



Leduc County

Investment Readiness and Implementation Strategy
Phase I and Phase II Report



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1. Project Overview

Leduc County is located south of Edmonton and is bordered in the west by Parkland and Brazeau counties, Wetaskiwin County in the south and Camrose, Beaver and Strathcona counties to the east. The cities of Leduc and Beaumont, the towns of Calmar and Devon and the villages of Thorsby and Warburg all lie within Leduc County's borders.

The county is a dynamic municipality providing diverse lifestyle options - from urban living to various farm operations. It is home to Edmonton International Airport, Nisku Business Park and Capital Power's Genesee Power Plant. Leduc County is strategically located at the crossroads of major air, road and rail transportation routes.

The Investment Readiness and Implementation Strategy (IRIS) project aims to create an implementation strategy that will provide clear direction for future growth and employment in crucial areas of rural development, agriculture, commercial and industrial growth within Leduc County. With the phase-out of coal-fired electrical generating plants, there is an urgent need for economic diversification opportunities.

The primary goal of IRIS is a long-term economic and planning strategy, which starts with current data, then investigates the future (2-5 years) to determine the most effective area(s) of the county to diversify its economy to continue to grow. Because of growth, planning and development must also be prepared when development occurs. Phases I and II are the response to economic growth and current/long-term land use and planning.

Leduc County retained MDB Insight and IBI Group to develop Phase I and Phase II of IRIS.



Phase I

Phase I of the study (November 2019 – June 2020) included a detailed land use analysis, a high-level marketing strategy informed by economic analysis and a summary report of findings and recommendations.

The first element of Phase I identified the region's socio-economic context and the development of a long list of possible sites for development/investment in Leduc County.

The second element identified five target sectors for Leduc County and a narrowed list of suitable sites for new investment attraction initiatives. The sectors were selected based on existing clusters of businesses and workforce, economic multipliers, the suitability of the County's land base to attract new investment, interviews and surveys with local stakeholders and the proximity to research, development, and education facilities. Specific sites were identified as suitable for investment in these sectors based on various site location factors.

The third element was developing the strategy, which brought together data collected in the previous reports to summarize the project teams' recommendations on how Leduc County can best utilize its current land use and economic resources to diversify and grow the local economy. The report also included distinct marketing and implementation strategies addressing the proposed recommendations.

Data Collection and Analysis

The comprehensive primary and secondary research to support this report is presented separately in accompanying technical reports. An effort has been made to provide relevant content in this strategic plan report in a summarized format to support readability.

Presented in this section is:

- **Data Collection and Analysis:** Outlines the approach used to gather information captured in the technical reports and the rationale for employing each tool.
- **Strategy Objectives and Actions:** The strategy is presented for the region and offers recommendations, including a timeline for implementation and relevance at the local and regional levels. Performance indicators are included to measure progress and impact.

Various scales of analysis have been used to complete the IRIS project. Input has been gathered through data collection and engagement activities. A summary of each assessed component is presented in the following list, with detailed results available in the technical documents:



Figure 1: Research and Engagement Activities



Background Document Review: Relevant strategic and policy documents from Leduc County and the region were assessed to understand critical and common themes.



Literature Review and Trends Analysis: The literature review includes relevant industry publications, leading research related to regional development issues, technology impacts and talent attraction and retention in a globalized and evolving market.



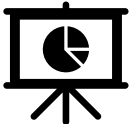
Land Use and Policy Analysis: The land use and policy analysis included reviewing Leduc County's Area Structure and Municipal Development Plans, Land Use Bylaw, Servicing Framework and identified Policy and Land Use Constraints.



Business Survey: Business surveys were completed in the region through 100 direct telephone interviews.



Key Informant Interviews: Key informant interviews were completed with identified stakeholders throughout the region; these included businesses, local government, and service providers.



Summary of Vacant Lands and Economic Focus Analysis: The analysis identified vacant lands and assessed those sites' economic focus.



Community Economic Analysis: Statistics Canada data from various sources paints a portrait of Leduc County's social and economic composition, including population, housing, living, income, education, employment, industries and occupations, and business characteristics.



Industry Sector Analysis: Five industries were analyzed to understand Leduc County's investment opportunities and identify suitable sites.



Investment Readiness and Implementation Strategy: Brings together data collected in the previous reports to summarize the project teams' recommendations on how Leduc County can best utilize its current land use and economic resources to diversify and grow the local economy. This report also includes distinct marketing and implementation strategies addressing the proposed recommendations.



