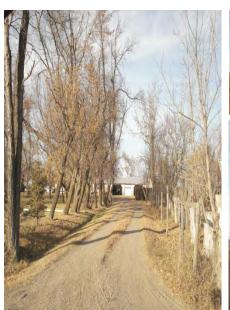
(Consolidated with Amendment Bylaw 05-16)





LEDUC COUNTY SOUTH OF DEVON INDUSTRIAL AREA STRUCTURE PLAN

August 2015



BYLAW NO. 21-14

LEDUC COUNTY

A BYLAW OF LEDUC COUNTY, IN THE PROVINCE OF ALBERTA, TO ADOPT THE SOUTH OF DEVON INDUSTRIAL AREA STRUCTURE PLAN.

WHEREAS

the Council of Leduc County deems it to be in the public interest to adopt the South of Devon Industrial Area Structure Plan.

NOW THEREFORE

be it resolved that the Council of Leduc County, duly assembled, hereby enacts to adopt the South of Devon Industrial Area Structure Plan, being Schedule A, attached to and forming part of this Bylaw.

This Bylaw shall take effect on the date of the third reading.

Read a first time this 24th day of June, A.D., 2014.

John Wholey
MAYOR

Blockes
COUNTY MANAGER

Read a second time this 25th day of Quest, A.D., 2015.

Read a third time and finally passed this 35th day of August, A.D., 2015

MAYOR

COUNTY MANAGER

South of Devon Industrial Area Structure Plan

Office Consolidation - Mar. 22 2017

Bylaw 21-14 was adopted by Council on August 25, 2015. In March 2017, this document was consolidated by the incorporation of the following bylaws:

> Bylaw 05-16 Approved March 22 2016

NOTE: Anyone using this consolidation is advised that the amendment has been included for convenience only and that the original South of Devon Industrial Area Structure Plan and the original amending Bylaw should be consulted for all purposes of interpreting and applying the Bylaw.

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Purpose of the Area Structure Plan	1
1.2	Location	2
1.3	Land Ownership	2
1.4	Public Consultation and Stakeholder Engagement	2
2	BACKGROUND RESEARCH AND ANALYSIS	4
2.1	Municipal Government Act	4
2.2	Alberta Land Use Framework and Land Stewardship Act	4
2.3	Capital Region Board	5
2.4	Leduc County Municipal Development Plan	6
2.5	Town of Devon/Leduc County Intermunicipal Development Plan	7
3	EXISTING SITE CONDITIONS	11
3.1	Biophysical Assessment	11
3.2	Environmental Screening Report	11
3.3	Existing Servicing	13
3.4	Historical Analysis	13
3.5	Soil Conditions and Topography	14
3.6	Transportation Impact Assessment	14
3.7	Market Conditions and Considerations	15
4	LAND USE CONCEPT, OBJECTIVES AND POLICIES	16
4.1	Light Industrial	18
4.2	Business Industrial	19
4.3	Medium Industrial	21
4.4	Environmental Reserve and Management	22
4.5	Municipal Reserve	23
4.6	Transportation and Pedestrian Network	24
4.7	Municipal Servicing	
	4.7.1 Water Network	_
	4.7.2 Sanitary Network	_
	4.7.3 Stormwater Network	30

	4.7.4	Oil and Gas Wells and Pipelines	30
	4.7.5	Shallow Utilities	31
4.8	Emer	rgency and Protective Services	31
5	IMPL	LEMENTATION	32
5.1	Deve	lopment Staging	32
5.2	Next	Steps	34
5.3	Revie	ew and Maintenance of the ASP	34
6	APPI	ENDICES	36
Appe	ndix A-	- Figures	36
		List of Figures	
		<u>List of Figures</u>	
Figure	1: Loca	ation of Plan Area	
Figure	2: Land	d Ownership	
_	-	ronmental Constraints	
_	-	Classification	
_	_	Topography Plan	
_		nsportation Network	
_		ource Constraints Plan	
_		d Use Concept Plan	
_	-	estrian and Open Space Network Iter Network	
_		itary Network	
_		rmwater Network	
_	13: Stag		
Ü	,		
		<u>List of Tables</u>	
Table	1 South	of Devon Industrial Lands Forecast Absorption (net ha)	15
		ndustrial Land Requirements	
Table	3 Land l	Use Statistics	17



1 Introduction

1.1 Purpose of the Area Structure Plan

The Town of Devon/Leduc County Intermunicipal Development Plan (IDP) was adopted in 2011. This IDP identifies the need for more industrial lands to be located within Leduc County adjacent to Highways 19 and 60. To meet this goal Leduc County (the County), the Town of Devon (the Town), and the rest of the project team lead by MMM Group Limited (MMM); worked together to develop the South of Devon Industrial Area Structure Plan (ASP). The objectives of the ASP are to accomplish the following:

- Prepare a land use planning and policy framework for the future development of industrial lands south of the Town of Devon.
- Identify the location of resource constraints and significant environmental features that may pose challenges with the future development.
- Identify transportation access points into the industrial area and the general alignment of collector roads within the ASP area.
- Identify the market demand for industrial land and appropriate type and size of the industrial development.
- Determine the location of business, light, and medium industrial land uses within the ASP area.
- Outline proposed servicing strategies and staging of the development within the area.
- Identify the approximate location of future Stormwater Management Facilities (SWMFs).
- Create policies that support the objectives and vision of this ASP document.
- Identify financial implications of infrastructure provisions on the County and the Town.
- Identify next steps, and the review and implementation process.

The ASP process commenced in December, 2013 and was completed in August 2015. As part of developing the ASP it was deemed necessary to amend the IDP. This amendment proceeded in conjunction with the development of the ASP. Public and stakeholder consultation was an integral part of this ASP preparation process. The ASP received first reading on June 24, 2014 and was later amended on September 9 to reflect further revisions. The ASP was submitted to the Capital Region Board (CRB) as a supporting document for the proposed IDP amendments contemplated by the Town of Devon and Leduc County. The IDP amendments were approved by the CRB on November 18, 2014 and were subject of a joint public hearing on December 23, 2014. The amended IDP was adopted by the Town of Devon and Leduc County on March 9, 2015 and March 10, 2015 respectively.

Public hearing for the South of Devon Industrial ASP was initiated on January 13, 2015 and concluded on March 10, 2015. The concerns raised during the public hearing were addressed and the ASP was adopted by the Leduc County Council by bylaw no. 21-14 on August 25, 2015.

1.2 Location

The South of Devon Industrial ASP is located within Leduc County south of the Town of Devon, as identified in **Figure 1**. For the preparation of this ASP, the County took into consideration a larger Study Extent Area which is identified by the following boundaries:

- North Realigned Highway 19 proposed by Alberta Transportation
- South -Township Road 502
- East Range Road 261
- West Highway 60

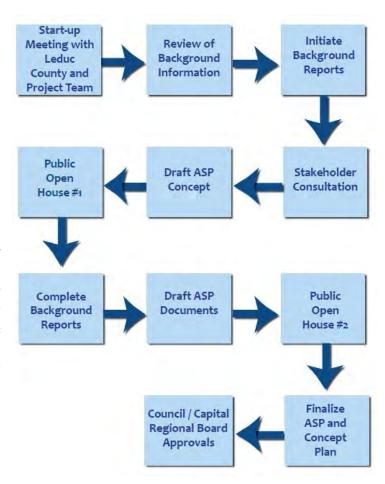
The Study Extent Area comprises 1,039.2 ha (2,567 acres) of lands legally described as 22-50-26-4W, 12-50-26-4W, 23-50-26-4W, and 14-50-26-4W. Based on the feasibility studies and marketing assessment undertaken for this Study area; the boundary of the Industrial ASP was further refined. The ASP area located in the northwest of the Study Extent Area; comprises of 323.9 ha of land within SW-22-50-26-4, NE-22-50-26-4, SE-22-50-26-4, SW-23-50-26-4, NW-14-50-26-4, NW-15-50-26-4 and NE-15-50-26-4.

1.3 Land Ownership

The lands within the ASP area are mostly privately owned. **Figure 2** shows the ownership information in more detail. The Study Extent area includes numerous oil and gas wells, pipeline rights-of-way, and a few existing building structures, which are also identified in **Figure 2**.

1.4 Public Consultation and Stakeholder Engagement

A public consultation and stakeholder engagement process was integral to the development of this ASP. A stakeholder engagement workshop was facilitated by MMM on February 10, 2014 at the Leduc #1 Energy Discovery Centre in the ASP area. This workshop was attended by MMM, Leduc County, Town of Devon representatives, and 23 stakeholders. The workshop invited input from the various stakeholders including land





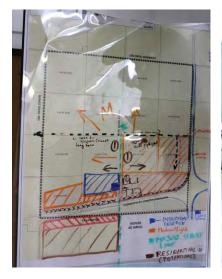
owners, Alberta Transportation (AT), and Edmonton International Airport (EIA) to provide background information as well as to help develop three concept plans.

Based on the results of the stakeholder consultation, three concept plans were developed. These three options were then presented to the Leduc County staff, as well as Leduc County and Town of Devon councillors, for their feedback and direction on-site accessibility and servicing constraints.

A number of stakeholders including representatives of Newton Energy Partners (NEP), Alberta Transportation, Edmonton International Airport, Leduc-Nisku Economic Development Authority, Devon Community and Economic Development, Alberta Environment, developers, and local land owners were contacted by email, phone, and in person to gather background information and feedback on the proposed ASP during this period.

This was followed by the creation of the fourth concept plan which was presented at the first open house on March 4, 2014. This open house was attended by 34 people including the project consultants, representatives from Leduc County, the Town of Devon, and local residents. This open house provided the public with an opportunity to review and provide input on the land use concept plan and servicing strategy presented.

The outcomes and feedback from the open house and findings of the market assessment were then incorporated into the concept plan. A second open house was held on April 16, 2014. This was a joint open house held in conjunction with the proposed Town of Devon Annexation and the Leduc County/Town of Devon IDP amendment. There were a number of people that attended, with the sign-in sheet indicating that 15 people attended the South of Devon Industrial ASP portion of the open house. Attendees included the project consultants, representatives from Leduc County and the Town of Devon, as well as local residents. During this second open house a range of discussions took place to explain to attendees the reasons for the proposed access points into the Study Extent Area, and the rationale for the size of the industrial land to be included within the Plan. Feedback received from the second open house is incorporated in the final land use plan.







2 BACKGROUND RESEARCH AND ANALYSIS

2.1 Municipal Government Act

The South of Devon Industrial ASP meets the requirements of Section 663 of the Municipal Government Act (MGA). It states that:

An area structure plan:

- (a) Must describe:
 - (i) The sequence of development proposed for the area.
 - (ii) The land uses proposed for the area, either generally or with respect to specific parts of the area.
 - (iii) The density of population proposed for the area either generally or with respect to specific parts of the area.
 - (iv) The general location of major infrastructure routes and public utilities.
- (b) May contain any other matters the council considers necessary.

2.2 Alberta Land Use Framework and Land Stewardship Act

The Alberta Land Stewardship Act (ALSA) was established in October 2009 and provides a legal basis for the Alberta Land Use Framework (LUF), which was developed in 2008. Both the LUF and the ALSA support and implement regional land use planning in Alberta. The ALSA:

- Provides a means by which government can give direction and provide leadership in identifying the objectives of the province, including economic, environmental and social objectives.
- Provides a means to plan for the future, recognizing needs of current and future Albertans.
- Provides for coordination of decisions by decision-makers concerning land, species, human settlement, natural resources and the environment.
- Creates legislation and policy that enable sustainable development by taking into account and responding to cumulative effects of human endeavour and other events (www.landuse.alberta.ca).

The LUF identifies seven regional planning areas in Alberta for which regional plans will be developed. The South of Devon Industrial ASP is located within the future North Saskatchewan Regional Plan (NSRP) area however this document had not yet been approved at the time of the ASP preparation. This industrial ASP conforms to the vision of the LUF in which "Albertans work together to respect and care for the land as the foundation of our economic, environmental and social well-being" (P 15 LUF).



The desired outcomes of this vision include:

- Healthy Economy supported by our land and natural resources.
- People-friendly communities with ample recreational and cultural opportunities.
- Healthy ecosystems and environment.

