

# ERIN RIDGE NORTH

## Area Structure Plan

### Bylaw 33/2009

As Amended February 25, 2019 - Bylaw 16/2018

**TABLE OF CONTENTS****Page**

1.0	INTRODUCTION.....	1
1.1	Purpose .....	1
1.2	Authority of the Plan .....	1
1.3	Timeframe of the Plan .....	2
1.4	Interpretation of the Plan .....	3
1.4.1	Map Interpretation.....	3
1.4.2	Application of the Plan .....	3
1.5	Objectives.....	4
1.6	Property Ownership Patterns.....	4
1.7	Planning Context .....	4
1.7.1	Intermunicipal Development Plan (IDP) .....	5
1.7.2	Municipal Development Plan (MDP) .....	5
1.7.3	Existing Area Structure Plan .....	5
1.7.4	Land Use Bylaw (LUB).....	5
1.7.5	Transportation Master Plan (TMP).....	6
1.7.6	Utility Master Plan (UMP).....	6
2.0	SITE ANALYSIS.....	8
2.1	Natural and Cultural Features.....	8
2.1.1	Topography and Drainage .....	8
2.1.2	Sturgeon River Designated Flood Line .....	8
2.1.3	Geotechnical Conditions .....	8
2.1.4	Vegetation Resources.....	9
2.1.5	Natural Site Assessment.....	11
2.1.6	Environmental Site Assessment .....	12
2.1.7	Heritage Resources .....	13
2.2	Current Development Patterns .....	13
3.0	Land Use Concept.....	15
3.1	Future Land Use Map .....	15
3.2	Land Use Concept: Major Development Patterns.....	15
3.3	Residential Land Use.....	16
3.3.1	Low Density Residential.....	16

## ERIN RIDGE NORTH AREA STRUCTURE PLAN

### Part 1

### Introduction

3.3.2	Medium Density Residential.....	16
3.3.3	Medium to High Density Residential .....	16
3.3.4	Mixed-Use Commercial with Residential .....	17
3.3.5	Supportive Housing.....	17
3.4	Commercial.....	18
3.5	Parks and Open Space.....	19
3.5.1	Trails .....	19
3.5.2	Woodlot.....	20
3.5.3	School/Park Site .....	21
	Table 3-1: Student Population Projection .....	21
3.5.4	Stormwater Management Facilities (SWMFs).....	22
3.6	Development Statistics .....	22
	Table 3-2: Development Statistics.....	24
4.0	TRANSPORTATION .....	26
4.1	Arterial Road Network.....	26
4.2	Collector and Local Road Network .....	27
4.3	Transit.....	28
4.4	Pedestrian/Bicycle Links.....	28
4.5	Noise Attenuation .....	28
4.6	Off-Site Levies .....	29
4.6.1	Notes	29
4.7	Capital Recreation Fees .....	29
4.8	Crime Prevention Through Environmental Design (CPTED) .....	30
4.9	Timing of Development – Coal Mine Road .....	30
5.0	UTILITY SERVICES.....	31
5.1	Water Supply and Distribution .....	31
5.2	Wastewater Collection System (Sanitary).....	31
5.3	Stormwater Management .....	32
5.4	Shallow Utilities.....	33
5.5	Public Utility Lots (PULs) .....	33
5.6	Timing of Development – Stormwater Management.....	34
6.0	IMPLEMENTATION .....	35
6.1	Development Staging .....	35
6.2	Redistricting and Subdivision.....	35
6.3	Building Inspections.....	36

<b>LIST OF FIGURES</b>	<b>Page</b>
Figure 1 Location Map .....	38
Figure 2 Future Land Use .....	39
Figure 3 Transportation .....	40
Figure 4 Water Servicing .....	41
Figure 5 Wastewater Collection System .....	42
Figure 6 Stormwater Management .....	43
Figure 7 Legal Descriptions .....	44
Figure 8 Municipal Reserve .....	45
Figure 9 Constraints .....	46
Figure 10 Phase 2 Staging Plan .....	47
Figure 11 Aerial Map .....	48

## 1.0 INTRODUCTION

### 1.1 Purpose

- (1) This plan establishes the conceptual land use, transportation, and servicing patterns for Erin Ridge North to implement the *Municipal Development Plan (MDP)*, which designates this sector of the city for commercial, residential, parks, and school uses. Erin Ridge North has two phases.
- (2) Servicing standards, population analysis and other details supporting this Area Structure Plan (ASP) for Phase 1 are referenced in the *Erin Ridge North Area Structure Plan Technical Report* (Technical Reports) Volumes I and II dated July 2009 and input from Al-Terra Engineering. The lands east of St. Albert Trail and north of Coal Mine Road (former Lutheran Lands) are referenced in the Lutheran Church Lands Area Structure Plan Amendment (Technical Reports) dated November 2014 and November 2016. Phase 2, is referenced in the *Erin Ridge North Area Structure Plan Technical Report* (Technical Reports) dated July 2013, as assembled by ISL Engineering and Land Services. The documents were used to prepare this Bylaw.

### 1.2 Authority of the Plan

The *Erin Ridge North Area Structure Plan (ASP)* has been adopted through a bylaw passed by Council in accordance with the *Municipal Government Act (MGA)*.

This plan is in keeping with the Proposed Future Land Use Concept (2015), Map 4 of the *Intermunicipal Development Plan Bylaw 7/2001*, as amended by Bylaws 1/2005, 2/2005, 19/2011, 18/2012, 10/2015, and 9/2017 shows the area as commercial corridor, and urban residential.

The MGA identifies an ASP for the purpose of providing a framework for subsequent subdivision and development of the area. The ASP is to describe sequence of development, land use purposes, population density, and general location of transportation, public utilities, and other matters Council considers necessary. The approval of the Erin Ridge North Area Structure Plan does not guarantee development rights. At the time of subdivision, detailed engineering

drawings and plans of subdivision will be reviewed and the City will then determine if development can proceed. In order to encourage development within the City of St. Albert, Council, by approving this Area Structure Plan, acknowledges the following limitations:

- That final approval of any servicing agreements remains subject to a review of plans of subdivision and detailed engineering drawings as per the City Engineering Standards, Utility Master Plan (UMP), Transportation Master Plan (TMP), Transportation System Bylaw (TSB), Municipal Development Plan (MDP), Land Use Bylaw (LUB), and any other documents, Municipal or otherwise, the City determines relevant to the development. The approval of this ASP does not mean approval of any servicing agreement, future districting, subdivision, development agreement, development permit, or building permit.
- That the City reserves the right to apply any additional infrastructure servicing specification to the lands covered by this ASP in order to provide quality services to the citizens.
- That all development expenses and other costs, of every nature and kind, are expended at the developer's sole risk, and that any additional expenses incurred by the development as a result of any modification resulting from the aforesaid Engineering Standards are at the developer's expense.
- The City is not responsible financially or otherwise, to provide infrastructure to support development of this ASP.

### 1.3 Timeframe of the Plan

The Area Structure Plan is future-oriented and depicts how Erin Ridge North Phases 1 and 2 are expected to be developed over a period of time and through a series of public and private sector initiatives. The completion of Phases 1 and 2 is a 10-year estimated timeline for full build-out and is dependant on servicing capacities and the market demand. While the plan envisions a desired future, changes to the plan may be required to respond to new circumstances. Thus, to ensure that it remains current and relevant, the plan may be reviewed, updated, and amended either generally or in regard to a specific issue as determined necessary by Council or when the *Municipal Development Plan* (MDP) is updated.

## 1.4 Interpretation of the Plan

### 1.4.1 Map Interpretation

Due to the small scale of the ASP maps, the boundaries or locations of any symbols or areas shown on a map within the ASP are approximate and not absolute, and are to be verified at the time of subdivision. With the exception of surveyed delineations, boundaries and symbols on the maps are not intended to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries such as existing road or utility rights-of-way. Minor deviations on the boundaries between land uses may be allowed, at the discretion of Planning and Development Department Administration, as long as the general location of land uses does not change or create potential impacts to surrounding land uses (existing or proposed), and the overall statistics for the neighbourhood are still achieved. While proposed roads and walkways are shown in order to illustrate possible alignments, the local road alignments and walkway locations are subject to verification and possible realignment at the time of subdivision.

### 1.4.2 Application of the Plan

The *Erin Ridge North ASP* shall apply to the area shown on Figure 1. The area is located in the northeast quadrant of St. Albert and is bounded by:

- Erin Ridge neighbourhood to the south;
- Neil Ross Road to the north is the boundary for Phase 1;
- North City limits is the north boundary for Phase 2;
- St. Albert Trail to the west; and
- City limits (Range Road 253) to the east.

Phase 1 of the ASP encompasses an area of 93.7 hectares inclusive of Coal Mine Road and the right-of-way adjacent to St. Albert Trail. Phase 2 encompasses an area of 55.7 hectares. The two phases combined have an area of 149.4 hectares.

## 1.5 Objectives

The objectives of this ASP are to:

- develop a neighbourhood that connects to the adjacent Erin Ridge neighbourhood and is connectable to surrounding future development;
- provide an urban commercial area to serve residents and the region;
- create a community where the pedestrian circulation routes link residential areas to schools, parks and open space, commercial/retail areas, and to future and existing adjacent neighbourhoods;
- provide a range of housing options to cater to a range of income, age and social groups, as well as tenure, which includes apartments, townhouses, semi-detached houses, single family houses, and may include mixed use developments;
- create a neighbourhood activity centre, which features a compact, walkable built form that encourages a mixture of commercial, residential, civic uses, and includes a central open space; and
- establish good connectivity for transit and to the future transit station proposed on the west side of St. Albert Trail.

## 1.6 Property Ownership Patterns

The majority of undeveloped land within the ASP boundary is owned by Landrex Hunter Ridge Inc., Landrex (Alberta) Developments Inc., and Landrex Inc. The City of St. Albert owns the road rights-of-way for St. Albert Trail, Neil Ross Road, Coal Mine Road, and parks. Figure 7 provides the legal descriptions of the parcels of land within the Plan Area.

## 1.7 Planning Context

The ASP has been prepared within the context of the statutory planning system in St. Albert, as well as other non-statutory master planning and servicing initiatives, which provides guidance for the future land use and development options of Erin Ridge North.



**1.7.1 Intermunicipal Development Plan (IDP)**

The *Intermunicipal Development Plan for Sturgeon County and the City of St. Albert* applies to these lands. The *IDP* designates lands with two proposed future land uses: commercial corridor and urban residential. With Bylaw 1220/10, Sturgeon County repealed their portion of the *IDP*, while the City of St. Albert continues to maintain the *IDP* as of the writing of this ASP.

**1.7.2 Municipal Development Plan (MDP)**

The City of St. Albert *MDP*, Bylaw 15/2007, as amended, *Future Land Use Policy, Map 2*, designates the Plan Area as commercial and residential.

The *Transportation Network, Map 5, MDP*, includes the proposed Neil Ross Road from St. Albert Trail east to the City's boundary as adopted by Council in Bylaw 15/2007 through amendment 11/2012. The naming of Neil Ross Road was announced March 15, 2013.

**1.7.3 Existing Area Structure Plan**

The original version of the Erin Ridge North Area Structure Plan was adopted on January 11, 2010, with amendments in March 2011, April 2013, February 2015, October 2015, and July 2017.

**1.7.4 Land Use Bylaw (LUB)**

The City's *Land Use Bylaw*, Bylaw 9/2005, as amended, controls development of the lands within the neighbourhood. The Urban Reserve District is a holding district for orderly transformation to future urban expansion or intensification development. Changes to the land use district will be required through an amendment to the *Land Use Bylaw* (redistricting), ahead of subdivision and development.

The ASP Future Land Use map demonstrates the base land uses and descriptions within this document describe the expected uses and densities. Land uses that are anticipated are: commercial, public and private services, mixed-use commercial with residential, low density

residential, medium and medium-high density residential, public park, a school site and stormwater management facilities (as public utility lots).