1.1.1 Selected Sectors

- **Agriculture:** A primary sector of Leduc County and increasingly significant for export. The region has been a significant investment recipient and has a strong base of research and development assets.
- **Energy:** The driving force behind the Provincial economy and a vital enabler of the County's industries, the energy sector has been struggling due to lower prices and lack of access to markets.
- **Food Processing:** An aspirational sector focused on value-added processing of Leduc County and Canada's domestic consumption and export products.
- **Manufacturing:** With a strong base rooted in the Energy supply chain, this sector provides and exports goods necessary for all industries. Due to the ongoing slump in oil prices, manufacturers invest in cost-saving measures and examine export opportunities.
- **Transportation and Logistics:** The sector is an enabler of the others, taking advantage of the strategic location of Leduc County and the high-quality transportation networks that serve the region, transporting inputs and exports of this dynamic region as well as serving the consumers of the area.

1.1.2 Recommendations and Implementation Plan

The recommendations that emerged from research and engagement formed three distinct categories and are expanded with specific actions and tactics in the implementation plan.

Planning and Land Use Considerations

These recommendations focus on crucial infrastructure investments, updating planning and land use bylaws, feasibility studies and identifying lands for new industrial parks.

Business Retention and Expansion (BRE) Programming

These recommendations highlight the importance of developing a comprehensive understanding of the local business community to identify policy and services gaps. Enabling business success will also improve investment attraction activities and generate new opportunities in Leduc County.

Development of a Sustained Investment Attraction Program

These recommendations align with the first two categories to preparing Leduc County to compete for investment by being proactive in attracting targeted sectors. These activities are centred on increasing new business investment through developing and communicating business-friendly policies, increasing awareness of the community, marketing and development of investment-ready land, enhancing economic development capacity and forging a corporate culture that actively supports investment.



Figure 2: IRIS Phase I High-Level Strategy

Recommendation 1: Planning and Land Use
Action 1: Update the County Land Use Bylaw
Action 2: Promote lands that have Industrial Agricultural Resource and Direct Control land use designations within the Rural Area
Action 3: Continue to identify the expansion of Nisku Spine Road in the County’s Capital Plan (Short to Medium-Term)
Action 4: Identify infill or intensification opportunities within the Nisku Business Park
Action 5: Investigate the feasibility of developing an Area Structure Plan for the western agricultural hub
Action 6: Investigate the feasibility of developing a small business park in New Sarepta (Long-Term)
Action 7: Promote the Northwest Saunders Lake Area Structure Plan as an expansion to airport-related development
Action 8: Document potential properties adjacent to hamlets that could be re-designated
Action 9: Investigate the feasibility of developing County lands adjacent to the Town of Calmar industrial park (Long-Term)
Recommendation 2: Business Retention and Expansion (BRE)
Action 1: Develop a Comprehensive Database of Businesses in Leduc County.
Action 2: Business Support Website and Content Development
Action 3: Support for Business Retention and Expansion.
Action 4: Workforce Development Program
Recommendation 3: Development of a Sustained Investment Attraction Program
Action 1: Investment Database Development and Maintenance
Action 2: Development of a “Certified Site” Program
Action 3: Promote the Value Proposition to Targeted Sectors that fit the Community’s Goals and Provide the Highest ROI.
Action 4: Partner Development
Action 5: Process Review
Action 6: Development/Leveraging of Investment Tools



1.1.3 Marketing Analysis and Implementation

This project's marketing analysis and implementation aspect include detailed tactics to realign Leduc County's investment readiness activities, both internally and externally. These tactics are designed to support all aspects of investment readiness activities and are interconnected with the final recommendations.

Figure 3: Marketing Plan Implementation Stages

Marketing Plan Implementation Table
Stage 1: Initial Marketing Campaign
Stage 2: Website and Content Development:
Stage 3: Public Relations:
Stage 4: Marketing Materials:
Stage 5: Investment Response Marketing
Stage 6: Targeted Sector Campaigns



2. Phase II Overview

Phase II of IRIS (August 2020 – April 2021) utilized the analysis and strategies developed in Phase I to develop further specific land use, environmental and economic policies, and procedures to ensure the county is ready for future investment, subdivision, and development. Phase II is broken down into three main elements; the first is a review of Planning and Development Policy and Procedures

The second is an Economic Impact Analysis of an expansion to the Nisku Spine Road.

The third is the development of Marketing Guidelines and Materials to support implementing the Marketing Plan and Implementation strategy developed in Phase I.

2.1 Data Collection and Analysis

The comprehensive primary and secondary research to support this report is presented separately in accompanying technical reports. An effort has been made to provide relevant content in this strategic plan report in a summarized format to support readability.

Presented in this section is:

- **Data Collection and Analysis:** Outlines the approach used to gather information captured in the technical reports and the rationale for employing each tool.
- **Strategy Objectives and Actions:** The strategy is presented for the region and offers recommendations, including a timeline for implementation and relevance at the local and regional levels. Performance indicators are included to measure progress and impact.

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Figure 4: Research and Engagement Activities



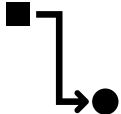
Planning and Development Policy and Procedures Analysis: Relevant strategic and policy documents from Leduc County and the region were assessed to understand current County operations and complete a best practice review.



