

Bylaw 18096

A Bylaw to amend Bylaw 15093, as amended,
being the Edmonton Energy and Technology Park Area Structure Plan

WHEREAS pursuant to the authority granted to it by the Municipal Government Act, on June 9, 2010, the Municipal Council of the City of Edmonton passed Bylaw 15093, being the Horsehills Energy & Technology Park Area Structure Plan; and

WHEREAS on May 2, 2011, the Horsehills Energy and Technology Park Area Structure Plan was amended by the passage of Bylaw 15642 renaming and adopting the plan as the Edmonton Energy and Technology Park Area Structure Plan; and

WHEREAS Council found it desirable to amend Bylaw 15093, the Edmonton Energy and Technology Park Area Structure Plan through the passage of Bylaws 16175 and 16767; and

WHEREAS an application was received by Sustainable Development to amend the Edmonton Energy and Technology Park Area Structure Plan; and

WHEREAS Council considers it desirable to amend the Edmonton Energy and Technology Park Area Structure Plan; and

NOW THEREFORE after due compliance with the relevant provisions of the Municipal Government Act RSA 2000, ch. M-26, as amended, the Municipal Council of the City of Edmonton duly assembled enacts as follows:

1. That Bylaw 15093, as amended, the Edmonton Energy and Technology Park Area Structure Plan is hereby amended by:

- a. deleting the statistics entitled “Edmonton Energy and Technology Park Area Structure Plan – Land Use and Population Statistics – Bylaw 16175” and replacing with the following:

**EDMONTON ENERGY AND TECHNOLOGY PARK
AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 18096**

	Area (ha)	%
Gross Area	5218	
North Saskatchewan River Valley/Ravine	376	7.2
Arterial/Freeway	383	7.3
Gross Developable Area	4459	100.00
SWM	388	8.7
Parks	104	2.3
Natural Areas	258	5.8
Circulation	669	15.0
Non-Developable Area	1419	31.8
Precinct	Area (ha)	% GDA
Medium Industrial	1591	35.7
Petrochemical	1134	25.4
Research and Development	315	7.1
Total	3040	68.2

Precinct	Total Area	% Developable	Developable Area	Employees/ha	Total Employees
Medium Industrial	2668	69	1591	21	33,420
Petrochemical	1841	71	1134	7	7,937
Research and Development	709	57	315	91	28,693
				Total	70,050

	Medium Industrial Precinct		Petrochemical Precinct		Research and Development Precinct	
	Area	%	Area	%	Area	%
Gross Area	2668		1840.64		709.28	
North Saskatchewan River Valley Arterial/Freeway	192	7.2	165	8.9	19	2.7
	179	6.7	69	3.7	136	19.1
Gross Developable Area	2297	100.0	1607	100.0	555	100.0
SWMF	202.	8.8	138	8.6	48.0	8.7
Parks	31	1.4	23	1.4	50	8.9
Natural Areas	128	5.6	72	4.5	59	10.6
Circulation	345	15.0	241	15.0	83	15.0
Net Developable Area	1591	69.3	1134	70.5	315	56.9

- b. deleting the second sentence of the second paragraph in Section “Executive Summary” and replace with:
- “In 2016 the Industrial Investment Action Plan (IIAP) was approved by Executive Committee, and as such this ASP has been amended to meet objective seven of the IIAP: increase speed to market. This document is a Statutory Plan that provides a land use framework to facilitate the development of petrochemical, manufacturing, logistics, business and research uses in Northeast Edmonton, comprising approximately 5,218 ha (12,894 acres).”
- c. deleting the first sentence of the third paragraph in Section “Executive Summary” and replacing with:
- “A global downturn in oil prices beginning in 2014 resulted in several industry participants re-evaluating individual corporate pace of growth and commitment to expansion.”
- d. inserting the following after the third paragraph in Section “Executive Summary”:
- “Increased liquefied natural gas supply, decreased costs of feedstocks, and increase the viability of value-added processing of products derived from base chemicals such as ethylene, propylene, benzene and ammonia within Alberta’s Industrial Heartland. Products manufactured from these base chemicals include: plastics and engineering resins, synthetic fibers, rubber products, paints and coating, lubricants and cleaning products.”
- e. deleting the fourth paragraph in Section “Executive Summary”.
- f. deleting the fifth paragraph in Section “Executive Summary” and replace with:

“The precincts within the plan area have been developed to function as an integrated system of industries that work together to refine chemicals into market products. The three precincts are: Petrochemical Cluster, Medium Industrial, and Research and Development.

The Petrochemical Cluster precinct will use feedstocks from the area for industrial processing to create added value.

The Medium Industrial precinct will include manufacturing, logistics, and general industrial uses. This precinct will use the refined chemicals to create goods and will be complemented by packaging and transportation services to move these goods to market. This precinct also allows for general industrial uses to provide opportunity for more conventional and stand-alone manufacturing and related uses.

The Research and Development precinct supports the technical needs and business functions of the Petrochemical Cluster Precinct. This precinct also provides opportunity for innovative businesses that take advantage of upcoming economic opportunities and incentives for alternative environmentally-friendly industries, such as renewable energy technology.”

- g. inserting the following after the last paragraph in Section “Executive Summary” with:

“VISION

The Edmonton Energy and Technology Park intends to chart a course to develop the area into a world class eco-industrial park that combines economic opportunity, ecological integrity, and efficient use of land and resources using a progressive and sustainable model of development based on eco-industrial principles.”

- h. deleting the second paragraph in Section 1.1 “Regional Context” and replace with:

“This relationship between the oil and gas industry and the Capital Region has also been strengthened with the creation of Alberta’s Industrial Heartland (AIH). AIH consists of over 580 square kilometres of land designated for heavy industrial uses that straddles portions of the City of Edmonton, Strathcona County, Sturgeon County, Lamont County, and the City of Fort Saskatchewan. These municipalities have worked together to create complementary Area Structure Plans to designate AIH as the best suited area for hydrocarbon processing and other heavy industrial development in the Capital Region. AIH provides heavy industry the benefits of co-location, including sharing common products and developing common supportive industries between multiple companies. The area currently houses over 40 chemical and advanced manufacturing businesses representing more than \$32 billion in investment and \$15+ billion in projects announced or under construction. The agglomeration of internationally recognized companies within AIH has made the AIH Canada’s largest hydrocarbon processing region. The AIH is represented by Alberta’s Industrial Heartland Association (AIHA), a body that actively plans and promotes opportunities within the AIH. Future development in AIH will provide significant long term opportunities for supportive industrial development in the Capital Region. It is anticipated that this ancillary industrial growth could represent more than fifty years of future development potential.”

- i. deleting the third and fourth paragraphs in Section 1.1 “Regional Context” and replace with:

“In early 2016, optimism within the AIH increased with the announcement of the Province of Alberta’s Petrochemical Diversification program. The program was created to encourage companies to invest in the development of new petrochemical facilities by providing up to \$500 million in incentives through royalty credits. As a result, in late 2016 the AIH announced two propane dehydrogenation (PDH) projects, and three facilities, including a propylene complex (plastic pellets manufacture) by Inter Pipeline Ltd. and Pembina Pipeline Corporation in Sturgeon County and Strathcona County. The propane will be processed into propylene, and then higher value polypropylene. The estimated potential capital investment as a result of these projects is close to \$6 billion.

Being a member of the AIH and having a large, skilled workforce to draw from, the EETP is ideally located to take advantage of industrial economic opportunities.

The City of Edmonton Investment Competitiveness Study (Watson & Associates Economists Ltd, 2016) forecasts that within the northeast Edmonton Capital Region, the EETP is expected to absorb 19% of the demand for heavy industrial lands between 2016 - 2026. Furthermore, the study indicates the City of Edmonton’s share of regional light medium industrial land is projected to decrease slightly, from 49% between 2011 - 2015, to 47% between 2016 - 2026 period. The EETP, however, is forecast to account for a significant amount of new light/medium industrial development between 2016 - 2026, offsetting what would otherwise have been a greater decline in market share (Watson & Associates Economists Ltd, 2016).”

- j. inserting the following after the first paragraph in Section 1.2 “Economic Growth Projections” with:

“The EETP ASP plan area, at 5,218 ha in gross area, is the source of approximately 2/3 of the City of Edmonton’s vacant industrial land.

The City of Edmonton Investment Competitiveness Study (Watson & Associates Economists Ltd (2016) states “The EETP is anticipated to capture an increasing share of the city’s industrial land absorption”. While the EETP’s share of industrial lands development activity over the 2016-2021 period is expected to be relatively modest, over the 2021-2026 period, the EETP is forecast to capture 43% of city-wide land industrial land demand” (p. 8-11). This increased share is forecast partly due to a recovery of the energy sector over the 2021 to 2027 period.”

- k. deleting all paragraphs in Section 1.3 “Projection Description” and replace with:

“It is in this context that the City of Edmonton authorized the preparation of the Edmonton Energy and Technology Park Area Structure Plan (ASP). The ASP is a Statutory Plan that is approved by City Council through Bylaw. The ASP establishes a coherent framework that will guide future development of the area.

It is the intention of the Edmonton Energy and Technology Park ASP to chart a course for the development of the Northeast area into a world class eco-industrial precinct specializing in petro-chemical manufacturing. At the same time, the EETP will be flexible enough to accommodate more conventional industrial development and research opportunities in response to changing economic conditions. The Edmonton Energy and Technology Park ASP will create an ordered pattern of development that integrates industry, nature, and people in a way that creates a whole that is better than the sum of its parts.”

1. deleting all the paragraphs in Section 2.0 “ECO-INDUSTRIAL” and replace with:

“The Edmonton Energy and Technology Park ASP provides a vision for a new kind of industrial area for the City of Edmonton. Environmental considerations are becoming increasingly important in public opinion, business functions, and corporate social responsibility. The Edmonton Energy and Technology Park provides an opportunity to blend both economic and environmental objectives into the planning process. Businesses know that maximizing efficiency is good for the bottom line. Development that maximizes utility and minimizes waste is also good for the environment. This is the fundamental principle behind the development of an industrial movement called ‘Eco-Industrial Development’, which can be defined as:

Eco-Industrial development promotes environmentally and economically efficient use of all resources and physical assets in new and existing industrial areas. Collaboration and cooperation between stakeholders, innovation, integration, systems thinking, and ecological respect underpin eco-industrial development. This influences the planning and evolution of industrial areas, design and usage of infrastructure and buildings, and operation of businesses. Eco-industrial development results in an industrial area with efficient land use that can protect and enhance local biodiversity; is integrated with adjacent uses; contains sustainable infrastructure; locally generates energy; and has high performance green buildings. Eco-industrial development enables by-product synergies; reducing waste and increasing efficiency while integrating and reinforcing natural systems.

An eco-industrial project balances economic, environmental, and social interests in a way that maximizes the benefit for each factor. This balanced philosophy is referred to as the ‘triple bottom line’. Eco-Industrial development in the City of Edmonton should be underpinned by the following principles:

- Protect, integrate, connect and enhance local and regional ecological features, functions, and diversity.
- Design and operate infrastructure systems that reduce the environmental impact and carbon footprint; are multi-purpose; and future-proof the development against changing needs and technologies.
- Incorporate green buildings, either new, or through retrofitting existing buildings to higher environmental standards.
- Support business to business symbiosis around all waste materials, water, and energy streams. Maximizes production use of input resources and by-products as waste is non-productive.
- Foster and enable collaborative strategies; partnerships and actions between stakeholders to reduce costs; increase return on investments; and lower environmental impacts.
- Maximize use of renewable energy systems and sustainably produced feedstocks in order to reduce dependency of fossil fuel sources and finite material supplies.
- Facilitate educational initiatives that increase the eco-industrial literacy of all stakeholders.

There are many practices used to implement these eco-industrial principles. Eco-industrial developments can create networks of businesses that share common services including waste outputs that can be reused as process inputs for other business. A land use framework and regulatory regime based on eco-industrial principles can encourage and facilitate sustainable site and building design. Sustainable infrastructure can be used to improve environmental performance while reducing costs by developing alternative roadway standards that reduce impermeable surfaces and paving costs; creating naturalized stormwater management facilities that improve groundwater recharge and reduce pipe costs; using recycled wastewater from nearby treatment facilities; and using rainwater instead of treated water for industrial processes or yard maintenance. Local service provision is also common in eco-industrial developments, whether that be an area-specific recycling facility, a local wastewater treatment plant, or even a co-generation power facility. These are just some examples of the many ways eco-industrial development is implemented.

The balance between economic, environmental and social interests makes it an ideal model to use as the basis for development in Edmonton Energy and Technology Park. The plan area does not have extensive existing infrastructure. That allows maximum opportunity to pursue eco-industrial development in the development of sites and major infrastructure.

Development policies and design requirements that respect eco-industrial principles will be incorporated throughout the plan to ensure that eco-industrial objectives become a cornerstone of development in Edmonton Energy and Technology Park.”

- m. deleting all the paragraphs in Section 3.1 “Site Context” and replace with:

“Edmonton Energy and Technology Park is located in northeast Edmonton. It accounts for most of the remaining undeveloped land within the City of Edmonton. The plan area is bounded by the Anthony Henday and Transportation / Utility Corridor (TUC) to the south, Manning Drive to the southeast, and Sturgeon County to the west, north, and northeast. Canadian Forces Base (CFB) Edmonton, located within Sturgeon County is situated along the west boundary, as shown in Figure 2: Edmonton Context.

In order to understand the existing natural features and determine the best way to integrate them with planned development, the Horsehills Industrial Area - Ecological Network Analysis (Delcan in association with Golder Associates, December 2008) was prepared.

The following sections provide a summary of the existing conditions. Supporting studies, including the initial Ecological Network Analysis, and subsequent studies including the Phase II Ecological Network Report Edmonton Energy Technology Park Chemical Precinct E-593 by Spencer Environmental Services (see Section 7.5) should be consulted for detailed information and mapping.”

- n. deleting the third paragraph in Section 3.2 “Biological Environment” and replace with:

“In addition to Horsehills Creek, there are several forest patches and wetlands. Many of these areas have been classified as areas of environmental significance in the studies undertaken for the City of Edmonton, as well as studies completed in support of rezoning and subdivision applications.

The studies update the Inventory of Environmentally Sensitive and Significant Areas undertaken by Geowest in 1993. These natural areas provide valuable habitat and refuge for many plant and wildlife species and often act as connecting corridors for species movement into the broader North Saskatchewan River Valley System. The mapping of these areas has been updated based on current aerial photographs, and are shown in Figure 12: Ecological Network.”

- o. deleting the last two sentences in the fourth paragraph in Section 3.2 “Biological Environment” and replace with:
 “Remaining habitat for these species likely includes areas that will be protected, such as the North Saskatchewan River valley, other riparian corridors, and significant wetlands. Additional detailed site specific assessments are required at the rezoning, subdivision and/or development application stages to identify appropriate protection measures prior to development.”
- p. inserting the following at the last sentence in the last paragraph in Section 3.3 “Physical Environment” with:
 “, and are required at the rezoning, subdivision and/or development application stages.”
- q. deleting the fourth paragraph in Section 3.4 “Social Environment” and replace with:
 “Edmonton Energy and Technology Park is bounded by Sturgeon County to the west, north and northeast. The Sturgeon County lands near the plan area are used predominantly for agriculture. The Municipal Government Board has required Sturgeon County to develop an Area Structure Plan for the area north of Edmonton Energy and Technology Park to determine future land uses. This project has not yet been initiated.”
- r. deleting the second sentence in the fifth paragraph in Section “3.4 Social Environment,” and replace with:
 “The closest lands to Edmonton Energy and Technology Park within Strathcona County are primarily agricultural. Strathcona County’s recently updated Municipal Development Plan has designated these lands for both continued agricultural uses and also ‘transitional urban reserve’ uses.”
- s. deleting the last two paragraphs in Section 3.4 “Social Environment” and replace with:
 “A mix of developed and developing lands within the City of Edmonton border the plan area. The lands to the east of Manning Drive are subject to the Horse Hill Area Structure Plan adopted in 2013 and include existing developments such as Alberta Hospital Edmonton, the Riverbend Receiver Site (a Department of National Defence facility), rural residential uses and agricultural operations. The Marquis Neighbourhood Structure Plan (NSP) was approved by Bylaw as an amendment to the Horse Hill ASP and is primarily intended as a residential area, with elements of commercial and business employment opportunities.

The lands south of the TUC between the 153 Avenue and 66 Street interchanges are covered by the Pilot Sound Area Structure Plan. Two Neighbourhood Structure Plans, McConachie and Cy Becker, have been adopted as amendments to the Pilot Sound ASP

and bounded the TUC to the south. The McConachie NSP was adopted in 2006 and the Cy Becker NSP was adopted in 2012. Both plans propose a combination of low and medium-density residential adjacent to the TUC. The Gorman area located east of Manning Drive and north of 153 Avenue is currently home to the Evergreen Cemetery and Memorial Gardens. It is anticipated that Gorman will ultimately be developed as a mixed-use area, containing business park, commercial, and residential uses, centred on a future LRT station.

The majority of the Plan area is in agricultural production, and is zoned as Agricultural. There are several existing developments, which include a federal penitentiary, several religious assemblies, and a railway museum, as identified in Figure 4: Existing Zoning.

There are two country residential developments: a small six-lot subdivision in the northeast corner west of 33 Street NE zoned (RR) Rural Residential Zone and a five-lot subdivision along 195 Avenue in the southwest zoned (EETR) Edmonton Energy and Technology Park Industrial Reserve Zone.

Parts of the central, southwest and northeast areas of the EETP have already been rezoned in preparation for future development (see Figure 4: Existing Zoning). These include:

- approximately 500 ha within the centre of the plan area to (EETC) Edmonton Energy and Technology Park Chemical Cluster Zone in 2014;
 - approximately 170 ha within the northeast to (EETL) Edmonton Energy and Technology Park Logistics Zone, (EETM) Edmonton Energy and Technology Park Manufacturing Zone, (AP) Public Parks Zone, (PU) Public Utility Zone and (A) Metropolitan Recreation Zone in 2013; and
 - approximately 170 ha within the southwest to (EETL) Edmonton Energy and Technology Park Logistics Zone, (EETM) Edmonton Energy and Technology Park Manufacturing Zone, (PU) Public Utility Zone, (AP) Public Parks Zone and (A) Metropolitan Recreation Zone in 2012. Subdivision of approximately 57 ha of the lands rezoned to the EETP Logistics and Manufacturing zones was approved in the southwest portion of EETP in 2014 and revised with minor modifications approved in 2016. The uses are expected to include commercial and office, with the potential for medium industrial uses.”
- t. deleting the first sentence in the second paragraph in Section 3.5 “Existing Infrastructure ” and replace with:
- “The EPCOR water transmission line is located along Manning Drive.”
- u. deleting the last paragraph in Section 3.5 “Existing Infrastructure”.
- v. deleting the first sentence in the first paragraph in Section 4.0 “PUBLIC INVOLVEMENT” and replace with:
- “Public involvement is important in the development of an ASP and is required by the Municipal Government Act and guided by the City of Edmonton Public Engagement Policy (C593).”
- w. inserting the following at the end of the first sentence in the first paragraph in Section 4.2 “Key Stakeholders Meetings” with:

“, as well as the various amendments since its adoption.”

- x. deleting the subheading 4.2.2 “Appropriate Separation Between Conflicting Land Uses” in Section 4.2 “Key Stakeholders Meetings” and replace with:
“4.2.2 Consideration of Adjacent Land Uses”
- y. deleting the first paragraph in Section 4.2.2 “Appropriate Separation Between Conflicting Land Uses” and replace with:
“This area borders several different land uses. Consideration for the interfaces between Edmonton Energy and Technology Park, CFB Edmonton, future development within the Horse Hill ASP, and the surrounding counties heavily influenced the development of the Edmonton Energy and Technology Park ASP.”
- z. deleting the subheading 4.3 “October 2008 Public Meeting” in section 4.2 “Key Stakeholders Meetings” and replace with:
“4.3 October 2008 Public Open House”
- aa. deleting the last sentence of the last paragraph in Section 4.3 “October 2008 Public Open House”.
- bb. deleting the subheading 4.4 “October 2009 Public Meeting” in Section 4.2 “Key Stakeholders Meetings” and replace with:
“4.4 October 2009 Public Open House”
- cc. inserting two subheadings in Section 4.2 “Key Stakeholders Meetings” with:
“4.5 March 2014 Public Open House

The fourth public event was held at Horse Hill School on March 18, 2014. The purpose of this event was to share information on the progress of the EETP Investment Readiness Initiative, the objectives of which are to attract private investment, reduce the time required to approve major projects, and plan new infrastructure options and solutions.

An invitation was sent to property owners in the study area and portable signs within the EETP plan area were used to advertise the open house.

The open house began with a formal presentation. Information boards were available for viewing and staff was available to answer any questions pertaining to the project.

102 people attended the event and four responses were received. Two responses were seeking further clarification on the details of the plan. The other two raised concerns about the potential tax increases of rezoning land to industrial.

4.6 Stakeholder Consultation and Fifth Public Open House November 2016

Administration completed consultation with key stakeholder groups on proposed EETP ASP and custom Zoning Amendments in 2016. The amendments proposed included a revised arterial road network (based on the grid pattern of section boundaries and existing road rights-of-way) and the merging of the Logistics and Manufacturing precincts into a

single EETP Medium Industrial Precinct. A new EETP Medium Industrial Zone was also proposed to implement the new Precinct.

Meetings were held with adjacent municipalities (Sturgeon County, Strathcona County and City of Fort Saskatchewan), as well as key stakeholders (including CFB Edmonton and Alberta's Industrial Heartland) landowners, development interests, and external agencies, with the goal of increasing "investment readiness" of the EETP.

A Public Open House was held on Wednesday, November 9, 2016 at the Horse Hill School from 6:30 PM to 8:30 PM.

Notifications were mailed to landowners and those adjacent to the EETP Plan area. The Open House was advertised on the City website and social media, as well as on three portable road signs throughout the plan area. E-mail notification was also provided to nearby municipalities, organizations, developers and realtors with an interest in the EETP. Over 120 people attended the Open House (98 individuals signed-in). Five feedback sheets were received at the Open House.

The revised arterial road network and merging of the Logistics and Manufacturing precincts into a single EETP Medium Industrial Precinct were presented. Reaction to both changes was overwhelmingly positive.

At the meeting, a brief presentation of the proposed changes was made. An information package (with feedback sheets, highlights of the amendments, and proposed maps) was given to the attendees. The Open House materials were also posted on the City website after the Open House.

In general, there was a high degree of support for the EETP Medium Industrial Precinct and accompanying custom zoning, as well as the revised Arterial Road Network."

dd. deleting all the paragraphs in Section 5.1 "Capital Region Board" and replace with:

"The Capital Region Board (CRB) was established on April 15, 2008 and is comprised of the 24 municipalities that make up the Capital Region. The role of the CRB is "to plan and manage the growth of the region in a strategic, coordinated and integrated way that preserves the unique characteristics of each municipality while ensuring the long term sustainability and prosperity of the region as a whole." (CRB Website, 2017).