#### **1.7.5 *Transportation Master Plan (TMP)***

The *Transportation Master Plan* (2015) prepared by Associated Engineering for the City of St. Albert guides how the City addresses current and future transportation needs. This document sets the vision and actions for the transportation network until 2042. The term transportation includes the roads, trails, sidewalks, and other infrastructure needed to move people and goods from one place to another.

Neil Ross Road is an arterial road that is identified to eventually connect with the future 127<sup>th</sup> Street Alignment. Element Drive North, Everitt Drive North, Coal Mine Road, and the future extension of Ebony Way are designated as a collector roads. The future rapid transit corridor is identified to run along the east side of St. Albert Trail with a rapid transit station with a park and ride on the west side of St. Albert Trail across from the Erin Ridge North Neighbourhood.

#### **1.7.6 *Utility Master Plan (UMP)***

The *Utility Master Plan (UMP)* (2014) for the City of St. Albert is a general framework for providing utility services to future developments (water, wastewater, and stormwater management). The timeframe for extending services is based on the pace of development and the ability of front ending parties to design and construct necessary infrastructure components.

The current stormwater management release rate is 2.5 litres, per second, per hectare (L/s/ha) for the Sturgeon River. Should release rates be altered, additional studies showing the impact on downstream stormwater facilities must be completed.

Currently, there is very limited servicing capacity within the existing infrastructure. The existing capacities do not have the ability to support the complete development of Erin Ridge North. Necessary off-site work

is outlined within the Utility Master Plan and delineated in the Off-Site Levy Bylaw, as amended.

## 2.0 SITE ANALYSIS

### 2.1 Natural and Cultural Features

#### 2.1.1 Topography and Drainage

Erin Ridge North Phase 1 and 2 lands are generally flat with ground elevations ranging between 690 metres to 684 metres. Phase 1 has a shallow ridge that runs across the subject lands from southwest to northeast. The land slopes from west to east towards the Sturgeon River on the east side of the shallow ridge. On the west side of the shallow ridge, lands slope from east to west into a localized low lying area located in Phase 2. In Phase 2, the low point is a wetland that has a drainage channel and weir used to hold water draining from lands to the north and as a catchment pond for stormwater from Highway 2 (St. Albert Trail). The management of the stormwater from the north needs to be addressed so that the stormwater from the north is not impacting development of Erin Ridge North Phase 2. Full development of Phase 2 may not be able to proceed until the stormwater issue has been addressed.

#### 2.1.2 Sturgeon River Designated Flood Line

The lands are above the Designated Flood Line for the Sturgeon River.

#### 2.1.3 Geotechnical Conditions

Geotechnical investigations within the Plan Area are documented in the report *Geotechnical Investigation-Proposed Bellerose Lands Residential Subdivision North of Coal Mine Road and East of Highway 2 Sturgeon County, Alberta*, prepared by J.R. Paine & Associates Ltd. in April 2001 with fieldwork completed in May 2000 for Landrex Developers Inc. The report provides a summary of the general soil and groundwater conditions and an assessment of conditions for site development, site grading, residential construction, the construction of roadways, the installation of sewer and water systems and the construction of stormwater management facilities. Forty-nine test holes for the whole of

SCHEDULE "A" TO BYLAW 33/2009 (Page 8)

Landrex's land were drilled for Erin Ridge Phases 1 and 2. In December 2012, an additional four test holes were drilled for Plan 982 3579, Lots 1 and 2. A geotechnical investigation was completed for the former Lutheran Lands parcel east of St. Albert Trail and north of Coal Mine Road in September 2014. A total of ten (10) test holes were drilled and 107 test probes advanced to assess soil and groundwater conditions.

Generally, the soil profile consists of topsoil, glaciolacustrine clay, glaciolacustrine silt and some sand. The three reports presented guidelines and standards for the construction of all components of commercial and residential development. The identified water tables are between 0.12 metres to 8.8 metres below the ground surface.

Areas of high ground water levels in the Plan Area may require further investigation at the time of subdivision or Development Permit and building construction stage to identify mitigation measures addressing hydro-geological concerns. If an acceptable strategy cannot be obtained, then the land may be deemed unsuitable for development.

#### 2.1.4 Vegetation Resources

In June 2008, Stantec prepared a natural areas report for the City of St. Albert, *St. Albert Natural Areas Review and Inventory*, which served as an addendum to the *St. Albert Natural Areas Review and Inventory, 1999* prepared by Spencer Environmental Management Services Ltd. The Addendum covered the lands annexed into St. Albert in 2007. An update titled *Natural Areas Assessment, Management and Conservation Plans Recommendations and Implementation Plan* was completed by Spencer Environmental Management Services Ltd. in 2015.

Within Phase 1 of the Plan Area is a woodlot that is shown in the Addendum as a Locally Significant Natural Area (NE 27). The woodlot is an area with a diverse plant and animal community. The area has aspen, balsam and willow wetland. The woodlot is a remnant of a larger habitat and is on the decline in the region. This is currently a good habitat for ungulates (deer) and birds.

The wetlands within the woodlot were assessed further on May 5, 2009 with a site reconnaissance by Stantec. The woodlot is approximately

4.87 ha and contains three wetland zones that comprise of Class I and III wetlands. The wetlands have been in existence since at least 1950, which is shown on aerial photos from 1950 to the present. The woodlot as it matures may draw down the wetlands and with recent drought conditions have low volumes of water.

Alberta Sustainable Resources Development (ASRD) must verify if the bed and shore of the wetland will be claimed by the Provincial Government under the *Public Lands Act*. If the wetlands are disturbed, then Alberta Environment, who administers the *Water Act*, will likely require compensation under the Water Act for the disturbed wetlands in the woodlot.

The MDP, Policy 10.2 indicates the City of St. Albert shall protect not only provincially and regionally significant areas, but also locally significant, sustainable areas, except where the protection compromises other necessary parks, trails and open space requirements in a neighbourhood. The City acknowledges that 70%± of the woodlot will be retained. The woodlot does not qualify as Environmental Reserve under the Municipal Government Act and the City has elected not to purchase the remaining woodlot as it cannot be confirmed if the tree stand will be sustainable once development and urbanization of the surrounding area occurs.

Stantec prepared a study in June 2013 for Erin Ridge North Phase 2. Within Phase 2 of the Plan Area is a wetland that is shown in the Addendum as a Regionally Significant Natural Area (NE 23). The wetland has an area of 16.5 hectares± and a wetland classification as Seasonal Pond (Class III). This wetland links with two smaller wetlands and a drainage channel to Carrot Creek. There is a woodlot with an area of 1.85 hectares±, located on the east property boundary that is Locally Significant (NE 22). The report prepared for Landrex Hunter Ridge Inc. indicated that Alberta Environment and Sustainable Resource Development (AESRD) will not claim the bed and shore of the wetland area and further consultation is required with AESRD. As of July 2015, AESRD is now called Alberta Environment and Parks (AEP). The woodlot will not be retained and will be developed.

### 2.1.5 Natural Site Assessment

EcoMark Ltd. prepared a Stage 1 Preliminary Natural Area Assessment for Portion of NW-16-054-25-W4M, St. Albert, Alberta on July 4, 2008, with a site inspection on June 10, 2008.

The assessment confirmed a woodlot of 4.87 hectares in size. This woodlot is a Locally Significant Natural Area. There are several environmental elements rated high in the woodlot that make it a Locally Significant Natural Area, which include flora, fauna, site size, ecological linkages, biological diversity, vegetation, and bird habitat. Should the site be reduced in size this may have a neutral to negative effect on its sustainability for flora, fauna, ecological linkages and vegetation. A neutral to positive effect may occur to bird habitat as naturalized stormwater ponds are created in other parts of the development. The biological diversity may increase with the stormwater ponds if their development includes the planting of wetland vegetation.

The site inspection determined the area had visits from robin, crow, black-billed magpie, black-capped chickadee, and Franklin's gull. At the time of inspection, there were heavy rains so songbirds were not present, but the vegetation is considered suitable for songbirds. The habitat of the area is not suitable for fish. The area would be common to snakes, frogs, toads, and salamanders.

At the time of inspection, the woodlot showed signs of moose and red squirrel. The forested area would also be habitat to chipmunk, snowshoe hare, shrew, and vole. The woodlot is suitable habitat for white-tailed deer, mule deer, and moose. The habitat of the woodlot is also a high quality nesting and feeding habitat for bird species.

The proposed retention of 70%± of the woodlot will provide home to some forms of wildlife; however, the nature of the area will also change because of the overall development in the area. The remaining woodlot will need to be maintained and managed to sustain many of the features it offers. It is questionable as to whether it will continue to be used by ungulates once development occurs in the area.

A Biophysical Impact Assessment (BIA) was completed for the area east of St. Albert Trail and north of Coal Mine Road on October 21, 2014.

The BIA indicated that the site is primarily used for cultivation; however, islands of habitat and potential temporary wetlands were identified. The

BIA concludes that a migratory bird nest search should be conducted if construction activities conflict with migratory bird nesting periods, and observing a species appropriate buffer of inactivity around any active migratory bird nests until the young have fledged. Should the wetlands collect and retain water in the spring, additional planning or mitigation options may need to be explored to protect potential breeding amphibians in the area.

### **2.1.6 Environmental Site Assessment**

A Phase 1 Environmental Site Assessment (ESA), based on the Canadian Standards Association (CSA) outlined in document Z768-01, Phase 1 Environmental Site Assessment (reaffirmed 2006), was completed in June 13, 2008 for the Landrex Hunter Ridge Inc. owned lands within Erin Ridge North Phase 1. The Phase I ESA indicated a Phase II ESA be conducted in the area surrounding the above ground storage tanks, the areas surrounding the storage barrels, and the areas of stressed vegetation, which were associated with farming activities.

A Phase II Environmental Site Assessment (ESA), based on the Canadian Standards Association document Z769-00 was conducted on May 7, 2009. The analysis determined there is no impact from former farming activities and no remediation is required. However, the granaries contain high levels of lead; thus, when they are removed they must be treated as hazardous material and disposed of in a safe, environmentally sound manner.

Erin Ridge North Phase 1 contains an abandoned oil well site that requires physical access. This wellhead must be located on privately held lands and provide adequate accessibility according to all pertinent standards and legislation.

A Phase I Environmental Site Assessment (ESA) was conducted for Erin Ridge North Phase 2 for the SW ¼-21-54-25-W4M and Plan 982 3579, Lots 1 and 2 with a site visit on January 25, 2013. The findings included potential soil and water contamination in areas that had equipment lay-down operations, historic oil pipeline, oil wells, septic systems, water wells, and hazardous building materials. Soil sampling is advised with potential for remediation. In addition, there are two oil wells located just



southwest of Plan 982 3579, Lot 2, and east of St. Albert Trail that do not have reclamation certificates, see Figure 9, Constraints. These two oil wells each require a reclamation certificate and provide a determination if a 5-metre radius setback is sufficient. Setback requirements are determined and regulated by Alberta Energy Regulator (AER). The wellheads should remain as privately held lands with appropriate physical access according to all pertinent standards and legislation. The City will not assume ownership or liability for a wellhead.

A Phase 1 ESA was conducted in 2014 for the lands east of St. Albert Trail and north of Coal Mine Road. No sources of contamination were found. Recommendations included to decommission septic tanks in accordance with the applicable acts, regulations and guidelines; and to take the former dugout area in the southern portion of the site into consideration during development to ensure any potential organic matter is removed.

### 2.1.7 Heritage Resources

ISL Engineering and Land Services, on behalf of Landrex Hunter Ridge Inc., was given *Historical Resources Act* clearance to proceed with development within Section 16, Township 54, Range 25, W4M and Section 21, Township 54, Range 25, W4M. A letter was provided from Alberta Tourism, Parks, Recreation and Culture that indicated the site has been cultivated for many years and has low potential for archaeological or palaeontological resources. Any existing structures are on file or are too new to be of historical value.