Identification of Underused Properties in Nisku: The project team reviewed Nisku properties and identified a selection of underutilized sites.



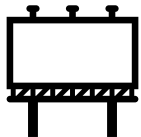
Planning and Policy Stakeholder Outreach: Interviews were conducted with Leduc County Staff, Regional Partners and Commercial Real Estate Firms to support the analysis of the County's policies and identify best practices.



Nisku Spine Road Economic Impact Analysis: The project team examined the potential new road sites and analyzed the economic impacts and projected assessment revenue.



Nisku Spine Road Stakeholder Outreach: Stakeholder interviews were completed with developers and real estate firms in the region to assess the qualitative impact of the Nisku Spine expansion.



Marketing Guidelines Development: Implementing the marketing strategy developed in Phase I, guidelines for marketing sites were developed along with a community profile and four target sector profiles.



Marketing Stakeholder Outreach: Input on the development of marketing materials was solicited from regional partners, including businesses, local government, and service providers.



3. Identification of Underused Properties in Nisku

As a precursor to the study and preparation of a new Local Area Plan for Central Nisku, IBI Group researched and prepared a list of vacant and underutilized properties in and near the Nisku Business Park. Underutilized properties were identified as properties with large outdoor storage components that could be subdivided or could form part of a future land assembly project.

The consultant team identified 161 properties within the Nisku and surrounding area, as shown in the table below. Most properties are within the Central Nisku plan area and are serviced. The properties range from 0.6 acres to 137 acres, with all lots totalling approximately 1860 acres. A detailed breakdown of the identified properties is listed in Appendix 'A'. Appendix 'A' also includes an air photo of the Plan Area.

