



Edmonton Energy and Technology Park

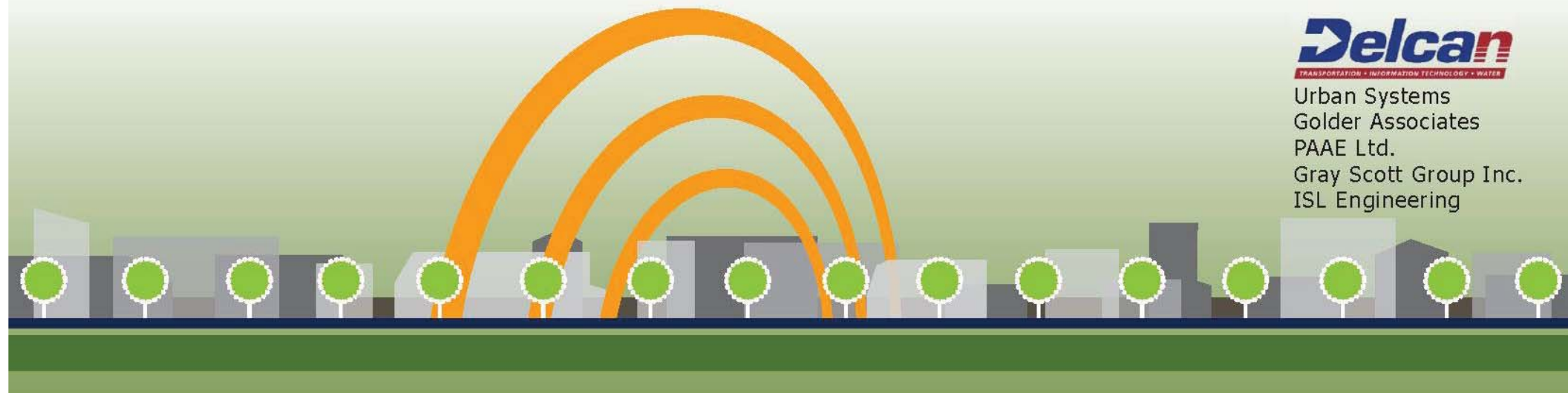
Area Structure Plan

December 2009

Office Consolidation January 2018



Urban Systems
Golder Associates
PAAE Ltd.
Gray Scott Group Inc.
ISL Engineering



Edmonton Energy and Technology Park Area Structure Plan

Office Consolidation Jan 2018

Prepared by:

Current Planning Branch

Sustainable Development

City of Edmonton

Bylaw 15093 was adopted by Council in June 2010. In January 2018, this document was consolidated by virtue of the incorporation of the following bylaws, which were amendments to the original Bylaw 15093

Bylaw 15093	Approved June 9, 2010 (To adopt the Horsehills Energy and Technology Park Area Structure Plan)
Bylaw 15642	Approved May 2, 2011 (To rename the ASP to Edmonton Energy and Technology Park ASP, identify a park site in the park area, delineate the City's Legal Entitlement to Municipal Reserve in Section 7.7 and update the Land Use Statistics Table)
Bylaw 16175	Approved January 23, 2013 (To amend the Edmonton Energy and Technology Park Area Structure Plan to amend the boundaries of the Plan and to incorporate administrative amendments that were approved as a part of Bylaw 16169 to rezone the subject lands)
Bylaw 16767	Approved September 23, 2014 (To allow for the development of a wider range of industrial production facilities in the Edmonton Energy and Technology Park ASP and to update contextual information.)
Bylaw 18096	Approved January 23, 2018 (Multiple amendments including merging the existing Logistics and Manufacturing Precincts into one Medium Industrial Precinct, will realign the arterial roadway network to create a more efficient land configuration and better describe the Eco-industrial vision. Administrative updates also included)

Editor's Note:

This is an office consolidation edition for the Edmonton Energy and Technology Park Area Structure Plan, as approved by City Council on June 9, 2010. For the sake of clarity a standardized format was utilized in this Plan. Private owner's names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. All text changes are noted in the right margin and are italicized where applicable. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaw.

This office consolidation is intended for convenience only. In case of uncertainty, the reader is advised to consult the original Bylaws, available at the Office of the City Clerk.