2.3 Capital Region Board

The Capital Region Board (CRB) was created by the Government of Alberta on April 15, 2008 to provide an integrated and strategic approach to planning future growth for the Capital Region. The Regional Evaluation Framework was also created as a mechanism for the approval of all municipal statutory plans for the 24 participating municipalities. The Capital Region Growth Plan (CRGP) was completed in March 2009 to address four principal components; a Land Use Plan, a Housing Plan, an Intermunicipal Transit Network Plan, and a Geographic Information Services (GIS) Plan. Every member of the CRB was aware of the preparation and development of each aspect of the CRGP.

The ASP area, as outlined in **Figure 1**, is not identified as a priority growth area by the Capital Region Board (CRB). However, according to the CRB:

"All municipalities shall be allowed to grow. The cumulative amount and impact of growth outside the priority growth areas shall be monitored by the Capital Region Board."



The Town of Devon/Leduc County Intermunicipal Development Plan (IDP) was approved by the CRB in 2011. Similar to the IDP, this Industrial ASP is not located within a priority growth area, but it is recognized by the Town of Devon as an important plan to help diversify the current tax base because of the closure of the Imperial Oil natural gas conversion plant. This ASP follows the policies and growth areas identified within the IDP.

2.4 Leduc County Municipal Development Plan

The Leduc County Municipal Development Plan (MDP) was adopted under Bylaw No. 35-99 in October, 1999. The purpose of this Plan is to effectively manage subdivision and development of land in the County for the benefit of its present and future residents and their quality of life (p1).

Map 2 – Land Use Concept and Map 3 – Overlay Policy Areas of the MDP will need to be updated to reflect the proposed development in the South of Devon Industrial ASP.

A number of policies contained within the MDP were considered for the preparation of this ASP to ensure the South of Devon Industrial ASP conforms to the approved Leduc County MDP.

Some of the industrial relevant policies include:

1. Economic Development and Tourism

1.2.6 The County shall encourage the distribution of desirable economic activities throughout the County, with the primary focus being the Nisku Business Park.

2. Industrial and Commercial

- 2.2.1 Rural industrial and commercial uses should:
 - (a) avoid environmentally sensitive areas;
 - (b) situate along major transportation routes;
 - (c) be compatible with neighbouring land uses;
 - (d) be considered as discretionary uses in all areas of the County, except in conventional country residential, hamlet, locality and lake front areas;
 - (e) if required by the County, be subject to the preparation of an area structure plan which should address transportation, utility servicing and development density concerns;
 - (f) provide products or services to the agricultural industry, recreation or nearby urban and/or industrial areas; and
 - (g) have minimal requirements for on-site improvements, municipal services and public amenities.



3. Agriculture

- **3.3.3** Land shall not be considered high capability agricultural land, if:
 - (b) in the opinion of the County Council, the subject lot is determined to be more suited to a land use other than agriculture, on the basis of the following:
 - (i) there is sufficient evidence that the farmland assessment or Canada Lands Inventory rating is questionable;
 - (ii) the size of the parcel is small enough to render it unsuitable for agricultural use;
 - (iii) there is reasonable proof that prevailing development pattern or trend in the general area have made agricultural uses difficult or not viable;
 - (iv) the land is required to allow hamlets, industrial or other non-agricultural uses to expand in a logical manner; or
 - (v) it is necessary to restrict or change agricultural uses to minimize conflicts with nearby urban, suburban, environmental conservation or other lands.
- **3.3.7** Non-agricultural uses and subdivisions on high capability agricultural land shall be avoided unless the County is convinced that the land use or subdivision,
 - (b) provides benefits to the County and the general public to the extent necessary to warrant the removal of high capability agricultural lands from production;
 - (d) the non-agricultural use or subdivision is consistent with an approved Area Structure Plan.

2.5 Town of Devon/Leduc County Intermunicipal Development Plan

The Town of Devon/Leduc County Intermunicipal Development Plan (IDP), which was approved in April 2011, is a joint development strategy for the Town of Devon and Leduc County over a 35 year planning horizon. The IDP was approved by the Capital Region Board, even though it is not located within a priority growth area. The proposed realignment and upgrade of Highway 19 will provide a direct link between Devon, Nisku and the Canamex Trade Corridor. This will encourage and support the location of industrial uses within the proposed South of Devon Industrial ASP area.

The IDP area is located close to Edmonton International Airport and Nisku Industrial Park. A range of industries are located in close proximity to the ASP area including the Devon Research Centre and Western Research Centre. A number of amenities are located nearby including the Rabbit Hill Ski area, Devonian Botanic Garden, and Castrol Raceway.

The closure of the Imperial Oil Natural Gas Conversion Plant has resulted in the need for the Town of Devon to increase its industrial tax base, and hence industrial land area. Most of the undeveloped lands located west of the Town are designated as residential according to the MDP, with the lands to the south designated for industrial use. The IDP identified limited industrial development space within the Devonian Business Park, which accounts for 8% of the

Town's overall assessment base. Through the exploration of cost and revenue sharing between the Town and County for new non-residential growth in the South of Devon Industrial ASP area, the Town will have opportunity to increase its non-residential tax base.

The ASP is in compliance with the following IDP policies:

4.2 Economic Development Policies

(b) Supply of Industrial and Commercial Land. Work collaboratively to ensure that a supply of industrial and commercial land in the IDP area is readily available.

7.2 Industrial Policies

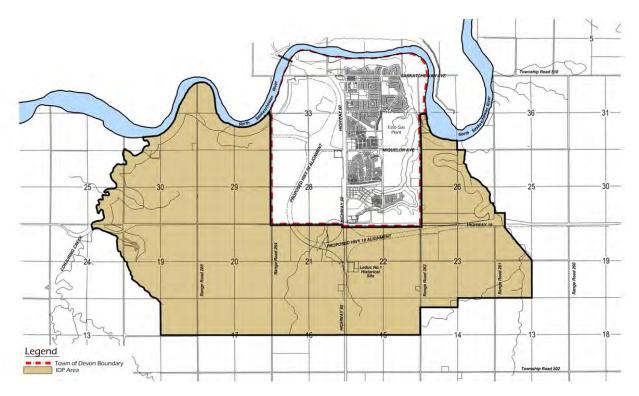
- (a) Design of Industrial Areas. Support the design of industrial areas that are well-designed and of a high quality. When it occurs, industrial development shall be in accordance with the design principles acceptable to the Town and County.
- **(b)** Area Structure Plans. New industrial developments or subdivisions would only be considered by the Town and the County through the preparation of an Area Structure Plan(s), in accordance with Section 633 of the Municipal Government Act.
- **(d) Future Industrial Development.** Any proposals for industrial development in the "joint future consideration" area will only be considered by the Town and the County through a proposed amendment to the IDP itself, considering the direction of the Growth Plan, and the preparation of an Area Structure Plan (s).
- **(e) Industrial Design Guidelines.** Jointly prepare design guidelines or regulations that would apply to future industrial areas along Highways 19 and 60 to ensure consistent and high quality development along major entranceways into the area.
- (f) Heavy Industrial Uses Not Permitted. Heavy Industrial uses, which are capable of having a detrimental effect on humans or the environment through the discharge or emission of toxic, noxious, or hazardous products, will not be considered in the IDP area.
- (g) Level of Service. Require future levels of infrastructure and municipal services for industrial development in accordance with the development standards of the Town, in consultation with Leduc County.

8.2 Industrial Development Strategy Policies

(b) Level of Service. Require future levels of infrastructure and municipal services for industrial development in accordance with the development standards of the Town of Devon, or at an alternate standard, in consultation with Leduc County. Interim on-site or communal systems for the provision of water, sanitary sewer, and stormwater management in the IDP area may be considered for certain uses, as agreed upon by both municipalities.



- **(c)** Cost/Revenue Sharing. Undertake discussions to determine a cost-sharing arrangement between the Town and County for the costs of providing infrastructure to the IDP area. Explore revenue sharing options between the Town and County for new non-residential growth within the South of Devon Industrial ASP area.
- (d) Comprehensive Development. Ensure that proposals for future industrial development in the IDP area are of a comprehensive nature, through the submission of an Area Structure Plan(s). Industrial development proposals of a small or non-comprehensive nature (e.g. single lot developments) will be required to undertake an evaluation of whether industrial lands within the Town boundaries would be better suited to accommodate the development.



IDP Area

Source: Town of Devon/Leduc County Inter-municipal Development Plan

Development to be located along Highway 19 will be light industrial and business park development which will complement uses identified within the proposed Highway 19 ASP. Industrial uses which may have a nuisance factor and outdoor storage will be located away from Highways 19 and 60. A future arterial road may be required to the south of the IDP area. An all turn access will be at Highway 60 and future Township Road 503. The Capital Region Growth plan does not identify regional water or sanitary systems being provided to the IDP area. Ideally, the future site will be serviced to full urban standards, but on-site servicing is permitted in the

short-term. A cost share agreement will be required as servicing the lands will most likely come from the Town of Devon.

Drainage will be provided by stormwater ponds within the IDP area which will ultimately discharge to the North Saskatchewan River. The land generally drains from south to north. The County and Town are working together to explore the potential of a regional water supply to the IDP area (Section 12.7).

There is a high water table within the area which will add to the costs of development. The area has a range of creeks and environmental areas which are located close to the Trans Canada Trail Network and Capital Region River Valley Park. Future development would include district park opportunities and multi-use trail and walkway connections (Section 3.2). There is a considerable amount of resource activity within the IDP area. This may limit development and cause fragmentation in certain areas which may place high costs on servicing future lands. It may also leave large amounts of contaminated land (Section 5.2).



3 EXISTING SITE CONDITIONS

3.1 Biophysical Assessment

A desktop Biophysical Assessment was completed by Spencer Environmental Management Services Ltd. (Spencer) in April 2014. The assessment included the review of high resolution colour aerial photography, biophysical databases, and historical aerial photographs. Using the historical photographs it was possible to estimate the approximate location of wetlands within the ASP area, and estimate their classification types. There were eight wetlands identified, mainly Class 3 or lower. The overall ecological value of most of the identified wetlands is likely low. There are four potential wetlands in the ASP area.

Two woodland features were identified. One of which is identified to be of conservation interest in the western portion of the ASP area. Environmentally sensitive ecological corridors need to be conserved in the southwestern and western portions of the ASP area.

The report identified conservation recommendations based on the results of the Biophysical Assessment. These areas of retention are shown in **Figure 3** and include:

- Retain the western wetland to the woodlands area south of the ASP area.
- Create an ecological corridor between the western wetland and woodlands to the south of the ASP area.
- Provide a naturalized corridor to the ravine north of the ASP area.

Areas of classified soil types are outlined in Figure 4.

3.2 Environmental Screening Report

The historical land use of the Site was identified from a variety of historical information sources including aerial photographs, land titles and interviews with individuals having knowledge of present and past land use activities within the study area.

A phone interview was completed in which the participant indicated that the Leduc/Devon Oilfield Historical Society owns approximately 22.25 hectares (55 acres) in NW 23-50-26-4. The site was seeded to grass in the years immediately following the 1948 Atlantic #3 well blowout. According to the source the Leduc/Devon Oilfield Society has a letter from Alberta Environment that confirms the historical presence of hydrocarbon contamination prior to any ownership by the Leduc/Devon Oilfield Society. According to source the Leduc/Devon Oilfield Historical Society would like to pursue a historical designation for a 5 acre portion of the site.

An ERIS Ecolog database search of the Site and surrounding properties (0.25 km buffer zone) was conducted for any environmental and contamination issues relating to the Site. The database search revealed that the Site and surrounding properties are currently registered on the following databases:

- Alberta Oil and Gas Wells (listed prior to September 2003): 132 wells on-site, 55 wells off-site
- Oil and Gas Wells (listed since September 2003): 46 wells on-site, 10 wells off-site
- Water Well Information Systems: 33 wells on-site, four wells off-site

A search of the Alberta Environment and Sustainable Resource Development (AESRD), Environmental Site Assessment Repository (ESAR) was completed for any scientific and technical information regarding assessment and reclamation for the Study Extent Area. The Canada Land Inventory (CLI) is a dry-land agriculture capability inventory for rural Canada and Alberta. The majority of the soil within the Site is identified as being of Class 1 (890 ha), Class 2X (7 ha), Class 3S (152 ha), and Class 6T (80%)-3S (20%) (4 ha).