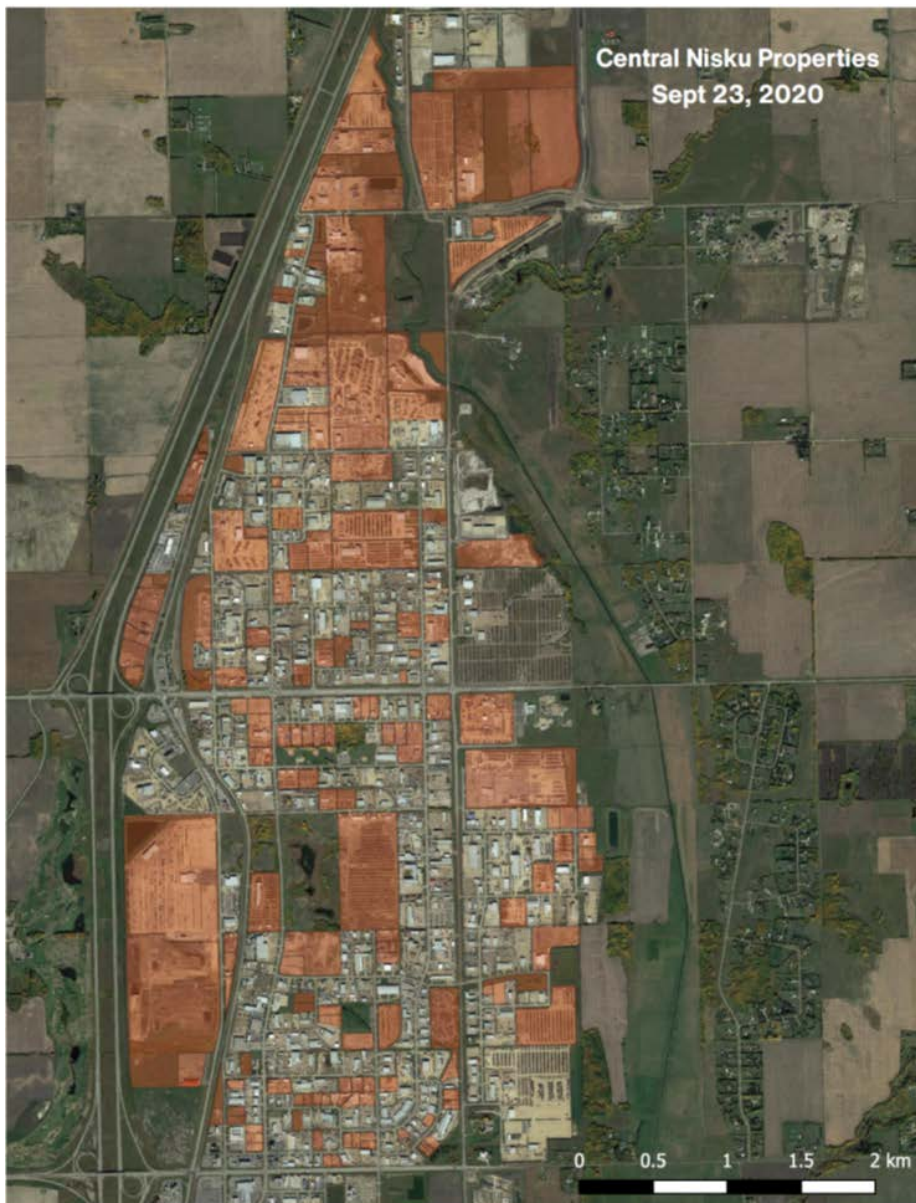


Table 1: Vacant and Underutilized Properties, Nisku Area

PLAN AREA	NO. PROPERTIES	SERVICED PROPERTIES	RANGE IN SIZE
Central Nisku	154	154	0.6 ac. to 137 ac.
North Nisku	10	7	14.3 ac. to 56.6 ac.
Blackmud creek	4	4	All lots approx 3.0 ac.
Total	168	165	

Source IBI

Figure 5: Vacant and Underutilized Properties, Nisku Area





4. Planning and Development Policy and Procedures

4.1.1 Current County Operations

Leduc County provides planning and development services to residents and developers similar to the other three rural municipalities (i.e., Parkland, Strathcona, and Sturgeon Counties) in the Edmonton Metropolitan Region. Planning and development applications are received and reviewed by internal staff and not by an outside agency that contracts to municipalities (e.g., Parkland Community Planning Services).

Leduc County maintains a municipal policy manual, with three policies applicable to the operations of the Planning and Development Department:

- CC-01 Public Participation
- LR-01 Agricultural Impact Assessments
- MR-03 Utility Right-of-Way for Municipal Reserves

The county's webspace contains development application terms of reference documents that describe what should be included and undertaken to prepare a plan or document. The terms of reference documents include:

- Outline Plan
- Local Area Structure Plan

A draft document was prepared in 2015 that was intended to be an overarching application guide for planning and development applications. While the document is comprehensive in describing application requirements and procedures, it is now somewhat dated and wordy for a policy/procedure document.

4.1.2 Best Practice Review

The Consultant Team undertook a review of Alberta municipalities similar to Leduc County to assess their policy framework and how this may be compared to Leduc County. Six municipalities were selected: rural or specialized Alberta municipalities with varying forms of urban-type development near larger urban municipalities. The Consultant Team looked at each municipality's webspace to download policies and procedures in the following areas:

- Biophysical assessments and wetland conservation
- Subdivision
- Development permits
- Statutory plans
- Outline plans
- Plan amendments
- Direct Control guidelines



The table below shows a summary of information that was taken from the municipalities' websites.

Table 2: Municipal Policy and Procedure Comparison

POLICY	COUNTY OF GRANDE PRAIRIE	RM WOOD BUFFALO	STRATHCONA COUNTY	PARKLAND COUNTY	RED DEER COUNTY	ROCKY VIEW COUNTY
Formal Pre-application form	No	Yes	Yes	Yes	No	Yes
Biophysical Assessment	No	No	Yes	Yes	No	Yes
Subdivision	Yes (Private Sewage)	No	Yes	Yes (Condition Fulfilment)	Yes (form)	Yes
Outline Plan	No	No	No	Yes (process chart)	Yes (LUB)	No
Statutory Plans	No	No	Yes	Yes (process chart)	Yes (LUB)	Yes (Ranking System)
Plan Amendments	Yes (LUB)	Yes (checklist)	Yes	Yes (process chart)	No	Yes (LUB)
Direct Control Guidelines	No	No	No	Yes (LUB)	Yes (form)	Yes (LUB)
Development Permit	Yes (LUB)	Yes (process chart)	Yes (form)	Yes (process chart)		

County of Grande Prairie

The County of Grande Prairie has minimal policy guidance for the operations of its Planning and Development Department¹. Two documents were identified through the best practice review and may be found in Appendix B of the Interim Report:

- The County provides guidance and technical requirements for subdivision applications that propose on-site sewage treatment systems;
- The County has a policy statement and provides guidelines for the posting of securities and deposits for development agreements, development permits and building permits;
- The County's Land Use Bylaw outlines the requirements for submission of a development permit. The Land Use Bylaw was approved in 2003 and is currently under review.

¹ County of Grande Prairie, countygp.ab.ca/EN/main/departments/planning-development.html



Regional Municipality of Wood Buffalo

The Regional Municipality of Wood Buffalo's (RMWB) policy manual does not cover matters that concern the Planning and Development Department². Several documents and checklists were identified through the best practice review and are attached in Appendix B of the Interim Report:

- RMWB requires a pre-application meeting to be held for multi-family, commercial, industrial, institutional, and new/expansions to oil sands projects;
- RMWB has a comprehensive set of checklists for land use bylaw amendments, subdivision, and development permit applications³. The Commercial development permit checklist is attached as an example, in Appendix B;
- RMWB has a process flowchart for development permit applications;
- Direct Control land use application requirements are contained within the RMWB Land Use Bylaw.