City of Edmonton

TABLE OF CONTENTS

Executive Summary	3		
VISION	4		
1.0 Introduction	5		
1.1 Regional Context	5		
1.2 Economic Growth Projections	8		
1.3 Project Description	8		
2.0 Eco-Industrial	9		
3.0 Site Conditions	11		
3.1 Site Context	11		
3.2 Biological Environment	13		
3.3 Physical Environment	14		
3.4 Social Environment	17		
3.5 Existing Infrastructure	21		
4.0 Public Involvement	25		
4.1 June 2008 Information Session	25		
4.2 Key Stakeholder Meetings	26		
4.3 October 2008 Public Open House	28		
4.4 October 2009 Public Open House	29		
4.5 March 2014 Public Open House	29		
4.6 Stakeholder Consultation and Fifth Public Open House November 2016	30		
5.0 Policy context	32		
5.1 Capital Region Board	32		
5.2 Capital Region Integrated Growth Management Plan – Final Report on Core Infrastructure (ISL Engineering and Land Services, 2008)	33		
5.3 City of Edmonton Strategic Plan – <i>The Way Ahead</i> and Municipal Development Plan: <i>The Way We Grow</i>	34		
5.4 Sturgeon County MDP	37		
5.5 City of Fort Saskatchewan MDP	38		
		5.6	Strathcona County MDP 38
		5.7	The Way We Move 39
		5.8	Alberta’s Industrial Heartland 39
		5.9	Industrial Investment Action Plan 40
		5.10	Transit Oriented Development Guidelines 41
		5.11	North Saskatchewan River Valley Area Redevelopment Plan 42
		5.12	Risk Management Policy 42
		5.13	Natural Areas Policies 44
		5.14	Historic Resources 44
		6.0 Guiding Principles	45
		6.1	Edmonton Energy and Technology Park stands for: Sustainable Development 45
		6.2	Edmonton Energy and Technology Park stands for: Industrial Ecology and Efficiency 45
		6.3	Edmonton Energy and Technology Park stands for: Effective Transportation 46
		6.4	Edmonton Energy and Technology Park stands for: Land Use Compatibility 46
		6.5	Edmonton Energy and Technology Park stands for: Innovative Infrastructure 46
		6.6	Edmonton Energy and Technology Park stands for: Environmental Protection 47
		6.7	Edmonton Energy and Technology Park Stands for: Effective Implementation 47
		7.0 Development Concept	48
		7.1	Land Use Precincts 48
		7.2	Petrochemical Cluster Precinct 50
		7.3	Medium Industrial Precinct 52
		7.4	Research and Development Precinct 55
		7.5	Natural Area Integration 57
		8.6	Open Spaces and Parks 62
		7.7	Risk Management Strategy 65
		8.0 Transportation	67

8.1	Regional Road Network	67
8.2	Arterial Road Network	69
8.3	Collector Road Network	71
8.4	Eco-Industrial Alternative Road Cross sections	74
8.5	Pedestrian/Bicycle Network	76
8.6	LRT and Transit Network	79
8.7	Heavy Rail	82
8.8	Pipeline Systems & Abandoned Wells	82
9.0	Infrastructure and Servicing	85
9.1	Water Servicing	85
9.2	Stormwater Servicing	88
9.3	Wastewater Servicing	91
9.4	Energy	94
9.5	Shallow Utilities	96
9.6	Communal Piping System	96
10.0	Design Guidelines	97
10.1	Sustainable Development	98
10.2	Industrial Efficiency and Ecology	99
10.3	Effective Transportation	100
10.4	Land Use Compatibility	101
10.5	Innovative Infrastructure	102
10.6	Environmental Protection	104
10.7	Effective Implementation	105
11.0	Implementation	106
11.1	General Staging	106
11.2	Technical Report Requirements	108
11.3	Planning Documents / Engineering Studies	109
11.4	Public Consultation Requirements	111
11.5	Monitoring	111
12.0	Land Use Statistics	113
13.0	References	115