## 2.2 Current Development Patterns

The Plan Area is bordered to the north by cultivated fields that are within Sturgeon County, to the east are farmland and a treed homestead, to the south are residential dwelling units within the Erin Ridge neighbourhood, and to the west is St. Albert Trail.

The Plan Area was predominantly in agricultural use with some tree cover as discussed in Section 2.1.4 and 2.1.5.

A portion of Gibson oil pipeline in the northwest portion of the site was been removed and remediated (Klohn Crippen Berger, February 2011, File A05035A04). Two Telus fibre optic cables exist in north-south alignments and

will be realigned as development occurs, in cooperation with Telus. FortisAlberta has overhead power transmission lines to the southeast of the Plan Area and at time of development FortisAlberta will determine how to integrate the lines into the Plan Area, including burial or relocation.

### 3.0 LAND USE CONCEPT

#### 3.1 Future Land Use Map

The Future Land Use Map for Erin Ridge North is shown on Figure 2. This map consists of a series of areas and symbols that define expected future land use and roadway patterns for the subject lands.

#### 3.2 Land Use Concept: Major Development Patterns

Two land use types will dominate the future Erin Ridge North – commercial and residential.

Erin Ridge North is situated adjacent to St. Albert Trail, which is a commercial corridor. Commercial uses will service both local and regional shopping interests.

##### Phase 1

The residential components within Phase 1 of the Plan Area include medium density residential, with medium to high density residential primarily adjacent to the commercial uses. A large stormwater management facility separates the medium to high density residential from the low density residential. The medium to high density residential area would consist of densities of 94 to 141 dwelling units per hectare. The medium density residential area could have a density of approximately 35 units per hectare and up to 94 units per hectare and would feature uses such as low rise apartments and townhouses. The low density residential areas would have a density of 12 to 20 units per hectare with development of single family, duplex, and semi-detached dwelling units. The total number of dwelling units proposed is 1,122 units. The proposed developable residential area is 32 hectares±, which is 34% of the gross developable area for the Plan Area.

Within the Plan Area, there is land shown as mixed-use commercial with residential. This area is intended to be a neighbourhood activity centre and could include a range of uses from mixed-use with lower-level commercial and residential above, separate commercial and residential uses, a park space, and institutional uses in a walkable, compact form.

### Phase 2

The residential components within Phase 2 of the Plan Area include medium/high density residential adjacent to the commercial with a road separating the low density residential area. The low density residential area has some walkways connecting cul-de-sacs to the trail system that is adjacent to large stormwater management facility. The overall area for Phase 2 is 55.8 hectares; however, only 20.3 hectares is being designed with land uses. The remaining 35.5 hectares will be designated as future development area. The proposed number of dwelling units is 162 units.

The proposed net residential density for Phases 1 and 2 is 34 dwelling units per net residential hectare.

## **3.3 Residential Land Use**

### **3.3.1 Low Density Residential**

Phase 1, low density residential land use will comprise of 26 hectares± of land. The number of low density residential units anticipated is 509 dwelling units. Phase 2, low density residential will comprise of 4.6 hectares± of land with approximately 92 dwelling units. The combination of Phases 1 and 2 will have a total number of 601 low density residential units, which is approximately 42% of all residential units.

Low density may include single-family detached, single-family detached with basement suite, semi-detached, and duplex housing forms.

### **3.3.2 Medium Density Residential**

In Phase 1 and Phase 2, medium density residential development may consist of townhouses and apartment buildings.

### **3.3.3 Medium to High Density Residential**

In Phase 1, medium to high density residential units will be located on the east side of Element Drive North with the commercial uses on the west side of the roadway. The number of dwelling units built is 253 with another 201 units anticipated, which would comprise approximately 40% of the total number of residential units in Phase 1.

No medium to high density residential units are proposed for Phase 2. Overall, there will be 454 units in the medium to high density residential area, which is 35% of the overall number of residential units.

#### **3.3.4 Mixed-Use Commercial with Residential**

The mixed-use development provides the opportunity to create a neighbourhood activity centre. Residential units could be located above lower level commercial units or in a standalone building. The area of land that will contain residential units is approximately 0.84 hectares. Approximately 120 residential dwelling units are proposed in the mixed-use portion of Erin Ridge North, which is 8.3% of the total residential units, with a density of 143 dwelling units per hectare.

This area is proposed to be built under the Direct Control Mixed Use (DCMU) Land Use District of the Land Use Bylaw. This would allow a flexible range of land uses with the intention to create a human-scale, mixed-use environment with a walkable commercial component of small shops, restaurants, offices, or other services for the neighbourhood. The mixed-use commercial-residential area may also include a central green space and institutional uses to service the northern region of the City. Architectural controls could be implemented to give the area character and to manage the mix of land uses. In the DCMU Land Use District, an overall conceptual site plan or site development plan in relation to the portion being developed is required at the time of development permit to illustrate how the development will be integrated with the area.

#### **3.3.5 Supportive Housing**

Supportive housing that includes assisted living is a residential use that can occur within the medium to high density residential. Supportive housing provides support services such as meals and laundry within a group living arrangement. This means the sleep units do not have a full kitchen. The number of units is 182 with a mix of longer term care and assisted living. The anticipated number of residents will vary because some units can support two people and some units are for singles. The range in population is 182 to 292. An average of 240 residents has been used for anticipated population.

### 3.4 Commercial

#### Phase 1

The overall developable area for commercial use is approximately 23% of the gross developable lands, which is approximately 21.7 hectares±. The commercial lands are adjacent to St. Albert Trail, and are comprised of four commercial cells. The commercial cell south of Neil Ross Road is developed with Costco with an area of 5.97 hectares±. The commercial cell north of Everitt Drive North has a land area of 13.73 hectares± and has an internal north-south roadway. These two commercial sites can be accessed from Element Drive North, Neil Ross Road, and Everitt Drive North. The smaller commercial cell south of Everitt Drive North is approximately 2.12 hectares±. The small commercial cell can be accessed from the future extension of Ebony Way and from Everitt Drive North. The fourth commercial development area is the mixed-use commercial with residential area. Of the mixed-use commercial with residential area, the majority of the ground level of the 5.18 hectare site is expected to be used for commercial purposes with an anticipated commercial floor area of approximately 140,000 square feet. Mitigation measures may be required to address noise, light, and odour issues created by the commercial uses, to ensure that the adjacent multiple family dwelling units are not impacted. This may include building design to create compatible living spaces. There may be potential for a right-in and right-out access from St. Albert Trail to the mixed-use commercial with residential area.

#### Phase 2

The commercial site north of Neil Ross Road has an area of 8.7 hectares±. The commercial area borders a medium and high density residential site. There is no physical separation such as a roadway from the proposed commercial uses. Mitigation measures may be required to address noise, light, and odour issues created by the commercial uses, to ensure that the adjacent multiple family dwelling units are not impacted.

Two land use districts, under the Land Use Bylaw, may be suitable for the development of the commercial cells along St. Albert Trail. The Regional Commercial (RC) District provides the opportunity for quality design and landscaping while providing a safe, pleasant and pedestrian-friendly environment. The other land use district is the Corridor Commercial (CC)

District, which allows for the sale of a wide variety of goods and services to serve the community and surrounding region.

### 3.5 Parks and Open Space

The parks and open space system in the Plan Area will include trails, the remaining woodlot, a school, parks, and stormwater management facilities. The *Municipal Government Act* and the *Municipal Development Plan* specify that 10% of the developable lands be dedicated as Municipal Reserve, which can be used for development of a school, woodlot, parks, and those trails that are not associated with public utility lots.

In Phase 1, there have been previous subdivisions within the Plan Area prior to annexation, some of the Municipal Reserve has already been provided to Sturgeon County as cash in-lieu of dedication. Therefore, instead of 10% Municipal Reserve dedication, the Plan Area for Phase 1 will only see approximately 8% of the land (7.7 hectares) dedicated as Municipal Reserve.

Phase 2 will see development start in the southwest corner with a trail around a portion of the stormwater management facility. The remainder of Phase 2, through an Area Structure Plan amendment, will show where parks are located. The dedication of Municipal Reserve would represent 10% of the Gross Developable Area in Phase 2, and what the City can ask as dedication as per the Municipal Government Act. Most connecting walkways within Phase 2 have infrastructure services beneath them; hence, the walkways are Public Utility Lots and do not receive Municipal Reserve credit. Dedication of Municipal Reserve occurs at time of subdivision.

The proposed Municipal Reserve dedication configuration is shown in Figure 8, while the parks and open space system is depicted on the Future Land Use map (Figure 2).

Should there be addition of road right-of-way to the area structure plan boundary for development purposes, 10% Municipal Reserve will be owed on those lands.

#### 3.5.1 Trails

Trails will provide connections to the following: the adjoining neighbourhood of Erin Ridge, Erin Ridge North Phases 1 and 2, the commercial areas, the woodlot, the school site, and the stormwater

management facilities. Some trails may have Public Utility Lot (PUL) designations where trails are within utility rights-of-way; therefore, no municipal reserve dedication would be granted in these circumstances. The trails must be installed at the time of subdivision so that future residents are aware of trail alignments.

Coal Mine Road is closed between Ebony Way and Eastgate Way, the closed road sections have been developed and enhanced with trails and trees to create a linear park. The development of Coal Mine Road as a linear park occurred in two phases with the first phase being developed between Everitt Drive and Eastgate Way in 2010 through Bylaw 10/2010. The second phase of the linear park development between Ebony Way and Everitt Drive occurred in July 2013, through Bylaw 14/2013. A road closure bylaw was required for each section of Coal Mine Road to be closed and the timing was agreeable with the City. Coal Mine Road will not receive Municipal Reserve credit as the land is owned by the City.

Some trail connections will join to trails in Erin Ridge that link to Oakmont and further to Red Willow Park.

### 3.5.2 Woodlot

The 4.87 hectare woodlot is considered a Locally Significant Natural Area. This woodlot is a remnant tree stand that has been in place since at least 1950, according to aerial photos. The woodlot provides good habitat for ungulates (such as deer and moose), birds, ground animals, reptiles and amphibians. The major tree species present are aspen, balsam poplar and willow.

To mitigate potential negative effects of development, the following measures would have to be taken as recommended by Stantec and EcoMark.

- Maintain a minimum 5-meter vegetated buffer around the exiting forested area to protect valuable edge habitat.
- Maintain surface drainage to the forested area.
- Plant forest vegetation in upland areas throughout the development and stormwater management facilities to promote habitat connectivity.



- Designate naturalized pathways (such as wood chip) along the forest boundary and through an existing game trail to prevent excess trampling of the forested area.
- Place appropriate signs to discourage residents from walking off designated trails.
- Prior to construction, fence or flag natural features and review mitigation measures with the construction contractor(s).
- Avoid clearing of native vegetation between April 15 and the end of August as this is nesting time for migratory birds and a breeding period for wildlife.
- All disturbed areas should be re-vegetated with native vegetation and all debris from construction removed.

The woodlot will be reduced to about 70%± of its existing size from 4.87 hectares± to 3.4 hectares±. The type of habitat the woodlot supports will change; however, it will still provide a place for birds and small ground animals. Steps will have to be taken to maintain the remaining woodlot and create trails that provide access while preventing further degradation of the area. The site has Municipal Reserve designation.

### 3.5.3 School/Park Site

In Phase 1, adjacent to Everitt Drive North, is a school site with an area of 1.45 hectares. In 2013, the Alberta Government announced the school site in Erin Ridge North is for the St. Albert Public School Board and Lois E. Hole School, a public elementary school, will be on the site. Adjacent to the school site is Everitt Park with an area of 1.05 hectares.

