDIX A

ASP & NASP alignment

APPENDIX B

Technical Studies