The CRB Growth Plan identifies the EETP ASP as being within Priority Growth Area "F" and its policies as they relate to economic development are:

- concentrate new growth within the Priority Growth Areas;
- ensure an adequate supply of land is available for future development of the Region's industries; and
- support further diversification of the Regional economy.

The ASP aims to uphold the CRB Growth Plan's principles and policies specifically the "Support Regional Economic Development" principal by ensuring a supply of industrial and commercial land opportunity for development.

The EETP ASP and amendments thereto are subject to the Regional Evaluation Framework (REF) planning referral and approval process of the CRB, in order to ensure that it meets the goals and policies of the 2010 Capital Region Growth Plan: Growing Forward.

The EETP ASP and amendments thereto meet the following three criteria for referral:

- any statutory plan that designates land for heavy industrial use;
- any statutory plan within 0.8 km of a road identified in the Regional Transportation Infrastructure map in the December 2009 Addendum to the Growth Plan (i.e. Anthony Henday and Manning Drive/Highway 15); and
- any statutory plan within 1.0 km of an approved Intermunicipal Transit route or Park and Ride facility as identified by the Growth Plan. (i.e. Manning Drive/Highway 15)

The 2010 Capital Region Growth Plan is soon to be replaced by the 2016 Growth Plan: *The Edmonton Metropolitan Region Growth Plan: Re-imagine. Plan. Build*. The 2016 Plan was approved by the CRB in October 2016 and is currently awaiting approval by Cabinet. It is anticipated that with the impending adoption of the new Growth Plan in 2017, there will be changes to the REF referral process."

- ee. deleting the subheading in Section 5.2 "Capital Region Integrated Growth Management Plan- Final Report on Core Infrastructure" and replace with:
"5.2 Capital Region Integrated Growth Management Plan- Final Report on Core Infrastructure (ISL Engineering and Land Services, 2008)"
- ff. deleting the subheading in Section 5.3 "City of Edmonton Strategic Plan - *The Way Ahead* and MDP" and replace with:
"City of Edmonton Strategic Plan - The Way Ahead and Municipal Development Plan: *The Way We Grow*"
- gg. deleting the first sentence in the second paragraph in Section 5.3 "City of Edmonton Strategic Plan- *The Way Ahead* and MDP" and replacing with:
"The plan area is designated as industrial/business in the Municipal Development Plan" (MDP)"
- hh. inserting the following at the end of Section 5.3 "City of Edmonton Strategic Plan- *The Way Ahead* and MDP" with:
"The EETP ASP presents a significant opportunity to incorporate policies in order to meet the goals and objectives of *The Way Ahead* and *The Way We Grow* for regional economic diversification, with an emphasis on value-added industrial processing and manufacturing, utilizing eco-industrial principles, with the long term goal of environmental and economic sustainability."
- ii. deleting all the paragraphs in Section 5.4 "Sturgeon County MDP" and replace with:

“The Edmonton Energy and Technology Park ASP is bordered by Sturgeon County to the west, north and northeast.

Sturgeon County’s MDP was adopted in 2014 and divides the County into “neighbourhoods” each with their own policies. Three “neighbourhoods” border EETP; G, H, and I.

Neighbourhood G encompasses CFB Edmonton, which abuts EETP to the west, and which is under federal jurisdiction. The restrictions and limitations on development within a majority of the EETP plan area have been addressed elsewhere within this ASP.

Neighbourhood H covers the area of land directly to the north of EETP, adjacent to Highway 37 and the predominant land use is agriculture. Its role is to recognize rural development opportunities, while respecting local constraints. Drainage and infrastructure are two constraints that have been identified that may have some bearing on the EETP. Sturgeon County has identified this neighbourhood for a drainage study to assess current and future drainage needs. Given the proximity of this area to the EETP and its complex stormwater management network, it is likely that any future development of this area will have some impact on City infrastructure.

Sturgeon County has recognized that continued development within this area has resulted in functional deficiencies and capacity constraints where County infrastructure connects with Provincial roadways. As a result, the County worked with the City of Edmonton and Alberta Transportation to identify and locate roadway corrections and intersections along Highway 37 to ensure that that future development does not impact road improvements. The Sturgeon County Highway 37 Planning Study – Highway 28 to Highway 15 (ISL Engineering and Land Services, 2015) provides direction for these improvements. The revised arterial network of EETP reflects the recommendations of this report.

Neighbourhood I is located to the north east of EETP and is comprised mostly of serviced medium industrial and agricultural parcels, but also envelops the hamlet of Lamoureux approximately 2 km from the EETP boundary along the North Saskatchewan River. Its role has been identified as an industrial corridor that supports and links regional economic growth. An outcome that the County has identified is to encourage a range of manufacturing, logistics and support industries that complement both the Alberta Industrial Heartland and the EETP. Sturgeon County will attempt to achieve this through the development and adoption of an Area Redevelopment Plan for Sturgeon Industrial Park, 1.5 km northeast of the EETP boundary. Also, Sturgeon County will seek to work with the Province and regional partners to ensure adequate transportation infrastructure within the area.

In accordance with an agreement in 2016 the City of Edmonton will purchase a triangular-shaped property located within Sturgeon County between 66 Street north of the Anthony Henday, and the west boundary of the EETP ASP. The area includes the 66 Street right-of-way, and is currently owned by Alberta Transportation who acquired it in order to provide a connection at 66 Street northward from the Anthony Henday. 66 Street enters the City of Edmonton and the EETP ASP plan area just south of 195 Avenue NW (see Figure 8 Development Concept). This will facilitate connectivity to the 66 Street arterial, to the southwest corner of EETP. Ultimately, the City of Edmonton would annex this small 16.3 ha parcel of land sometime in 2018.”

- jj. deleting all the paragraphs in Section 5.5 “City of Saskatchewan MDP” and replace with:
 “The City of Fort Saskatchewan’s MDP was adopted in 2010. In alignment with the Land Use Bylaw, the MDP has identified the lands adjacent to the North Saskatchewan River (the closest portion of the City to the EETP) as River Valley Greenbelt. This designation will help maintain the area for natural space and recreation and ensure appropriate setbacks between new industrial development and the river’s edge.

The MDP also encourages eco-industrial planning principles, with these principles reinforced through their industrial Area Structure Plans.”

- kk. inserting the following after the second paragraph in Section 5.5 “ City of Fort Saskatchewan MDP” with:

“5.6 Strathcona County MDP

Strathcona County’s MDP was adopted in 2007. As with the City of Fort Saskatchewan, the closest portion of Strathcona County to the EETP is adjacent to the North Saskatchewan River. This land falls under the policies of the Agriculture Large Holdings Policy Area where a key policy is to minimize the fragmentation of agricultural land. The primary land use within this area is agriculture, but the area does also contain a golf course, a public utility (wastewater treatment facility) and some low-density country residential development.

Beyond this area to the south and east are lands covered by the *West of 21 Area Concept Plan* and have mostly been identified for light and medium industrial uses. East of this area lies Bremner which has been identified as the County’s next major growth area.”

- ll. deleting the last sentence of the second paragraph in Section 5.7 “Alberta’s Industrial Heartland” and replace with:

“The opening of the northeast portion of Anthony Henday Drive provides highway connections between the EETP and the Heartland via the Yellowhead Highway and Highway 21”.

- mm. deleting the subheading in Section 5.8 “Industrial Land Strategy” and replace with:

“5.9 Industrial Investment Action Plan

As outlined within the Executive Summary, the City of Edmonton’s Industrial Investment Action Plan was approved by Executive Committee on June 21, 2016. This is a collection of nine actions that the City is advancing to facilitate, attract and retain businesses in Edmonton’s industrial neighbourhoods to support the non-residential tax base. The nine actions were drafted based in part on a comprehensive assessment of Edmonton’s industrial land inventory. This was completed resulting in an evaluation of Edmonton’s current market conditions and trends, target sectors, market readiness and competitiveness.

One of those nine actions, Action 7, is to increase the investment readiness of EETP. The investment readiness is measured on three performance criteria: land absorption (zoned, subdivided and developed), development investments, and industrial taxes. As part of the implementation plan for the Industrial Investment Action Plan, five key deliverables have been established to meet Action 7.

Administration proceeded with land use applications in 2017 on the first of the five key deliverables:

- Amend the EETP ASP to implement efficient infrastructure solutions and accommodate land use planning principles including the revision of the arterial road network and a targeted approach to edge development.

The changes included a revised arterial road network aligned with existing road right-of-ways and property lines.

Edge development changes included an amendment to merge the Manufacturing and Logistics precincts into a single Medium Industrial precinct along with the creation of an EETIM Medium Industrial Zone to implement the new precinct.

Administration will continue to work on the other four key deliverables:

- prepare an alternative stormwater management solution;
- develop municipal and industrial servicing plans and partnerships;
- develop an eco-industrial initiative (City-wide and EETP-specific); and
- prepare ongoing economic/financial analyses, and marketing/business development cases for investment.

The fifth key deliverable for Action 7 (develop an eco-industrial initiative); in part implements Action 8 of the Industrial Investment Action Plan (implement industrial eco-industrial principles).

In addition to the eco-industrial regulations that will be amended into the EETP, the third and fifth deliverables may also result in further amendments as they relate to servicing and any changes required in order to better facilitate business development.”

nn. deleting the subheading in Section 5.9 “Smart Choices” and replace with:

“5.10 Transit Oriented Development Guidelines

The City of Edmonton’s Transit Oriented Development (TOD) Guidelines lay the framework to provide appropriate development around LRT stations and transit centres. They assist the City, businesses and citizens to plan ahead for the integration of transit and land use. They are enabled through the City of Edmonton Transit Oriented Development Policy (C565).

The TOD Guidelines are divided into four separate categories: Land Use & Intensity; Building & Site Design; Public Realm; and Urban Design and Crime Prevention through Environmental Design (CPTED) principles.

LRT stations may be developed within the Research and Development Precinct along an LRT line that would parallel Manning Drive (see Section 8.6). These would be classified as “Employment” station area types in the City of Edmonton’s TOD Guidelines. Employment stations recommend a mixture of retail and office uses, along with improved pedestrian and bicycle connectivity.

The guidelines prescribe increased density and land use intensity within 800 m of an LRT station and within 400 m of a transit centre. They provide direction for the desired relationship between buildings on the street, providing transitions between taller and

shorter buildings. They also prescribe appropriate block dimensions, and encourage pedestrian and bicycle connectivity.

Dependent on the final LRT alignment within the City's northeast, any amendments to the EETP ASP that provide more direction on line and station locations shall be subject to the TOD Guidelines. In addition, rezoning and development applications within 800 m of potential LRT stations or 400 m of potential transit centres will be subject to the TOD Guidelines".

- oo. deleting all the paragraphs in Section 5.10 "North Saskatchewan River Valley Area Redevelopment Plan" and replace with:

"The North Saskatchewan River Valley Area Redevelopment Plan (NSRVARP) serves as the primary statutory plan regulating development on public land within the river valley and ravine system. The major goals of the NSRVARP are: to ensure preservation of the natural character and environment; to establish a public metropolitan recreation area; and provide for recreational, aesthetic, and cultural activities in the plan area.

Horsehills Creek and its tributaries are regulated by the NSRVARP, the Provincial Water Act, and the Provincial Public Lands Act. All proposed transportation crossings, alterations to the creeks/tributaries, and new stormwater outfall structures are subject to city and provincial regulatory approvals under the aforementioned Bylaws and Legislation. Appropriate Environment Reserve and Municipal Reserve will be identified and dedicated at appropriate planning stages to ensure the long term preservation and recreation goals of the ARP are met."

- pp. deleting Section 5.11 "Zoning Bylaw".

- qq. deleting the paragraph in Section 5.13 Natural Areas Policies" and replace with:

"In addition to the above mentioned policies, these areas will also fall under the City of Edmonton's Natural Area Systems Policy (C531), the Natural Connections Strategic Plan, the City of Edmonton's Environmental Policy (C512), and the Alberta Wetland Policy. These have been addressed in the Ecological Network Analysis."

- rr. deleting the first paragraph in Section 6.0 "Guiding Principles" and replace with:

"This plan is intended to create a new kind of industrial development in Edmonton that incorporates economic opportunity with eco-industrial principles, as outlined in the "Vision". This brand of industrial development is intended to look, feel, and function differently than a conventional industrial park. In order to create an ASP that results in an industrial park that would achieve the "Vision", the following questions were considered:"

- ss. deleting the first three paragraphs in Section 7.1 "Land Uses Precincts" and replace with:

"In order to use the petrochemical industrial resources and to achieve the goal of an industrial plan focused on eco-industrial principles, three main land use precincts are needed: Petrochemical Cluster; Medium Industrial; and Research and Development.

The Petrochemical Cluster precinct provides the core of heavy industrial land uses. It will require a collaborative strategy and supportive industrial land uses to function as an eco-industrial development including shared logistics, product manufacturing, research and development and supportive commercial uses."

- tt. deleting all the paragraphs in Section 7.2 "Petrochemical Cluster Precinct" with:

“The heart of the plan area will incorporate the Petrochemical Cluster precinct (Figure 9: Petrochemical Precinct). This area will produce the chemical products that will be refined, researched, molded, and moved in other parts of Edmonton Energy and Technology Park, and will also provide a location for other heavy industrial uses.

The Petrochemical Cluster precinct land uses will be largely comprised of chemical facilities, but will also include any necessary storage or trans-shipment facilities specializing in chemical processing. As development related to chemicals can pose an elevated risk to the general public in the event of an accident, the Petrochemical Cluster land use uses have been located in the centre of the plan, isolating them from any existing or future residential developments. This central location also provides the ability to create larger lots to accommodate various sizes of chemical plants.

Examples of the types of facilities that may be developed within the Petrochemical Cluster precinct include:

- Chemical plants
- Local power generation facilities
- Local wastewater treatment facilities
- Recycling centres
- Ancillary warehousing
- Heavy industrial uses

Examples of the types of facilities that will not be considered within the Petrochemical Cluster Precinct include:

- Nuclear power facilities
- Waste stockpiles
- Landfills

Objectives

1. In this precinct, waste outputs, such as steam or hydrogen, are encouraged to be traded between industrial developments using a local private pipe system located within road right-of-way or on-lot easements.

Policy

1. Industrial businesses that would introduce risks to public health or safety are required to submit a risk assessment prior to the issuance of zoning approvals to ensure that they do not pose unacceptable risk to the surrounding area.”

uu. deleting section 7.3 “Logistics Precinct” and replace with:

“7.3 Medium Industrial Precinct

This precinct will provide for an array of industries and services which will include logistics, manufacturing, and commercial uses. These uses can either support those located within the Petrochemical Cluster precinct or provide a standalone service.

Logistics facilities provide the means by which chemical and other products manufactured within the EETP can be efficiently gathered and shipped to local and international markets. Logistics uses should be located adjacent to rail facilities and have convenient access to regional roadways.

Manufacturing facilities are well-suited to being located within the EETP as they can benefit from feedstocks supplied by the petrochemical industries to create finished goods such as plastics, synthetic fibres, rubber products, engineering resins, paints and coating, lubricants, and cleaning products. As with logistic facilities, they should be located for ease of access to rail and major roadways to facilitate the movement of goods.

Service Commercial Nodes will be allowed within the Medium Industrial precinct to provide convenient support services to the employees and businesses within EETP. To ensure that commercial uses do not proliferate throughout the EETP, and in order to limit potential human occupancy in proximity to heavy industrial uses in the nearby Petrochemical Cluster, uses will be restricted by size and location.

Examples of the types of facilities that may be developed within the Medium Industrial precinct include:

- Manufacturing or processing of a variety of products
- Plastics facilities
- Pharmaceutical production
- Pipe coating or production
- Intermodal yards
- Trucking yards
- Packaging facilities
- Tank farms
- Courier services
- Warehouses
- Palleting facilities
- City-owned integrated services facilities

Examples of the types of facilities that will not be considered within the Medium Industrial Precinct include:

- Petrochemical plants
- Landfills
- Self-storage facilities

Objectives

1. Use of rail and pipelines is encouraged to reduce roadway congestion, transportation costs, and greenhouse gas emissions.
2. Manufacturing developments are encouraged to cluster, or develop multiple uses within the same building, in order to use land more efficiently.

3. All properties adjacent to a rail line should, at the time of rezoning and subdivision, consider the extension of rail lines to maximize rail access for the entire plan area.
4. Manufacturing processes that generate significant noise or odour may not be developed within 100 m of an existing residential use or existing agricultural homestead.

Policy

1. Outdoor storage areas are permitted, but shall be screened from roadways using landscaping, fencing, public art, or other methods.
2. Intermodal facilities based on rail shall be located interior to the plan.

Examples of the types of Uses that may be developed within the Service Commercial Nodes include:

- Automotive and Equipment Repair Shops
- Convenience Retail Stores
- Gas Bars
- Restaurants

Examples of the types of Uses that will not be considered within the Service Commercial Nodes include:

- Bars and Neighbourhood Pubs
- General Retail Stores
- Warehouse Sales

Policy

1. Locations of proposed Service Commercial Nodes are to be identified at the time of rezoning.
2. Service Commercial Nodes shall be limited to 2 ha in size to maintain the industrial integrity of the precinct.
3. Service Commercial Nodes shall not abut the CN Rail Line (Dangerous Goods Route) and also leave connections for spur lines.
4. Service Commercial Nodes should be located as to minimize the impact of traffic flow on arterial roadways.
5. Service Commercial Nodes shall be accessed from a collector or local roadway.”

vv. deleting Section 7.4 “Manufacturing Precinct”.

ww. deleting all paragraphs in Section 7.5 “Research and Development Precinct” and replace with:

“The Research and Development precinct is anticipated to be the strongest employment generator in the plan area and takes advantage of the availability of arterial roadways and the potential for LRT connections. The Research and Development precinct uses are intended to include offices, laboratories, research and development centres, together with additional business opportunities that complement the development of the Petrochemical Cluster (Figure 11: Research and Development Precinct).

Examples of the types of Uses that may be developed within the Research and Development precinct include:

- Professional, Financial and Office Support Services
- Research and Development Facilities
- Laboratories
- Business Support Services
- Light Industrial Business

Examples of the types of Uses that will not be considered within the Research and Development precinct include:

- General Industrial Uses
- Government Services
- Warehouse Sales

Objectives

Business park developments are encouraged to cluster, or develop multiple uses within the same building, in order to use land more efficiently.

1. Site developments are encouraged to incorporate the theme of “technology, energy, and innovation” into their facades and signage, as appropriate.
2. Developments are encouraged to incorporate visible green technology into facades and signage, such as photovoltaic cells, recycled materials, and green roofs.
3. Arterial or freeway frontages are encouraged to provide additional landscaping to enhance the view corridor into the plan area.

Policy

1. Commercial development may occur within the Research and Development precinct, but they must only serve the plan area and may not be intended to serve a larger catchment area. These local uses may include small coffee shops or restaurants, copy centres, or other related uses.”

xx. deleting section 7.6 “Natural Area Integration” and replace with:

“The Edmonton Energy and Technology Park development provides an opportunity to conserve and enhance the area’s natural areas such as Horsehills Creek and its tributaries, other water courses, wetlands, potential wetlands, potential linkages, and other natural features. Together, these components will form the area’s ecological network as outlined in the *Horsehills Industrial Area - Ecological Network Analysis* (Delcan in association with Golder Associates, December 2008) and subsequent studies, including the *Phase II Ecological Network Report Edmonton Energy and Technology Park Chemical Precinct E-593* (Spencer Environmental Services, December 2014). This network is illustrated on Figure 12: Ecological Network.

The integration of natural areas will be essential to achieving the area’s eco-industrial vision. Natural areas will enhance industrial development by maintaining the ecological function of the land and by providing for amenity spaces for area workers as well as a green and healthy working environment.

The Ecological Network Analysis has been completed at a broad geographic level to identify the area's overall Ecological Network and to establish priorities for natural resource management and integration into the ASP. For mapping purposes, only those natural areas that are greater than 2 ha in size have been identified in Figure 12: Ecological Network. The mapping has identified 258.19 ha (5.79% of GDA) of natural areas within the plan area. Although the natural areas are considered to be non-developable, additional investigations will be required either as part of future planning studies or during the site-specific rezoning, subdivision or development approval stages to determine their future use. The following provisions will apply.

Policy

1. Additional studies and plans will be required prior to development, and the information requirements will vary depending on the stage of planning and development approval. Development applications will include sub-area planning, rezoning approvals, subdivision approvals, and development permitting approvals.
2. There will be an emphasis on requiring ecological information as key components of development applications in order for the applications to be received by the City and deemed "complete". This includes a Phase II Ecological Network Report at the rezoning stage. This will assist the City in making informed decisions in a timely manner. Development applicants will be required to pre-consult by way of a meeting with the City before preparing and submitting any development application in order to confirm the need for and scope of additional studies, and when they are required.
3. Wherever plans or studies are required, they will be completed on behalf of applicants by qualified professionals and will be reviewed and approved by the City at the appropriate stage in the planning and development process. The most current plans, policies, regulations, and information, at the time of development application, should be utilized.
4. Natural areas that fall under the definition of Environmental Reserve under the MGA (Sec. 664(1)) will be acquired as Environmental Reserve by the City.
5. The City may consider accepting wetland compensation in-lieu of acquisition, in accordance with the Alberta Water Act and/or *Alberta Wetland Policy*. The compensation may be directed towards the creation, restoration and/or management of other wetlands, water courses and/or water bodies.
6. The preliminary identification of Provincially owned water bodies has been conducted for the plan area. However, verification of crown ownership will be required at the rezoning, subdivision and/or development application stage.
7. Natural areas that do not qualify as Environmental Reserve may be considered for protection through Municipal Reserve dedication. The City will place priority on those natural areas which it determines can form valued components of a connected ecological network.
8. The City will require the preparation of a Natural Site Assessment, completed in accordance with the Natural Site Assessment Guidelines, to support development applications that propose development or site alteration within or adjacent to any designated natural area or associated buffer. Objectives will include, but not be limited

to: identifying existing protected ecological features; researching additional details of the valued ecological components; recommending measures to restore and enhance the feature; and recommending measures to mitigate impacts of site development on ecological features. The study will be reviewed and approved by the City at the earliest opportunity, be it the sub-area, zoning, subdivision, or development permit stage.