Strathcona County

Strathcona County has a comprehensive policy manual that addresses the county's Planning and Development Services Department's core functions⁴. Policies identified within the best practice review are attached in Appendix B of the Interim Report and include:

- Biophysical assessment report preparation;
- Statutory plan application preparation and process and terms of reference document describing what should be provided and discussed within an Area Structure Plan or Area Redevelopment Plan;
- Subdivision application requirements and procedures;
- Land Use Bylaw amendment requirements and procedures;
- Direct Control land use application requirements are contained within the Strathcona County Land Use Bylaw;
- The development permit application checklist is included with the application form.

Parkland County

Parkland County's policy manual addresses three areas that concern the Planning and Development Services Department⁵. The County's webspace also contains several flowcharts for planning and development applications, with timelines. Policies and procedure documents identified within the best practice review are attached in Appendix B of the Interim Report and include:

- Subdivision condition release and plan endorsement requirements;
- Biophysical assessment preparation;

² Regional Municipality of Wood Buffalo, rmwb.ca/en/permits-and-development/development-and-planning.aspx

³ Regional Municipality of Wood Buffalo, rmwb.ca/en/permits-and-development/applications-licences-and-permits.aspx#Checklists

⁴ Strathcona County, strathcona.ca/council-county/administration/departments/planning-development-services/

⁵ Parkland County, parklandcounty.com/en/county-office/Planning-and-Development.aspx?_mid_=7886



- Environmental stewardship and protection;
- Direct Control land use application requirements are contained within the Parkland County Land Use Bylaw.
- Process flowcharts for the following approvals processes: conceptual schemes, land use bylaw amendments, subdivision applications, development permit applications, development agreements, statutory plans and land use bylaw amendments. Flowcharts include a time estimate of each step in the process and an overall estimate of when an application may expect to be presented to the approving authority.

Red Deer County

Red Deer County's webspace does not have separate checklists for applications. Development permit and subdivision applications include a checklist of required documents and additional permit requirements that may be required⁶. Documents identified within the best practice review are attached in Appendix B of the Interim Report and include:

- Development agreement letter of credit provisions, where the County differentiates between developers with a previous good track record with the County, and those who are either new or have not fulfilled the requirements;
- Referrals to adjacent landowners on planning and development applications;
- Road widenings as a condition of approval for subdivision;
- Comments and inquiries received for planning and development applications;
- The County's Land Use Bylaw has basic language regarding the rationale for Direct Control districts and has not been included as a reference.

Rocky View County

Rocky View County's webspace has several listed resources for Planning and Building Department clients⁷. The County has prepared development permit application package forms for specific uses that are the most commonly applied. These application packages include checklists specific to the use that has been applied. Examples of the uses listed on the County's webspace include Cannabis; Commercial/Office/Industrial/Institutional Uses; Communications Facilities, Home Based Business; Stripping/Grading/Excavation, and Fill.

Rocky View is also unique in the municipalities surveyed as they require pre-consultation and use a basic online form to request a meeting with a planner⁸.

Documents identified within the best practice review are attached in Appendix B of the Interim Report and include:

- Area Structure Plan Priority Policy, where administration prepared a priority list for ASP areas according to the sequencing of existing ASP reviews and the preparation of new ASP areas;

⁶ Red Deer County, rdcounty.ca/170/Planning-Development

⁷ Rocky View County, rockyview.ca/building-planning

⁸ Rocky View County, rockyview.ca/book-a-planning-meeting



- Service delivery expectations for land use bylaw amendments and subdivision applications;
- The holding and release subdivision and development securities;
- Direct Control land use application requirements are contained within the Rocky View County Land Use Bylaw. Note: The County recently concluded their Land Use Bylaw update and maybe a good comparative resource for Leduc County's Land Use Bylaw review;
- The County has also published a guide for the land use redesignation and subdivision proposals.

Best Practice Summary

The collected materials give a good overview regarding policy and procedure development. All of the surveyed municipalities have developed specific policies regarding the development process segments; however, Strathcona County appears to have the most comprehensive set of policies that concern the planning and development process. Wood Buffalo and Parkland County also have useful materials for the development of checklists and flowcharts. Finally, Rocky View County may have a valid policy that could be employed in the future for considering the upgrading or dealing with amendments in growth areas outside of the Nisku Area. Rocky View and Strathcona Counties have also developed user guides for planning applications.



5. Policies and Procedures

Following the Best Practice materials review, five applications or supporting assessments were identified as important for policies and procedures to be developed. Policies and procedures were drafted using the County's policy template. Flowcharts were also prepared that could be separated and given to a prospective applicant. The existing Agricultural Impact Assessment Policy was used to guide how County policies and procedures should be structured.

A summary of the draft policies and procedures is presented below. All of the policies and procedures may be found in Appendix B.