**Table 3-1: Student Population Projection**

Age	Grades	% of 2016 City of St. Albert Census age composition population 60,052	Student Generation Erin Ridge North Population 2,991
5-9	K-4	6.6%	197
10-14	5-9	6.8%	203

15-19	10-12	6.8%	203
<b>Total</b>			<b>603</b>

The anticipated number of students in the Erin Ridge North neighbourhood at full build-out is around 603 students between the ages of 5 to 19 years. This is based on the City of St. Albert 2016 Census Age Composition population of 60,052, the anticipated population of 2,991 for Erin Ridge North, and the percentage of each age/grade category. At the time of development, the most current Census for St. Albert and consultation with school boards will occur to better anticipate student population.

### 3.5.4 Stormwater Management Facilities (SWMFs)

#### Phase 1

Two stormwater management facilities are proposed within Phase 1, both as wet ponds. These facilities are connected through a combination of overland flows and buried pipes. The stormwater management facilities will be dedicated as Public Utility Lots (PULs); therefore, no Municipal Reserve credit will be given for PUL uses. Municipal Reserve credit may be provided to trail areas, based upon City policies, to be determined at the time of subdivision.

The design of the SWMFs will maximize the opportunity to complement or enhance the fragmented habitat in the Plan Area. This can be accomplished through plantings that are supportive of wildlife and bird life that access wetlands and marshes. The SWMFs will also be designed to provide visual amenities for passive recreational uses.

#### Phase 2

One stormwater management facility is proposed within Phase 2 to support 20.4 hectares± of development.

### 3.6 Development Statistics

The titled area for the boundary of the Erin Ridge North Area Structure Plan is 149.4 hectares. A portion of Phase 2 is shown as “possible development area” on Figure 2, the Future Land Use Map, with an area of 35.3 hectares± and has no land use designations. The wetland/drainage in the central-north portion of

Phase 2 must be dealt with before land uses can be considered. The portion of Phase 2 that is developable is 20.4 hectares±. Between Phase 1 and Phase 2, 114.1 hectares± is developable. There is no Environmental Reserve to be dedicated in the Plan Area. All roads are included within the developable area. The residential area is 38.0 hectares±, which is 33%± of the developable area. The commercial area is 34.84 hectares±, which is 31%± of the developable area. The mixed-use commercial with residential area is 5.2 hectares±, which is 4.6% of the developable area.

How the developable lands will be designated is shown in the Table 3-2 Development Statistics.

The population per household fluctuates depending on the type of dwelling unit as indicated in the *City of St. Albert Census 2016*. In the low density units, of which 601 units are projected, 2.93 persons per household are anticipated. In the medium density residential area, 109 units are projected and the number of persons per household is 2.17. In the medium/high density residential area, 454 units are projected at 1.73 persons per household. In the mixed-use commercial with residential area, 120 units are projected with 1.73 persons per household. The population is estimated at 2,991 residents.

Policy 4.11, Neighbourhood Design Principles, of the *MDP* requires a minimum of 30 dwelling units per net residential hectare. Phase 1 has 35 dwelling units per net residential hectare and Phase 2 has 26 dwelling units per net residential hectare. Overall, there are 34 dwelling units per net residential hectare. The policy also requires a minimum of 30% medium density and medium/high density residential units.

The total number of residential units on the developable area is 1,284, of which 683 are medium density, mixed-used residential, and medium/high density units, which equates to 53% of the proposed units.

# ERIN RIDGE NORTH AREA STRUCTURE PLAN

## Part 3

## Land Use Concept

**Table 3-2: Development Statistics**

PHASES	PHASE 1				PHASE 2				OVERALL			
	Area (ha)	% of GDA	Units	Pop.	Area (ha)	% of GDA	Units	Pop.	Area (ha)	% of GDA	Units	Pop.
<b>Gross Area</b>	<b>93.7</b>				<b>55.8</b>				<b>149.5</b>			
Possible Development Area	0				35.5	63.6%			35.5	23.7%		
Developable Area of Phase 1	93.7				0	0			93.7	62.6%		
Developable Area of Phase 2	0				20.3	36.6%			20.3	13.6%		
<b>Gross Developable Area (GDA)</b>	<b>93.7</b>	<b>100%</b>			<b>20.3</b>	<b>36.3%</b>			<b>114.0</b>	<b>76.3%</b>		
Trail (Coal Mine Road – PUL)	2.2	2.3%			0	0			2.2	1.9%		
Walkways (PUL)	0.6	0.7%			0.5	2.4%			1.1	1.0%		
Municipal Reserve (includes trails not over utilities, woodlot, school/park)	7.7	8.2%			0.6	2.9%			8.3	7.3%		
Stormwater Management (PUL)	6.5	7.0 %			1.0	5.0%			7.5	6.6%		
Arterial Road-Neil Ross Road & ROW adjacent to 875 St. Albert Trail (see notes)	4.00	4.2%			0	0			4	3.5%		
Internal Circulation (non-arterial)	13.1	14.0%			3.3	16.3%			16.4	14.4%		
Interim Road Connection	0.03	0.03%			0	0			0.03	0.03%		
<b>Subtotal Other Uses</b>	<b>34.2</b>	<b>36.4%</b>			<b>5.4</b>	<b>26.6%</b>			<b>39.5</b>	<b>34.8%</b>		
Commercial	21.7	23.2%			8.7	42.8%			30.4	26.7%		
Mixed-Use Commercial	4.36	4.6			0	0			4.36	3.8%		
<b>Subtotal Commercial</b>	<b>26.1</b>	<b>27.9%</b>			<b>8.7</b>	<b>42.8%</b>			<b>34.8</b>	<b>30.5%</b>		
Supportive Housing (see notes)	1.5	1.6%	*182	240	0	0			1.5	1.3%	*182	240
<b>Subtotal Supportive Housing</b>	<b>1.5</b>	<b>1.6%</b>	<b>*182</b>	<b>240</b>	<b>0</b>	<b>0</b>			<b>1.5</b>	<b>1.3%</b>	<b>*182</b>	<b>240</b>
<b>Residential</b>												
Low Density Residential	26.0	27.7%	509	1,491	4.6	22.7%	92	270	30.6	26.8%	601	1,761
Medium Density Residential (R3A), Landrex	0.8	0.8%	39	85	1.6	7.9%	70	152	2.4	2.1%	109	237
Mixed-Use Residential	0.84	0.9%	120	208	0	0	0	0	0.84	0.7%	120	208
Medium/High Density Residential (R4)	4.2	4.5%	454	785	0	0	0	0	4.2	3.7%	454	785
<b>Subtotal Residential</b>	<b>31.84</b>	<b>34.0%</b>	<b>1,122</b>	<b>2,569</b>	<b>6.2</b>	<b>30.6%</b>	<b>162</b>	<b>422</b>	<b>38.0</b>	<b>33.3%</b>	<b>1,284</b>	<b>2,991</b>

## ERIN RIDGE NORTH AREA STRUCTURE PLAN

### Part 3

### Land Use Concept

#### Table 3-2 Notes:

- May not add up to 100% due to rounding.
- Overall, there will be 34 dwelling units per net residential hectare, MDP Policy 4.11 requires 30 dwelling units per net residential hectare with a minimum of 30% medium and/or high density residential.  
Residential breakdown consists of:
  - 20 du/ha for low density residential;
  - 35 du/ha for medium density residential;
  - 143 du/ha for mixed-use commercial with residential based on an estimated residential area footprint of 0.84 ha.
  - 141 du/ha for medium/high density.
- Of the net residential hectare, 7.4 ha± are for medium and/or high density and mixed-use residential; 53% of the units are medium and/or high density residential.
- Expected population per residential unit based on St. Albert's 2016 Census is:
  - 2.93 persons per low density dwelling unit;
  - 2.17 persons per medium density dwelling unit; and
  - 1.73 persons per medium/high dwelling unit.
- \*Supportive Housing is not included in the dwelling unit count, because the units do not have full kitchens.
- Population statistics include supportive housing.

## 4.0 TRANSPORTATION

### 4.1 Arterial Road Network

The Transportation network for Erin Ridge North is shown on Figure 3.

St. Albert Trail is the west arterial boundary of the Plan Area and Neil Ross Road is the bi-sectioning arterial for Phases 1 and 2. The roadways with all directional access onto St. Albert Trail include Neil Ross Road, Everitt Drive North, and the existing intersection of Coal Mine Road. Located between Everitt Drive North and Neil Ross Road is one all directional access to the large commercial area east of St. Albert Trail and two right-in and right-out accesses to the commercial area.

Neil Ross Road will be accessed from Element Drive North, a major collector road that extends north-south through Phase 1 and Phase 2. Element Drive North has all directional access at the intersection of Neil Ross Road and will likely need traffic signals as development proceeds. In Phase 2, a major collector roadway will occur approximately 400 metres north of Neil Ross Road. Each commercial block may have right-in and right-out access at 200 metres intervals. Off Neil Ross Road, there is an anticipated left-in access to the commercial site and a right-in and right-out off Neil Ross Road to the commercial site. All access points must be approved by the City at the time of Subdivision or Development Permit.

In 2009, Stantec Consulting conducted a study of the St. Albert Trail corridor extending from Villeneuve Road to the City's north boundary. The study indicated major collector roads would have all-directional intersections with St. Albert Trail, and properly spaced minor collector roads, may have the opportunity to have right-in and right-out access only. Direct access from a business onto St. Albert Trail is not being considered, as access to businesses would be provided by the major and minor collector roads.

## 4.2 Collector and Local Road Network

The City expects development of good road connectivity within the Plan Area, to the rest of the City, and to areas in Sturgeon County.

The closure of Coal Mine Road occurred in two stages through road closure bylaws. The first stage was closed through Bylaw 10/2010, which was located between Everitt Drive and Eastgate Way. Beneath this section of road is deep sanitary service. Traffic from the east will have the option to travel south on Eastgate Way or north through Erin Ridge North; both directions will be on a local roadway. Coal Mine Road between Everitt Drive and Ebony Way was closed with Bylaw 14/2013. Each section of closure for Coal Mine Road has been developed as a linear park.

Coal Mine Road between Ebony Way and St. Albert Trail will remain open and at the time of development of the mixed-use commercial with residential Phase 1 site, Coal Mine Road will be upgrade to a minor collector with pedestrian connections such as sidewalks on both sides of the roadway.

To provide connections between Erin Ridge and Erin Ridge North, Everitt Drive has been and Ebony Way will be extended into Erin Ridge North as major collector roads. The portion of Everitt Drive in the existing Erin Ridge neighbourhood will have parking removed from one side to allow for transit to loop between the two neighbourhoods. Ebony Way will extend north to Everitt Drive North and will be aligned with the internal road access to the commercial area north of Everitt Drive. Traffic calming measures shall be considered for Ebony Way and the intersection of Ebony Way/Coal Mine Road to mitigate shortcutting traffic. These options will be considered at the time of development permit, subdivision and/or the neighbourhood traffic calming process.

As a portion of Phase 2 will be developed at a later date, all-weather turnaround on roadways may be required.

### 4.3 Transit

Transit routes must be established as part of the first stage of development for Phase 1 and for Phase 2 as per *MDP* Policy 12.7, New Area Structure Plan Technical Reports. Transit routes within the neighbourhood should be within 400 metres to residents; thus, providing the opportunity to use transit. A rapid transit station is proposed on the west side of St. Albert Trail; therefore, good pedestrian linkages, road connections, and medium to medium/high density residential uses are required in this area of the City to support transit services.

In Phase 2, when a transit stop is placed near an intersection, pedestrians will use the intersection to cross the street. However, where intersections are not near a transit stop, mid-block crossings may be required.

### 4.4 Pedestrian/Bicycle Links

Sidewalks or a multi-use trail will be adjacent to roadways for pedestrian and bicycle movement. In addition, adjacent to a portion of the stormwater management facilities and along the closed sections of Coal Mine Road (east of Ebony Way and west of Eastgate Way, with traffic crossing at Everitt Drive) there is a multi-use trail. The linkages connect to existing trails in the Erin Ridge neighbourhood. Trails provide a higher level of comfort for cyclists even though motor vehicles are to share roadways. Cycling and walking are sustainable means of transportation and efforts should be made to encourage these modes of mobility.