9. The City will use its guidelines for determining Environmental Reserve dedication for wetlands and other water bodies when applying buffers to those natural areas. Appropriate buffers will also be established surrounding other natural areas to ensure their protection. These will be determined at the zoning or subdivision stages, on a case by case basis and in consultation with the City.
10. Natural areas that are retained as public lands will have public access to provide the opportunity for them to be integrated with the open space network. River valley and ravine system will have public access consistent with the *City of Edmonton's Development Setbacks from River Valley/Ravine Crests Policy (C542A)*.
11. The City will require development proponents to prepare Natural Area Management Plans for natural areas and buffers to be retained within or adjacent to developments, in accordance with the *City of Edmonton's Natural Area Systems Policy (C531)*. The Plans will be reviewed and approved by the City at the sub-area planning stage and should follow and be informed by the reports identified in Policy 8 above.
12. The City will require that applicants complete a Tree Conservation and Landscape Plan as a component of development applications. The goal of these Plans will be to retain and plant as much natural vegetation as possible to augment the designated natural areas. Plan objectives will be: to assess the quality of forest patches, specimen trees, windrows, and other naturally vegetated areas and their value for retention; to recommend site design and mitigation measures that will conserve those areas to be retained, to recommend measures to transition and integrate new landscaped areas with adjacent natural features, and to recommend new tree or vegetation planting that will contribute to native vegetation cover in the area. The Plans will be reviewed and approved by the City at the development permit stage.
13. Any proposed activities within the designated North Saskatchewan River Valley Area are regulated by existing Bylaws and the associated Area Redevelopment Plan (Bylaw 7188). These regulations are supported by this Plan and will be reflected in the regulations of the City's Zoning Bylaw, including, but not limited to, the North Saskatchewan River Valley and Ravine System Protection Overlay, that are applied to the ASP area.
14. The City's Zoning Bylaw will be used as one of many tools to implement the area's ecological network objectives. The Bylaw will stipulate the natural areas where development is strictly controlled, and the regulations and site development criteria that apply. This zoning process will be completed by the City upon the approval of the Area Structure Plan.

In addition to these polices, the City will utilize all of its other various policy and regulatory means to achieve the goals as set out in the Municipal Development Plan in regards to planning for the natural environment.”

- yy. deleting all paragraphs in Section 7.7 “Open Spaces and Parks” and replace with:

“A number of parks have been identified in addition to natural areas. A district activity park has been identified in the centre of the plan area, with an area of approximately 45.56 ha (Figure 13: Open Spaces and Parks). It is connected to natural areas and additional park spaces, via the North Saskatchewan River Valley and Ravine System, and multi-corridor pathways (Figure 16: Pedestrian and Bicycle Network). This district park will be used for large programmed sporting events that would attract users from surrounding areas. In addition to this large park, additional smaller local park locations are identified in the plan area, including a relatively larger one to the south at the confluence of the Horsehills Creek and another tributary of approximately 19 ha.

Most existing industrial areas in the City of Edmonton do not incorporate smaller, local parks. Local parks will be incorporated into Edmonton Energy and Technology Park to provide recreation opportunities for area employees as well as the public at large, further differentiating this area from conventional industrial park development.

The Urban Parks Management Plan (UPMP) does not contemplate parks for industrial areas, and therefore does not designate a park type to be used in these cases. These park locations will most closely resemble the community or urban village park in intent, but are anticipated to be slightly smaller given the lack of necessity for community league facilities. They are therefore anticipated to be approximately 4 ha in size each and will provide open spaces that can be programmed to provide passive or active recreation. Precise placement of these community level parks will be identified at the time of zoning and subdivision, and as supported in shadow plans, but are identified generally in Figure 13: Open Spaces and Parks below.

The Municipal Government Act entitles the City of Edmonton to 10% of the total Gross Developable Area as Municipal Reserve upon subdivision. It is anticipated that 103.72 ha or 2.33 percent of the City’s Legal Entitlement (should all lands be subject to subdivision) will be taken as land, with the rest, approximately 342.22 ha or 7.67% percent, taken as cash-in-lieu.

The proposed 103.72 ha of municipal reserve land would provide parks with the following approximate areas:

- a central district park at 45.56 ha;
- a local park south of the district park at 19 ha;
- a triangular park at 195 Avenue and the CN Rail line at 3.66 ha;
- two pocket parks in the northeast portion of EETP, on either side of the ravine totalling approximately 5.73 ha;
- a park west of 33 street at 1.79 ha; and
- six local parks totalling 28 ha (4 ha each, except for a southwest park at 8 ha).

The seven natural areas identified in Figure 13: Open Spaces and Parks are proposed to be retained through appropriate environmental reserve dedication on subdivision. Exact boundaries will be confirmed through detailed ecological network studies as a condition of rezoning and subdivision applications. Other natural areas, as identified in Figure 14:

Arterial Road Network, may also be required to be dedicated as environmental reserve on subdivision.

- zz. deleting the third paragraph in Section 7.8 “Risk Management Strategy” and replace with:
- “A risk buffer, approximately 1.6 km in depth and consistent with MIACC principles, serves as a transition from the heavy industrial uses within the Petrochemical Cluster precinct to other land uses within and adjacent to the EETP that may be subject to greater rates of human occupancy. This will be implemented through EETP custom zoning.
- General locations for fire stations have also been identified in Edmonton Energy and Technology Park in consultation with the Emergency Response Branch. These facilities have been located to provide efficient emergency services to this area, which also works to reduce the risk and severity of any accidents that may occur in the plan area.
- The Riverbend Receiver Site is a Department of National Defence facility located at SW 22-54-23-W4M. It is vital to the Canadian Forces High Frequency communications which in turn is crucial to strategic imperatives such as operations in the north, and national search and rescue. Due to the potential for electromagnetic interference, any rezoning within 1.6 km of the antennas located at this site are subject to consultation with the Department of National Defence.”
- aaa. deleting the fifth policy in Section 7.8 “Risk Management Strategy” and replace with:
- “Buffer areas will be designated in order to transition from uses within the Petrochemical Cluster precinct to adjacent areas through zoning that restrict uses within the buffer to those that pose a risk of death of no greater than 1:1,000,000 in accordance with MIACC principles.”
- bbb. inserting the following after the fifth policy in Section 7.8 “Risk Management Strategy” with:
- “6. The rezoning of lands within a 1.6 km radius of the antennas located at SW 22-54-23-W4M are subject to consultation with the Department of National Defence.”
- ccc. deleting Section 7.9 “Existing Residential”.
- ddd. deleting the third sentence of the first paragraph in Section 8.0 “Transportation” and replace with:
- “Therefore, some consideration of the road network through the lands south of Manning Drive, including the concept provided in the Horse Hill Area Structure Plan, is included in this discussion to provide some context for regional traffic movement.”
- eee. deleting all paragraphs in Section 8.1 “Regional Road Network” and replace with:
- “The south boundary of the plan area is Anthony Henday Drive, the northeast section of which was completed in 2016. It is a full access controlled freeway ring road encompassing the City of Edmonton. This ring road allows for the movement of goods and services through the region at higher speeds and less delay. The portion of Anthony Henday Drive west of Manning Drive was completed in 2011 and has access via interchanges at 66 Street and Manning Drive. A future half interchange is planned at 50 Street, with access to and from the west.

To the east of the plan area, Manning Drive is an expressway facility on a southwest – northeast alignment, ultimately becoming Highway 15 and turning eastward to Fort Saskatchewan. It connects to Anthony Henday Drive to the south.

To the north of the plan area is Highway 37 which connects this northeast part of the Capital Region near Fort Saskatchewan to the northwest parts closer to St. Albert. Today, it is a high speed two-lane rural highway with at-grade intersections with other highways, and graveled or paved municipal rural roads.

The road alignments shown in this ASP, including approximate intersection locations, represents the best available information at the time of writing. It was developed through discussions with Alberta Transportation, and studies related to the regional road network. These studies included the Sturgeon County Highway 37 Planning Study – Highway 28 to Highway 15 Final Report (ISL Engineering and Land Services, March 2015), and the Freeway Concept Plan Highway 15 & 28A within the City of Edmonton R-1198 (Alberta Transportation, January 2016). The latter report was developed between 2012 and 2015 partly in response to anticipated growth on either side of Manning Drive.

The Capital Region Board's Integrated Regional Transportation Master Plan recommends a new route across the North Saskatchewan River and to address Alberta Transportation's previous Capital Region Ring Road initiative.

These plans provide for systems interchanges at Highway 28A and Manning Drive, and Highway 28A and Highway 37. Access to the EETP is provided via service interchanges on Manning Drive west of Meridian Street, and in the vicinity of 243 Avenue. Flyovers are also planned west of 18 Street and at Meridian Street. This is represented in Figure 14.

Future discussions and on-going studies, including the Northeast River Crossing (NERC, below) may lead to modifications of the Highway 28A alignment and the system interchanges.

The Capital Region Board's Integrated Transportation Management Plan (IRMP) (September 2011) identifies a new river crossing in the northeast sector of the Capital Region as one of the 10-year investment priorities. The City of Edmonton commenced a functional planning study (FPS) for the planned Northeast River Crossing in partnership with Alberta Transportation, Strathcona County, City of Fort Saskatchewan and Sturgeon County in 2016.

The freeway will facilitate improved regional travel by creating a direct connection between Strathcona County, the City of Edmonton and Sturgeon County; thereby also providing a bypass of the City of Fort Saskatchewan.

The NERC FPS includes linkages between Highway 21 in Strathcona County and Highway 15 (Manning Drive). The FPS limits are from Highway 21, approximately 1.4 km north of Highway 16 (Yellowhead) to Highway 28A, about 1 km north of Manning Drive. The FPS is expected to identify right-of-way requirements for both the bridge and the linkages, and will be completed by the end of 2018.

It is expected that construction of the NERC route will not occur for at least 25 to 35 years, however this could change depending on development pressures in EETP and the Capital Region.

Alberta Transportation is currently engaged in a High Load/Over-dimensional study for a strategy for highway routes throughout Alberta to accommodate oversized loads. The

study is expected to be complete some time in 2017. The Highway 28A/Northeast River Crossing route was envisioned to be a “Heavy Haul” or “Over-dimensional” highway route in the Capital Region Board’s Integrated Regional Transportation Master Plan (IRTMP). While the terms of reference for the NERC do not include such a requirement, the option for the route to be constructed to accommodate over-dimensional loads remains. A final decision on the NERC route has implications for flows of heavy equipment and over-sized loads into and out of the EETP.

Given that there are expected to be large industrial facilities within EETP, a High Load corridor that provides an efficient connection to suppliers of materials to EETP (e.g. modules used in the construction of manufacturing and petroleum plants), and buyers of products produced within EETP, is desirable.

Existing and potential high load corridors, that may connect EETP to potential suppliers within the Capital Region (PCL and Ledcor, Nisku Industrial Park, CESSCO in the City’s southeast, and PCL in Aurum Industrial Park in Strathcona County, have been identified in the ISL Engineering and Land Services Edmonton Energy and Technology Park Over-dimensional Routes Assessment (December 2015).

The EETP will benefit greatly with a direct link to a northeast North Saskatchewan River Crossing as this will facilitate the movement of goods and labour into and out of the area. Maximum flexibility will be gained if the route also meets the requirements as an over-dimensional highway route.”

fff. deleting all paragraphs in Section 8.2 “Arterial Road Network: and replace with:

“The Arterial Road Network has been revised since the initial concept that was approved in the ASP in 2010. The network is now less curvilinear, and based on a more conventional grid pattern, following section boundaries, as well as existing road right-of-ways as much as possible (Figure 14: Arterial Road Network). This will minimize unnecessary fragmentation of parcels and reduce the overall costs for the road network. The revised road network is based on the Edmonton Energy and Technology Park Arterial Road Network Analysis (ISL Engineering and Land Services, December 2015) and Edmonton Energy and Technology Park Traffic Impact Assessment (ISL Engineering and Land Services, August 2016).

The lands in the plan area are well serviced with arterial roads. There are generally three north south arterials spaced at 1.5 to 2 km apart. 66 Street (which becomes 50 Street in EETP) and 50 Street (which becomes 34 Street in EETP) connect Anthony Henday Drive to Highway 37. 18 Street is the third arterial road. It passes Anthony Henday Drive and winds through the lands south of Manning Drive, crosses Manning Drive and connects to Highway 37.

There are also three east west arterials spaced 2 to 3 km apart. 195 Avenue parallels Anthony Henday Drive to the west portion of the plan area and it is proposed to extend into the plan area intersecting 50 Street and 34 Street and then across Manning Drive to connect to 8 Street within the Horse Hill Area Structure Plan. The central east west arterial extends from 50 Street to connect to the central service interchange on Manning Drive and then eastward into the lands south of Manning Drive. The northern arterial parallels Highway 37 from west of the plan area, connects to 50 Street, 34 Street and 18 Street, crosses the proposed Highway 28A freeway to connect to the north service interchange and then into the lands south of Manning Drive.

High Load standard arterials, connecting the interior of EETP to Highway 37 to the north, and then routing to Highway 28A (potential High Load corridor route) north and south, are required. In addition, over-dimensional load connections to Manning Drive/Highway 15, with potential connection to a future extension of Highway 28A through a new northeast river crossing (see NERC study under Section 8.1, above) and then to Highway 21 are required.

Lands within the ASP will be subject to Arterial Roadway Assessments (ARA) pursuant to the Arterial Roads for Development Bylaw 14380, or to the policies and Bylaws regarding arterial roadways in place at the time of development to cost share the construction of arterial roadway facilities necessary to serve the area. In general terms, the ARA outlines the developer's contribution for arterial roadways construction within the catchment area and is based on the estimated and actual costs for the construction of the arterial roads required for access to a catchment area.

Policy

1. Additional access points to and from Anthony Henday Drive or Manning Drive will not be permitted.
2. Direct access within EETP to the future improved Highway 28A alignment connecting Highway 37 with Manning Drive, and ultimately, to the future northeast North Saskatchewan River Crossing, will not be permitted, in accordance with Alberta Transportation required separation of system interchanges.
3. Interim accesses for staging purposes must be provided in the location of ultimate interchanges or intersections.
4. At least one over-dimensional/high load arterial corridor will be provided to connect to each of Highway 37 and to Manning Drive/Highway 15. The exact determination of appropriate routes will be determined prior to construction improvements of the Arterial Road Network.”

ggg. deleting Section 8.3 “Collector Road Network”: and replace with:

“A conceptual collector road network is shown in Figure 15. The Collector Road Network is provided as a guideline only. The Collector Road Network concept is to be flexible and may be modified in subdivision applications through supportive shadow plans. Changes may be merited dependent on the type, location and site requirements of uses proposed within the EETP.

The Collector Road Network concept was developed using the following guiding principles:

- Minimize creek crossings and other environmental impacts.
- Connect to arterial roadways a minimum 300 m from arterial-arterial intersections and then spaced at a minimum of 200 m along the arterial roadway.
- Provide a reasonable amount of transit coverage through the area to be served from the collector roads, ensuring a maximum 400 m walking distance where possible.
- Provide connectivity to potential future LRT alignments.

- Locate roadways adjacent to or on quarter section lines where possible, but with the flexibility to relocate as the lands develop to ensure the roadway maximizes, as far as possible, access to development facilities.
- Routed to allow for signed bicycle route connectivity.
- The network is conceptual, and subject to change based on shadow plans submitted at the time of subdivision and rezoning applications.

Policy

1. The Collector Road Network will be determined based on shadow plans at the time of rezoning and subdivision applications, and may vary from Figure 15: Collector Road Network Concept, depending on traffic impact assessments.
 2. The final Collector Road Network and changes thereto shall be done in accordance with the principles as contained in the City of Edmonton’s Complete Streets Policy (C573A).”
- hhh. deleting the second sentence in the last paragraph in Section 8.4 “Eco-industrial Alternative Road Cross-sections” and replace with:
- “Modified urban cross-section roadways may be permitted within the plan area, subject to the review and approval of the City of Edmonton City Planning Branch and subject to the City of Edmonton’s Complete Street Policy (C573A).”
- iii. deleting Section 8.5 “Pedestrian/ Bicycle Network” and replace with:

“A Pedestrian and Bicycle Network concept provides a potential network of comprehensively developed multi-use trails, sidewalks, and on-street signed bike routes (Figure 16: Pedestrian and Bicycle Network). As with the Collector Road Network (Figure 15), this is a concept, subject to change with the final collector and arterial road alignment.

The multi-use trails form part of the standard arterial roadway cross-section. The trails will connect from known connection points south of Anthony Henday Drive on 50 Street and on 18 Street and along the future LRT alignment to feed into the area. The primary goal is to continue these trails into the plan area along these north/south arterial roads to connect to destinations within the plan area and potentially into Sturgeon County.

Typical destinations and routings include:

- Regional park facilities
- Local parks
- LRT and transit facilities
- Linear park systems such as along top of bank of the creeks in the area
- Connections through the lands south of Manning Drive to connect to the river valley park system

The standard arterial roadway cross-section includes a multi-use trail on one side which allows for many choices for users. Multi-use corridors are required on the top of bank of ravines of the North Saskatchewan River Valley and Ravine System, as prescribed in the City of Edmonton’s Development Setbacks from River Valley/Ravine Crests Policy (C542A). These are shown as Multi-use Corridor” in Figure 16. These multi-use corridors

have been provided as alternatives for users wishing to stay away from the roadways. A circle route linking regional parks within the plan area to the river valley may also be provided with any future development within the Horse Hill Area Structure Plan south of Manning Drive. A commuting bicycle facility may be included adjacent to LRT alignment for future development and use. A concept for on-street signed bike routes is also shown to provide local connections to the multi-use trail system.

Another key component is to ensure that people have well-maintained pathways or sidewalks to walk on throughout the year on all roadways. A key factor to promoting walking or other non-motorized travel is the establishment of convenient and safe routes to multi-use trails. Without those routes, people are less likely to use the multi-use trails or transit to reach their destination. Therefore, all collector roads should have a sidewalk on one side at minimum with bus stop connector walks as required.”

jjj. deleting all paragraphs in Section 8.6 “LRT and Transit Network” and replace with:

“The City of Edmonton has identified a northeast corridor extension of the existing LRT network, with a planned station in Gorman, located at 153 Avenue and Victoria Trail. Corridor planning northeast of the Gorman station is being prepared separately from the Edmonton Energy and Technology Park ASP and will be considered at a later date. The LRT alignment shown in Figure 17: LRT and Rail Network is a potential alignment only, and will be updated to reflect the completed planning for the Northeast LRT when a final route is determined.

The potential LRT alignment for the plan area is assumed to originate from the Horse Hill Area Structure Plan south of Manning Drive via a crossing somewhere between 18 Street and Meridian Street. It runs northward across Manning Drive and then it turns northeastward to parallel Manning Drive to the northeast City limit. Stations could be strategically located within the Research and Development Precinct, given that it will be the area of highest employment density. Stations within this area will be considered as an “Employment” standard LRT Station as defined in the City of Edmonton TOD Guidelines (see Section 5.9 Transit Oriented Development [TOD] Guidelines).

Stations could be located at nodes selected to serve both walk-in riders and employees transferring from buses circulating on the larger collector and arterial road network. A large number of people are expected to work in the plan area at full development. Providing transit service to these employees will help manage the vehicle demands of the area. As with the LRT line location, potential station locations will be determined as part of future northeast LRT corridor studies.

The need or desirability to have LRT routed through the plan area as shown is highly dependent upon the rate of development within both the EETP plan area and the Horse Hill Area Structure Plan area south of Manning Drive, where two LRT stations are proposed in the vicinity of the Alberta Hospital along 18 Street and the Town Centre southwest of the planned crossing of Meridian Street with Manning Drive

Whether the LRT alignment is north, south, or on both sides of Manning Drive ultimately depends on the rate of development within the EETP ASP as compared to the Horse Hill ASP, and in turn which area will provide the highest level of ridership or add efficiencies to the system.

Figure 17: LRT and Rail Network shows the potential LRT routes. As with the Collector Road Network (Figure 15), the LRT routes shown are conceptual. Shadow or concept

plans in support of subdivision applications will include bus routes required to service the various sub-areas of EETP.

The bus network to serve the area ultimately depends on where transit ridership is concentrated in the plan area. Ridership will depend, in turn, on the final road network, development staging, and job density of the EETP.

The bus network will utilize the collector and arterial roads to provide service within the plan area and then travel to the LRT station. Therefore, where the LRT station is located has little impact on the transit coverage for the plan area, but it has a greater impact on the frequency of service.

One of the principles considered when establishing the conceptual collector road network, and hence, the transit network was the walking distance to the collector road network from the more remote lands. People will typically walk 400 m to a transit stop. Therefore, if the majority of the lands are within, or close to this comfortable walking distance to a collector roadway, then the area is assumed to have good transit coverage. The network shown was established with a goal of greater than 85% coverage and this should be the general goal when subdivision and development proposals are made that may result in modifications.

kkk. deleting section 8.8 “Pipeline Systems” and replace with:

“8.8 Pipeline Systems & Abandoned Wells

The Capital Region Regional Energy Corridors Master Plan (February 11, 2016) provides priorities for future pipeline corridors connecting with the EETP. Two future priority corridors are identified, both as medium priority projects, to be developed within five to 20 years:

1. The Edmonton Energy and Technology Park Connector will connect Alberta’s Industrial Heartland to the EETP, as well as the TUC. It would connect EETP via the northwestern portion of the EETP, and would generally run north-south along the western edge of EETP; and
2. The Northwest Alberta Connector would also connect to the northwest portion of EETP, however, would run diagonally in a southeasterly direction, through EETP, along a corridor already defined by existing high pressure pipelines identified in Figure 5: Existing Pipelines and Wells. This connector would connect northwest Alberta and northeast British Columbia to EETP and the rest of Alberta’s Industrial Heartland.

A City of Edmonton EETP – Corridor from TUC to the City’s Northern Boundary with Sturgeon County (259 Avenue NW/Hwy.#37 study, August 6, 2015) identified a potential north-south corridor between the west boundary of EETP and 50 Street. Such a corridor could be applied to the Edmonton Energy and Technology Park Connector. This is based on other work completed in the Edmonton Energy & Technology Park (EETP) Linear Corridor Feasibility Analysis & Assessment completed by Stantec Consulting (December 2015).

A pipeline corridor linking EETP to the rest of the Industrial Heartland, northern Alberta and British Columbia is an easy and efficient way for feedstocks to make their way to Edmonton Energy and Technology Park. A pipeline corridor would provide an alternative means of moving product into the plan area. The specific alignment of any future pipelines

will require coordination with the Province, Alberta's Industrial Heartland Association, affected municipalities, and the companies that will be using them in future.

The plan area has four abandoned well sites located within it; these are identified in Figure 5: Existing Pipelines and Wells. The Alberta Energy Regulator (AER) has established minimum setback requirements from abandoned wells in Directive 079 (Surface Development in Proximity to Abandoned Wells). Development within the plan area is required to abide by these requirements in conjunction with the City of Edmonton's Oil and Gas Facilities Policy (C515).