Based on the results of the screening, it was determined that varying levels of historical environmental impact and subsequent remedial actions associated with oil well operations have occurred across the site. There are four locations where the reporting of remedial action is incomplete and the current status of environmental contamination on those sites is unknown. It is recommended that Leduc County make further inquiries to Alberta Environment and Sustainable Resource Development to determine if these sites have received Reclamation Certification. If certification has not been granted, it is recommended that AESRD be contacted to provide the current status of remedial action on these sites and a Phase II environmental site assessment investigation would be required prior to any subdivision and development permit application being approved by the County.



3.3 Existing Servicing

The Town of Devon stormwater drainage system includes both a minor and a major drainage system in most areas of the community, with the remainder of the town drained by open ditches and other major system features. The minor system consists of storm sewer pipes, manholes, catch basins, outfalls and ponds. The major system consists of ditches, channels and creeks which ultimately discharge to the North Saskatchewan River. The County stormwater drainage system consists of roadway ditches, culverts, channels and creeks.

3.4 Historical Analysis

As there are no Historical Resources Values for palaeontology, it is assumed that the palaeontological potential of the project area is low and no further work is deemed necessary relative to possible project impacts on palaeontological resources. The site distribution pattern in the area appears to be one of association with the North Saskatchewan River and its tributaries. The number of archaeological sites within the general area indicates high precontact and historic land use. Based on the high number of archaeological sites within the area, any areas of remaining native vegetation and/or deep deposits are of particularly high potential for identification of significant sites.



Avoidance of the Leduc No. 1 Discovery Well and the Leduc-Woodbend Oilfield is required. Ministerial consent will be required for any disturbances within designated lands. Avoidance of the Atlantic No. 3 Wild Well Site (HS 81996) which is located in LSD 12-23-50-26 W4M is also required. Ministerial consent will be required for any disturbances within these designated lands. One historic farmyard is located within SE 22-50-26 W4M. Detailed site recording of the historic structures located within this historic farmyard is recommended. This farmyard will remain on-site until development in the ASP area requires removal of the farmyard. Relative to

archaeology, the potential is considered to be low for the recovery of intact and significant sites and further archaeological work is not recommended for the South of Devon Industrial ASP. However, documentation and detailed site recording of the historic structures located within SE 22-50-26 W4M prior to impact is recommended.

3.5 Soil Conditions and Topography

A desktop geotechnical study was completed in March 2014. This desktop study included an analysis of the Study Extent Area using a range of supporting reports, contour information, and air photos. The report identifies that from a geotechnical standpoint most of the Study Extent Area appears suitable for development, however, there is a high water table and soft wet soils in some low areas of the Study Extent Area which would require investigation at the more detailed planning and design stage. Developing the existing pond/wetland areas may be challenging. The clay soils should provide conditions suitable for open-trenched underground utility installation. The clay soils should also allow for standard SMWF design. Shallow foundations are generally feasible for use within the Study Extent Area. Footings would likely only be feasible for relatively lightly loaded developments. Industrial and commercial developments that would contain large storage yards appear feasible in all areas of the ASP site. The site topology can be seen in **Figure 5**.

3.6 Transportation Impact Assessment

A Transportation Impact Assessment (TIA) was completed for the site as indicated in the Functional Planning Study (FPS), completed by Stantec in 2005 and based on discussions with Alberta Transportation and ISL Engineering Ltd., the Highway 19 and Highway 60 realignment will be completed in three stages. The first stage will include realignment of Highway 19 by deflecting it south of the existing route and will be constructed coincidently with the future interchange ramps east of Highway 60. The second stage of the project will include construction of the Highway 19 and Highway 60 interchange and the remainder of the highway route west of the existing development in Devon. The final stage will include construction of the Miquelon Avenue interchange.

Highway 19 is identified as a current expressway and future freeway. In order to obtain freeway status of Highway 19, the existing at-grade accesses along Highway 19 would need to be removed in the future. Access to the ASP area from Range Road 262 and Highway 19 intersection will need to be closed when Highway 19 becomes a freeway or at such traffic generation that the intersection cannot be operated at an acceptable safety level. Access at Township Road 503 and Highway 60 intersection will serve the development within the whole ASP area until the Highway 19 and Highway 60 interchange is constructed. At this time Township Road 503 and Highway 60 access will be closed. Based on the detailed design of the interchange, a new access to the ASP area will be required at Township Road 502 or 502A and Highway 60 intersection. Additional access may be available to the east at Rabbit Hill Road (Range Road 260) and Highway 19. After closure of access at Range Road 262 and Highway 19 this access may be used as a potential emergency access.



3.7 Market Conditions and Considerations

A market assessment was carried out to determine the suitability and size of future industrial development within the Study Extent Area. Based on an analysis of regional market growth potential, it was forecasted that industrial land demand (absorption) would total approximately 190 net ha (470 net acres) over the 2014-2044 period, as presented in **Table 5**. This absorption forecast was based on the assumption that lands would become developable in 2019. Over the 2019-2024 and 2024-2029 periods, land absorption would be relatively modest, at 15 ha and 20 ha, respectively. Over the 2029-2034 period, this would gradually increase to 30 ha, and then significantly increase by 2034-2039 and 2039-2044 to 60 ha and 65 ha, respectively, with the anticipated completion of the planned major roadway improvements to Highway 19.

Table 1 South of Devon Industrial Lands Forecast Absorption (net ha)

Period	Land Absorption (net ha)
2014-2019	0
2019-2024	15
2024-2029	20
2029-2034	30
2034-2039	60
2039-2044	65
Total 2014-2044	190

The net land does not reflect site-specific takeouts, including open space, arterial roads, stormwater ponds and easements, which require an upward adjustment to determine gross land requirements. Also, it does not reflect future land vacancy as identified in **Table 6**. Assuming a vacancy adjustment of 15% and a 70% net to gross ratio, this translates into a minimum requirement of 312 gross ha (771 gross acres). Based on this analysis, the County would need to designate a minimum of approximately 312 gross ha of industrial land within the ASP to address forecast land demand to 2044. This is a reasonable size for an industrial park of this nature, achieving the critical mass needed to provide reasonable presence, choice and economies of scale.

Table 2 ASP Industrial Land Requirements

	На	Acres
Net Industrial Land Absorption	190	269
Net land Need with Vacancy Adjustment ¹	219	540
Gross Land Requirement ²	312	771

¹A 15% land vacancy adjustment has been assumed to account for vacant parcels of land which will not develop over the long term.

²Assumes 70% net to gross ratio.

4 LAND USE CONCEPT, OBJECTIVES AND POLICIES

The land use concept for the South of Devon Industrial ASP is shown in **Figure 8** with the land use statistics outlined in **Table 6**; **Appendix C**. The objectives of this ASP include the following:

- Promote sustainable and efficient development.
- Build a strong industrial region.
- Produce a flexible plan that can respond to market conditions.
- Provide good access to the industrial parcels.

The concept plan, objectives and policies developed for the South of Devon Industrial ASP were created taking into consideration the existing policies and vision of the following:

- The Leduc County MDP
- The Town of Devon/Leduc County IDP
- Other statutory plans including the Draft Highway 19 ASP
- > Environmental and resource constraints
- Transportation requirements
- A market analysis of industrial supply
- A fiscal impact assessment

Based on the market assessment, it was determined only a portion of the Study Extent Area is required for the industrial ASP. In spite of the oil and gas well facilities and related setbacks, the area in the north-west portion of the Study Extent Area was selected for industrial development. This location was chosen because of accessibility to the Highways, and short efficient connection to existing services. The proposed land uses in the Plan area include business industrial, light industrial, and medium industrial. The business and light industrial uses will be located adjacent to Highways 19 and 60 with the medium industrial uses located internally within the site.

The proposed industrial land use dedication accounts to 323.9 ha of Gross Area (GA). For the purpose of land use statistics aspect of this ASP, land identified within the 100 m setbacks from wellheads is not considered developable land, however, NEP representatives indicated that there is potential for using the lands within the well setbacks for open storage areas such as open storage yards and parking dedication for trucking companies. Such proposals from developers and land owners are subject to review by NEP representatives. Setback distances are determined on an individual basis and are subject to Energy Resources Conservation Board (ERCB) Directives and requirements, which are also subject to change.

This section will outline specific objectives and policies associated with the different industrial land uses, Environmental Reserve (ER), Municipal Reserve (MR), resource constraints, and servicing for the ASP area. The collector road layout within the ASP area will allow for



convenient accessibility to the local road network and servicing infrastructure. A variety of parcel sizes ranging from one to 25 acres will be accommodated within the Plan area to ensure the needs of various industrial uses are served efficiently. This ASP is a high level document which provides flexibility to allow for a range of industrial parcel sizes. This approach ensures the plan is flexible to respond to changing market conditions, allowing a diverse range of industrial uses to locate within the future ASP area. The actual industrial parcel sizes will be determined at the rezoning and subdivision stages.

The objectives and policies associated with ER and MR are in line with the requirements of the MGA and Leduc County MDP standards. The exact configuration of MR parcels will be determined at the rezoning and subdivision levels. Cash in lieu or a combination of MR/cash in lieu will be an option for any future development. Natural/ ER areas identified within the ASP will require further geotechnical and biophysical analyses to establish the exact development setback line and configuration of these areas.

The setbacks and development constraints associated with oil and gas facilities will be implemented in accordance with the ERCB, NEP Guidelines, and Leduc County standards. More detailed Environmental Site Assessments may be required prior to any subdivision to determine if contamination is present on-site.

Table 3 Land Use Statistics

ASP Area	Area (ha)	
Gross Area	324.6	
Well setbacks	61.0	
Natural Areas/Environmental Reserve	6.4	
Gross Developable Area (GDA)	257.2	100%
Land Uses		% of GDA
Business Industrial	34.4	13%
Light/Medium Industrial	182.6	71%
Institutional	1.2	0.4%
Natural Areas/Environmental Reserve	6.4	2.5%
Public Utility Areas (PUL)	21.6	8%
Circulation		
Roads	16.8	7%
Service Road	0.6	0.2%
	263.6	
Net Area*	218.2	

Areas are approximate and are subject to a more detailed calculation at the subdivision/rezoning stage.

^{*}Net Area is the GDA minus MR, PUL and Circulation.

4.1 Light Industrial

As outlined in **Figure 8**, approximately 182.6 ha of land (excluding well setbacks) within the South of Devon Industrial ASP is identified for future light / medium industrial use. The light industrial uses will provide a transition area between the highways, business industrial, and the medium industrial uses which will be located internally within the site.

In accordance with Leduc County's Land Use Bylaw the South of Devon ASP may accommodate land uses such as:

- Business Office
- Convenience Retail
- Recreation, Indoor
- Manufacturing, Limited Indoor
- Warehousing and Storage (indoor)
- Truck Terminal

The County's land use bylaw for LI – Light Industrial District also allows for use such as cultural facility, religious assembly, indoor recreation, gas bar, funeral service, and several discretionary uses.

A range of objectives and policies have been developed for light industrial areas.

Objectives

- To allow for light industrial uses within the Plan area that provides for a diverse mix of land uses.
- To create visually appealing entryways into Devon.
- To ensure that sufficient lands for light industrial uses are located within this area.
- Prohibit heavy industrial uses.
- Promote sustainable and efficient development.
- Build a strong industrial region.
- Produce a flexible plan that can respond to market conditions.

- **4.1.1** Light industrial areas shall be located closer to the Highway 19 and/or Highway 60 corridors.
- **4.1.2** Industrial uses that create environmental concerns and have a nuisance factor shall not be permitted within this district.
- **4.1.3** Heavy industrial uses shall not be permitted.



- **4.1.4** Development within the light industrial area will occur in a contiguous manner where possible.
- **4.1.5** Light industrial uses must be complementary and not have a negative impact on other industrial areas within Leduc County.
- **4.1.6** Access to parcels shall be through the internal collector and local road system. More detailed site plans will determine the location of access to individual parcels.
- **4.1.7** Allow for a variety of parcel sizes from 1 acre to 10 acres to ensure a range of different light industrial uses can locate within the ASP area. Larger lots will be considered based on the type of industrial use.
- **4.1.8** Development shall be in compliance with the Industrial and Entrance Corridor Design Guidelines that will be jointly prepared by the County and the Town for development along Highways 19 and 60.
- **4.1.9** Use of green (energy efficient) technologies and development practices is encouraged in building siting, design, and construction and landscaping.