### 4.5 Noise Attenuation

Noise attenuation amenities from arterial routes will be required, at the cost of the developer, at the time of subdivision, Development Agreement, or Development Permit as per City standards. Additional requirement may be needed for residential developments adjacent to commercial developments so that noise, light, and odours from the commercial area to the residential area are addressed prior to or at the time of Development Permit.



#### **4.6 Off-Site Levies**

The Erin Ridge North neighbourhood is subject to Off-Site Levies for arterial roadway networks, water, wastewater, and stormwater management facilities. Off-Site Levies will be calculated, assessed, and collected at the time of subdivision or upon execution of a Development Agreement, in accordance with the rate that is applicable at that time.

Should a subdivision or Development Agreement not be part of the development process, levies will then be collected at the time of Development Permit.

In addition to Off-Site Levies, additional costs may need to be borne by the developers to facilitate the near term plan of infrastructure capacity improvements.

##### **4.6.1 Notes**

As upgrades are required to the water supply and distribution, to the wastewater collection system (sanitary), to the stormwater management facilities, and arterial road network, infrastructure identified within the Off-Site Levy Bylaw, required to support a development stage, may be required to be front-ended by the developer to enable that development stage. Front-ending and recovery processes shall be consistent with approved Council Policies.

Should a developer choose to oversize without a request from the City, the oversizing will be at the cost of the developer and cost will not be recoverable. In addition, the City will take ownership of such oversized infrastructure and will determine how the capacity will be used.

#### **4.7 Capital Recreation Fees**

The Erin Ridge North residential areas are subject to the Capital Recreation Contribution that is charged per residential unit. The Contribution is determined in the Capital Recreation Contribution agreement prepared as a condition of subdivision or as a condition of the Development Permit.

#### **4.8 Crime Prevention Through Environmental Design (CPTED)**

Decisions relating to transportation design, street patterns, access, noise barriers, public open spaces, parks, the woodlot, multi-use trails, walkways, stormwater management facilities, and the built environment shall use CPTED principles to create a safe and secure neighbourhood. The following basic strategies, respecting existing City standards, will be used during the development of Erin Ridge North:

- Use of natural surveillance strategies to increase visibility and awareness of public and private space;
- Use of natural access control techniques to guide/direct person within the natural and built environments; and
- Promotion of territorial reinforcement by increasing definition of space and local stewardship.

#### **4.9 Timing of Development – Coal Mine Road**

Coal Mine Road east of Ebony Way and west of Eastgate Way has been closed. The linear trail between Eastgate Way and Ebony Way has been completed. Ebony Way west to St. Albert Trail will remain open and be upgraded to a minor collector roadway with pedestrian connections such as sidewalks on both sides of the roadway, when the mixed-use commercial with residential Phase 1 site is developed.

Utilities have been installed under Coal Mine Road east of Everitt Drive and west of Eastgate Way.

## 5.0 UTILITY SERVICES

### 5.1 Water Supply and Distribution

Water will be provided to Erin Ridge North through existing lines on Ebony Way, Everitt Drive and Eastgate Way. Off-site water improvements are required to support Erin Ridge North and future lands within the north annexation area once 75% of the lands in the Plan Area are developed. Pipe sizing will be determined at the time of subdivision to ensure an adequate level of service is provided. Water mains of the appropriate sizes will be required to be carried through the development and connections will extend to the edge of the ASP boundary or acceptable termination points as determined by the City. The required water servicing for the Plan Area is as per Figure 4.

See Notes under Section 4.6 Off-Site Levies, of this document.

### 5.2 Wastewater Collection System (Sanitary)

The wastewater collection system proposed is by gravity and will flow south. Long term servicing schematics must be consistent with the approved Utility Master Plan (2014).

The wastewater collection system components of the appropriate size and depth with adequate capacity will be required to be carried through the development and extend to the edge of the ASP boundary or acceptable termination points as determined by the City and as depicted in Figure 5.

The wastewater collection system required the installation of deep services under Coal Mine Road east of Everitt Drive and east of Eastgate Way, which is needed to service lands within this Plan Area.

The sanitary lines being extended from Ebony Way and Everitt Drive have limited wastewater capacity.

Phase 2 requires a pump station because there is a 6-metre grade difference between the on-site gravity system and the existing 900 mm sanitary trunk that is located in Phase 1 at Element Drive North and Neil Ross Road. The proposed pump station location is on the east side of Element Drive North adjacent to low density residential and parkland. The pump house will also contain a storm pump station.

See Notes under Section 4.6 Off-Site Levies, of this document.

### 5.3 Stormwater Management

There are two stormwater management facilities within Erin Ridge North Phase 1 and two stormwater management facilities in Phase 2, at full build-out. The required release rates at the time of writing this document are 2.5 litres, per second, per hectare (L/s/ha) and 1.8L/s/ha when draining to Carrot Creek as per the *Big Lake Stormwater Management Plan Report May 2004*. The limiting factor for development in the Plan Area will be the stormwater management facilities because the finite capacity in the existing system only allows approximately 50 hectares of land to be developed. Long-term servicing schematics must be consistent with the approved Utility Master Plan (2014).

Phase 1, SWMF 1 is located south of Neil Ross Road and has an area of 3.0 hectares. SWMF 2 is located in the low density residential area in the east of the Plan Area and has an area of 3.5 hectares. Stormwater will move to SWMFs through pipes and as overland flows.

Stormwater pond sizes are approximations and may change in size at time of subdivision or Development Permit. A change in pond size may not require an amendment to this Area Structure Plan, providing development statistics and land use areas are not impacted. Stormwater Management for the Plan Area is as per Figure 6. Consultation with Administration will be required should a SWMF change in size.

The collection system components of the appropriate size and depth with adequate capacity will be required to be carried through the development and extend to the edge of the ASP boundary or acceptable termination points as determined by the City.

The lands north of Phase 2 currently flow into Carrot Creek in small storm events and temporarily pool in Erin Ridge North Phase 2 lands in larger storm events and during spring runoff before discharging into Carrot Creek. Erin Ridge North Phase 2 Stormwater Management Plan, prepared by ISL, indicates that the stormwater flow should be diverted to Carrot Creek for large and small storm events. In large storm events, the stormwater is anticipated to temporarily pool on Landrex owned lands north of Erin Ridge North Phase 2 before flowing into Carrot Creek. Ultimately it is recommended that a watershed study be completed for Carrot Creek to investigate the effects of development within the Watershed and construct necessary recommendations to support development.

There is no downstream capacity to support development of Erin Ridge North Stage 2 or the off-site stormwater that still needs to be managed and directed to Sturgeon River. Options to manage stormwater include an outfall pipe that crosses through Sturgeon County on private land or an outfall pipe within City boundaries that extends to Sturgeon River; neither of which have funding or a proposed development date.

Until an outfall pipe is installed, the developer proposes Real Time Control, which means holding stormwater in ponds and pipes until there is downstream capacity to release the water. The rate of release is restricted by the downstream capacity. To support the Real Time Control process, a downstream stormwater pump station is proposed to control the discharge from Erin Ridge North Phase 2. The stormwater pump station will be within the same building structure as the sanitary pump station.

The implementation of Real Time Control System will require detailed review at the time of subdivision.

See Notes under Section 4.6 Off-Site Levies, of this document.

#### **5.4 Shallow Utilities**

Power, gas, and communication franchise systems will service the area through agreements established with the developers by the provider. Shallow utilities may be located within a public utility lot (PUL) or through a utility right-of-way agreement.

Any existing overhead services must be relocated and placed underground at the time of Development.

Telus Communications Company has advised that there are fibre cables and copper cables in the Phase 1 that would have to be re-routed at the developer's expense. Telus would also require a 5 metre by 5 metre easement for new facility placement to be located at a mutually agreed upon location at the time of subdivision.

#### **5.5 Public Utility Lots (PULs)**

A Public Utility Lot is where services such as water, wastewater, stormwater pipes, and shallow services are located. The size of a PUL will vary based on the number of utility services and pipe sizes accommodated. PULs can

typically range between 6 metres to 9 metres in width. PULs do not receive Municipal Reserve credit. Emergency access to a site will be classed as a public utility lot and width of access will be determined in consultations with City Engineer and Public Works. Where services are shared or required, provisions of utility rights-of-way will be required to allow passageway for utilities from landowner/developer to enable development by other landowner/developer to proceed.

#### **5.6 Timing of Development – Stormwater Management**

All required agreements must be obtained from Sturgeon County and all impacted landowners for the stormwater outfall connection through Sturgeon County to the Sturgeon River. Development of Erin Ridge North Phase 2 may be limited until stormwater issues are addressed.

.

## 6.0 IMPLEMENTATION

### 6.1 Development Staging

The sequence of development for the commercial and residential components will be from south to north. Staging must also follow growth management objectives of the City as specified in the MDP, including avoiding “leap-frogging” of development in new areas by encouraging orderly, economical, and contiguous development. Therefore, in addition to the infrastructure requirements, all development of Erin Ridge North must be contiguous and sequential in manner as per *MDP* Policies 3.2 and 4.2 and with Neighbourhood Design Principles and Medium Density Residential staging as per *MDP* Policies 4.11 and 4.13. These *MDP* policies indicate when required medium density residential is to be developed in relation to the overall residential development.

As development is market driven and limited by servicing capacities, the order of development will be reviewed at the subdivision stage. Contiguous and sequential development is important for efficient city services such as police, fire, transit, recreation and road maintenance.

Erin Ridge North Phase 2 as shown in Figure 10 has two (2) proposed stages of development. The first stage will include development of commercial, medium/high density residential, and one stormwater management facility. Stage two will include low density residential, pump house for storm and sanitary service, and parkland.

### 6.2 Redistricting and Subdivision

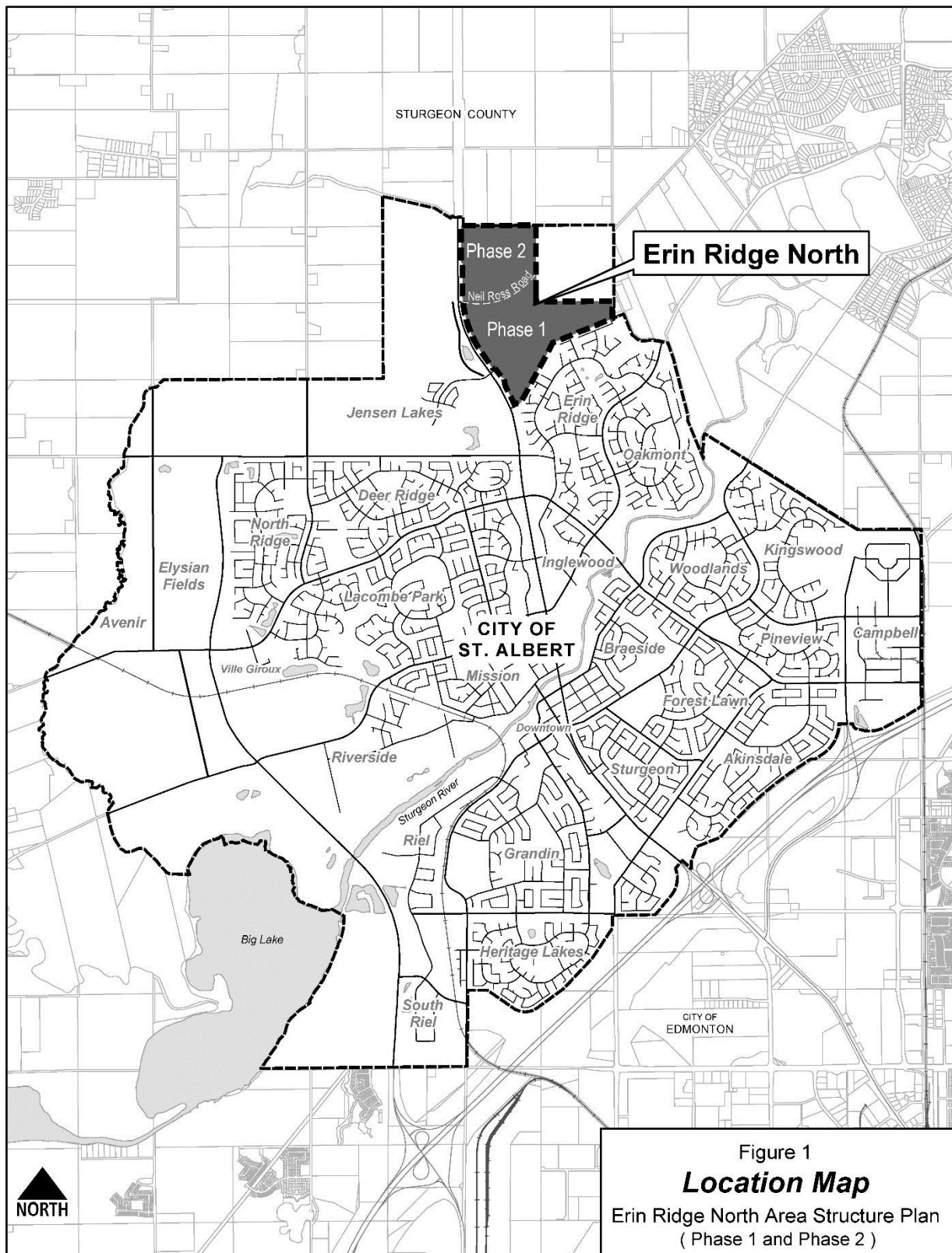
Timing of redistricting and subdivision applications are based on response to servicing capacity, agreements, and market needs. Development will occur generally from the south to the north by successive stages that avoid leap frog development that are in accordance with *MDP* policies.