Due to the large parcel sizes required by the industries that the EETP is looking to attract, it is possible that subdivision of certain parcels within the plan area may not be required. The subdivision process is an important aspect in determining the provision of easements, right-of-ways and Public Utility Lots, which are means by which a pipeline could be protected. As such, it is important that developers engage with pipeline operators and owners throughout the various stages of development (rezoning, subdivision [if required] and development) to determine appropriate development setbacks from existing pipelines.

Policy

1. Further studies and review of existing studies are required to establish future pipeline right-of-ways to connect the EETP to the rest of Alberta's Industrial Heartland, as well as other key locations, including the Capital Region, northern Alberta and Northern British Columbia.
 2. Future development within the EETP ASP plan area may be required to dedicate right-of-way required for future key pipeline routes through mechanisms such as easements or right-of-way.
 3. Future development within the EETP ASP plan area shall abide by the City of Edmonton's Oil and Gas Facilities Policy (C515)."
- III. Deleting all paragraphs in Section 9.1 "Water Servicing" and replace with:

"The Edmonton Energy and Technology Park area is partially serviced with water. A 900 mm diameter EPCOR supply line bounds part of the industrial area, running north of Manning Drive after crossing Manning Drive at 18 Street NW (Figure 18: Water Servicing). This supply line is fed from a 600 mm diameter EPCOR primary pressure zone transmission main which extends north from Clareview Reservoir.

Other water infrastructure in the vicinity includes an EPCOR-owned 300 mm distribution main which connects to the supply line at 167 Avenue. This feeds Evergreen Manufactured Home Community, local acreages and greenhouses. There is also a 200 mm distribution main from the primary pressure zone servicing Alberta Hospital and local acreages near 18 Street, north of 167 Avenue. This infrastructure is located to the south of Manning Drive and is not included as part of the overall water servicing infrastructure for the Edmonton Energy and Technology Park. However, depending on development progress there may be opportunity to utilize this infrastructure on an interim basis.

The EPCOR supply line north of Manning Drive has the potential to allow for cost effective servicing of the Edmonton Energy and Technology Park. The existing EPCOR 600mm main will need to be twinned to deliver sufficient flows to the area.

It is expected that a future EPCOR water line connection will be extended to 50 Street south of 195 Avenue, within the Southwest portion of EETP, as a result of subdivision

approved in this area in 2014. This will include a 450 mm water main stub to serve a 400 mm distribution line.

EPCOR's Clareview reservoir would be the main supply point for the area. Clareview reservoir is located within the primary pressure zone, and is filled from Rossdale Water Treatment Plant via EPCOR's transmission network. EPCOR has indicated that the Clareview reservoir may become dedicated to supplying Northeast Edmonton, north of the TUC, when development proceeds. EPCOR has also indicated that a series of local upgrades between the Rossdale Water Treatment Plant and the Clareview Reservoir would be completed to provide the required conveyance capacity to the reservoir.

At least one local reservoir will be required in the Edmonton Energy and Technology Park. A proposed location for this is indicated on Figure 18: Water Servicing southwest of Meridian Street and 22 Avenue NW. Additional reservoirs, depending on future water demands, may also be required and possible locations for these are also shown in the southwest and northeast areas of the Plan. The reservoir sites are located at higher elevations within sub-areas of the EETP and would be supplied from the local water distribution system as shown. It should be noted that the suggested local water servicing infrastructure is subject to change, depending on development progress and the required water demands.

Initial development may be fed directly from Clareview reservoir via the existing EPCOR supply line north of Manning Drive.”

mmm. deleting paragraph seven in Section 9.2 “ Stormwater Servicing” and replace with:

“The use of a number of on-site best management practices is anticipated. This includes the use of on-site storage facilities such as underground cisterns and storage ponds for irrigation and process water purposes. Limited Impact Development practices that are encouraged include facilities that promote groundwater recharge such as permeable pavements, bio-retention areas and grassed swales to maintain the pre-development hydrology and to enhance the quality of stormwater discharges.”

nnn. inserting a paragraph after the last paragraph in Section 9.2 “ Stormwater Servicing” with:

“Given the limitations of conventional stormwater systems due to the requirements of the Edmonton Garrison Heliport Zoning Regulations and the existing condition of ravines susceptible to erosion, alternative drainage systems are being explored so that flexibility in the phasing of development over time can be maximized.”

ooo. deleting the second paragraph in Section 9.4 “Energy” and replacing with:

“As part of the Heartland Transmission Project, a new 66 km high voltage (240 kV/500kV) transmission line has been constructed by Altalink and EPCOR, to connect Alberta's Industrial Heartland to the City of Edmonton. The transmission line within EETP, which runs east of the CN Rail Line, and then veers east toward Fort Saskatchewan, was completed at the end of 2013. The location of the new Heartland line provides increased opportunities for heavy industrial uses within Alberta's Industrial Heartland and EETP.”

ppp. inserting the following after the last numbered paragraph in Section 10.1.2 “Site Design” with:

“4. Incorporate Limited Impact Development (LID) principles in order to minimize impact on the environment and in order to increase efficiencies with regard to stormwater management, circulation, and water use, and other infrastructure.”

- qqq. deleting the fifth numbered paragraph in Section 10.6.2 “Site Design” and replace with:
- “5. Reduce the amount of light pollution onto natural areas and reduce the amount of energy consumed by using high efficiency L.E.D. lighting and sharp cut-off luminaries.
 6. Incorporate Limited Impact Development (LID) principles in order to limit environmental impact and increase efficiencies of infrastructure.”
- rrr. deleting all paragraphs in section 11.1 “General Staging” and replace with:
- “Development staging is not intended to be regulation, but instead provides a guideline for development sequence, given the location of existing services, market conditions, demographics, and other factors relevant to growth patterns (Figure 22).
- Development is expected to commence in the southern portion of the plan area and extend towards the northeast corner, following Manning Drive. Development will then trend towards the northwest corner from Manning Drive as services are extended from their existing locations.
- Given that chemical feedstock availability is critical to the development of the Petrochemical Cluster, it is important that a supply of these feedstocks is available for the plan area. It is anticipated that the development of the Petrochemical Cluster area may lag in the initial stages of development. Therefore, the initial stages will likely have stronger development growth within the Medium Industrial precinct and Research and Development precinct. It is expected that the Medium Industrial and Research precinct and Development precinct will develop more or less contiguously, as infrastructure is extended from the south and along Manning Drive.
- Once initial development within the Petrochemical Cluster precinct commences, it is expected that this will create greater impetus for complementary industrial and associated businesses within the outer Medium Industrial and Research and Development precincts.”
- sss. deleting the third paragraph of Section 11.2 “Technical Report Requirements” and replace with:
- “Therefore, this area will require a new type of process for the review of zoning applications. Zoning applications in Edmonton Energy and Technology Park will require a coordinating technical report to be in place to address this detail shortfall, which will take the form of a technical report. The Technical Report will be provided by applicants for land use changes in the area. The general geographic extent of the Technical Report is identified in Figure 23. It should be noted that the exact location and extent of the plan sub-area boundaries shown within Figure 23 may change, dependent on technical requirements. The requirements may change depending on existing Technical Reports and associated studies completed for nearby sub-areas.”
- ttt. inserting a bullet in the fifth paragraph in Section 11.2 “Technical Report Requirements” with:
- “• Phase II Ecological Network Report”
- uuu. deleting the fifth and sixth paragraphs in Section 11.3 “Planning Documents / Engineering Studies” and replace with:

“Ecological Information Requirements

A range of studies will be required to assist the City in protecting and restoring Edmonton Energy and Technology Park’s many and varied natural areas. These studies include Natural Site Assessments, Phase II Ecological Network Reports, Wetlands Evaluations, Natural Area Management Plans, and Tree Conservation and Landscape Plans. The highest value natural areas will be acquired through a combination of Environmental and Municipal Reserve. Natural areas of lesser priority will be retained through the site decision process and integrated into developments. The studies and their timing requirements are identified in Section 7.6.

Risk Assessment

A Risk Assessment will be required for any proposed industrial development that either stores, creates, or uses hazardous materials as a part of their operations. This study will be required prior to the issuance of zoning approvals and before development permitting may commence. Furthermore, the Zoning Bylaw will include regulations around designated buffer areas restricting uses within these buffer areas to those that pose a risk of death no greater than 1:1,000,000 as determined by an approved Risk Assessment.”

vvv. deleting all text in Section 12.0 “References” and replace with:

“AcuTech Consulting (2002). Process Safety Management in Canada – The Dissolution of MIACC. Retrieved from: http://www.acusafe.com/Newsletter/Stories/1299News-PSM_Canada.htm

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- City of Edmonton (2006). Environmental Policy (C512) (May)
- City of Edmonton (2007). Natural Area Systems Policy (C531) (July)
- City of Edmonton (2007). Natural Connections Strategic Plan
- City of Edmonton (2008). Oil and Gas Facilities Policy (C515) (January)
- City of Edmonton (2006). Public Involvement Policy (C513) (January)
- City of Edmonton (2012). Transit Oriented Development Policy (C565) (February)
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- City of Edmonton (2009). The Way We Move: Transportation Master Plan (September)
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- Delcan in Association with Golder Associates (2008). Horsehills Industrial Area - Ecological Network Analysis (December)
- Doug McCutcheon & Associates (2007). Heavy Industrial Land Use Risk Approval Review
- FdP Associates (2008). Presentation: Downstream Industrial Cluster Opportunities for the North East Quadrant Phase 1: Demand Analysis
- Golder Associates (2014). Technical Brief: Industrial Site Location Analysis in the Edmonton Energy and Technology Park (May 16)
- ISL Engineering and Land Services (2008). Capital Region Integrated Growth Management Plan: Final Report on Core Infrastructure
- ISL Engineering and Land Services (2009). City of Edmonton Drainage Services Final Report Horsehills Area Master Plan (July)
- ISL Engineering and Land Services (2015). Edmonton Energy and Technology Park Arterial Road Network Analysis (December)
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- ISL Engineering and Land Services (2015). Edmonton Energy and Technology Park Over-dimensional Routes Assessment (December)
- ISL Engineering and Land Services (2016). Edmonton Energy and Technology Park Traffic Impact Assessment (August)
- ISL Engineering and Land Services (2015). Sturgeon County Highway 37 Planning Study – Highway 28 to Highway 15 Final Report (March)
- ISL Engineering and Land Services (2009). City of Edmonton Drainage Services Final Report Horsehills Area Master Plan (July)

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Strathcona County (2007) Municipal Development Plan. (Bylaw 1-2007)

Watson & Associates Economists Ltd (2016). City of Edmonton Investment Competitiveness Study (February 9)

- www. deleting the map entitled "Bylaw 16767 – Edmonton Energy and Technology Park Area Structure Plan" and substituting therefore the map entitled "Bylaw 18096 Amendment to Edmonton Energy and Technology Park Area Structure Plan" attached hereto as Schedule "A" and forming part of this Bylaw'
- xxx. deleting the map entitled "Figure 1: The Capital Region" and replace with the map entitled "Figure 1: The Capital Region" annexed hereto as Schedule "B" and forming part of this Bylaw;
- yyy. deleting the map entitled "Figure 2: Edmonton Context" and replace with the map entitled "Figure 2: Edmonton Context" annexed hereto as Schedule "C" and forming part of this Bylaw;
- zzz. deleting the map entitled "Figure 3: Horsehills Area Topography" and replace with the map entitled "Figure 3: Topography" annexed hereto as Schedule "D" and forming part of this Bylaw;
- aaaa. deleting the map entitled "Figure 4: Existing Zoning" and replace with the map entitled "Figure 4: Existing Zoning" annexed hereto as Schedule "E" and forming part of this Bylaw;
- bbbb. deleting the map entitled "Figure 5: Existing Pipelines and Well Locations " and replace with the map entitled "Figure 5: Existing Pipelines and Wells" annexed hereto as Schedule "F" and forming part of this Bylaw;
- cccc. deleting the map entitled "Figure 6: Existing Roadways" and replace with the map entitled "Figure 6: Existing Roadways" annexed hereto as Schedule "G" and forming part of this

Bylaw;

- dddd. deleting the map entitled “Figure 7: Land Development Concept Municipal Development Plan Bylaw 15100” and replace with the map entitled “Figure 7: Land Development Concept Municipal Development Plan Bylaw 15100” annexed hereto as Schedule “H” and forming part of this Bylaw;
- eeee. deleting the map entitled “Figure 8: Development Concept” and replace with the map entitled “Figure 8: Development Concept” annexed hereto as Schedule “I” and forming part of this Bylaw;
- ffff. deleting the map entitled “Figure 9: Petrochemical Cluster Precinct” and replace with the map entitled “Figure 9: Petrochemical Precinct” annexed hereto as Schedule “J” and forming part of this Bylaw;
- gggg. deleting the map entitled “Figure 10: Logistics Precinct” and replace with the map entitled “Figure 10: Medium Industrial Precinct” annexed hereto as Schedule “K” and forming part of this Bylaw;
- hhhh. deleting the map entitled “Figure 11: Manufacturing Precinct” and replace with the map entitled “Figure 11: Research and Development Precinct” annexed hereto as Schedule “L” and forming part of this Bylaw;
- iiii. deleting the map entitled “Figure 12: Research & Development Precinct ” and replace with the map entitled “Figure 12: Ecological Network” annexed hereto as Schedule “M” and forming part of this Bylaw;
- jjjj. deleting the map entitled “Figure 13: Ecological Network” and replace with the map entitled “Figure 13: Open Spaces and Parks” annexed hereto as Schedule “N” and forming part of this Bylaw;
- kkkk. deleting the map entitled “Figure 14: Open Spaces and Parks” and replace with the map entitled “Figure 14: Arterial Road Network” annexed hereto as Schedule “O” and forming part of this Bylaw;
- llll. deleting the map entitled “Figure 15: Road Network” and replace with the map entitled “Figure 15: Collector Road Network Concept” annexed hereto as Schedule “P” and forming part of this Bylaw;
- mmmm. deleting the map entitled “Figure 16: Pedestrian and Bicycle Network” and replace with the map entitled “Figure 16: Pedestrian and Bicycle Network” annexed hereto as Schedule “Q” and forming part of this Bylaw;
- nnnn. deleting the map entitled “Figure 17: LRT and Rail Network ” and replace with the map entitled “Figure 17: Bus, LRT and Rail Network” annexed hereto as Schedule “R” and forming part of this Bylaw;
- oooo. deleting the map entitled “Figure 18: Water Servicing Network” and replace with the map entitled “Figure 18: Water Servicing” annexed hereto as Schedule “S” and forming part of this Bylaw;
- pppp. deleting the map entitled “Figure 19: Stormwater Management Network ” and replace with the map entitled “Figure 19: Stormwater Management Network” annexed hereto as Schedule “T” and forming part of this Bylaw;

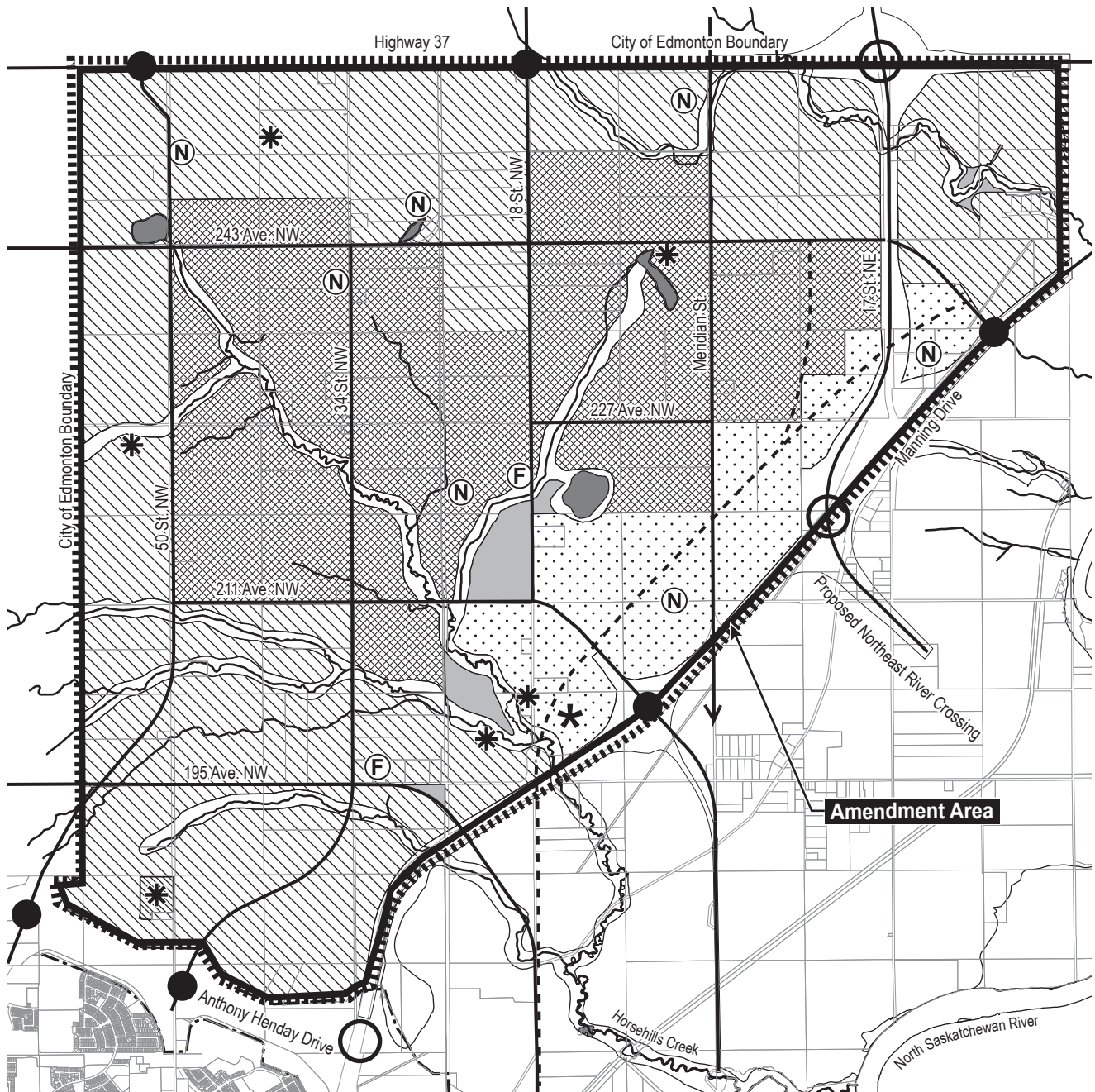
- qqq. deleting the map entitled “Figure 20: Wastewater Servicing Network” and replace with the map entitled “Figure 20: Wastewater Servicing” annexed hereto as Schedule “U” and forming part of this Bylaw;
- rrr. deleting the map entitled “Figure 21: Potential Power Substations” and replace with the map entitled “Figure 21: Utilities and Potential Power Substations” annexed hereto as Schedule “V” and forming part of this Bylaw;
- sss. deleting the map entitled “Figure 22: Development Staging” and replace with the map entitled “Figure 22: Development Staging” annexed hereto as Schedule “W” and forming part of this Bylaw;
- ttt. deleting the map entitled “Figure 23: Technical Report Sub-Areas” and replace with the map entitled “Figure 23: Technical Report Sub Areas” annexed hereto as Schedule “X” and forming part of this Bylaw;

READ a first time this day of , A. D. 2017;
 READ a second time this day of , A. D. 2017;
 READ a third time this day of , A. D. 2017;
 SIGNED and PASSED this day of , A. D. 2017.