- The land use plan in **Figure 8** identifies the location of future medium, light and business industrial areas.
- The subdivision, rezoning, and development permit process will control this.
- Market research and a fiscal impact analysis were undertaken for this project.

4.2 Business Industrial

Business industrial uses (34.4 ha) excluding well setbacks are identified in **Figure 8**. These uses will be located along the Highway 19 and Highway 60 corridors in order to create visually appealing entryways into Devon. These business industrial areas will provide a buffer from the light and medium industrial uses which will be located internally within the ASP area. Some of the typical land uses that will be accommodated in the ASP area may include:

- Business Office
- Professional, scientific, technical service
- Cultural Facility
- Institutional Use

- Liquor Sales
- Financial Services
- Recreational, Indoor
- Restaurant
- Hotel

The County land use bylaw also allows for motel, utility service, information service, and several discretionary uses under IB - Industrial Business District.

A range of objectives and policies have been developed for business industrial areas.

Objectives

- To allow for business industrial uses within the Plan area in order to provide a diverse range of land uses.
- To create visually appealing entryways into the Town of Devon.
- Prohibit heavy industrial uses.
- To ensure that sufficient lands are allocated, and accommodate the Business Industrial land use requirements of Leduc County and The Town of Devon.
- Promote sustainable and efficient development.
- Build a strong industrial region.
- Provide good access to the industrial parcels.
- Produce a flexible plan that can respond to market conditions.

- **4.2.1** Business industrial shall be located adjacent to Highways 19 and 60.
- **4.2.2** Heavy industrial uses shall not be permitted.
- **4.2.3** Industries that create nuisance factors such as but not limited to, noise, dust and/or fumes, vibration, and light; or environmental impacts shall not be considered business industrial.
- **4.2.4** Development within the business industrial area will occur in a contiguous manner where possible.
- **4.2.5** Minimal outdoor storage may be considered and should be appropriately screened where such use is necessary for the operation of a development contained within an enclosed structure on the site.
- **4.2.6** Business industrial uses must be complementary and not have a negative impact on other industrial areas within Leduc County.
- **4.2.7** Access to parcels will be through the internal roadway system.
- **4.2.8** Buildings located along Highways 19 and 60 will be aesthetically pleasing, and sites will be landscaped and may include a berm to help create a visually attractive entranceway into Devon
- **4.2.9** Development shall be in compliance with the Industrial and Entrance Corridor Design Guidelines that will be jointly prepared by the County and the Town for development along Highways 19 and 60.
- **4.2.10** Use of green (energy efficient) technologies and development practices is encouraged in building siting, design, and construction and landscaping.



- The land use plan in **Figure 8** identifies the location of future medium, light and business industrial areas.
- The subdivision, rezoning, and development permit process will guide and regulate the development.
- Market research and a fiscal impact analysis were undertaken for this project.
- Architectural and landscape design guidelines will be developed for this area.

4.3 Medium Industrial

Approximately 182.6 ha (excluding well setbacks) of the ASP area is identified for light and medium industrial uses, as outlined in **Figure 8**. These areas will be located internally within the ASP, with the business or light industrial uses providing a visual buffer to Highways 19 and 60. The appropriate landscape buffering will be provided internally on individual lots so as to limit the visual impacts on surrounding businesses and public areas in general. Medium Industrial development that discharges harmful toxins and substances will be restricted within the ASP area.

The land uses listed below may be accommodated within the medium industrial development area.

- Automotive/Equipment Repair
- Automotive/Equipment Body Repair
- Contractor Service, General
- Contractor Service, Limited

- Manufacturing, light
- Recycling Depot
- Warehousing and Storage
- Business Office

In addition to these uses, the IND - Industrial District of the County land use bylaw allow for several discretionary uses.

Objectives

- To allow for medium industrial uses within the Plan area so as to create a diverse mix of land uses.
- Reduce the visual impact of medium industrial development.
- Produce a flexible plan that can respond to market conditions.
- Build a strong industrial region.
- Provide good access to the industrial parcels.

- **4.3.1** Medium industrial uses shall not be located adjacent to Highways 19 or 60.
- **4.3.2** No heavy industrial uses will be permitted within the ASP.

- **4.3.3** Appropriate landscaping and screening shall be used to buffer outdoor storage areas and provide appropriate transitions from light to medium industrial areas.
- **4.3.4** Where applicable, development shall be in compliance with the Industrial and Entrance Corridor Design Guidelines that will be jointly prepared by the County and the Town for development along Highways 19 and 60.
- **4.3.5** Allow for a variety of parcel sizes ranging from one to 25 acres to ensure a range of different industrial uses can locate within the ASP area.
- **4.3.6** Medium industrial uses shall be complementary and not have a negative economic impact on other industrial areas within Leduc County.
- **4.3.7** Medium Industrial uses will have a minimum or no negative impact on the environment or natural ecosystems of Leduc County.
- **4.3.8** Use of green (energy efficient) technologies and development practices is encouraged in building siting, design, and construction and landscaping.
- **4.3.9** Access to parcels shall be through the internal roadway system.

- The land use plan in **Figure 8** identifies the location of future medium, light and business industrial areas.
- Leduc County Bylaw standards shall be implemented for landscape buffering.
- This development will be controlled by the subdivision process.

4.4 Environmental Reserve and Management

A desktop Biophysical report was completed to support this ASP. A desktop Geotechnical study was also completed which identified that the general ASP area supported development from a geotechnical point of view. **Figure 5** outlines the existing site topography of the area.

Objectives

- Integrate environmentally significant wetlands into future development.
- Implement Low Impact Development (LID) features where possible.
- Protect natural and environmentally sensitive areas.

- **4.4.1** The developer shall undertake a geotechnical investigation at the rezoning application stage.
- **4.4.2** Environmentally sensitive areas are identified as ER within this ASP and shall be delineated and dedicated through a field survey at the rezoning and subdivision stage.



- 4.4.3 The County may require the developer to submit a Water Act Approval application to Alberta Environment and Sustainable Resource Development (AESRD) to determine any permanent or semi-permanent wetlands in support of development. Removal and compensation of wetlands will be determined by the County and/or AE on a case by case basis.
- **4.4.4** Wetland areas, ephemeral drainage and other significant ecological connections shall be protected by naturalization.
- **4.4.5** Natural vegetative areas, wetlands, and corridors shall be protected and incorporated into site design through MR (Municipal Reserve) and ER (Environmental Reserve) dedications.
- **4.4.6** The developer shall undertake a Phase 1 Environmental Site Assessment (ESA) at the time of submitting a rezoning application. The developer shall undertake a Phase 2 and 3 ESA's should the Phase 1 ESA deem them necessary.

- Investigate if the Province wishes to claim any wetlands.
- A future Water Act Approval application may be sent to Alberta Environment to determine if any wetlands will be claimed as future public lands.
- The outline of ER areas will be delineated at the rezoning and subdivision stages.
- More detailed biophysical and geotechnical reports will confirm site specific ER areas.

4.5 Municipal Reserve

As part of the open space and environmental connectivity within the Plan a range of conceptual pedestrian and trail linkages are shown in **Figure 9**. This trail linkage can be incorporated with future LID features such as bioswales to enhance ecological and environmental aspects of the ASP area. These areas will also connect to future Stormwater Management Facilities (SWMFs) which will further enhance the open spaces network within the ASP area.

In accordance with the MGA, the Study Extent Area and ASP combined indicates 10% Municipal Reserve (MR) allocation in the form of preservation of natural areas. The majority of the natural area is located within the Study Extent Area. The required 10% MR within the ASP area will be provided through MR, cash in lieu, or a combination of both. The requirement for open space areas will be examined in more detail at the subdivision level. To reduce the fragmentation of industrial and open space development and support contiguous and comprehensive planning, subdivisions may under or over dedicate MR. Depending on the scenario the County may need to buy land from the owner or developer to compensate for the over-dedication, or in the case of under-dedication the County may be compensated through cash in lieu.

A range of objectives and policies have been developed for Municipal Reserve areas.

Objectives

- Provide areas for recreational opportunities such as trails and park areas.
- Provide connectivity between creeks, SWMFs, ER, and MR areas.
- Provide an interconnected trails and pathway system throughout the site.

Policies

- **4.5.1** Municipal Reserve (MR) shall be provided at 10% of the Gross Developable Area (GDA), or as cash in lieu.
- **4.5.2** A multi-use trail system shall be developed through the ASP area to enhance pedestrian and ecological connectivity.

Implementation

The MGA stipulates that 10% of the GDA will be provided as MR in the form of land or as cash in lieu, or a combination of both. The MR will be dedicated at the rezoning and subdivision stages.

4.6 Transportation and Pedestrian Network

A Transportation Impact Assessment (TIA) was completed as part of this ASP. The TIA identified transportation issues regarding access points into the ASP area and the general configuration of the future collector road alignment.

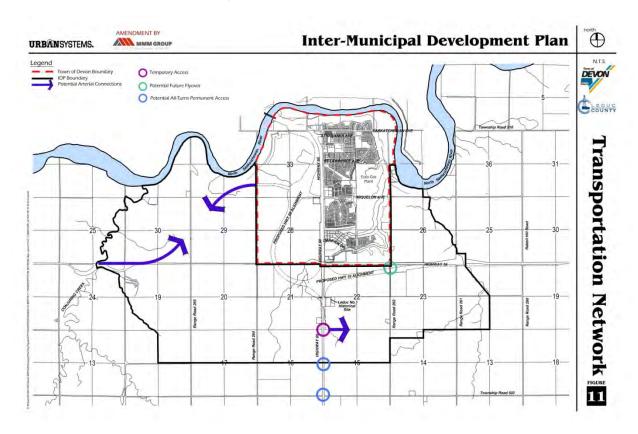
The transportation network is key to the development of industrial lots within the future Plan area. The internal road network enables access to all of the proposed lots, and it will be developed to standards acceptable to both the Town of Devon and Leduc County. Ideally the network will be constructed to rural standards with ditches. As development within the ASP area will be staged over time, it is important to expand the internal transportation network in a logical and economically sustainable way. This will reduce the potential for fragmentation of land uses and the unnecessary development of valued agricultural land.

Figure 6 identifies the Transportation and pedestrian network in the ASP area. Given the realignment plans for Highway 19 and the uncertain timeframe for its eventual upgrade to an expressway and ultimately a freeway; this ASP proposes that temporary access to the industrial development in the ASP area is from the Township Road 503 and Highway 60 intersection. Based on a discussion between the Town of Devon and Alberta Transportation, it is understood that Highway 19 and Highway 60 interchange will not be constructed for another twenty years and detailed plans are not available at this time. Access to Range Road 262 from Highway 19 will be permitted as long as Highway 19 is not designated as a free way or the intersection operates at acceptable capacity parameters. Alberta Transportation, in their letter dated July 13, 2015, stated that they are not opposed to signals and will continue to work with the Town and County to maximize the service life of the Highway 19/Range Road 262 intersection. There is potential that this access may be used as an emergency access. Township Road 503 and



Highway 60 will serve the entire ASP area until the Highway 19 and Highway 60 interchange is built. Based on the detailed design and configuration of this interchange, permanent access to the ASP area will be moved further south at Township Road 502 or 502A and Highway 60. If the need is demonstrated, there is a potential for a future flyover at Range Road 262 and Highway 19 location to connect the residents of the Town to the ASP area both via vehicular and pedestrian network.

Figure 6 shows the proposed major and minor collector roads including Township Road 503 and Range Road 262. A future emergency access may be possible from Township Road 502, on approval from Alberta Transportation and Leduc County. The current access to Leduc #1 off of Township Road 503A will be closed. A service road is proposed to provide easy access to the Leduc #1 Energy Discovery Centre site and will also serve the business industrial uses located along Highway 60. The service road will continue south of the ASP area to provide access to the Area of Joint Future Consideration. The appropriate separation distance will be provided between the service road and Highway 60 at the subdivision. It is not anticipated that any significant noise attenuation will be required along Highways 19 and 60. However, an appropriate noise assessment study will be required at subdivision if deemed necessary by Leduc County. Appropriate berming may also be required at the subdivision stage. Noise attenuation is not the responsibility of the Province.