**6.3 Building Inspections**

The geotechnical investigations within the Plan Area indicated there are soft and wet soils. The developer, as part of the purchase package to builders, needs to identify soil issues and indicate that further geotechnical study may be required at building permit stage.

At time of subdivision, the developer and the City will consider restrictive covenants related to wet and soft soils that may impact development.

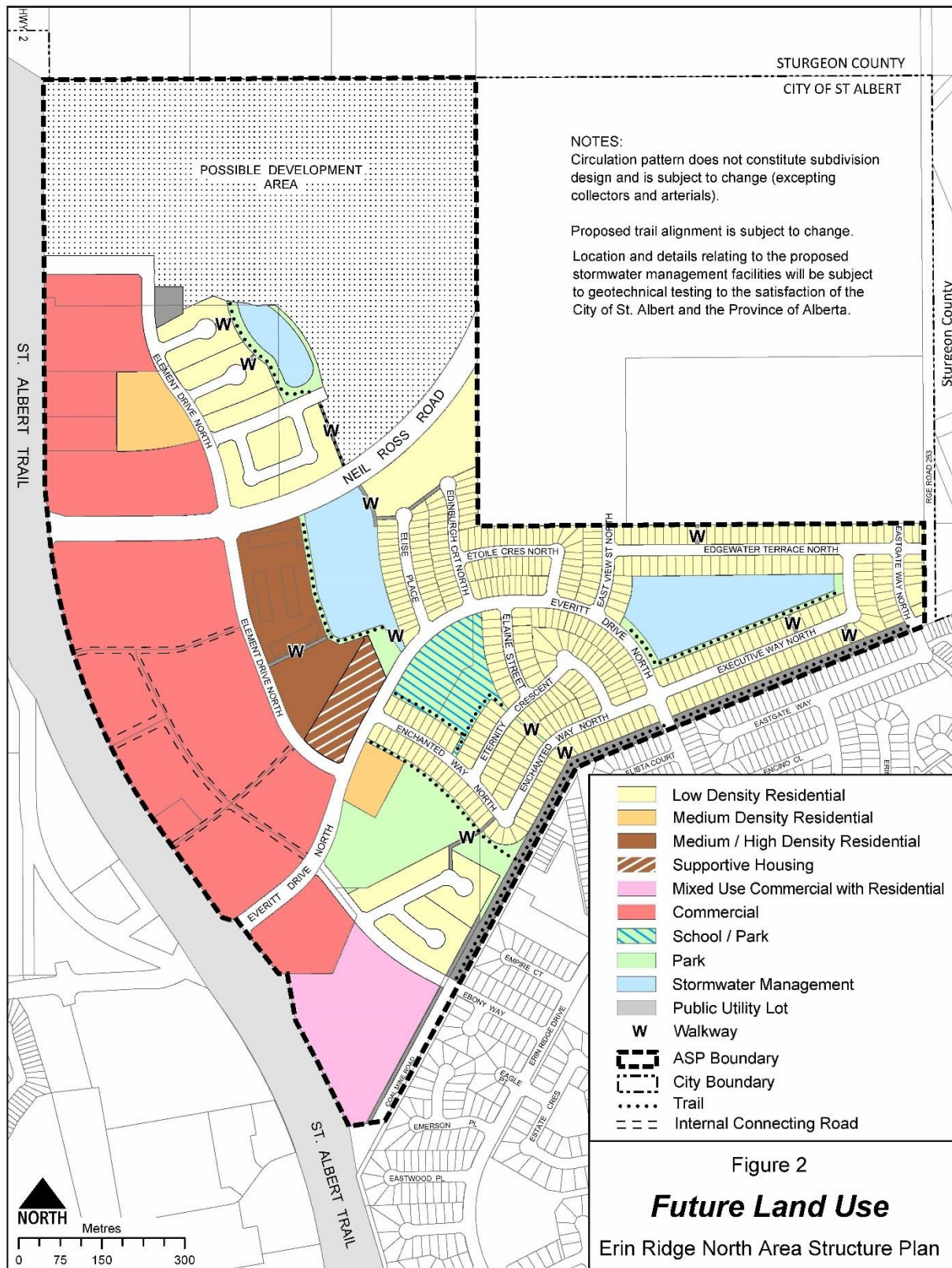




G:\MAPS\Area Structure Plans\Erin Ridge North\2017 Amendment\_Bylaw9-2017 KoK ASP LUB MR Exchange\ASP Final Maps\Fig1\_LocationMap.mxd

# ERIN RIDGE NORTH AREA STRUCTURE PLAN

## Figures

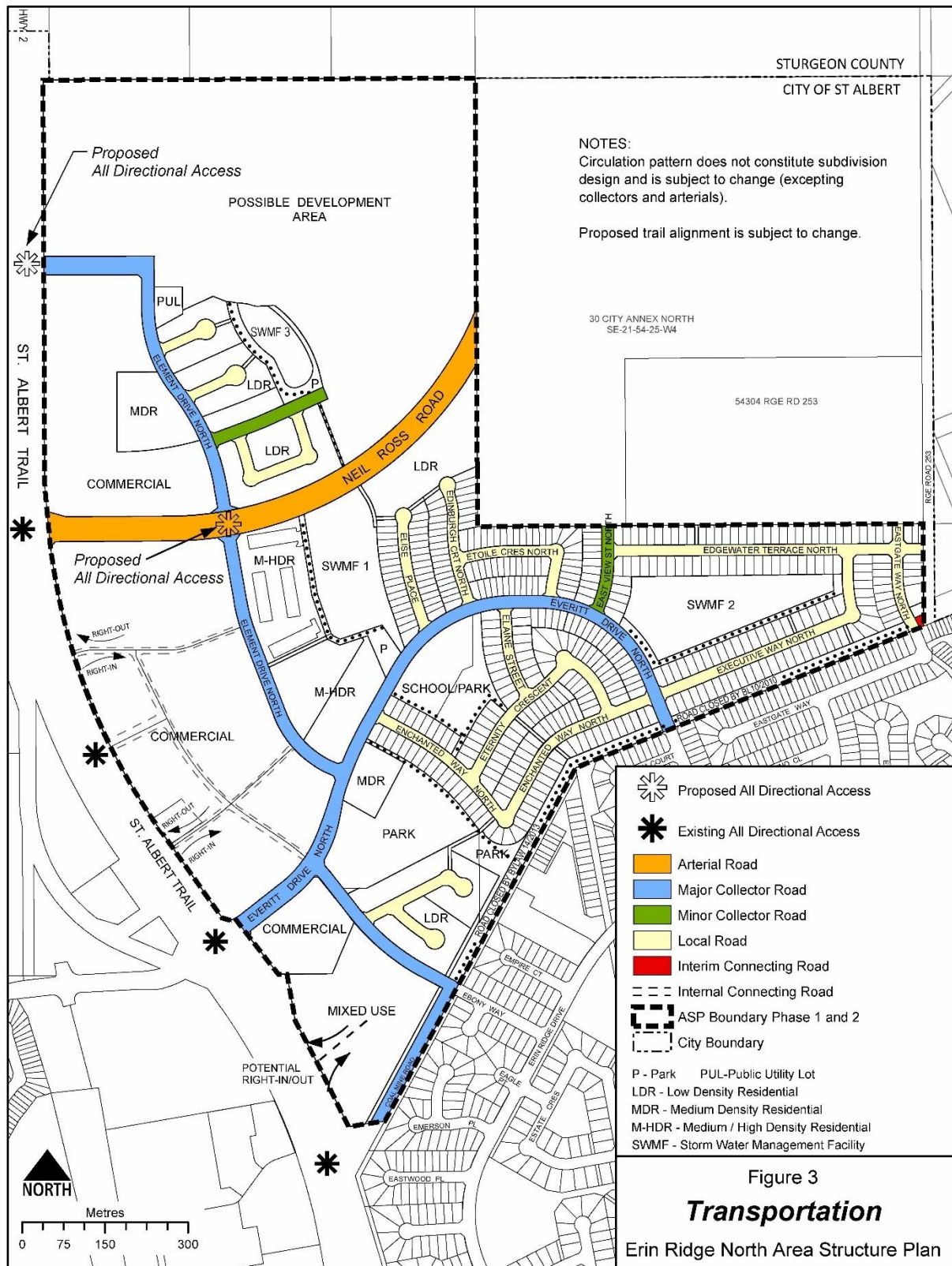


P:\Planning & Engineering\IP & D\Planning\Geomatics\MAPS\Area Structure Plans\Erin Ridge North\2018 and 8 Amendment\_Bylaw\X-2018 ERN Phase 2 - 130 Element Drive ASP-LUB\ASP Figures\Fig2\_FutureLandUse.mxd