THE CITY OF EDMONTON


















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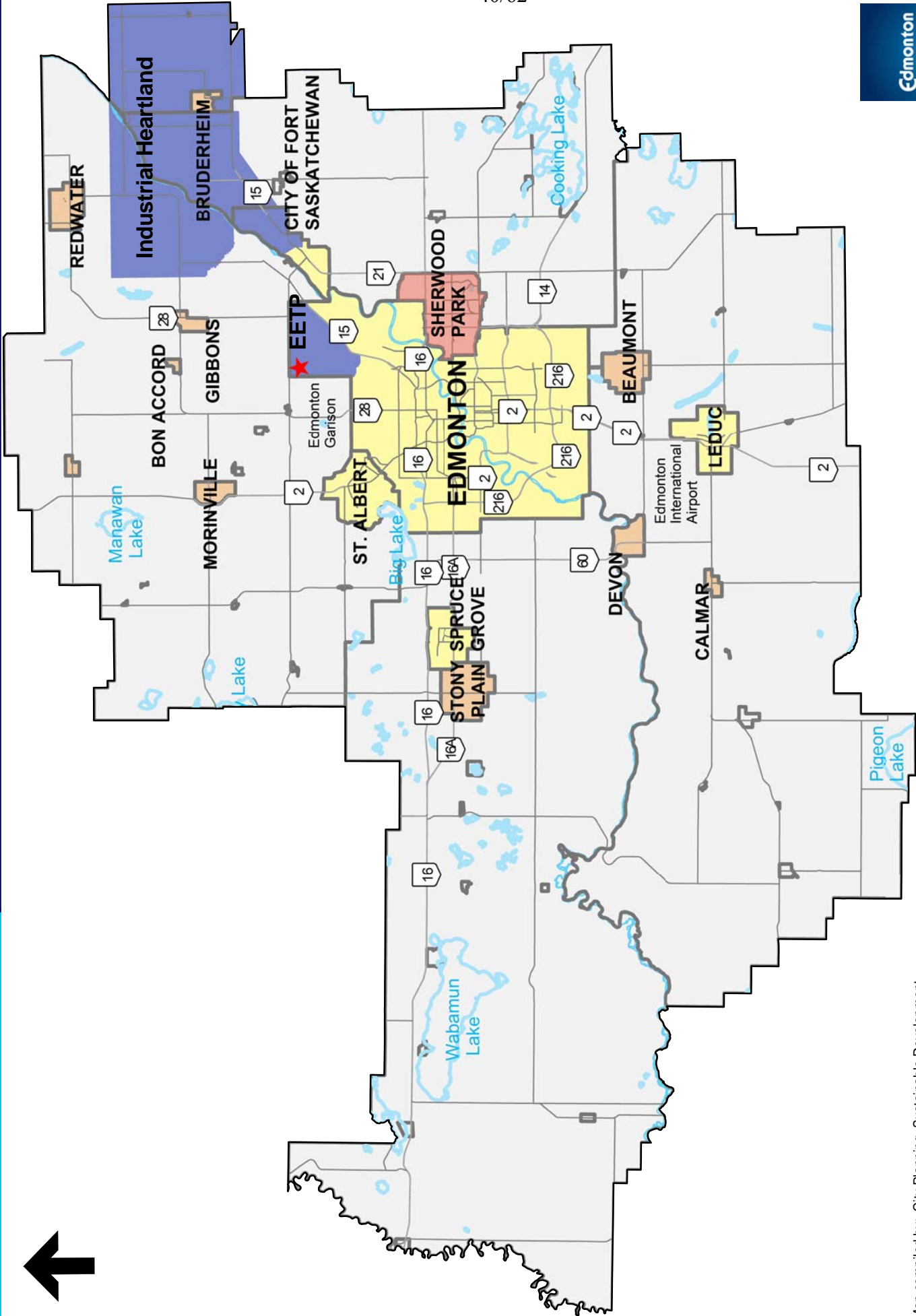
CITY CLERK



**BYLAW 18096
AMENDMENT TO
EDMONTON ENERGY & TECHNOLOGY PARK
Area Structure Plan**



- | | | | |
|---|-----------------------------------|---|-------------------------|
|  | Research and Development Precinct |  | Potential LRT |
|  | Petro-Chemical Precinct |  | Road Network |
|  | Medium Industrial Precinct |  | Existing Property Lines |
|  | Park |  | System Interchange |
|  | Waterbodies |  | Service Interchange |
|  | Nanaksar Gurdwara Gursikh Temple |  | Potential Fire Stations |
|  | ASP Boundary |  | Potential Natural Areas |
|  | Creeks & Streams |  | Potential Parks |
|  | Transportation Utility Corridor | | |










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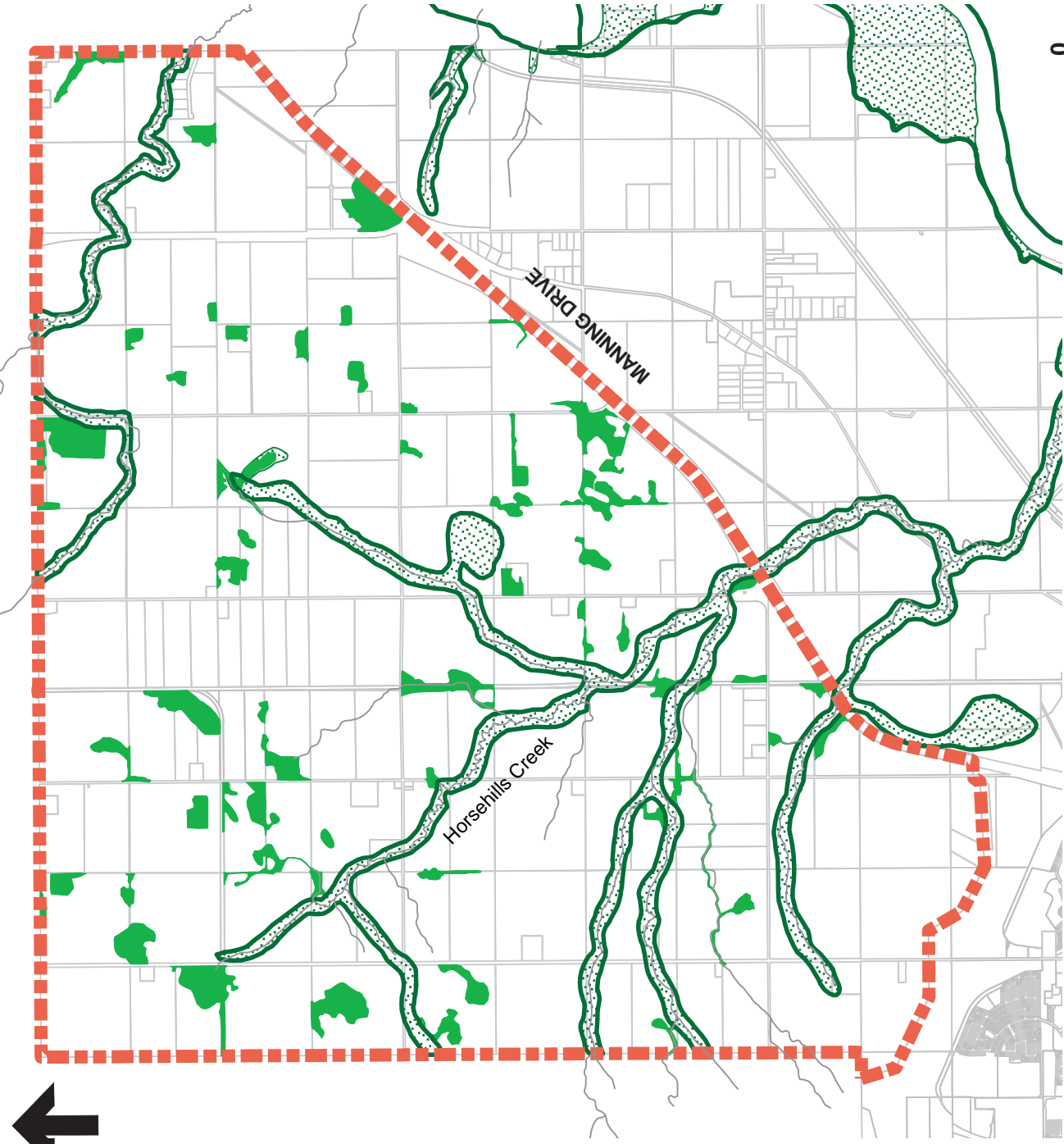
Figure 1: The Capital Region





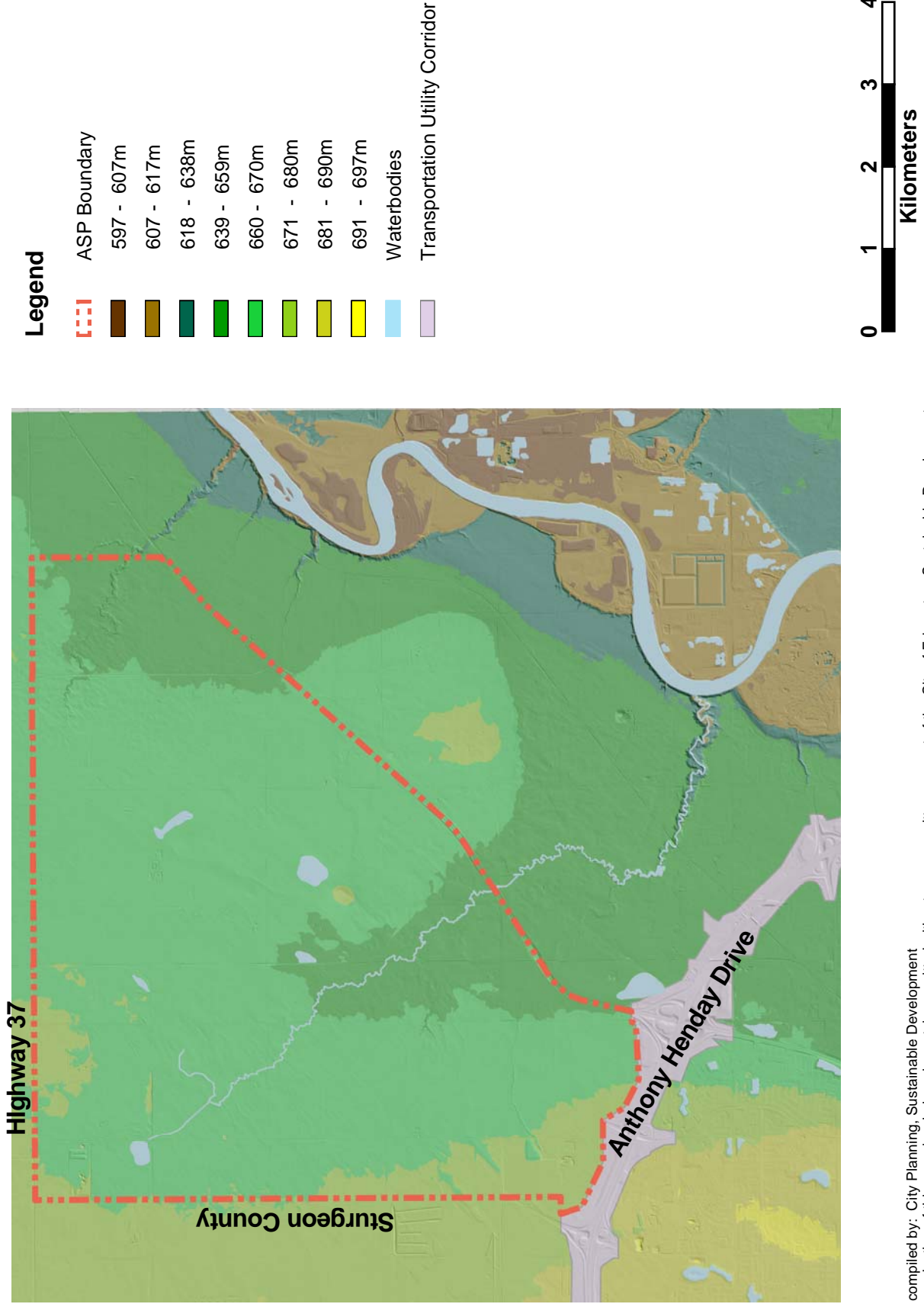
Legend

-  ASP Boundary
-  Natural Areas
-  NSRV ARP (Bylaw 7188)
-  Top of Bank
-  Waterbodies
-  Property Lines
-  Transportation Utility Corridor



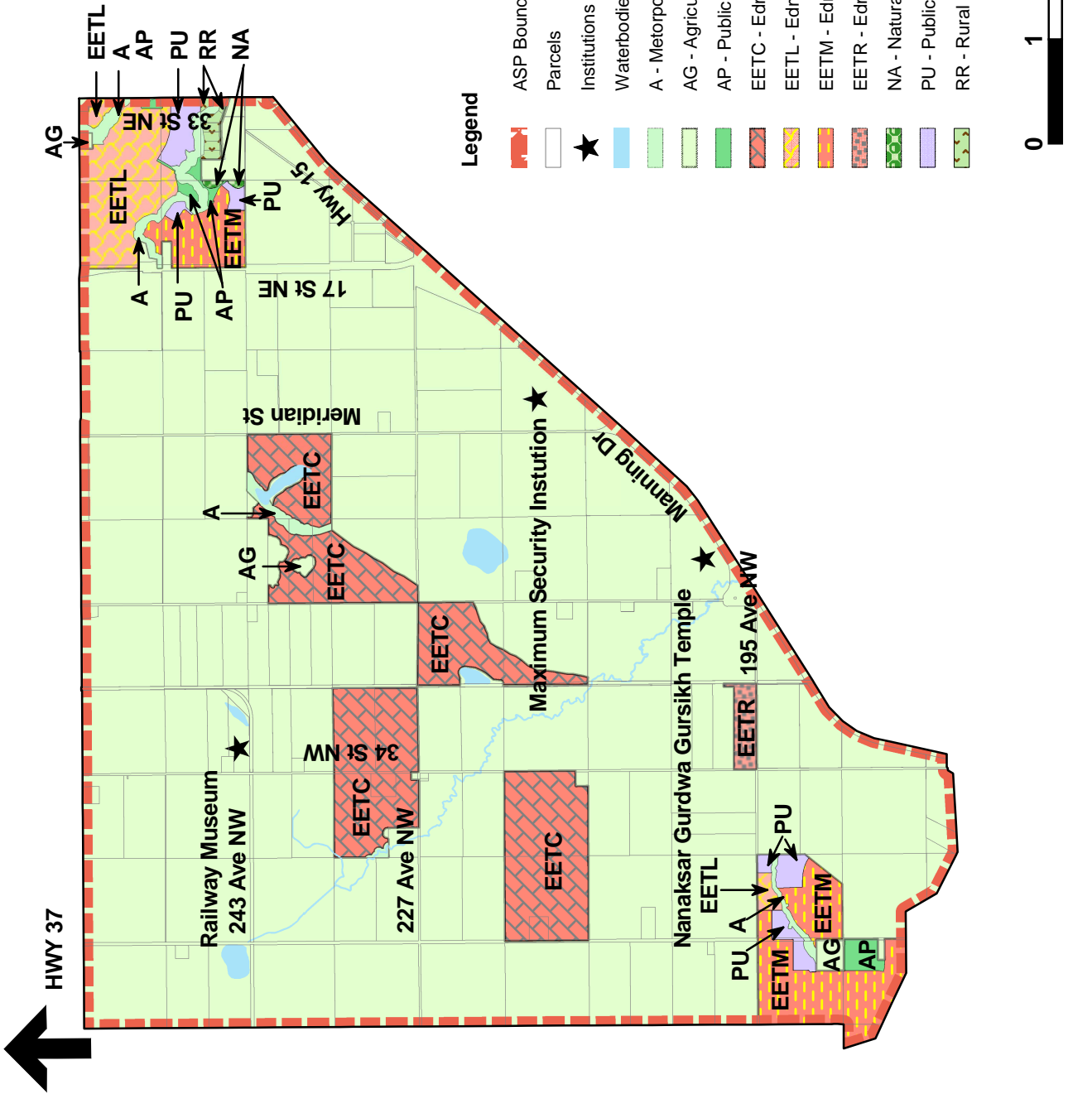
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Figure 2: Edmonton Context



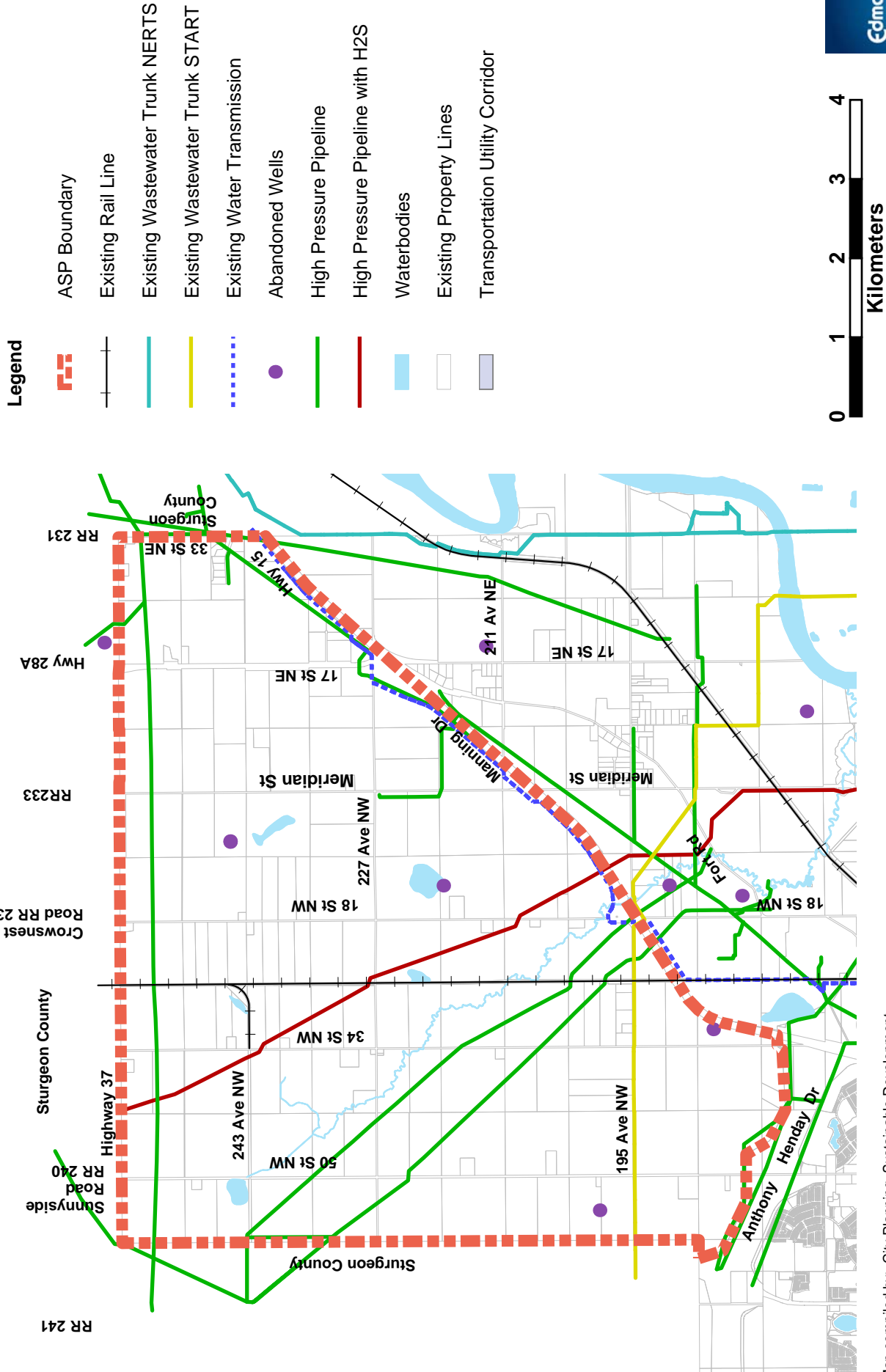
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Figure 3: Topography



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Figure 4: Existing Zoning As of Bylaw 16943 (October 20, 2014)



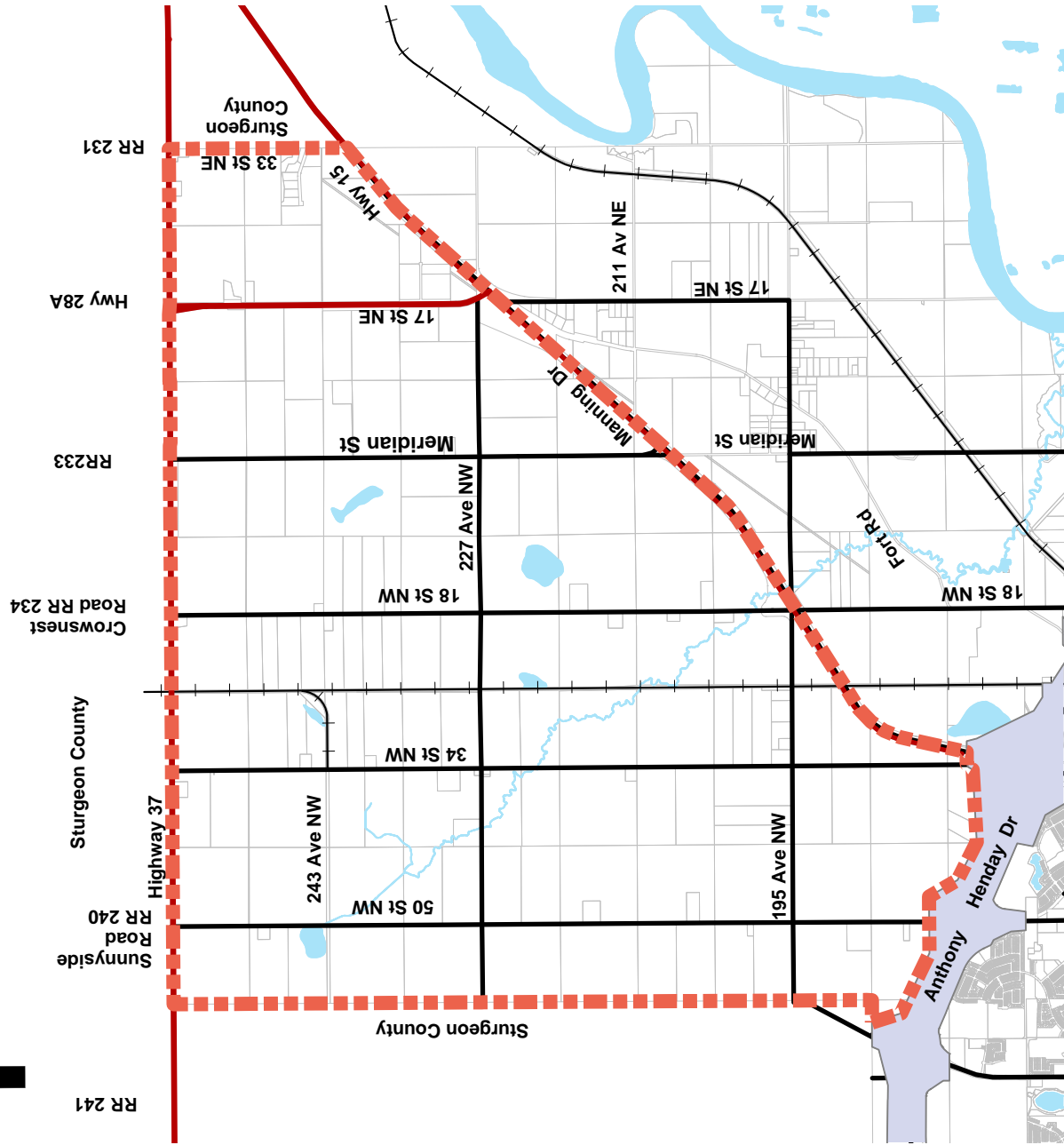
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Figure 5: Existing Pipelines and Wells





- Legend**
- ASP Boundary
 - Existing Arterial Roads
 - Roads Under Provincial Jurisdiction
 - Existing Rail Line
 - Property Lines
 - Waterbodies
 - Transportation Utility Corridor