Transportation Network

Source: Town of Devon/Leduc County Inter-municipal Development Plan

A multi-use trail is proposed along one side of Township Road 503 and Range Road 262, and a separated walk along the potential internal major and minor collector roadways as shown in **Figure 9**. There is a potential for flyover multi-use trail connection from the ASP area across Highway 19 along Range Road 262 alignment to the southern portion of Devon. A sidewalk, which will be furnished, will be provided along the service road to provide pedestrian access to the Leduc #1 Historic Site. A pedestrian/bike access route across Highway 19 from lands located within the South of Devon Industrial ASP should be considered in the design and development of the Highway 19 realignment and incorporated with any future planned overpass at this location. This will promote alternative modes of transportation including walking and cycling. The collector roads will accommodate future public transit within the Plan area. A future arterial road will be provided south of the ASP area, as identified within the IDP map above.

A range of objectives and policies have been developed for the transportation network.

Objectives

- Provide an efficient and reliable internal road network within the ASP that provides efficient access to the future development.
- Provide road rights-of-way that accommodate municipal servicing.
- Provide buffering of medium industrial uses from adjacent land uses and highways.
- Develop an industrial area that is accessible for the pedestrian, and a bicycle network that allows for recreational activities to take place which promotes a work/play environment.
- Provide a flexible road network to facilitate efficient future development.

- **4.6.1** Internal collector and local roads will be developed to rural standards acceptable to both the Town of Devon and Leduc County.
- **4.6.2** The future road network will be provided generally in line with the design outlined in **Figure 6**. Modifications to the proposed road network are possible due to numerous site constraints in certain areas of the ASP. It will be at the discretion of Leduc County as to whether these modifications would require an ASP amendment.
- **4.6.3** Permanent access to the ASP area will be provided from Highway 60.
- **4.6.4** Ensure appropriate berming, landscaping and fencing is provided wherever required in accordance with Leduc County's Land Use Bylaw to provide a visual buffer from medium industrial development.
- **4.6.5** Develop a multi-use trail network within the ASP to promote walkability and a bicycle friendly environment.



- **4.6.6** Supporting traffic studies will be required to demonstrate whether proposed development does, or does not, align with the overall TIA supporting the ASP to the satisfaction of Leduc County.
- **4.6.7** The potential for public transit in the Plan area will be reviewed at the next update of the ASP.

- Transportation requirements will be controlled through the subdivision, and development agreement process.
- Although the actual future road alignments may entail small deviations from the plan identified in Figure 6, the general concept will be consistent.
- The access points into the ASP area are consistent with Alberta Transportation requirements.

4.7 Municipal Servicing

This section will detail the proposed servicing for the future Industrial ASP area, with the separate servicing study for Water, Sanitary, and Stormwater Management that informed the creation of the ASP. The municipal servicing options developed are based upon the proposed roadway system, as well as the appropriate development policies and relevant physical features of the Plan area. The specific location and alignment of roadways, services, and stormwater management facilities may be technically amended and changed at the time of subdivision; however, the general concept will be consistent.

Servicing will be provided in accordance with the Town of Devon Service Levels and Design Standards in consultation with Leduc County More detailed information on policies and servicing follows:

Objectives

- Provide an efficient and reliable servicing network within the ASP area.
- Provide full urban servicing for the ultimate build out scenario.
- Allow flexible servicing in order to prevent limitations on industrial growth.
- Create a visually attractive development.
- Provide efficient expansion of existing services.
- Minimize disruption to existing drainage patterns in the area.
- Use utility rights-of-way for multi-purpose uses, to increase efficiencies and utilize land otherwise not useful for development purposes.
- Protect existing water bodies from erosion and flooding.

- **4.7.1** Water, sanitary and storm servicing will be provided in accordance with the Town of Devon Service Levels and Design Standards in consultation with Leduc County. Development shall not exceed water demand approved by the Town.
- **4.7.2** Alternative individual lot interim servicing maybe considered for certain parcels until such time as full urban servicing can be provided in an efficient and economically viable way.
- **4.7.3** Effluent from the ASP going into the Town's sanitation system shall be in accordance with the Town of Devon Service Levels and Design Standards in consultation with Leduc County. It shall not have harmful content which may have adverse effects on the Town's sewage collection system and operation of the wastewater treatment plant.
- **4.7.4** Water distribution for the ASP area will be provided from the existing distribution system, with the main connection to the ASP being provided from a new proposed reservoir. The Town may consider a looped connection into the existing system, subject to the Town of Devon's approval at that particular time.
- **4.7.5** The appropriate fire protection shall be provided to all future buildings in accordance with the Alberta Building Code regardless of how servicing is provided.
- **4.7.6** All shallow utility services within the ASP will be located underground.
- **4.7.7** Development and the extension of services will occur in an efficient and sequential way.
- **4.7.8** Drainage will be provided in a way that utilizes the current contours of the land so as to minimize disruption to existing drainage patterns.
- **4.7.9** Stormwater management ponds are to be located 100 m from active/suspended wellheads in accordance with the Albert Energy Regulator's setback requirements.
- **4.7.10** Stormwater management ponds are to be located 40 m from any provincial highway right-of-way property line.
- **4.7.11** Pipeline rights-of-way and utility easements can be utilized for multi-use trails.
- 4.7.12 LID strategies that retain and filter water such as bioswales and landscaping features should be integrated at the subdivision and development permitting stage. These strategies will be built to standards acceptable to both the Town of Devon and Leduc County.
- **4.7.13** An independent study shall be conducted before development of the Washout Creek and the "unnamed creek" outfall locations to determine that they are suitable and will not cause negative downstream impacts.
- **4.7.14** A flow monitoring program shall be initiated on either a temporary or permanent basis in conjunction with computer modelling to determine the stormwater management pond's storage requirements.



4.7.15 Detailed engineering shall be undertaken at each stage of development for water, stormwater and sanitary services.

Implementation

- Municipal services will be examined at the subdivision and engineering design stages.
- Detailed Stormwater Management Facility (SWMF) reports and Erosion and Sediment Control reports will be required prior to development.
- The County will work with the developer to explore how utility rights-of-way can incorporate multi-functional uses.
- LID design will be explored in more detail at the subdivision stages.

4.7.1 Water Network

The ultimate water system for the ASP area will meet the Town of Devon Servicing Levels and Design Standards in consultation with Leduc County. The ASP area will be supplied by an extension of Devon's existing water distribution system. The ultimate water supply is from Devon's Water Treatment Plant adjacent to the North Saskatchewan River.

Figure 10 outlines the conceptual water servicing for the ASP area. A reservoir is required to provide the necessary storage under *Alberta Environment Standards and Guidelines for Municipal Waterworks and Storm Drainage Systems*. A water main will be extended from the existing 300 mm water stub located north of Highway 19, within the Town of Devon. This line will supply the proposed reservoir from Devon's distribution system during periods of low demand. The location is at the northern limits of the ASP, between the existing Highway 19 alignment and the future Highway 19 alignment. This reservoir location also supports the proposed future development north of Highway 19. The proposed on-site water network consists of looped water mains that will satisfy fire flow demands generated by the Plan area. Individual lot interim servicing maybe considered for certain parcels until such time as full urban servicing can be provided in an efficient and economically viable way.

4.7.2 Sanitary Network

The ultimate sanitary system for the ASP area will meet the Town of Devon Servicing Level and Design Standards in consultation with Leduc County. Sanitary service to the ASP area will involve connecting to future off-site services. The future off-site services will also support the proposed future development north of Highway 19. The size and alignment of the off-site services must be confirmed at the detailed engineering stage. Conceptually the off-site sanitary servicing will parallel the alignment of Range Road 262. Off-site services will convey flow through a combination of gravity and forcemain pipes, from the ASP area to Devon's wastewater treatment plant. **Figure 11** outlines the conceptual on-site sanitary servicing for the ASP area. The on-site system has been designed to take full advantage of the natural topography of the Plan area. The system proposed will permit sewage to drain by gravity, with

a short section conveyed by forcemain, to the off-site services. Individual lot interim servicing may be considered for certain parcels until such time as full urban servicing can be provided in an efficient and economically viable way.

4.7.3 Stormwater Network

The ultimate stormwater system for the ASP area will meet Town of Devon Servicing Levels and Design Standards in consultation with Leduc County. Stormwater within the ASP area will be collected by grassed ditches located within road rights-of-way. **Figure 12** outlines the conceptual stormwater servicing for the ASP area. There is no water conveyance proposed in the Highway 19 right-of-way. All outfalls to Washout Creek on the north side of Highway 19 will be through a piped system.

Alberta Environment requires that any new development control discharge to pre-development rates by using some type of on-site SWMF. The SWMFs will be sized to accommodate flows based on development characteristics. SWMFs will include erosion and sedimentation control measures as well as a control structure to regulate the discharge rates. Approvals under the Water Act and Environmental Protection and Enhancement Act will need to be obtained for each of the facilities.

Interconnecting piping is proposed between the SWMFs. Ultimately flows will outfall to Washout Creek and the unnamed creek to the east of the study area. An independent study shall be conducted before development proceeds to determine the capacity of the Washout Creek and the "unnamed creek" to confirm the suitability of outfall locations.

It is encouraged that LID Strategies are implemented with the ASP development. This will help to reduce the impact of runoff water into water bodies, while providing a filtration mechanism to assist in removing potentially harmful contaminants from stormwater before being discharged into water bodies. No heavy industrial uses will be permitted, within the ASP area, and therefore the use of harmful industrial chemicals is unlikely.

4.7.4 Oil and Gas Wells and Pipelines

There is a significant presence of oil wells and pipelines within both the ASP and Study Extent Area. These constraints have been shown on **Figure 7** at a higher ASP stage; however, these locations may be subject to change based on more detailed surveys and studies at the subdivision and rezoning stages. As per the ERCB regulations 100 m setbacks are required around the active and suspended wells. Abandoned wells require a setback in accordance with ERCB requirements. These well sites and setbacks, and pipeline rights-of-way are shown in **Figure 7**. A Newton Energy Partners (NEP) facility is located within the ASP as identified in **Figure 7** which also requires a 100 m setback. In accordance with sections 7.11.12.2 and 7.11.12.3 of the ERCB guidelines development is prohibited within this 100 m setback except for a road right-of-way which can be developed 40 m from the wellhead. There are a number of sour gas pipelines located within the ASP and Alberta Energy Regulator (AER) will decide on whether additional setbacks are required from these pipelines.



There are a range of utility corridors present within the ASP area. It may be possible to explore using these as part of future multi-use trail connections within the area. The appropriate crossing agreements will need to be in place with the utility companies prior to the construction of any roads or trails across, or within any rights-of-way. Future subdivision applications will be circulated to affected utility owners to ensure they support proposed future crossings or trail connections.

4.7.5 Shallow Utilities

All shallow utilities including telecommunications infrastructure, gas pipelines, and power will be provided underground. These services will expand from the Town of Devon into the area with prior approval from the utility providers. The developer will pay for the expansion of these services into future subdivision lots. These services will be extended with the road network into the ASP area.

4.8 Emergency and Protective Services

All future development will adhere to the following policies related to the provision of emergency and protective services.

- **4.8.1** All future development within the ASP will comply with the existing emergency service provisions identified within the Town of Devon Land Use Bylaw.
- **4.8.2** Appropriate building materials with acceptable "burn times" shall be used if appropriate, which will enable adequate response times for emergency vehicles.
- **4.8.3** All new development proposals shall include input from the appropriate emergency service departments to ensure that appropriate resources are available within the Town of Devon.

5 IMPLEMENTATION

5.1 Development Staging

The proposed development staging of the Plan can be seen in **Figure 13**. The staging approach was developed in correlation with the most efficient and economically viable extension of infrastructure servicing into the area. **Figure 13** illustrates the Staging Plan for the ASP area. It is anticipated that Stage 1 will be located close to the existing temporary access along Highway 19 and Range Road 262 intersection. From this initial stage, the development will proceed south and west along the proposed minor collector west of Range Road 262 and north of Township Road 503 towards the temporary access at Township Road 503 and Highway 60. This staging approach supports logical expansion of municipal servicing and responds to the timing of anticipated transportation infrastructure upgrades. Based on the timing of Highway 19 and Highway 60 interchange construction and its detailed design, a permanent access at Township Road 502 or 502A and Highway 60 will be developed and access at Township Road 503 and Highway 60 will be closed. Northwest and southeast portions of the ASP area will be part of the last stages to be serviced by municipal servicing. Based on the timing and design of the interchange construction the staging may need some re-consideration.