5.1.1 Biophysical Impact Assessment

At the County Staff's request, the City of Calgary's Biophysical Impact Assessment (BIA) framework was used as a best practice for the development of the policy. The policy identifies the usage of three assessment tools corresponding to two levels of reporting. The first level relies on an initial checklist (Preliminary Natural Site Assessment) to determine the investigation level and reporting for a specific site. Depending upon the project's location, the PNSA may suffice, or a more detailed Environmental Screening report or a fully scoped BIA would be required.

The policy includes the PNSA checklist and sample tables of contents for both the Environmental Screening report and Scoped BIA. Decision trees for various types of investigation:

- Review Process for Area Structure Plans and Outline Plans
- Environmentally Sensitive Areas
- Streams and Watercourses
- Wetlands
- Known Contaminated Sites

5.1.2 Land Use Bylaw Amendment

The Land Use Bylaw Amendment procedure provides a structure for the evaluation of a land-use bylaw amendment. Land Use Bylaw Amendment applications are reviewed by the County's Planning and Development Department, with input from other departments. County Council is the approving authority for any Land Use Bylaw application.

Areas covered within this procedure include:

- Conformity to County policies and statutory plans
- The requirement to amend the Land Use Bylaw
- Pre-application submissions
- Planning Applications which may be considered on a concurrent basis
- Deeming an application complete
- Direct Control Bylaw applications



- Circulation, Notification, and Sign Requirements
- Council Process and Approval
- Development Agreement execution
- Re-application procedures
- Additional considerations

5.1.3 Statutory Plan Approvals

Statutory Plans include the County's Municipal Development Plan, Intermunicipal Development Plans, Area Structure Plans (including Local Area Structure Plans), and Area Redevelopment Plans (including Local Area Redevelopment Plans). The Municipal Government Act regulates statutory Plans. Statutory Plan applications are reviewed by the County's Planning and Development Department, with input from other departments. County Council is the approving authority, with the mandatory review and approval by the Edmonton Metropolitan Region Board.

The procedure's framework will govern the approval process for Statutory Plans, including the following matters:

- Application submission, including the holding of a public participation program
- Circulation and notification of the application
- External consultation and referrals
- Inactive applications
- Re-applications
- Other planning applications which may be considered concurrently

5.1.4 Subdivision Applications

Provincial regulations guide subdivision applications, the County's statutory plan framework, and the Land Use Bylaw. Subdivision applications are evaluated by the County's Planning and Development Department, with input from other departments, and approved by the County's Subdivision Authority. Appeals of a Subdivision Authority's decision may be appealed to the County's Subdivision and Development Appeal Board in specific circumstances.

The procedure for Subdivision approvals includes the following matters:

- Pre-application submission
- Application submission and requirements
- Circulation, notification, and decision
- Endorsement process
- Expiry of approval
- Re-applications
- Other planning applications which may be considered concurrently



5.1.5 Outline Plan Applications

Outline Plan applications are non-statutory approval documents but are essential for the efficient sequencing of development, servicing, and transportation networks within the Plan Area of an Area Structure Plan or Local Area Structure Plan. Outline Plans also provide a framework for future subdivision and development of land. Outline Plan applications are evaluated by the County's Planning and Development Department with input from other departments. Council is the approving authority for Outline Plan applications.

The procedure for Outline Plan approvals includes the following matters:

- Application submissions
- Pre-application submission
- Circulation, notification, and decision
- Other planning applications which may be considered concurrently



6. Nisku Spine Road Expansion Economic Impact Study

The EIS's purpose was to assess and quantify the short- and long-term economic impacts of the proposed Spine Road expansion and provide support and input for the County's Western Economic Diversification Canada grant application for the Canadian Coal Transition Initiative ("CCTI").

The phasing out of coal-fired electricity is expected to have a negative impact on the County's future property tax revenues. It is estimated that the eventual closure of the Genesee Generating Station will reduce the County's property tax revenues by almost \$6 million.

To help mitigate the loss in revenue and to create future opportunities for economic diversification, the County has proposed the Spine Road expansion project to "unlock" new and existing lands for development and provide improved goods movement for the County. To quantify the magnitude of the impact of the Spine Road expansion project, IBI Group has estimated the short- and long-term economic impacts relating to GDP, labour income, tax generation, and job creation to highlight the benefits for the County, Provincial and Federal governments.

The proposed Spine Road expansion has the potential to assist in transforming the County's economy through the provision of critical transportation linkages to the greater regional market and surrounding multimodal hubs. The expansion is expected to unlock additional development lands to strengthen the County's tax base and create opportunities to attract or expand new industries such as transportation and logistics, agri-food processing uses and manufacturing uses. Additional opportunities such as connected vehicle infrastructure and the expansion of broadband internet will further increase economic activity within the Nisku Area.

A summary of the report's findings is presented below. The full report may be found in Appendix C.