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Figure 6: Existing Roadways

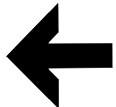
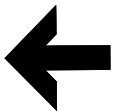
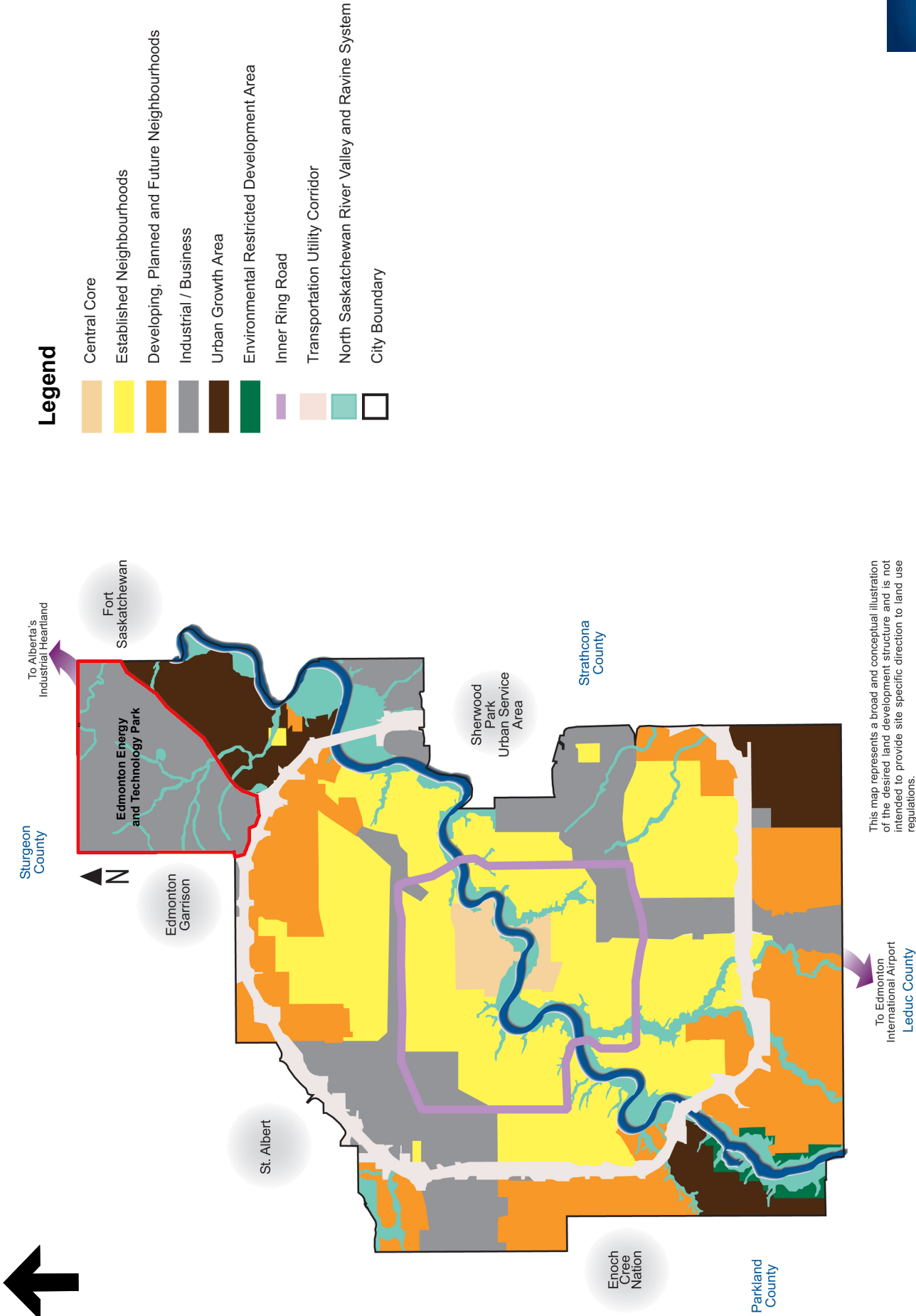
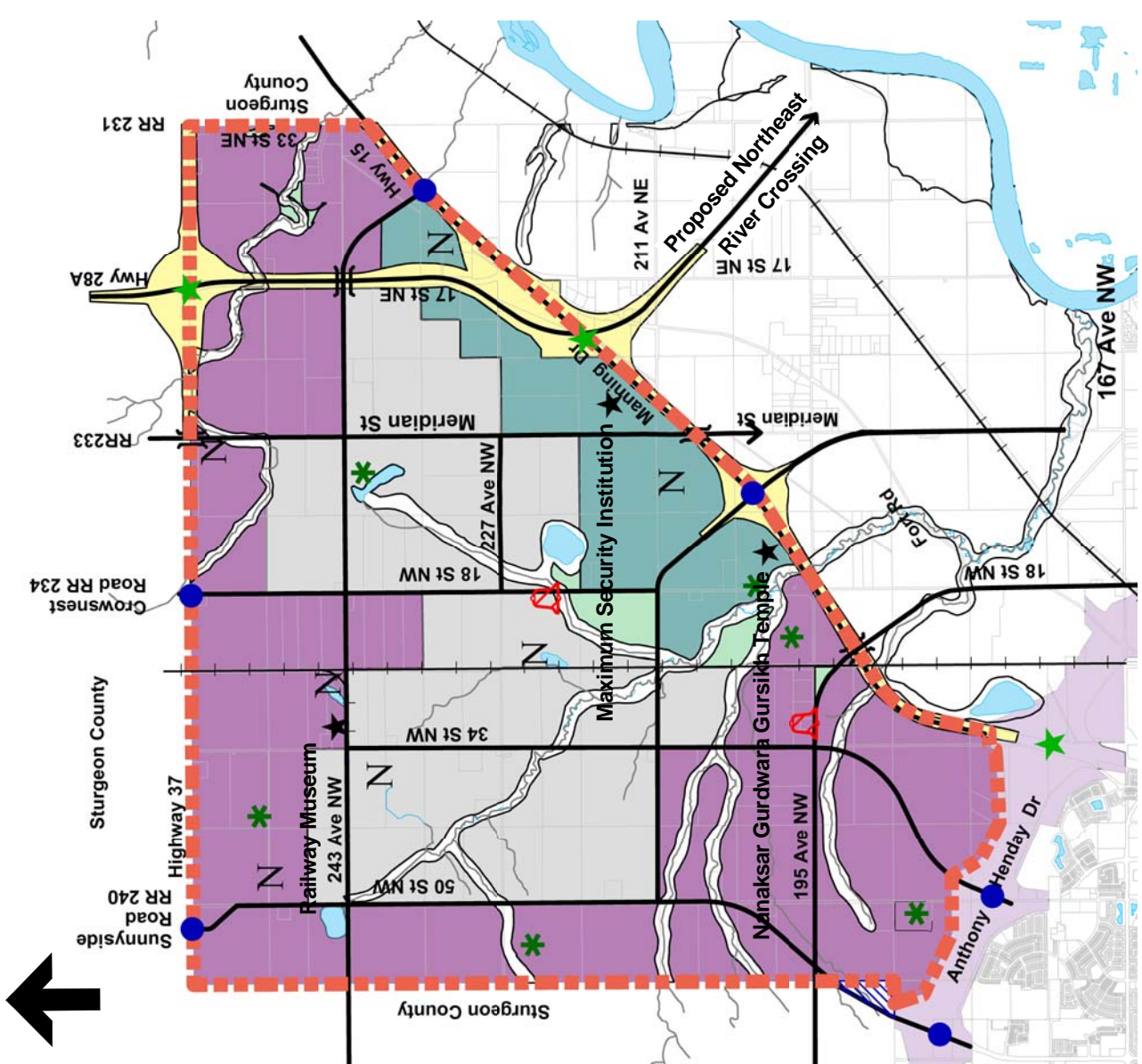


Figure 7: Land Development Concept Municipal Development Plan Bylaw 15100





- Legend**
- ASP Boundary
 - Medium Industrial Precinct
 - Research and Development Precinct
 - Petrochemical Precinct
 - Right-of-Way
 - Arterial
 - Flyover
 - Existing Rail Line
 - System Interchange
 - Potential Firestations
 - Service Interchange
 - Natural Areas
 - Proposed Parks
 - Park
 - NSRV ARP (Bylaw 7188)
 - Property Lines
 - Waterbodies
 - Transportation and Utility Corridor
 - Area proposed to be annexed by City of Edmonton









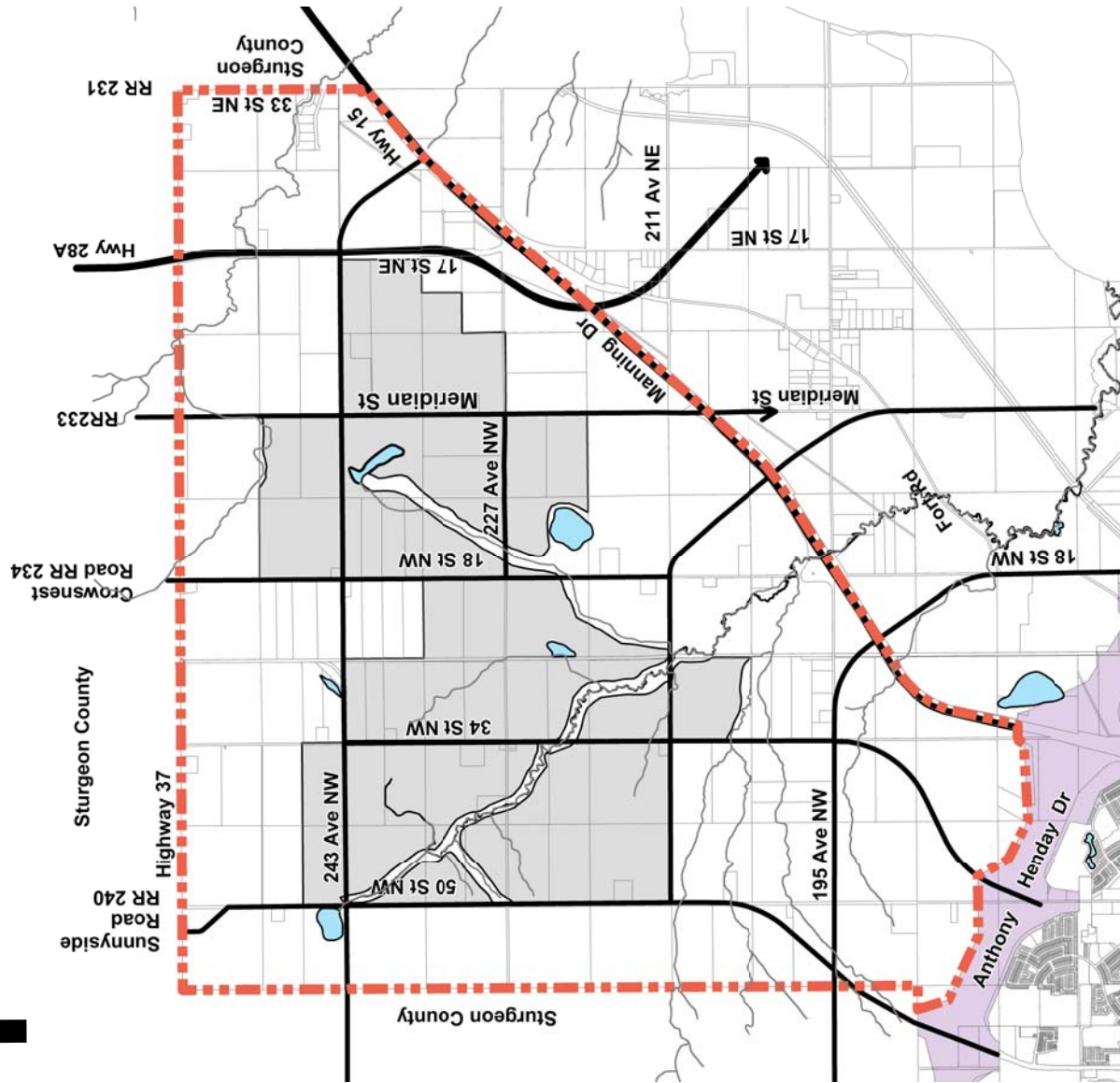
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Figure 8: Development Concept



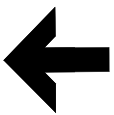
Legend

-  ASP Boundary
-  Petrochemical Precinct
-  Arterial
-  Property Lines
-  Waterbodies
-  Transportation and Utility Corridor

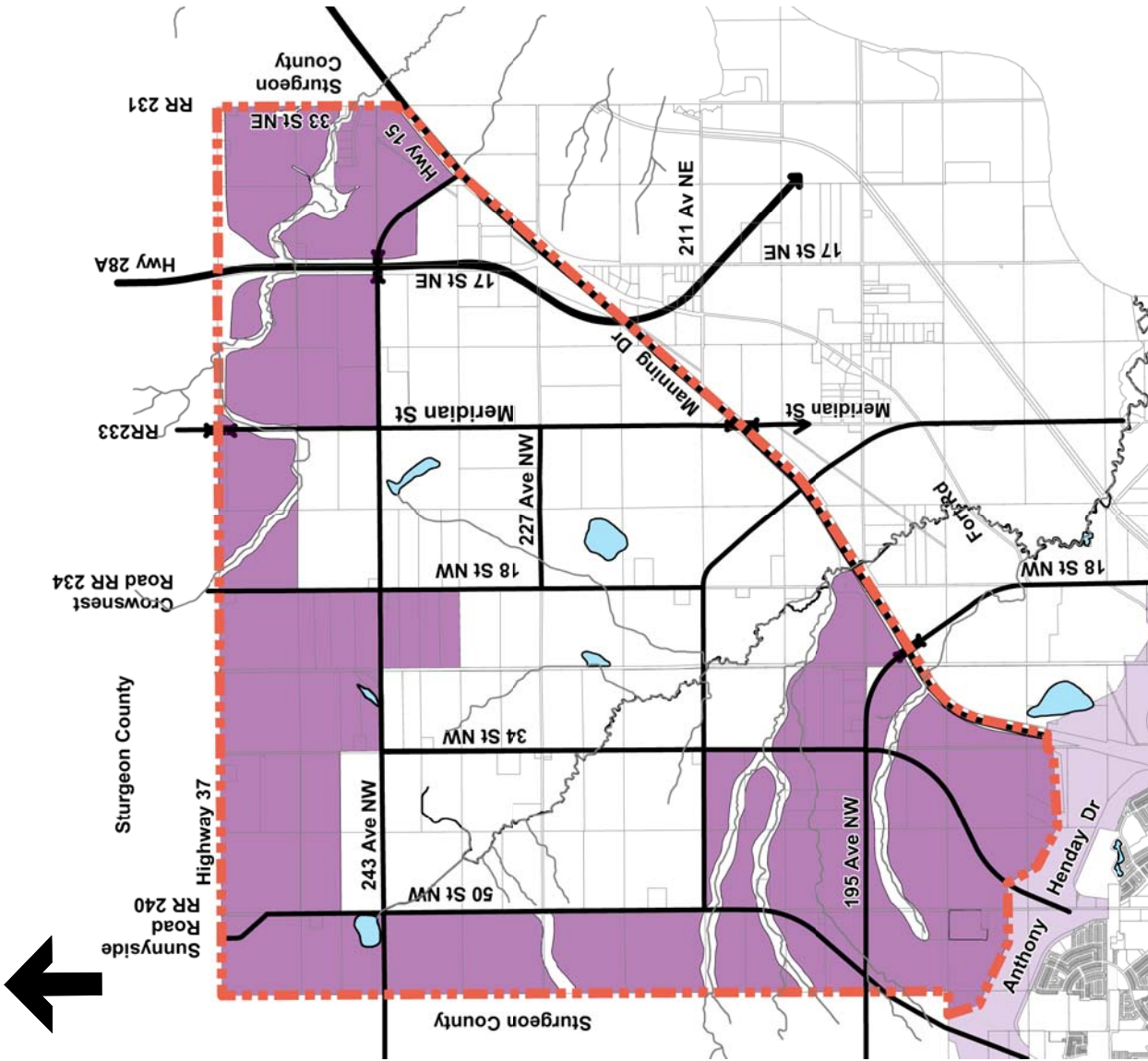


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Figure 9: Petrochemical Precinct

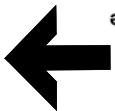


- Legend**
- ASP Boundary
 - Medium Industrial Precinct
 - Arterial
 - Property Lines
 - Waterbodies
 - Transportation Utility Corridor



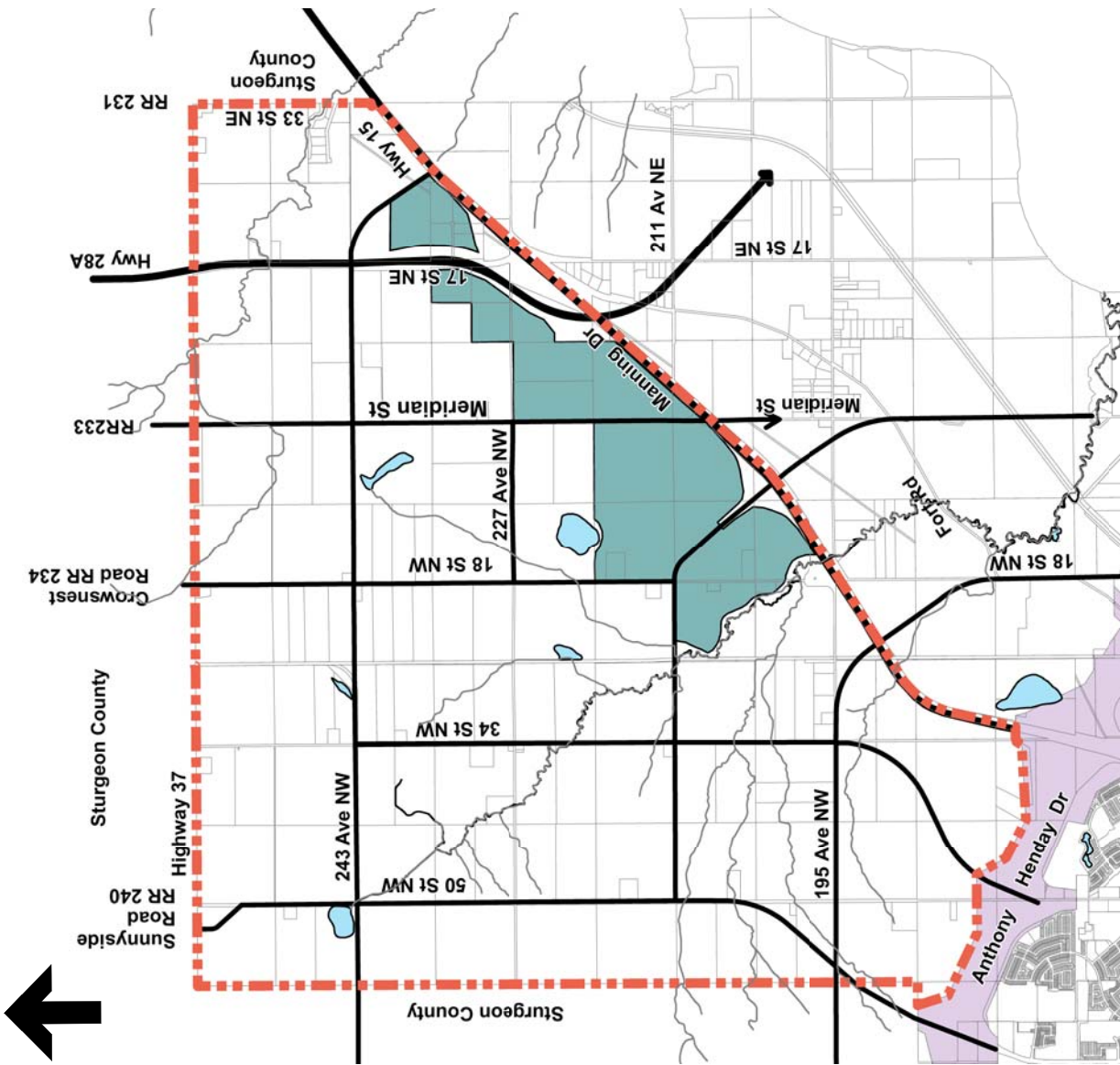
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Figure 10: Medium Industrial Precinct













- Legend**
- ASP Boundary
 - Research and Development Precinct
 - Arterial
 - Property Lines
 - Waterbodies
 - Transportation and Utility Corridor

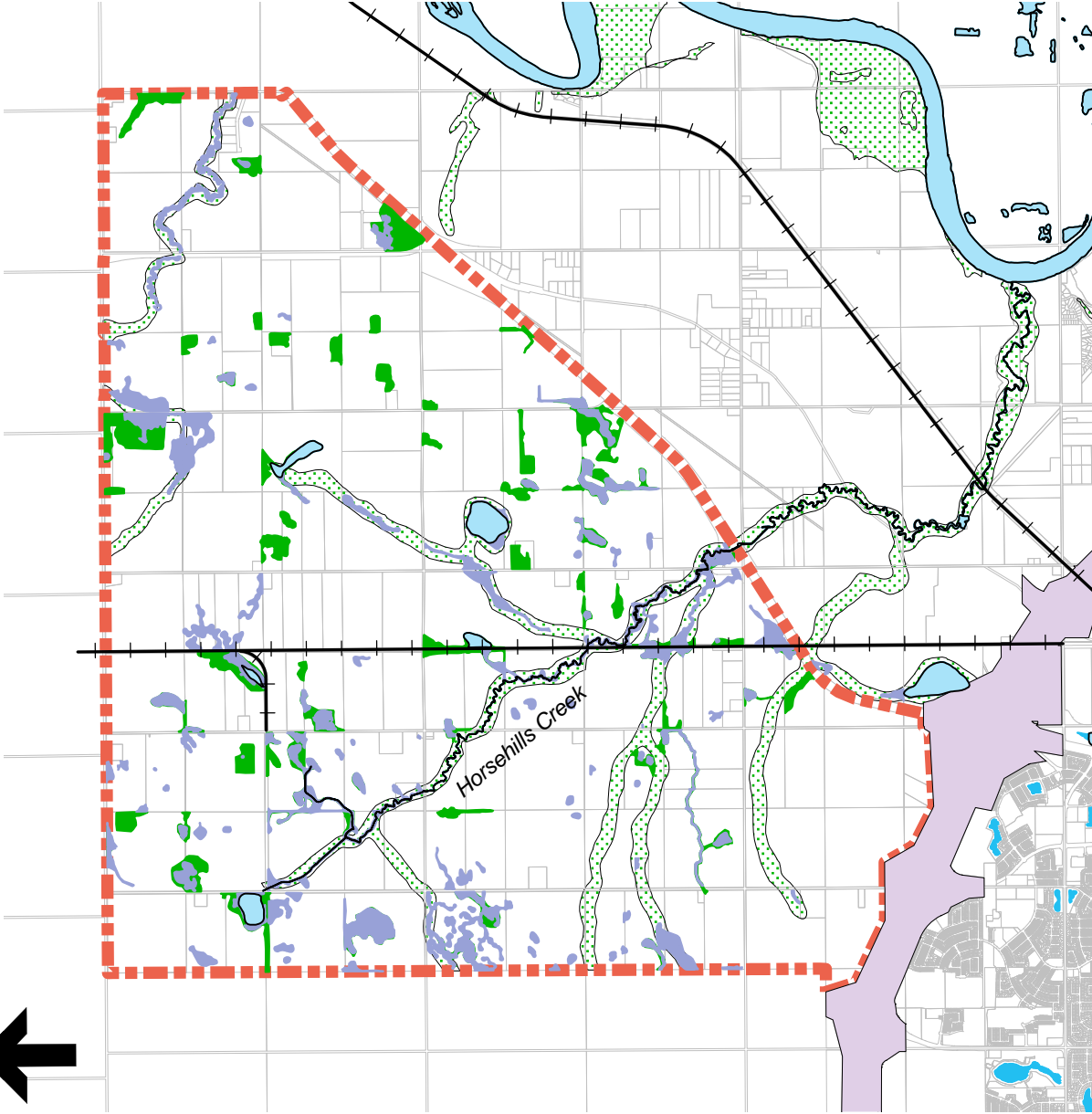


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Figure 11: Research and Development Precinct