Existing access at Highway 19 and Range Road 262 intersection will be used with traffic control improvements until the Highway 19 and Highway 60 interchange is developed, and as long as



the subject intersection operates at acceptable capacity parameters. The proposed temporary access at Township Road 503 and Highway 60 will be built prior to the closure of the temporary access at Highway 19 and Range Road 262. The permanent access to the ASP area at Township Road 502 or 502A and Highway 60 will be developed prior to the closure of the temporary access at Township Road 503. Currently access to the Leduc #1 Energy Discovery Centre provided off Township Road 503A

across Highway 60. It is anticipated that this access will be eliminated upon the build out of Phase 1. Access to Leduc #1 is anticipated to be provided off of a service road when Highway 60 is upgraded and prior to the closure the existing access to the site.

Municipal servicing to the ASP area will be extended from the Town of Devon. This will enable connections to the Town of Devon's existing services when this infrastructure is expanded to



service the new developments north of Highway 19 and the ASP area. Development within the ASP area will be served by interim on-site servicing until off-site infrastructure is expanded.

It is difficult to determine the exact location and sequence of the development stages as this is a high level plan and many factors may affect the development of the area including the actual industrial type being developed and market demand, therefore, the staging shown in **Figure 13** is tentative only and is subject to change. The proposed industrial development provides approximately a 30 year industrial land supply based on the market assessment study.

Policies:

- **5.1.1** The development within the ASP area will be serviced by interim on-site servicing until off-site infrastructure is upgraded.
- **5.1.2** The County and the Town will develop cost and tax revenue sharing agreement that will include the development of the County's off-site levy bylaw.
- **5.1.3** The responsibilities of the developer and the County and/or Town will be defined through a development agreement required as a condition of subdivision approval.
- **5.1.4** The developer may be required to enter into a development agreement with the County to ensure that the development is constructed in accordance with County and Town developed Industrial Design Guidelines and to ensure the developer pays for the development's share of the infrastructure that it will benefit from.
- **5.1.5** The developers of the ASP area shall be responsible for undertaking the construction and installation of local servicing and roads through the conditions of the subdivision approval and development permits, and implemented through development agreements.
- **5.1.6** Following construction of required roads and utility infrastructure to the satisfaction of the County and/or Town, development permits to individual land owners/ applicants will constitute the final stage of the development approval process prior to construction.
- 5.1.7 Notwithstanding Policy 5.1.5, construction and installation of local servicing and roads may not be required for applications for "first parcel out" subdivisions within the Plan. "First paracel out" subdivision applications shall be considered in accordance with the policies contained in the Municipal Development Plan.
 Bylaw 05-16

Implementation:

- The County and the Town are currently working on developing a cost and revenue sharing agreement.
- The County and the Town shall develop Industrial Design Guidelines.
- The County and the Town shall develop Entrance Corridor Design Guidelines.
- Traffic level and traffic control measures will be monitored closely at intersection of Highway 19 and Range Road 262.

5.2 Next Steps

This ASP is a high level document that sets out a general framework for the Plan area. A range of supporting studies were completed in support of this ASP including; a Transportation Assessment, Desktop Biophysical Assessment, Desktop Geotechnical Study, Environmental Screening Report, Servicing Report, and a Historical Analysis. As part of future planning and development applications the following studies are required:

- Phase 1 Environmental Site Assessment (ESA) and geotechnical investigation at the rezoning stage
- Detailed engineering at the subdivision stage and prior to the development permit stage
- An independent study before development proceeds to determine the capacity of the Washout Creek and the "unnamed creek" to confirm the outfall locations
- A flow monitoring program in conjunction with computer modeling at the rezoning stage to determine the stormwater management pond's storage requirements

The following studies may be required:

- Transportation Impact Assessment (TIA)
- Detailed Biophysical and Wetland Assessment at rezoning and subdivision level
- Studies to determine the capacity and feasibility of un-named creek for an outfall location as recommended in the servicing report
- Phase 2 and 3 Environmental Site Assessment (ESA) if deemed necessary by Phase 1 ESA

Objectives

Encourage sound and environmentally sensitive development in the ASP area.

Policies

- **5.2.1** The above studies shall be undertaken by the developer at the development stages identified in Section 5.2 Next Steps.
- **5.2.2** The County shall not accept any rezoning and subdivision applications in absence of the above studies.
- **5.2.3** "First parcel out" subdivision approvals may be exempt from Policy 5.2.2; however, further subdivision of any lands will have to comply with all policies.

5.3 Review and Maintenance of the ASP

In order for this ASP to be a solid planning framework for the industrial development it must be flexible to market conditions. Economic influences and the provision of infrastructure services to



the area may result in development occurring in a different manner than originally anticipated. In order to recognize and incorporate these external influences it is important to develop a document that can respond to market conditions in a positive way. An ASP amendment maybe required if there is a deviation from the current policies and land use concept. The ASP should be reviewed periodically to ensure its implementation and enforcement as well as to identify any changes that may be required to incorporate.

Objectives

- Provide a flexible document that can be responsive to market and economic conditions.
- Ensure implementation and enforcement of the objectives and policies of this document.

Policies

- **5.3.1** Any change to the existing land use plan and general configuration of the road and servicing network would require an ASP amendment.
- **5.3.2** Undertake a periodic review of the ASP document to ensure its implementation and enforcement is in alignment with the ASP objectives and policies.
- **5.3.3** Undertake a periodic review to ensure its conformance with the County and the Town's new statutory plans.

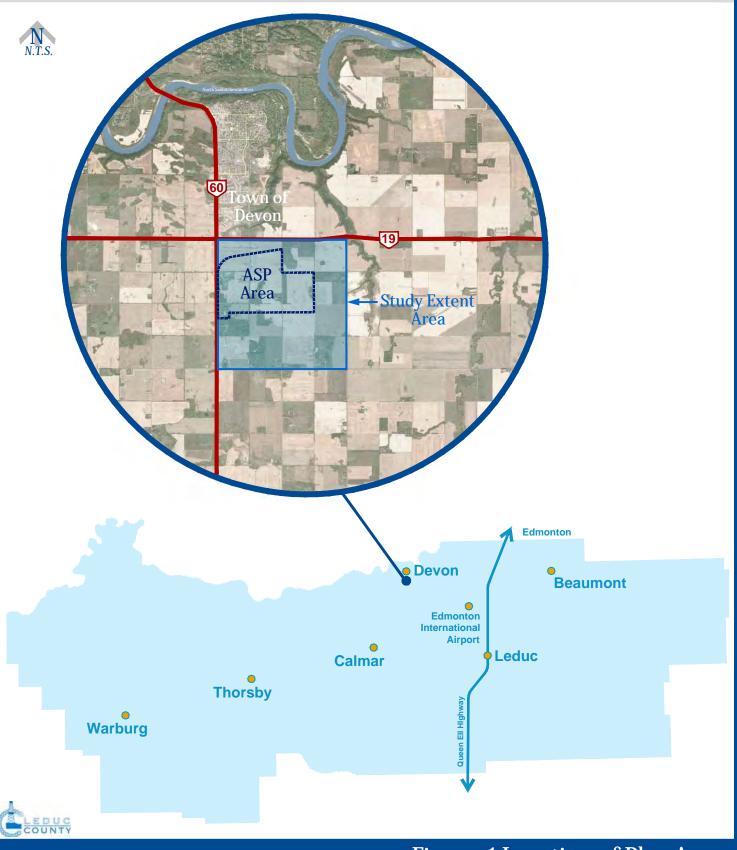
Implementation

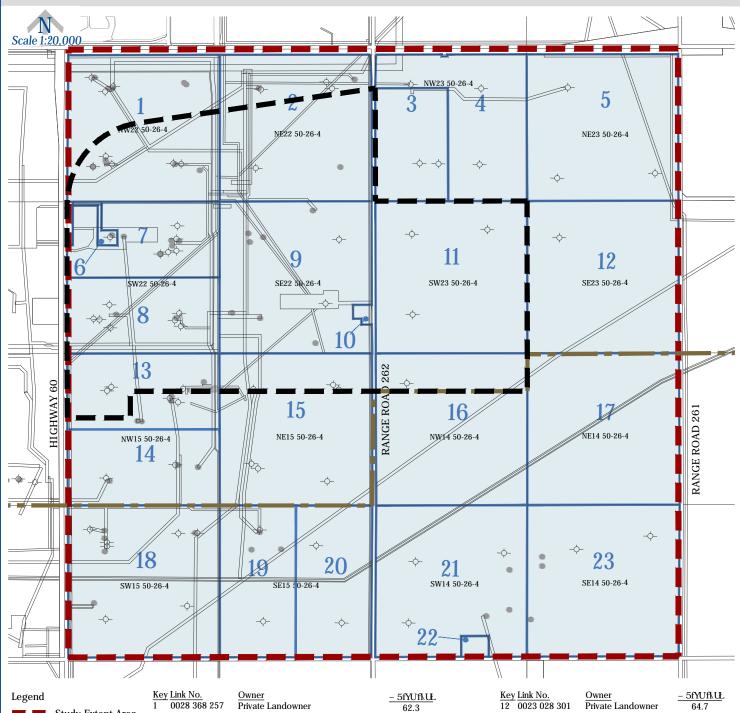
This will be controlled through the amendment of the ASP and/or IDP, which requires support from both Leduc County and The Town of Devon.

6 APPENDICES

Appendix A- Figures







2.43 23.1 39.1 62.3 1.4 30.3 32.4 63.79 0.91

64.7

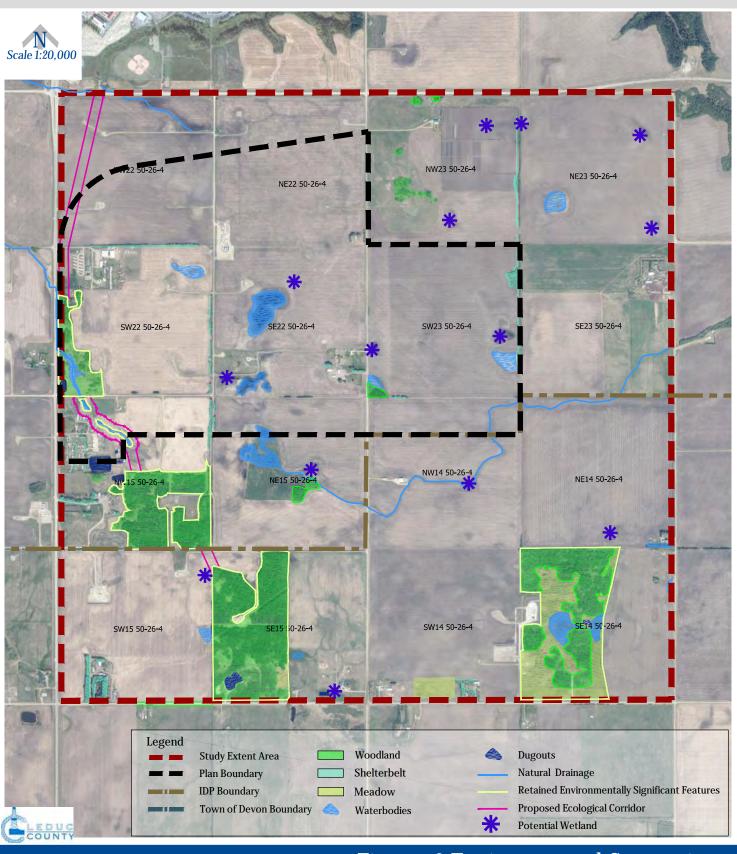
Legend	
	Study Extent Area
	Plan Boundary
	IDP Boundary

ey	Link No.	Owner
	0028 368 257	Private Landowner
	0023 028 947	Private Landowner
	0029 116 944	Leduc/Devon Oilfield Historical Society
	0029 116 936	Private Landowner
	0010 938 033	Private Landowner
	0014 494 983	Province
	0031 346 258	Leduc/Devon Oilfield Historical Society
	0033 080 383	Private Landowner
	0026 228 486	Private Landowner
)	0026 228 494	Private Landowner
l	0013 781 026	Private Landowner