# ERIN RIDGE NORTH AREA STRUCTURE PLAN

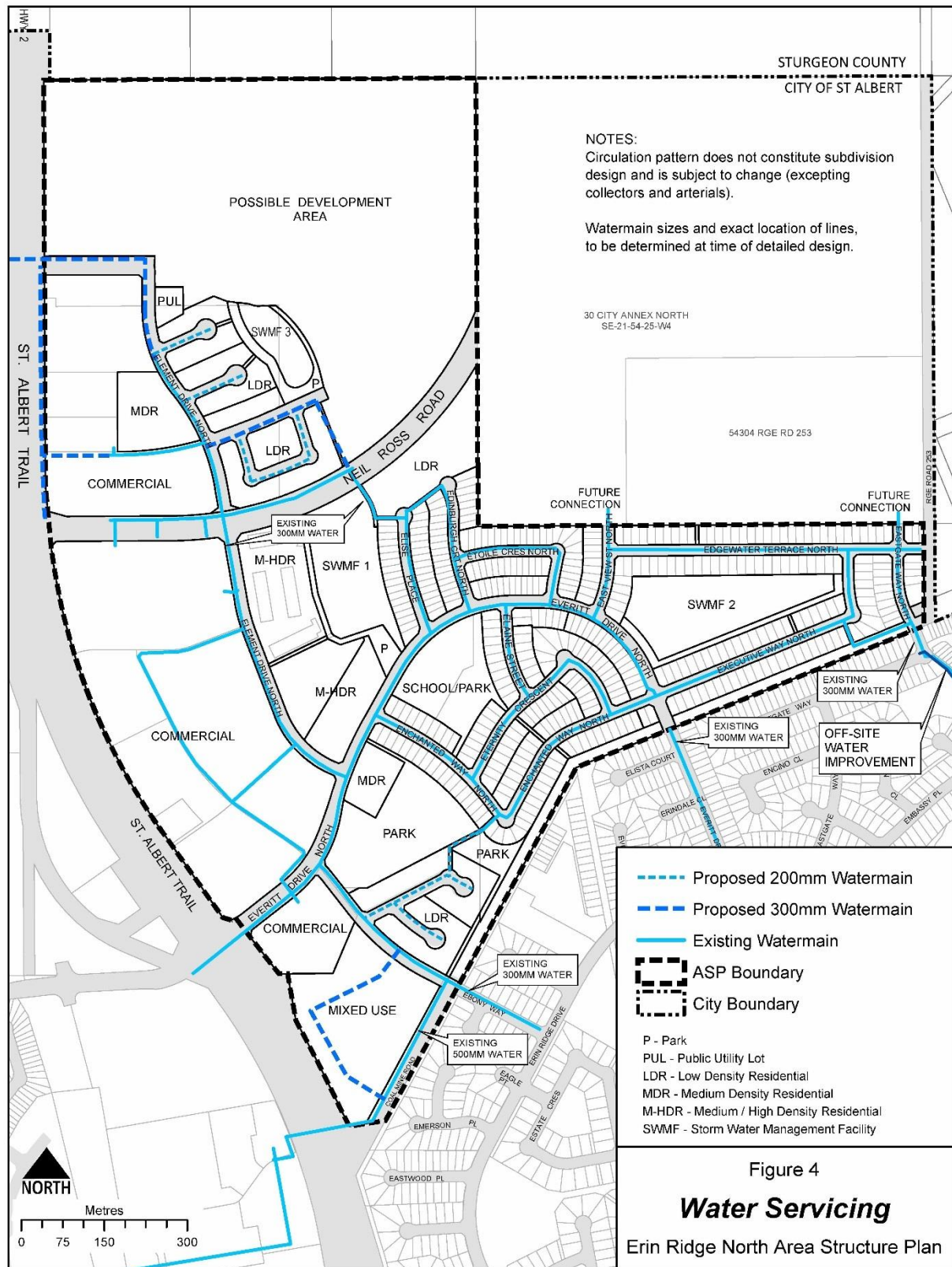
Figures



P:\Planning & Engineering\IP & D\Planning\Geomatics\MAPS\Area Structure Plans\Erin Ridge North\2018 and 8 Amendment\_BylawX-2018 ERN Phase 2 - 130 Element Drive ASP-LUBASP Figures\Fig3\_Transportation.mxd

# ERIN RIDGE NORTH AREA STRUCTURE PLAN

Figures

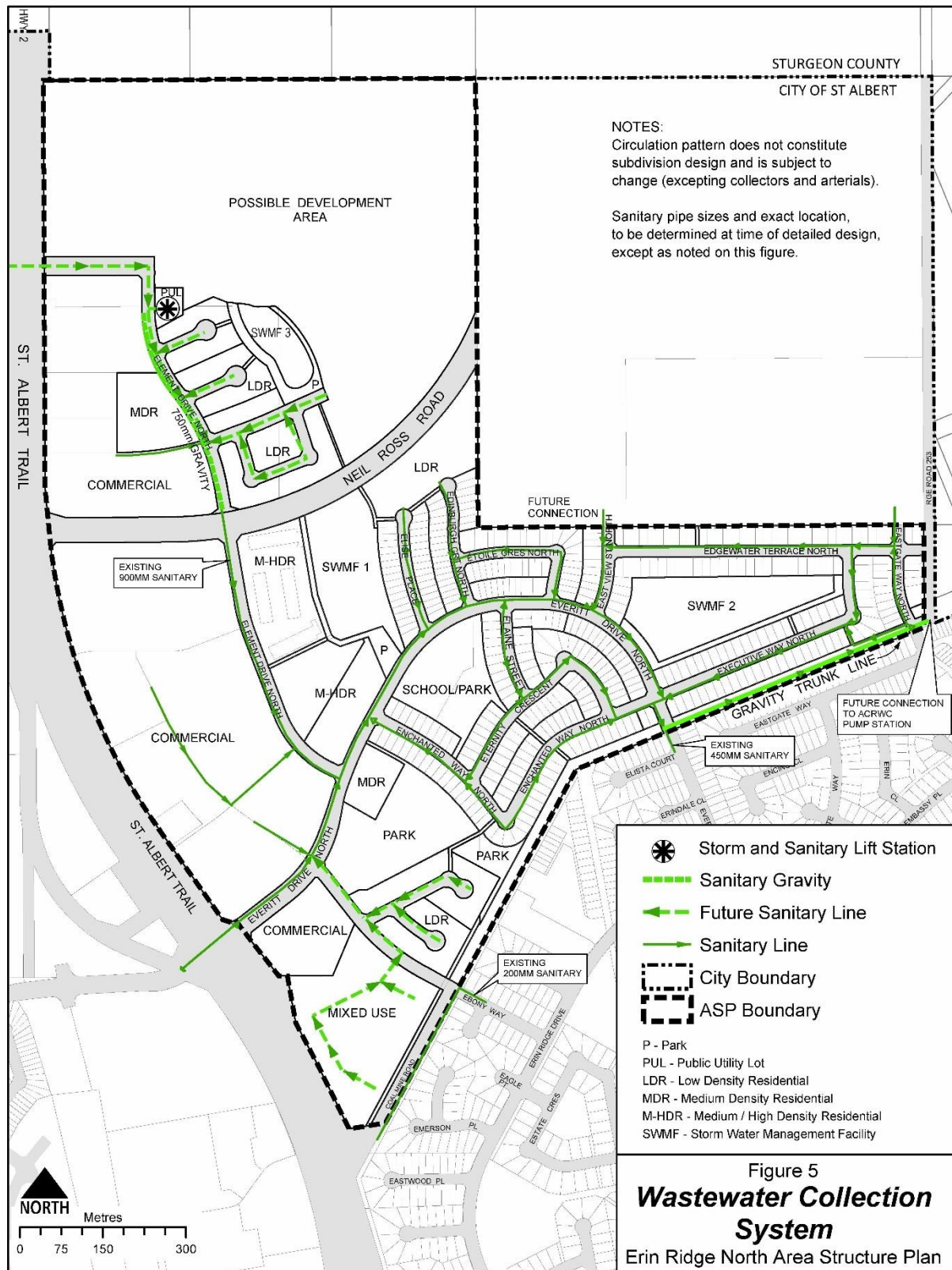


P:\Planning & Engineering\IP & D\Planning\Geomatics\MAPS\Area Structure Plans\Erin Ridge North\2018 and 8 Amendment\_BylawX-2018 ERN Phase 2 - 130 Element Drive ASP-LUB\ASP Figures\Fig4\_WaterServicing.mxd



# ERIN RIDGE NORTH AREA STRUCTURE PLAN

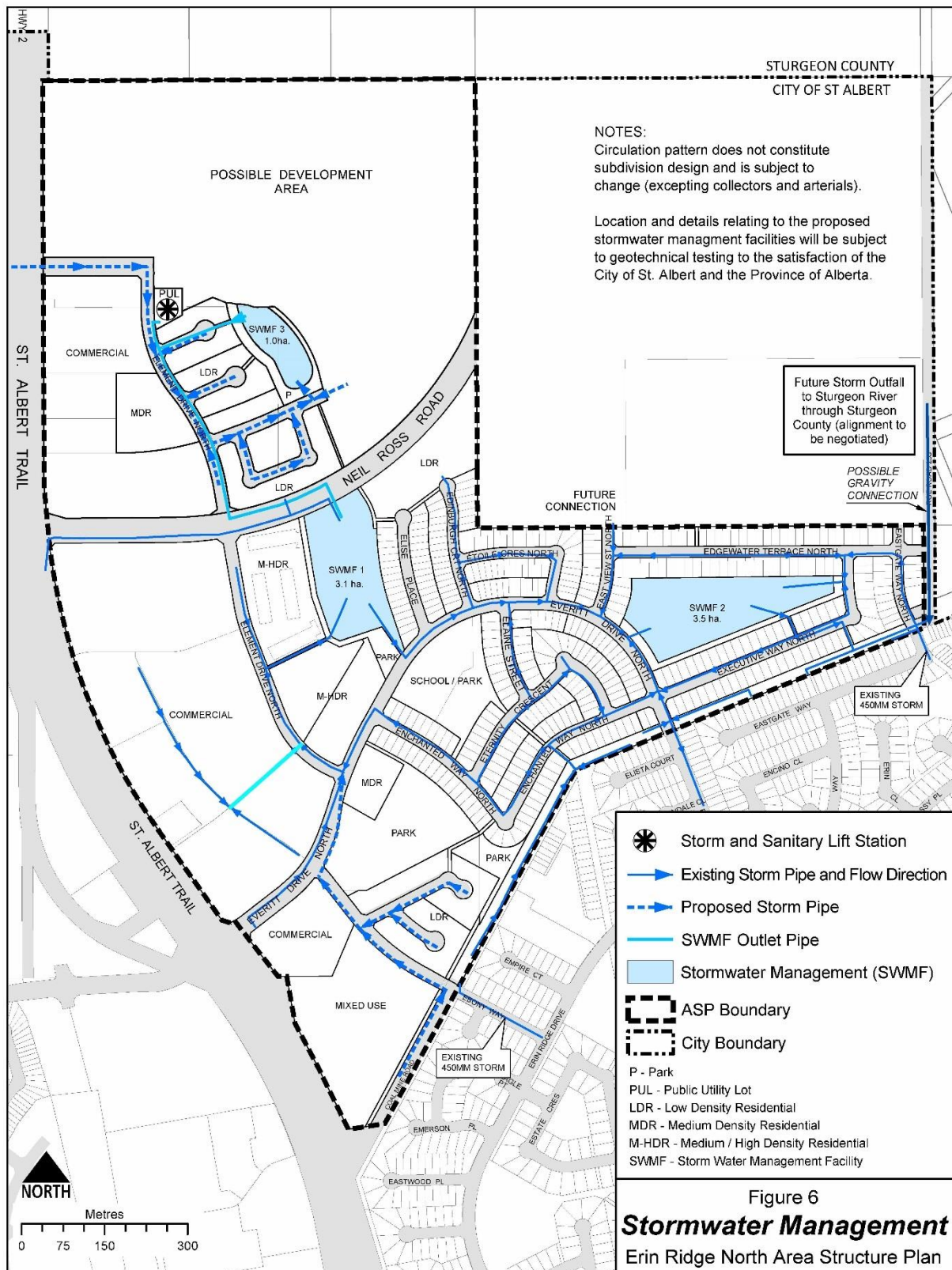
Figures



P:\Planning & Engineering\IP & D\Planning\Geomatics\MAPS\Area Structure Plans\Erin Ridge North\2018 and 8 Amendment\_Bylaw\X-2018 ERN Phase 2 - 130 Element Drive ASP-LUB\ASP Figures\Fig5\_Wastewater.mxd