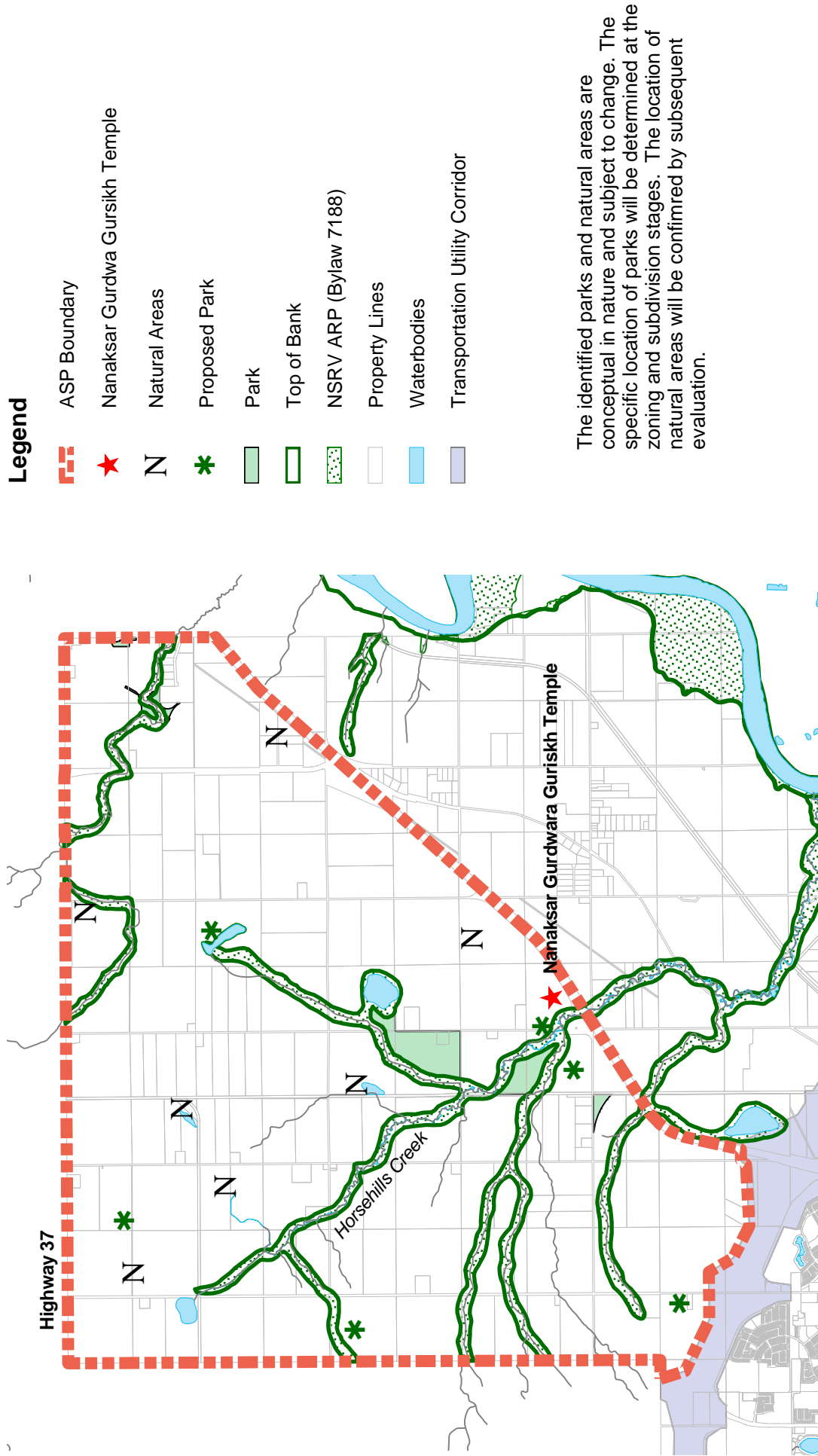


- Legend**
-  ASP Boundary
 -  Wetlands
 -  Natural Areas
 -  NSRV ARP (Bylaw 7188)
 -  Existing Rail Line
 -  Property Lines
 -  Waterbodies
 -  Transportation Utility Corridor



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Figure 12: Ecological Network



Legend

- ASP Boundary
- Nanaksar Gurdwara Gursikh Temple
- Natural Areas
- Proposed Park
- Park
- Top of Bank
- NSRV ARP (Bylaw 7188)
- Property Lines
- Waterbodies
- Transportation Utility Corridor

The identified parks and natural areas are conceptual in nature and subject to change. The specific location of parks will be determined at the zoning and subdivision stages. The location of natural areas will be confirmed by subsequent evaluation.



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Figure 13: Open Spaces and Parks

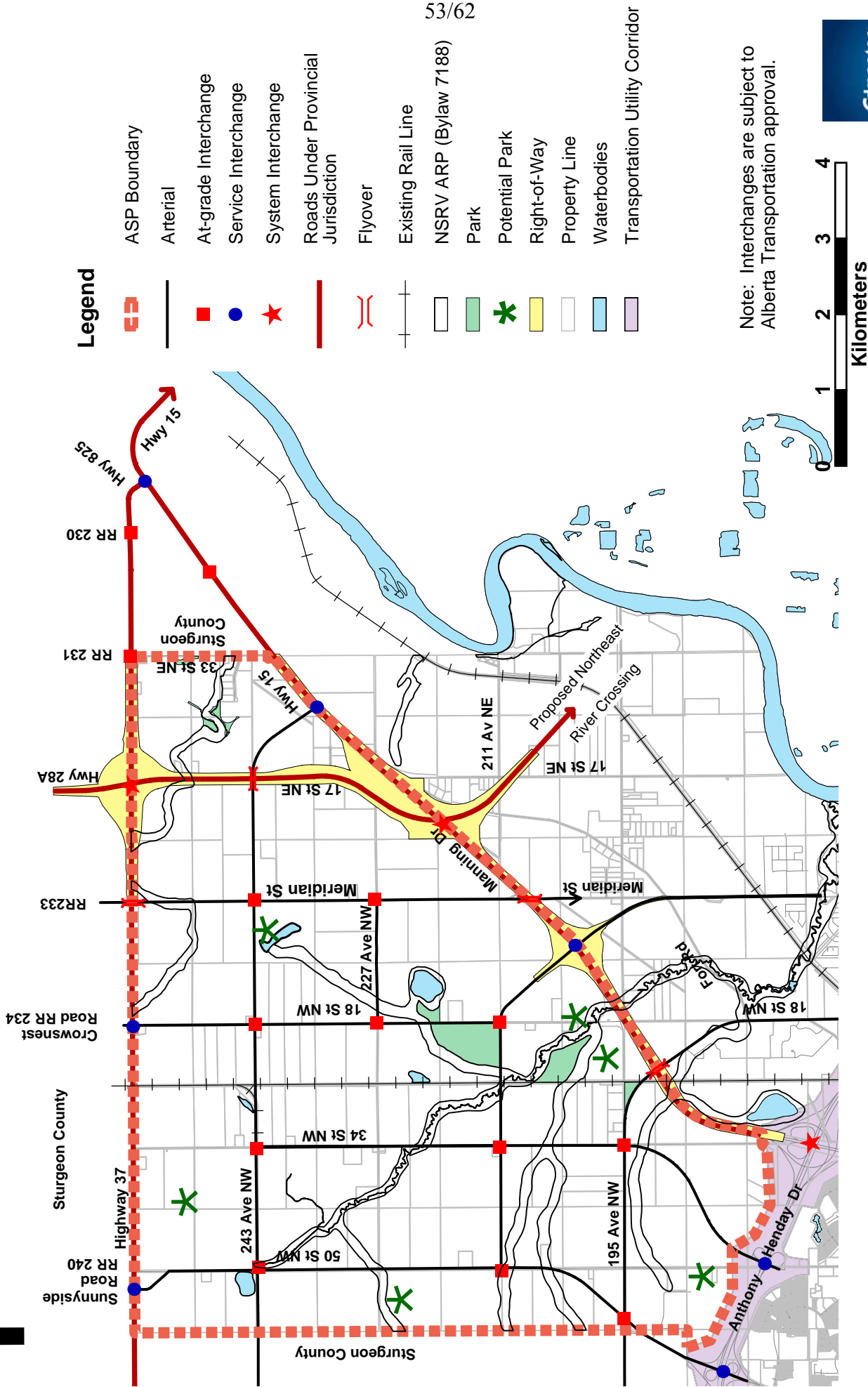
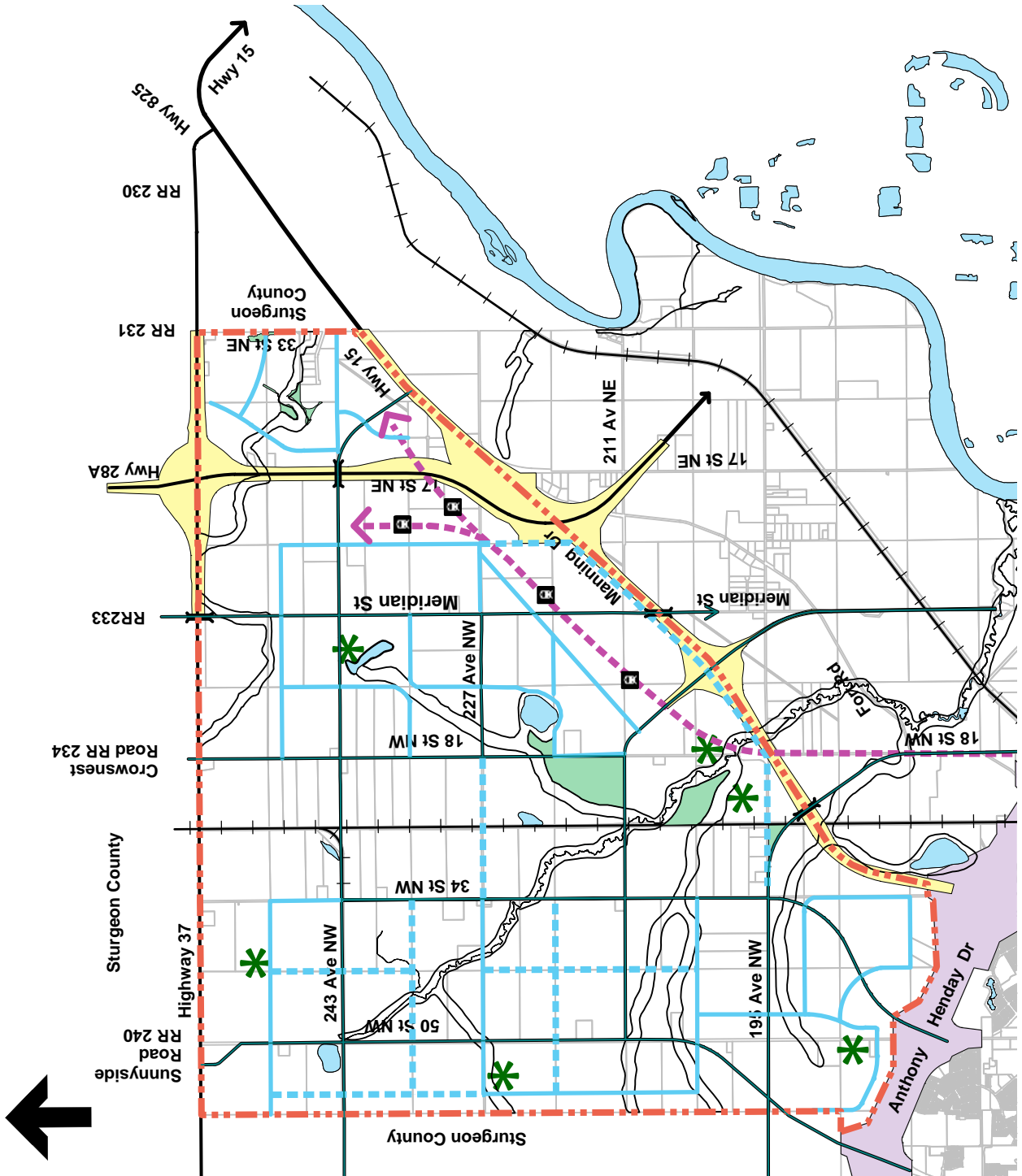


Figure 14: Arterial Road Network



- Legend**
- ASP Boundary
 - Arterial
 - Collector
 - Optional Collector
 - Potential LRT
 - NSRV ARP (Bylaw 7188)
 - Flyover
 - Potential Park
 - Park
 - Right-of-Way
 - Existing Rail Line
 - Property Lines
 - Waterbodies
 - Transportation Utility Corridor

* Collector Road Network is conceptual and subject to change



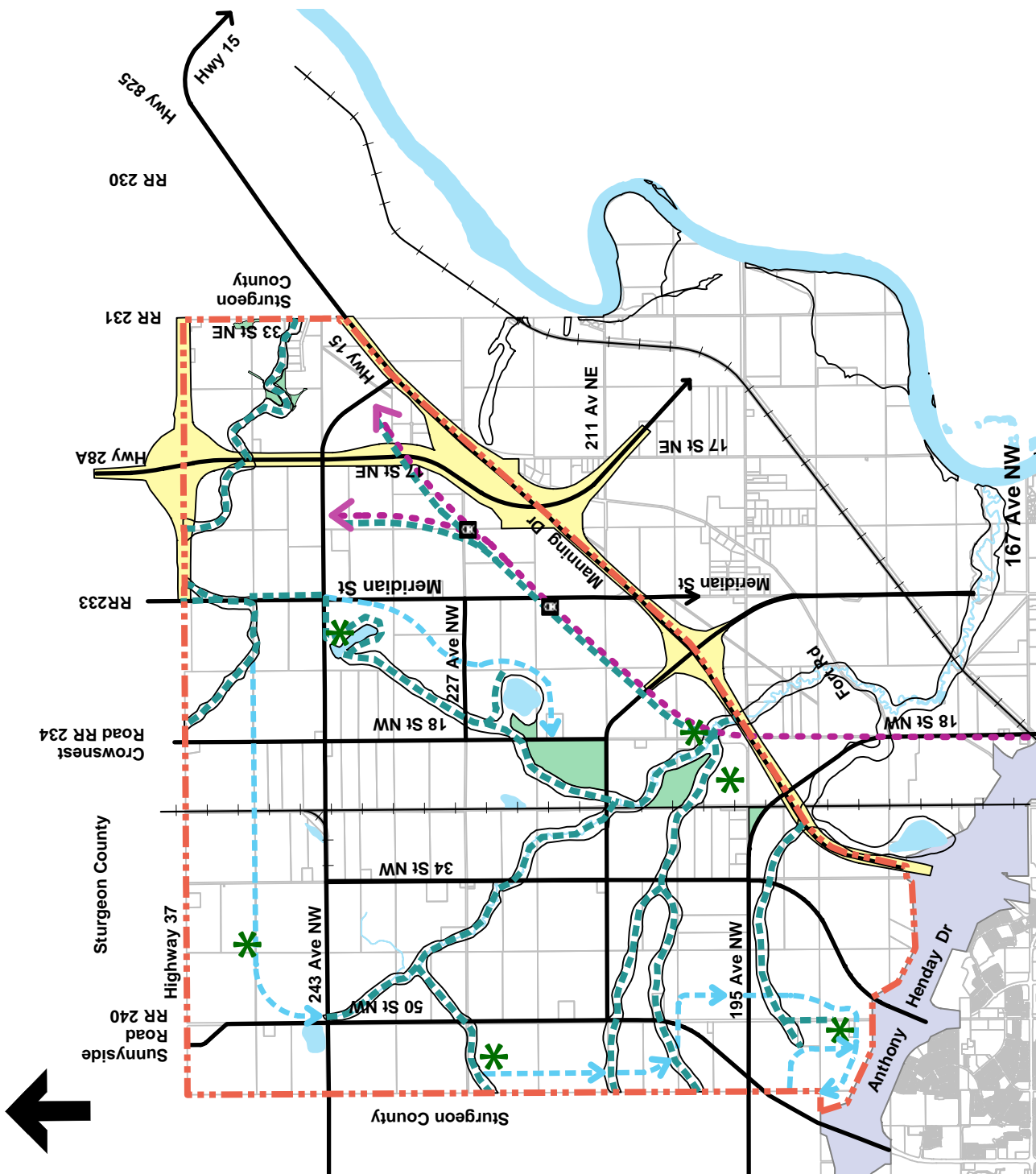
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Figure 15: Collector Road Network Concept



- Legend**
- ASP Boundary
 - On-Street Signed Bikeway (Concept)
 - Arterial
 - Multi-use Corridor
 - Potential LRT
 - NSRV ARP (Bylaw 7188)
 - Potential Parks
 - Park
 - Existing Rail Line
 - Right-of-Way Buffer
 - Property Lines
 - Waterbodies
 - Transportation Utility Corridor

Note: Multi-use corridor and On-Street Signed Bikeway are conceptual and subject to change with road and top-of-bank alignments.



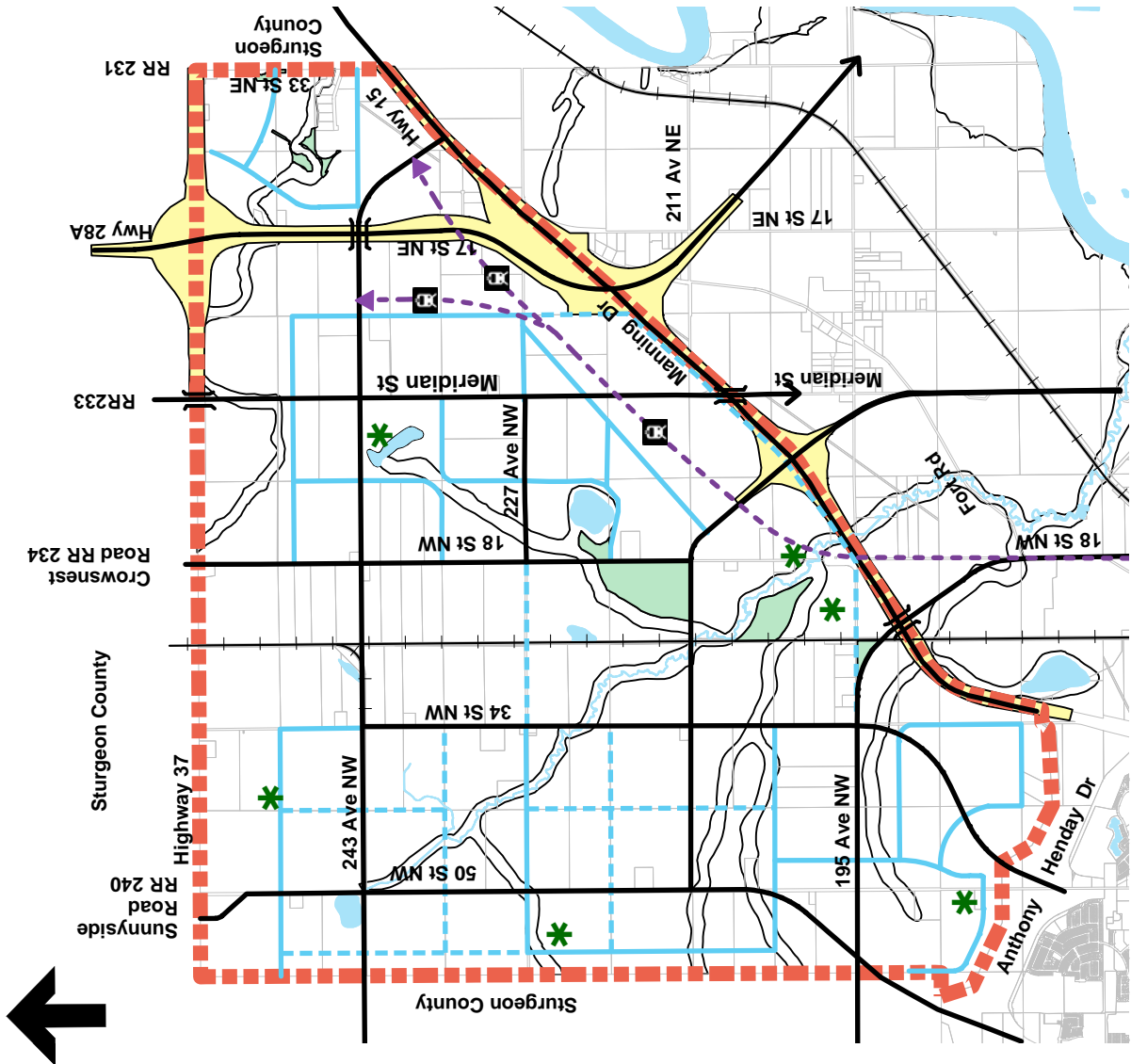
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Figure 16 - Pedestrian and Bicycle Network



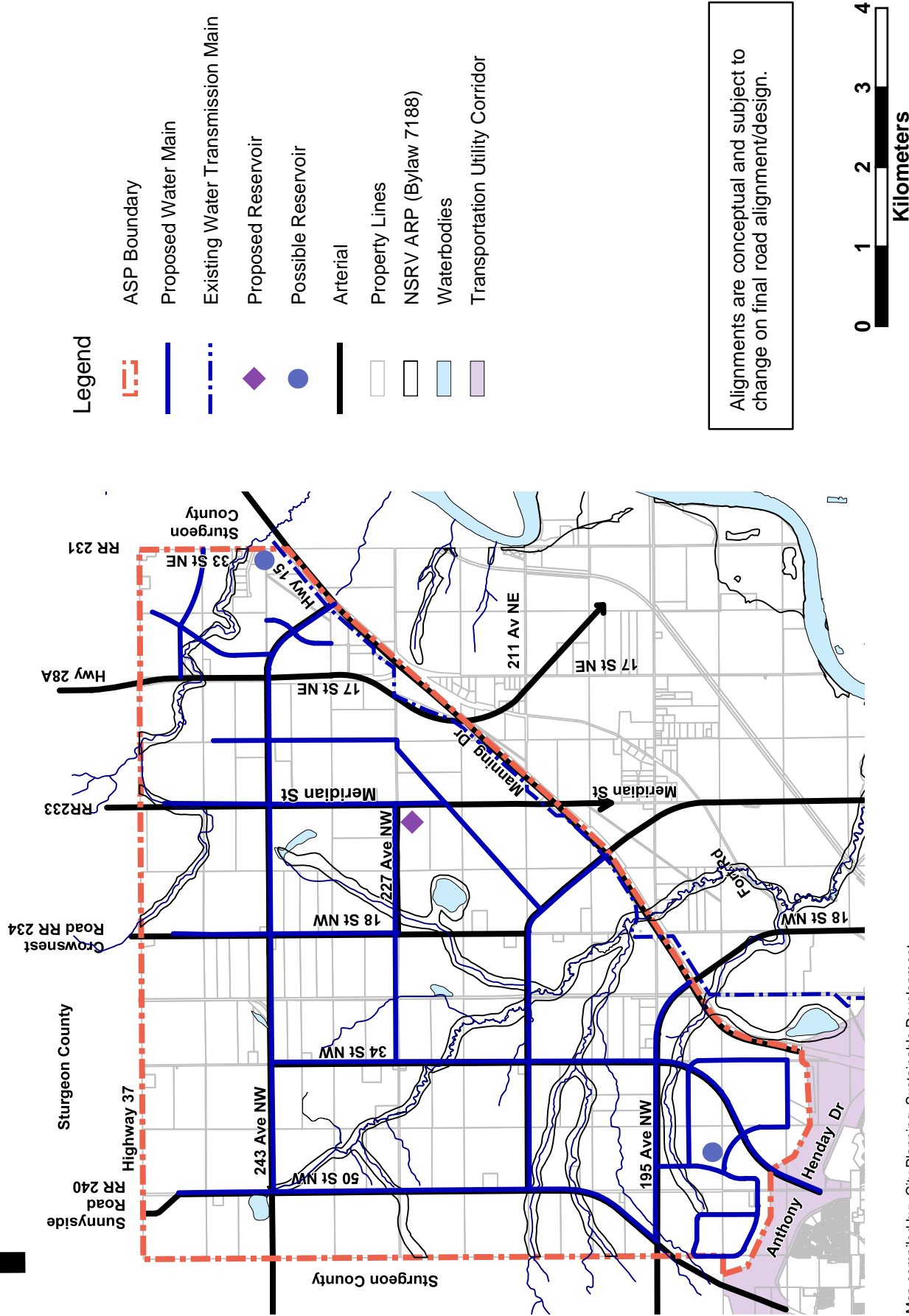
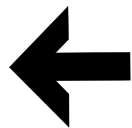
- Legend**
- ASP Boundary
 - Arterial
 - Collector
 - Optional Collector
 - Potential LRT
 - Flyover
 - NSRV ARP (Bylaw 7188)
 - Potential Parks
 - Parks
 - Right-of-Way
 - Existing Rail Line
 - Property Lines
 - Waterbodies
 - Transportation Utility Corridor

LRT Routes are conceptual and subject to change, depending on development staging, job density and changes to the road network.