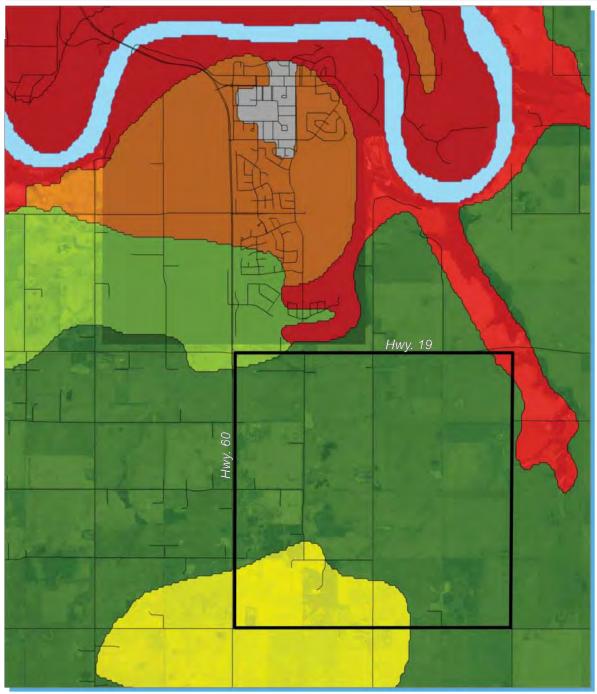
Key	<u>Link No.</u>
12	0023 028 301
13	0023 030 331
14	0023 031 751
15	0012 593 853
16	0021 842 562
17	0023 028 293
18	0023 029 580
19	0022 056 287
20	0022 056 303
21	0024 028 011
22	0024 028 029
23	0021 842 596

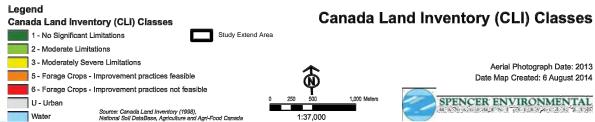
Owner	<u> - 5fYUfi</u>
Private Landowner	64.7
Private Landowner	32.4
Private Landowner	32.4
Private Landowner	64.7
Private Landowner	32.4
Private Landowner	32.4
Private Landowner	63.09
Private Landowner	1.61
Private Landowner	64.3



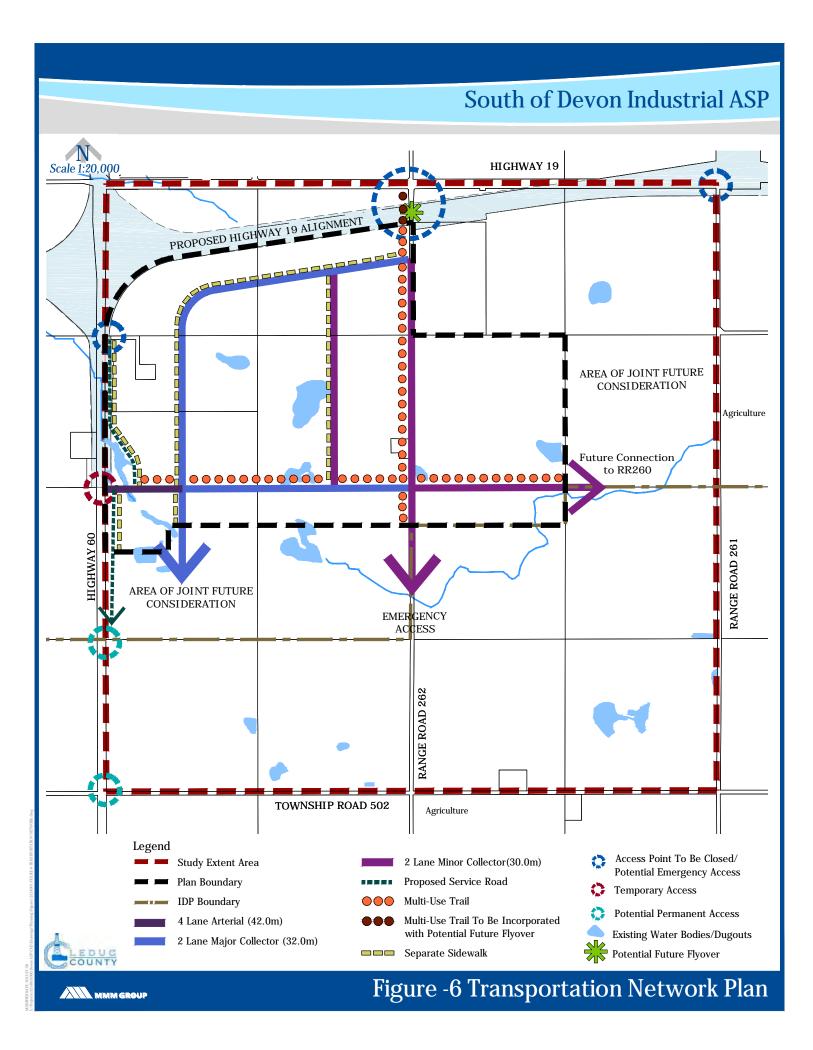




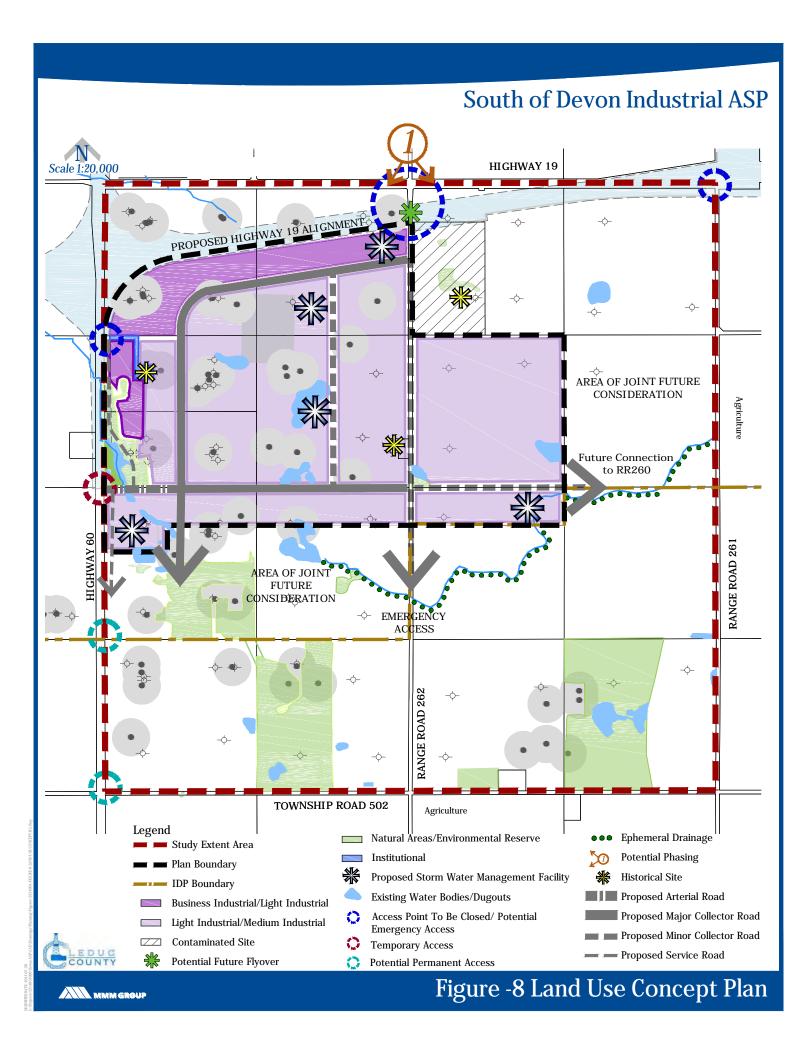


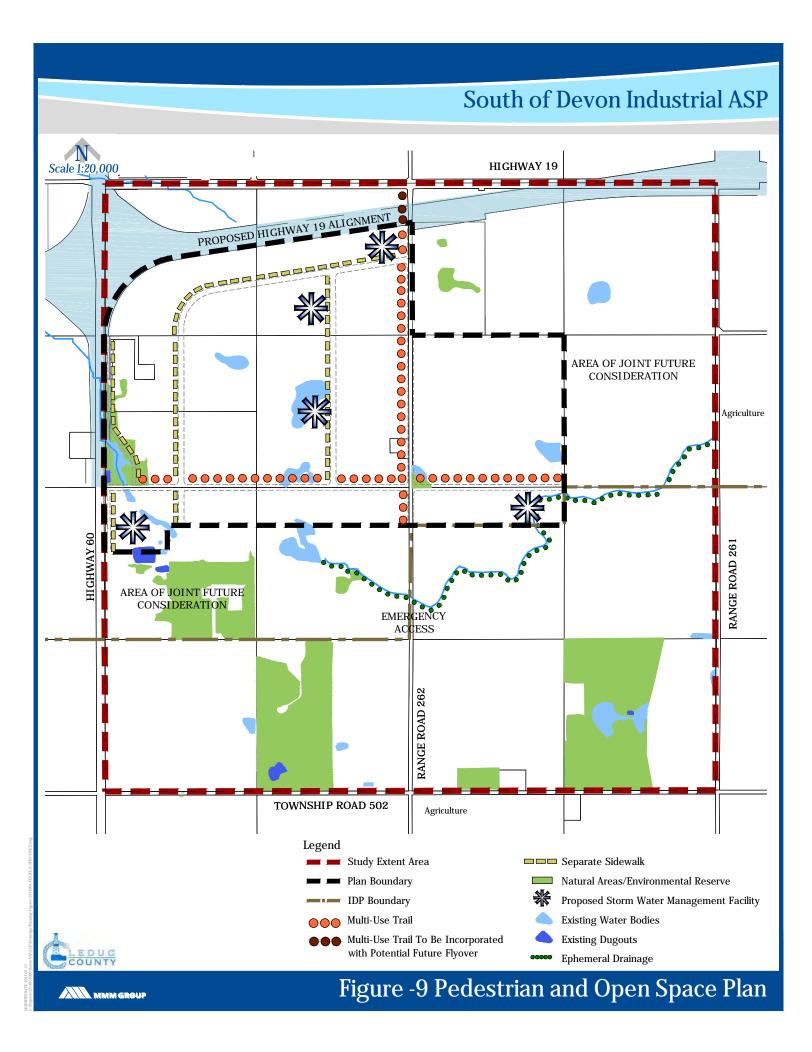


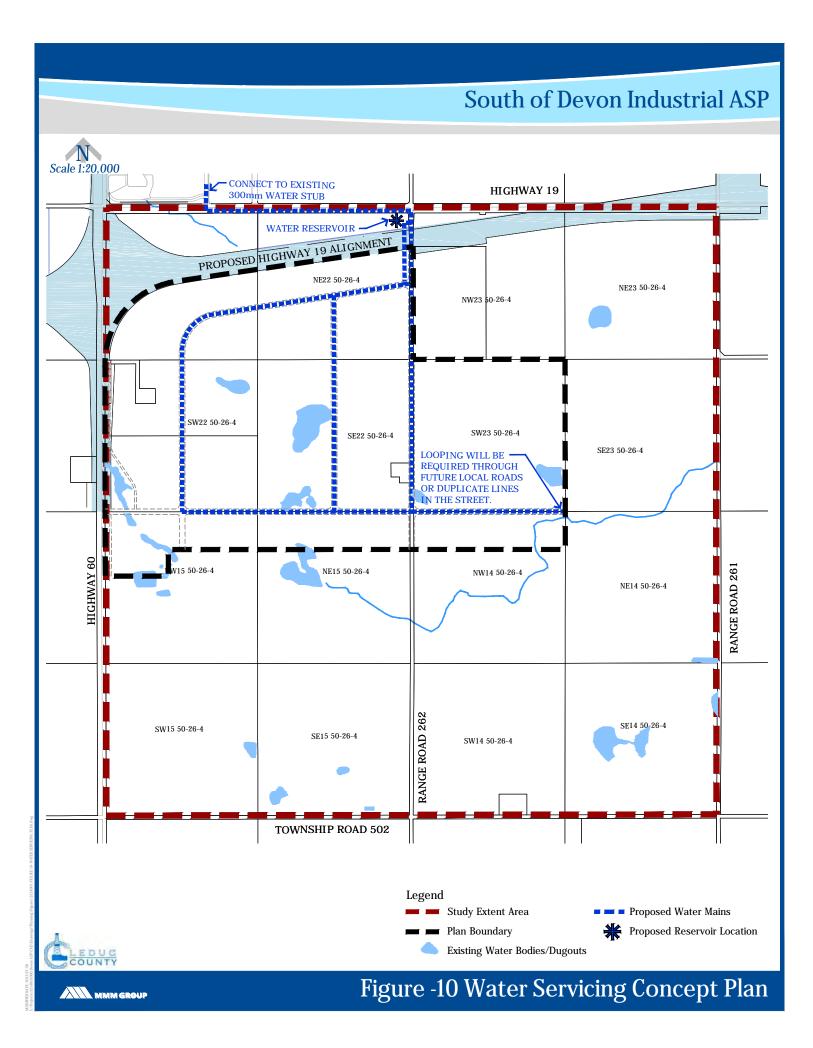
South of Devon Industrial ASP 0 SW22 50**-**26-4 Direction of Lower Elevation Study Extent Area Town of Devon Boundary Plan Boundary Contours at 0.5m Intervals **IDP Boundary** Contours at 1.0m Intervals Figure -5 Site Topography Plan