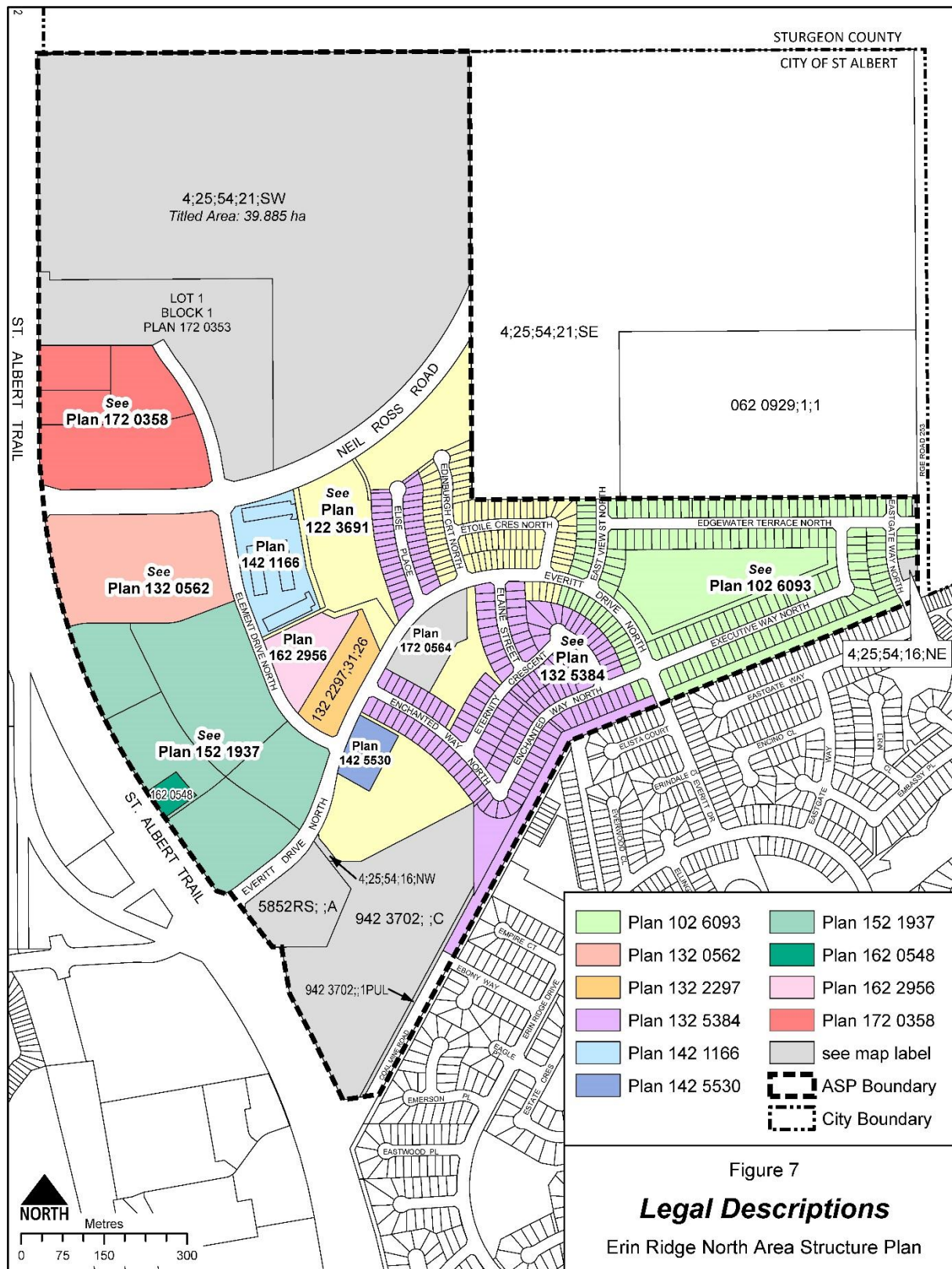
# ERIN RIDGE NORTH AREA STRUCTURE PLAN

Figures



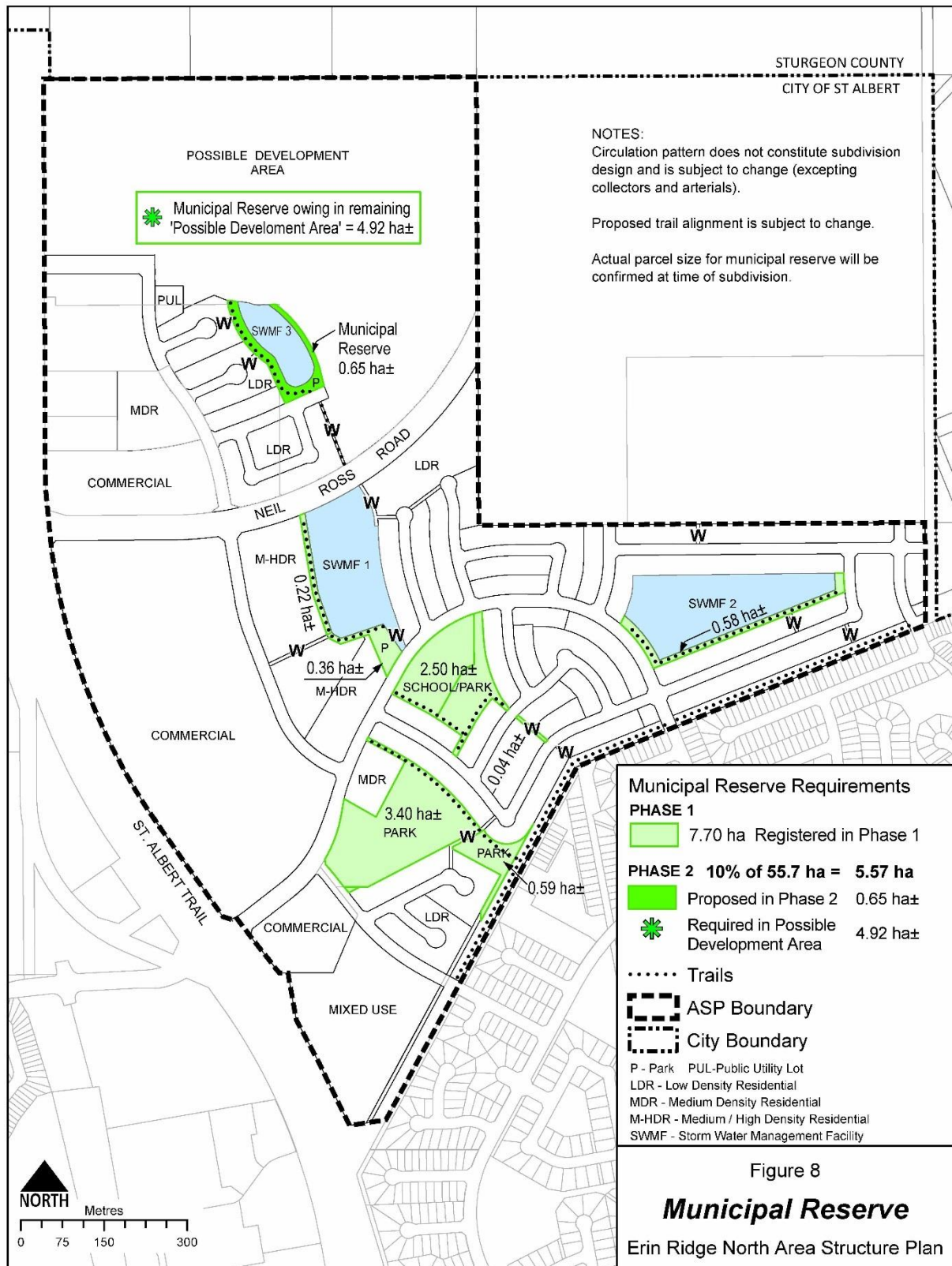
P:\Planning & Engineering\IP & D\Planning\Geomatics\MAPS\Area Structure Plans\Erin Ridge North\2016 and 8 Amendment\_Bylaw\X-2018 ERN Phase 2 - 130 Element Drive ASP-LUB\ASP Figures\Fig6\_Stormwater.mxd





# ERIN RIDGE NORTH AREA STRUCTURE PLAN

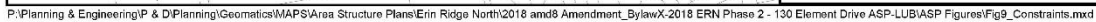
Figures

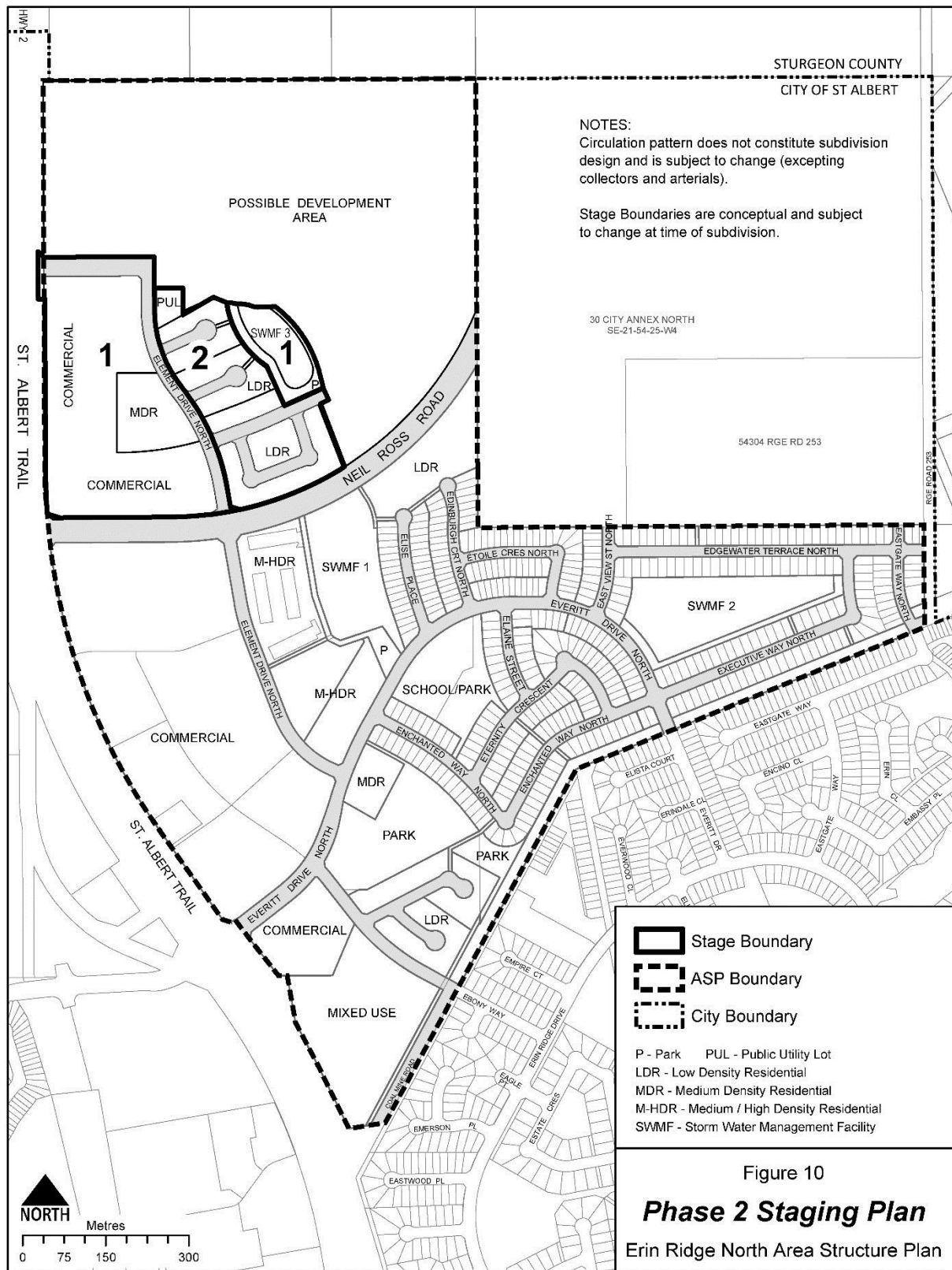


P:\Planning & Engineering\I & D\Planning\Geomatics\MAPS\Area Structure Plans\Erin Ridge North\2018 and 8 Amendment\_Bylaw\X-2018 ERN Phase 2 - 130 Element Drive ASP-LUB\ASP Figures\Fig8\_MunicipalReserve.mxd



## Figures







# ERIN RIDGE NORTH AREA STRUCTURE PLAN

Figures