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Figure 17: LRT and Rail Network



Legend












- ASP Boundary
- Proposed Water Main
- Existing Water Transmission Main
- Proposed Reservoir
- Possible Reservoir
- Arterial
- Property Lines
- NSRV ARP (Bylaw 7188)
- Waterbodies
- Transportation Utility Corridor

Alignments are conceptual and subject to change on final road alignment/design.

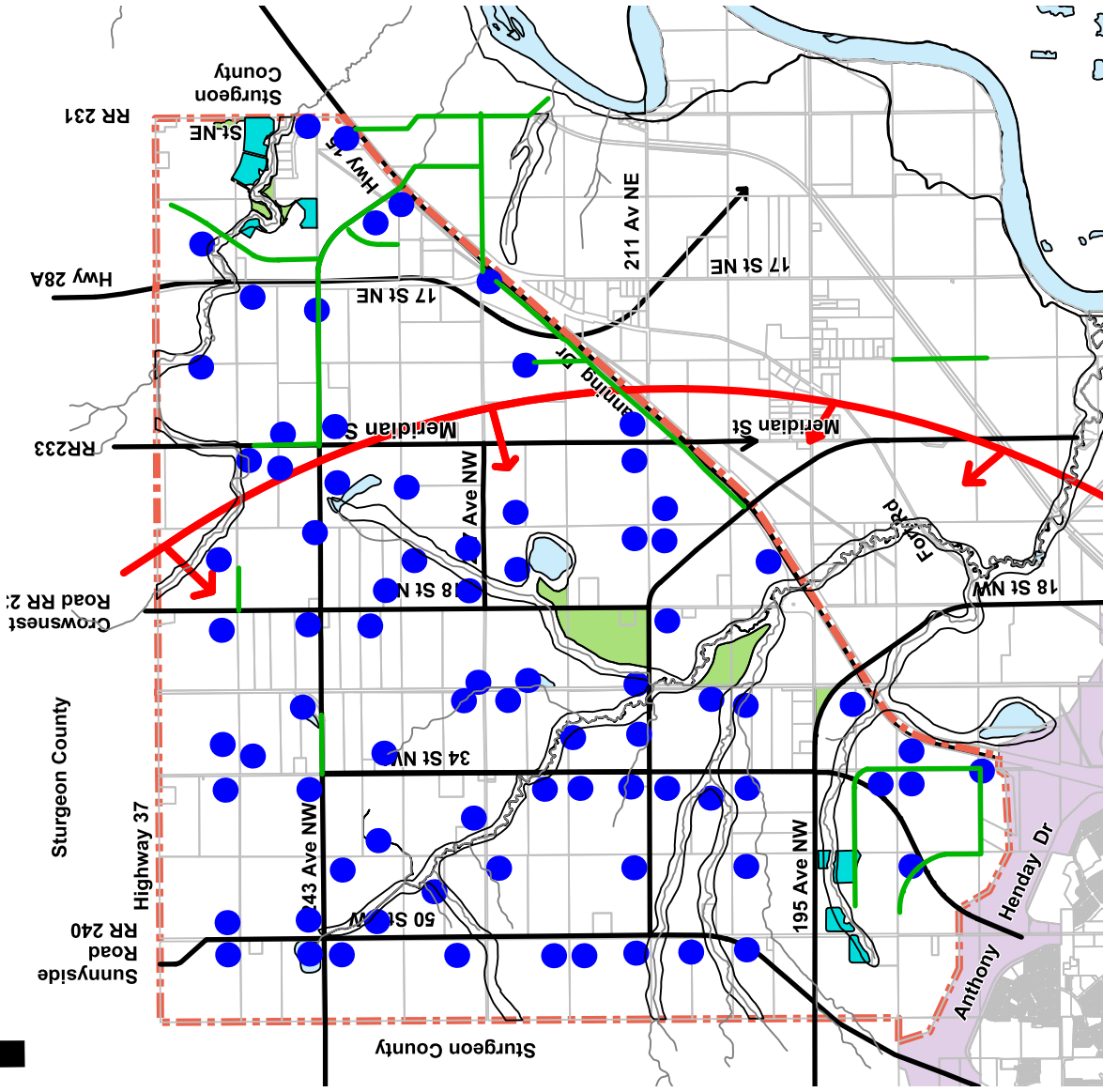


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Figure 18: Water Servicing

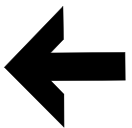
- Legend**
-  ASP Boundary
 -  Limits of Bird Hazard Zone
 -  Proposed Storm Trunk
 -  Proposed Storm Pond
 -  Storm Pond
 -  Arterial
 -  NSRV ARP (Bylaw 7188)
 -  Property Lines
 -  Park
 -  Waterbodies
 -  Transportation Utility Corridor

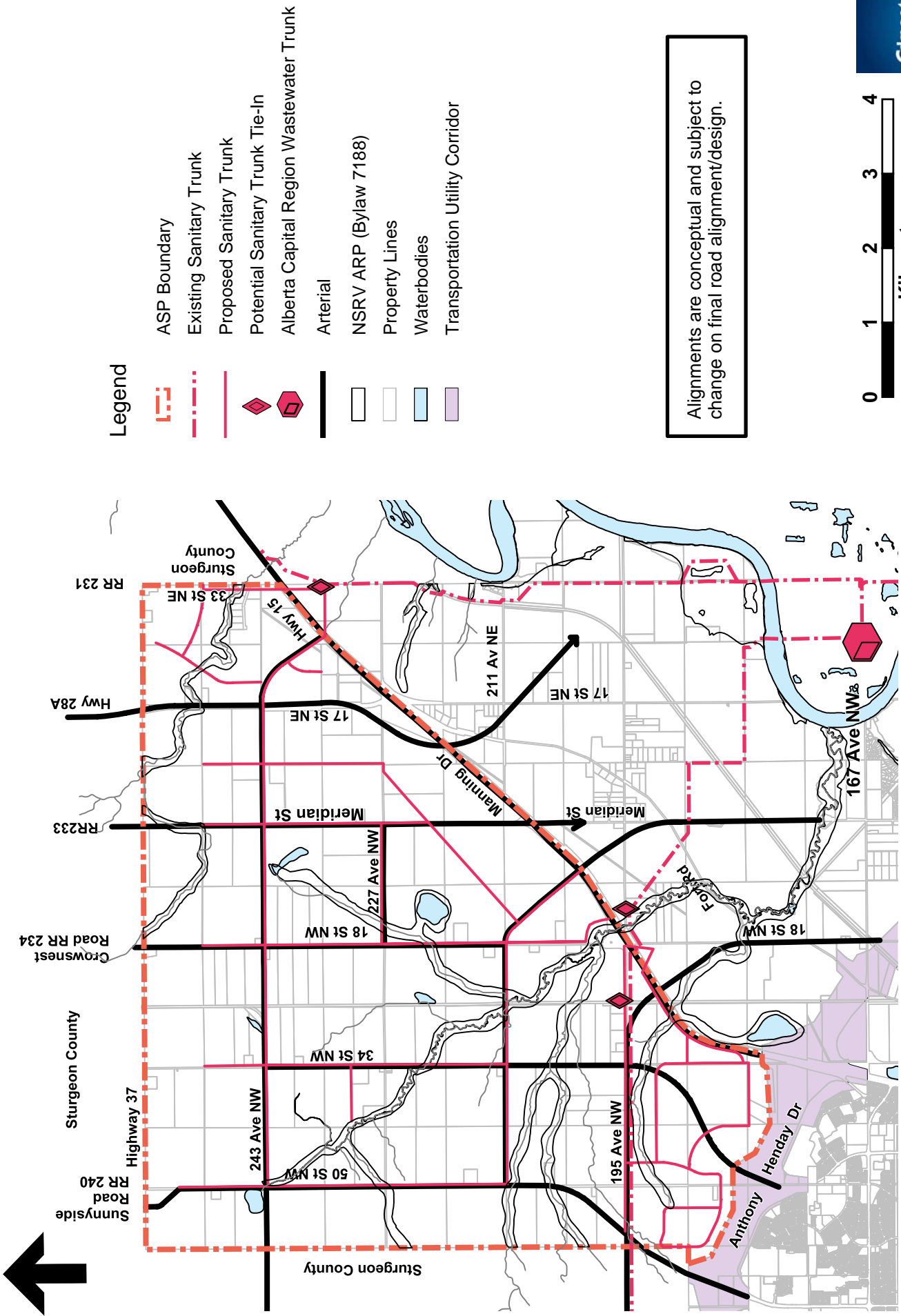
The number, size and identified locations of stormwater management facilities are shown only to illustrate network principles and are strictly conceptual. The specific attributes of stormwater management facilities will be determined in subsequent evaluations.



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Figure 19: Stormwater Management Network





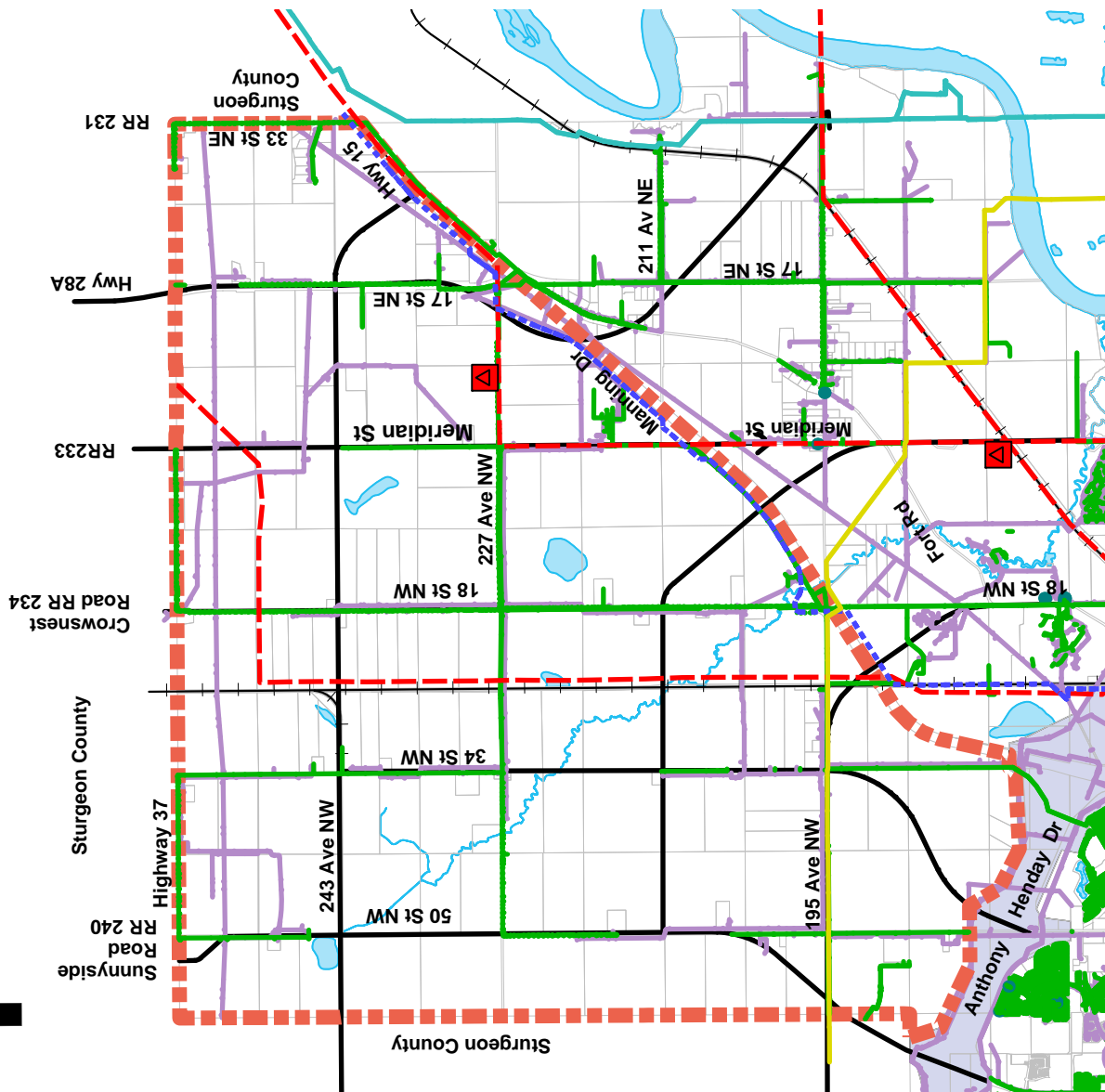
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Figure 20: Wastewater Servicing



Legend

- ASP Boundary
- Existing Gas Line
- Existing telephone Line
- Existing Wastewater Trunk NERTS
- Existing Wastewater Trunk Start
- Existing Water Transmission
- Existing AltaLink Transmission Right-of-Way
- Potential Power Substations
- Arterial
- Existing Rail Line
- Property Lines
- Waterbodies
- Transportation Utility Corridor



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Figure 21: Utilities and Potential Power Substations

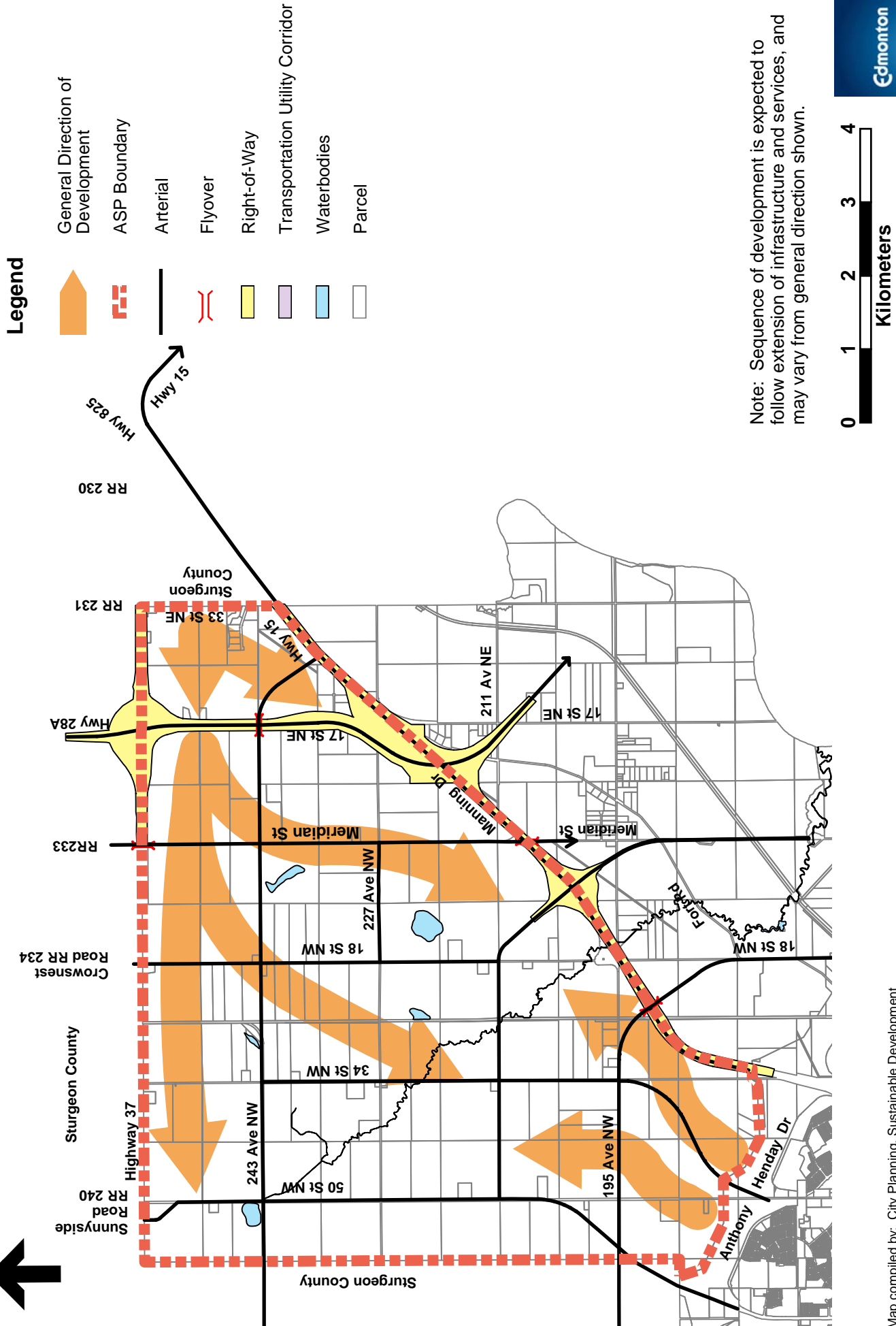
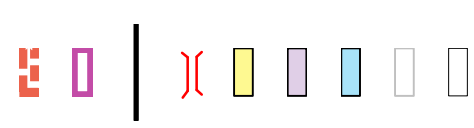


Figure 22: Development Staging

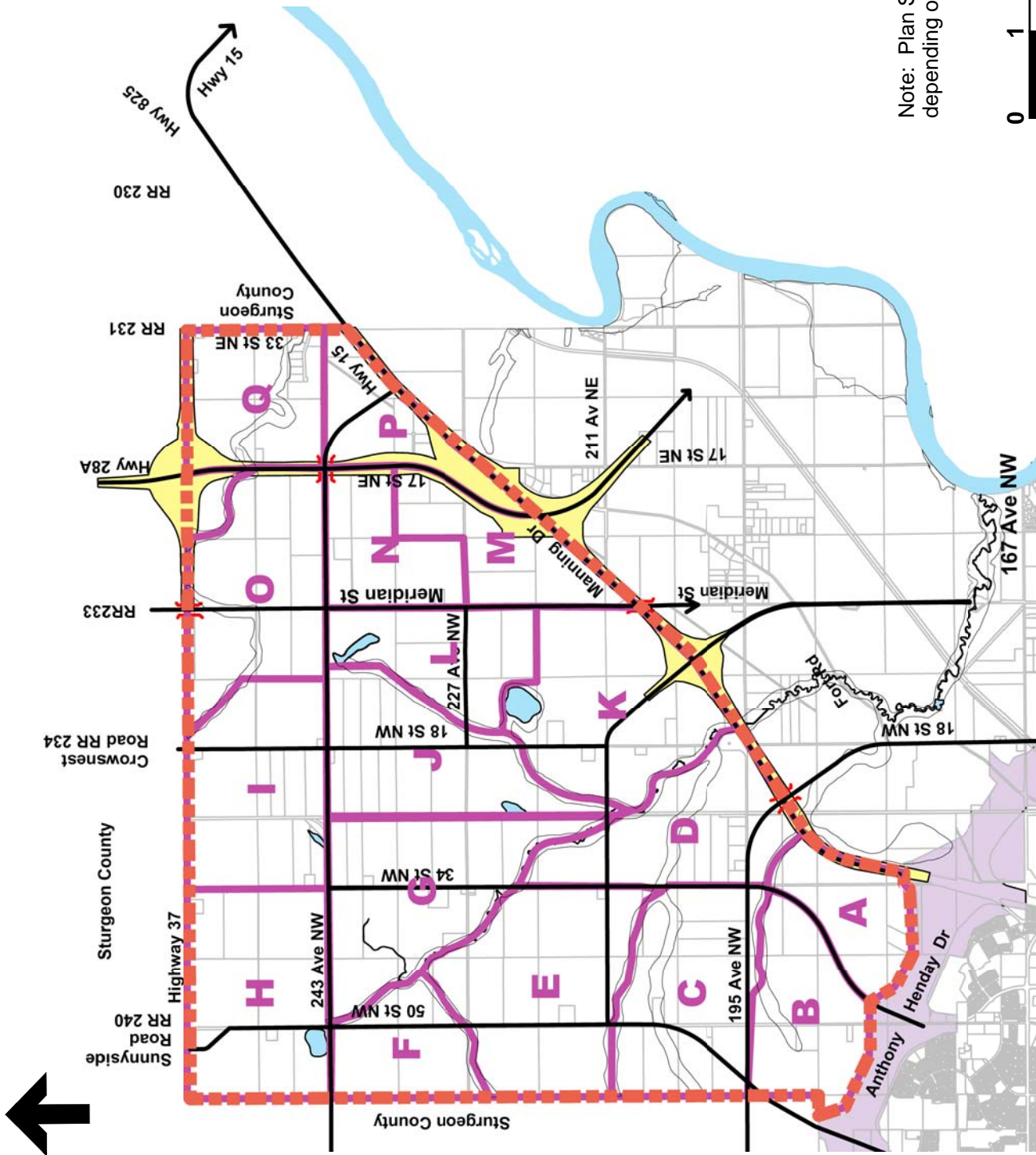


- ASP Boundary
- Plan Sub Areas
- Arterial
- Flyover
- Right-of-Way
- Transportation Utility Corridor
- Waterbodies
- Parcel
- NSRV ARP (Bylaw 7188)

Legend



Note: Plan Sub Area boundaries may change, depending on technical requirements.



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Figure 23: Technical Report Sub Area