Summary of Findings

The proposed Nisku Spine Road Expansion project will result in short- and long-term economic benefits for the County. The following summarizes the estimated qualitative and quantitative benefits of the Spine Road expansion:

- The development of the Spine Road expansion will complete one of the highest priority transportation projects in the region and will support interregional and multimodal connections to major employment areas, including the Nisku Industrial Park, the CP Railway facility and the Edmonton International Airport.
- The development of the proposed Spine Road expansion will help in the accommodation of the County's forecasted employment growth of 26,330 jobs to the 2044 planning horizon by unlocking new employment lands for development.
- The Spine Road expansion is anticipated to advance the County's economic diversification strategy, as identified in the County's Investment Readiness and Implementation Strategy, for further investment in the agriculture, energy, food processing, manufacturing and transportation and logistics sectors. These growth sectors are expected to build upon the County's existing industry profile and support Edmonton International Airport and the greater regional market.



- Approximately 1,250 acres (505 hectares) of vacant lands are available within one-quarter section (approximately 800m x 800m) of the proposed Spine Road expansion. At build-out, this could yield between 11.1 million and 22.1 million square feet of gross floor area.
- The proposed Spine Road expansion is expected to have positive economic impacts for the County, Province and Federal governments.
 - The short-term impacts associated with the construction of the Spine Road are anticipated to generate \$16.4 million in GDP, \$9.5 million in labour income, produce 127 person-years of employment and create \$300,000 in taxes for the County and the Province of Alberta.
 - The long-term economic impacts (build-out) associated with the construction of the Spine Road and on the vacant lands adjacent to the Spine Road expansion are anticipated to generate from \$1.9 to \$3.8 billion in GDP and from \$1.2 to \$2.3 billion in labour income. This would create between 16,467 and 32,806 person-years of employment and produce from \$136.3 to \$272.2 million in taxes for the County and the Province of Alberta.
 - At build-out, the function and operations of the development on vacant lands are estimated to create between 14,893 and 29,787 jobs and could generate between \$740.7 million and \$1.48 billion in annual labour income within the County.
- The current assessment base of the vacant parcels is estimated to generate a property tax revenue of \$11.1 million. Vacant parcel property tax revenue is estimated to total \$1.1 million. The net tax increase for the development of vacant parcels is estimated as follows:
 - **Low Impact:** The re-designation of agricultural lands and assignment of assessment values to “exempt” parcels could generate an additional \$2.04 million in tax revenue for the County.
 - **Medium Impact:** The development of 50% of the vacant parcels could generate an additional \$4.86 million in tax revenue for the County.
 - **High Impact:** The full build-out of the vacant parcels could generate an additional \$6.79 million in tax revenue for the County.
- The development of the vacant parcels within the study area will help to mitigate the lost property tax revenue associated with the phasing out of coal-fired electricity uses.



7. Marketing Guidelines

A marketing implementation strategy was developed as part of the Phase I Investment Readiness and Implementation Strategy. The strategy included a variety of specific actions to improve Leduc County's broader marketing capacity. The following report focuses more specifically on marketing four types of properties: Residential, Commercial, Agriculture Hubs, and Industrial. These guidelines are linked to the strategy and the overall investment readiness project to facilitate implementation.

7.1.1 Constraints

The vast majority of developable land in Leduc County is privately held, somewhat complicating the County's ability to market these lands as either the developer or landowner will need to be involved in the process. The first step in the marketing process will be engaging with and supporting these stakeholder groups, including developing materials they can use to further their objectives.

7.1.2 High-Level Guidelines

- Marketing activities need to reflect the relationships with developers, landowners, and real estate firms;
- All materials will need to be vetted and updated with the requirements of local partners;
- The development of a Comprehensive Land Inventory will be necessary to support investment attraction;
- Ensure the land inventory identifies the required Site Criteria for each type of site and target market;
- Developing Marketing Materials that target the identified uses.

These guidelines will inform a set of marketing materials for Leduc County, including a community profile and five sector profiles for Food Processing, Agriculture, Transportation and Logistics, Energy and Manufacturing.

7.1.3 Marketing Goals

The goals identified in the previously developed marketing strategy from Phase I were designed to define the plan's successful implementation. The following goals guided the priorities of the marketing plan and informed the suggested activities. For the Leduc County Investment Readiness Strategy, the goals were as follows:

- Leduc County has a clear economic development and investment attraction strategy centred on five key sectors;
- Leduc County is promoting investment-ready sites in target sectors
- Leduc County is proactively improving its investment readiness and investing in investment attraction
- Leduc County is viewed as investor-ready. Both internal and external investors must be confident that Leduc County is ready for investment.



- Potential investors, visitors and residents are aware of what development or investment sites are available. In addition to attracting new business and investment, Leduc County has a strong focus on promoting the many existing unique businesses and community assets, including any appropriate capital investment.