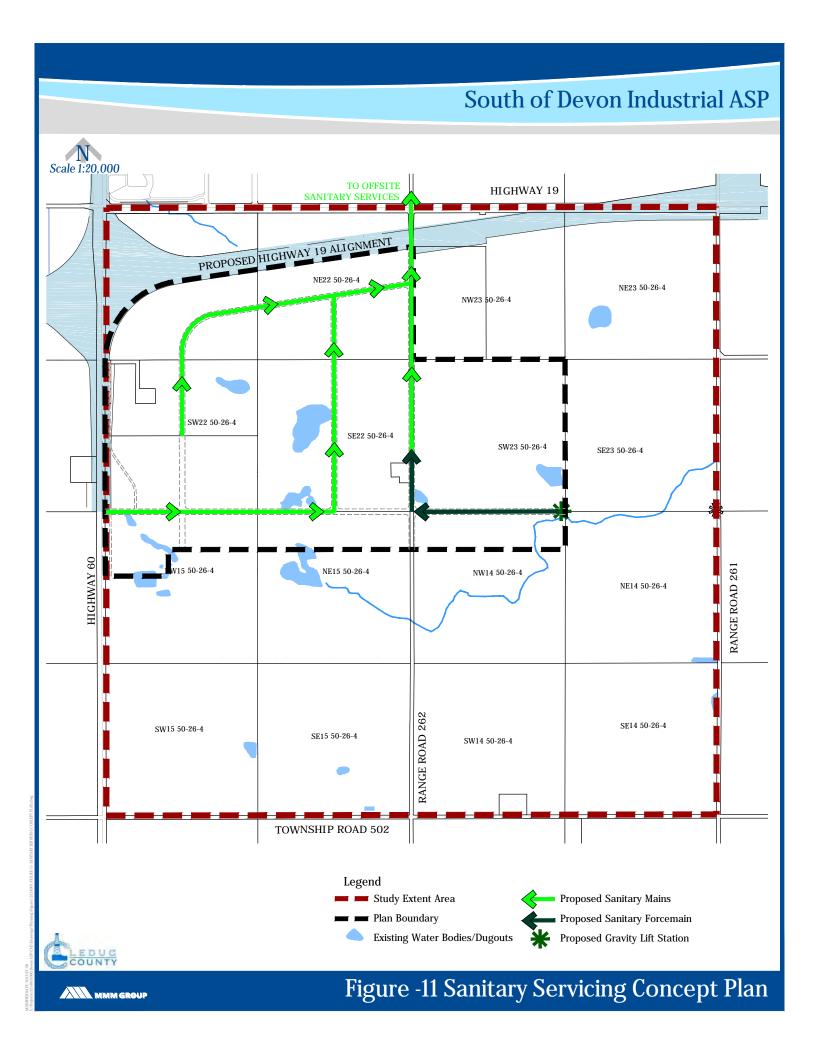


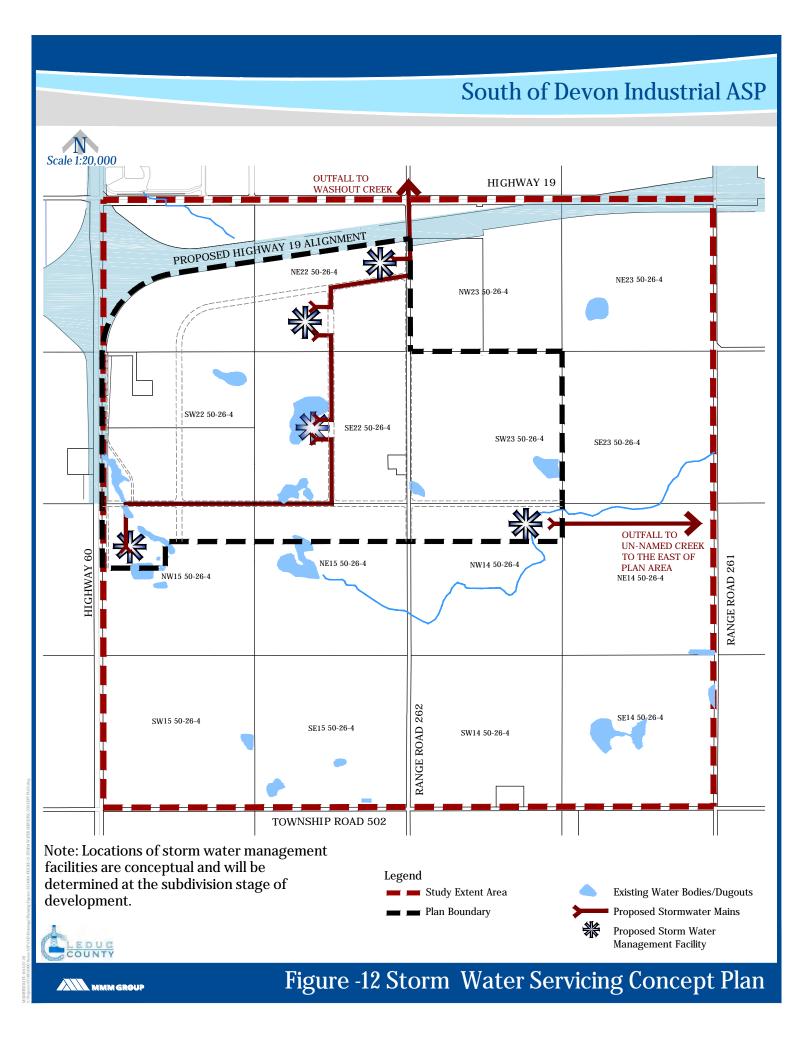
South of Devon Industrial ASP N Scale 1:20,000 HIGHWAY 19 NE22 50-26-4 XXX23 50-26-4 NE23 50-26-4 \$W22 50-26-4 SE22 50-26-4 SW23 50-26-4 SE23 50-26-4 LOT A 982 2185 RANGE ROAD 261 NE15 50-26-4 NW14 50-26-4 NE14 50-26-4 NW15 50-26-4 RANGE ROAD 26 SE14 50-26-4 SE15 50-26-4 SW14 50-26-4 SW15 50-26-4 TOWNSHIP ROAD 502 Legend Study Extent Area Abandoned Wellheads Active/Suspended Wellhead Setback (100m) Active/Suspended Wellhead Plan Boundary Highway 19 Re-alignment Access Point To Be Closed/ Potential **IDP Boundary** NEP Facility emergency Access Town of Devon Boundary NEP Setback (100m) **Temporary Access Existing Structures** Sour Gas Pipeline Potential Permanent Access Historic Site Figure -7 Resource Constraints Plan MMM GROUP

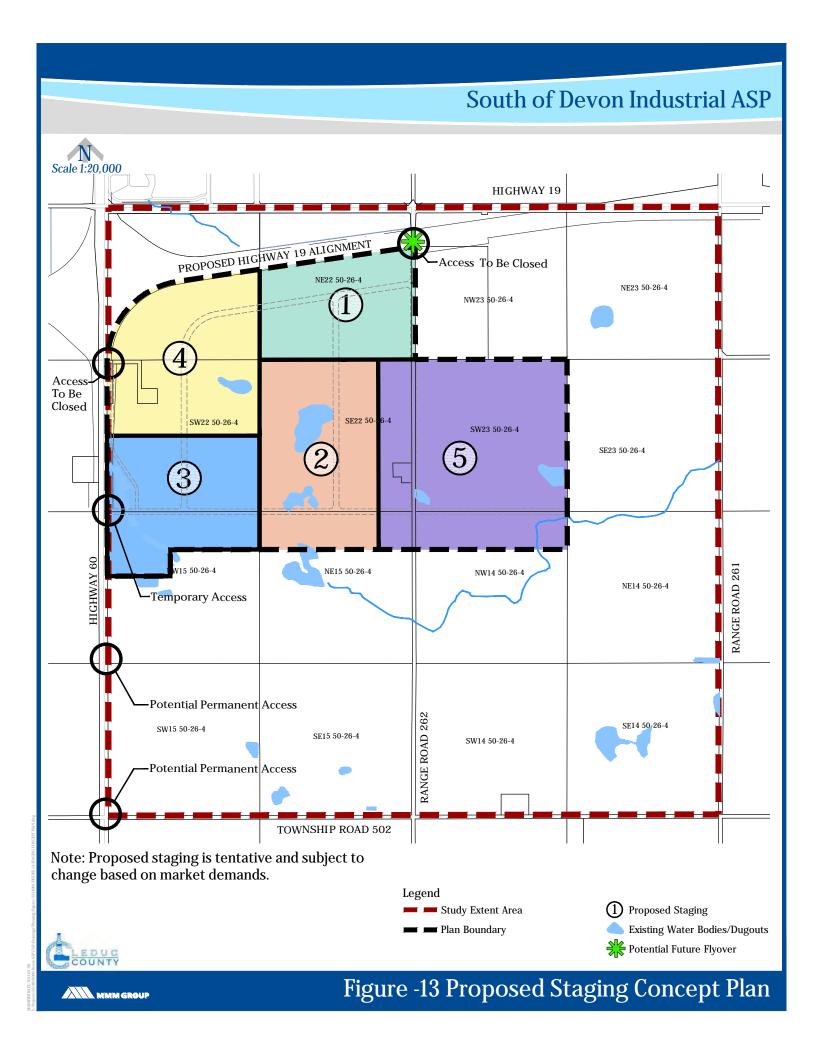












LEDUC COUNTY SOUTH OF DEVON INDUSTRIAL AREA STRUCTURE PLAN AMENDMENTS

BYLAW No.	DATE	DESCRIPTION
05-16	Mar. 22 2016	Text Amendment

BYLAW NO. 05-16 LEDUC COUNTY

A BYLAW OF LEDUC COUNTY, IN THE PROVINCE OF ALBERTA, TO AMEND THE LEDUC COUNTY SOUTH OF DEVON INDUSTRIAL AREA STRUCTURE PLAN BYLAW NO. 21-14.

WHEREAS

The Council of Leduc County deems it to be in the public interest to amend the Leduc County South of Devon Industrial Area Structure Plan Bylaw No. 21-14;

NOW THEREFORE,

be it resolved that the Council of Leduc County, duly assembled, hereby enacts that Bylaw No. 21-14 be amended as follows:

- 1. Add the following regulation under 5.1, Development Staging:
 - 5.1.7 Notwithstanding Policy 5.1.5, construction and installation of local servicing and roads may not be required for applications for "first parcel out" subdivisions within the Plan. "First parcel out" subdivision applications shall be considered in accordance with the policies contained in the Municipal Development Plan.
- 2. Add the following regulation under 5.2, Next Steps:
 - 5.2.3 "First parcel out" subdivision approvals may be exempt from Policy 5.2.2; however, further subdivision of any lands will have to comply with all policies.

This Bylaw shall take effect on the date of the third reading.

Read a first time this 22nd day of March, A.D. 2016.

Read a second time this 22nd day of March, A.D. 2016.

Read a third time with the unanimous consent of the Council Members present and finally passed this 22nd day of March, A.D. 2016.

MAYOR

COUNTY MANAGER