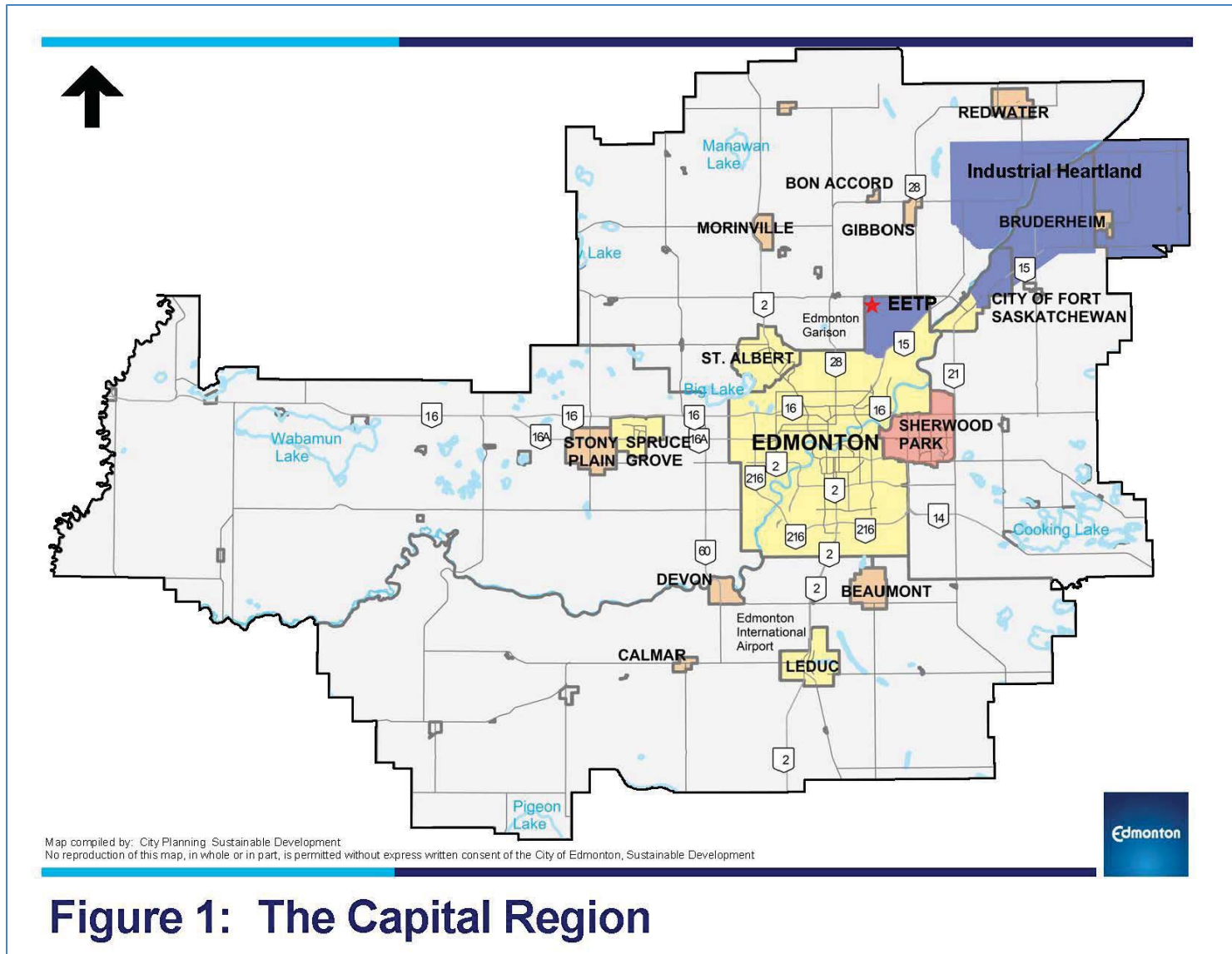
TABLE OF FIGURES

Figure 1:	The Capital Region	7
Figure 2:	Edmonton Context	12
Figure 3:	Horsehills Area Topography	16
Figure 4:	Existing Zoning	20
Figure 5:	Existing Pipelines and Wells	23
Figure 6:	Existing Roadways	24
Figure 7:	Municipal Development Plan	36
Figure 8:	Development Concept	49
Figure 9:	Petrochemical Cluster Precinct	51
Figure 10:	Medium Industrial Precinct	54
Figure 11:	Research and Development Precinct	56
Figure 12:	Ecological Features	61
Figure 13:	Open Spaces and Parks	64
Figure 14:	Arterial Road Network	75
Figure 15:	Collector Road Network Concept	73
Figure 16:	Pedestrian and Bicycle Network	78
Figure 17:	Bus, LRT and Rail Network	81
Figure 18:	Water Servicing	87
Figure 19:	Stormwater Management Network	90
Figure 20:	Wastewater Servicing Network	93
Figure 21:	Potential Power Substations	95
Figure 22:	Development Staging	107
Figure 23:	Technical Report Sub-Areas	112

LIST OF ABBREVIATIONS

ACRWC	Alberta Capital Region Wastewater Commission
AIH	Alberta's Industrial Heartland
ARA	Arterial Roadway Assessments
ARP	Area Redevelopment Plan
ASP	Area Structure Plan
CFB	Canadian Forces Base Edmonton
CN	Canadian National Railway
CRNWSC	Capital Region Northeast Water Service Commission
LRT	Light Rapid Transit
MDP	Municipal Development Plan
MGB	Municipal Government Board
MIACC	Major Industrial Accidents Council of Canada
NSRV	North Saskatchewan River Valley
TMP	Transportation Master Plan
TOD	Transit Oriented Design
TUC	Transportation Utility Corridor
UPMP	Urban Parks Management Plan





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.

8.2 Arterial Road Network

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.