7.1.4 Target Market Goals

In this section of the project, marketing guidelines are designed to focus more specifically on marketing the four types of properties. The goals of these guidelines are:

- The types of land available are well known to the development community
- The types of land and developments the community wants are well known
- Developers, landowners, and real estate firms have access to materials and data that support their activities
- The development process for prioritized types of land and sites is well understood by the development partners.

7.1.5 Target Market(s)

The following section represents critical target markets for Leduc County's marketing message:

Internal Stakeholders/Municipal Staff

Internal stakeholders, including municipal staff across all departments, must be aware of the types of sites and investments the County is trying to attract. Prioritized sectors and sites should be top of mind for staff across the organization who have a working knowledge of Leduc County and can refer businesses or development proponents to the marketing resources developed to promote the County.

Community Partners

Organizations that operate within the region should be aware of the Investment Readiness and Implementation Strategy and the resources being developed due to the strategy. In some cases, these community partners are identified as potential partners in implementation. These organizations must be made aware of the Investment Readiness and Implementation Strategy, the potential partnership opportunities it provides, and the development of effective referral relationships and shared resources.

Existing Business Owners/Property Owners

Existing business and property owners represent the established business community and the most significant economic growth potential through retention and expansion. These individuals are invested in the community, and longstanding tenants or owners are involved through upturns and downturns in the economy.

Developers, Relocating Businesses and Entrepreneurs

New businesses and developers bring vibrancy to the local economy and can rehabilitate older buildings, fill vacant commercial spaces, build new developments and create local employment.

Real Estate Professionals

Often overlooked, commercial real estate agents are a key market in terms of regional awareness. Real



estate agents are often the gateway for potential investors or business owners. They can often provide their clients with a lasting image of your community before or after they have had a chance to visit your website. By tapping into the real estate community and ensuring they are aware of the Investment Readiness and Implementation Strategy and the community's vision, you can help create a positive impression and turn your real estate professionals into community ambassadors. Leduc County is currently engaged with the real estate community and can further enhance its outreach by engaging with realtors from across the region.

7.1.6 Feedback from Developers

The consultant team has solicited feedback from developers on the specific data they would find useful in Leduc County's Marketing materials. They include:

- Why it is easier/quicker/cheaper to do business in a particular County;
- Showing graphics that outline the mill rates in Leduc County vs. other counties in the area;
- Graphics that show permit timelines;
- A step-by-step guide as to how to obtain permits with the County;
- List of the correct people to speak to within the County (planners, assessment, fire, etc.) to make it streamlined and easy for users;
- Features the County has to attract these groups and diversify the user base (access, highways, EIA, proximity to YEG, land costs, taxes, etc.);
- Maps that showcases all the features of the County (like those mentioned above);
- Price of the Land for new development;
- Map of all the new developments in the County (Border, Monarch, *discovery, etc.);
- Identify major infrastructure and transportation projects;
- Key Tenants in the County (List of business # of years of operation, description of their business (use/sector));
- Stats on demographic, workforce/labour, Grants/incentive business programs;
- The cost of development permits;
- Vacancy rates;
- "Lead a conversation about how Nisku is no longer an Energy Park. It is now becoming more of a business park, much in how Acheson has attracted a lot of companies from Northwest Edmonton."
- "Nisku is doing the same for groups from Southeast Edmonton. Given the location of the airport, infrastructure upgrades, including 41st Avenue interchange and Spine Road, and new developments, we are seeing more groups interested in coming to Nisku/Leduc. Being able to say that X% of businesses are now non-energy related would go a long way to that story."



7.1.7 Marketing Guidelines Table

The following table summarizes the content that marketing guidelines should have and their applicability to various development sectors within Leduc County.

Table 3: Marketing Guidelines Summary Table

GUIDELINES	RESIDENTIAL	INDUSTRIAL/ AG HUBS	COMMERCIAL
<p>Marketing Materials should be short and graphically appealing, minimizing text and maximizing the key messages with clearly defined data points.</p> <ul style="list-style-type: none"> ▪ Identify National, Provincial, Edmonton Region and Leduc County Data Points for Each Sector ▪ Data Points need to be targeted to the specific needs of potential investors ▪ Data Points should be short, easy to understand and highlight Leduc County’s position as a top investment location. ▪ Engage Developers, Real Estate Firms and Landowners for feedback on data points ▪ Engage with Edmonton Global and Site Selectors Guild for feedback and relevant data points related to FDI ▪ Continually refine and articulate each sector’s value proposition to partners 	Yes	Yes	Yes
<p>Establish and prioritize the specific sites preferred for development</p>	Yes	Yes	Yes
<p>Identifying Target Markets</p> <ul style="list-style-type: none"> ▪ Be aware of the audience; residential developers may want materials to attract residents ▪ Tearsheets for each sector that can stand alone or form a larger investment package 	N/A	Yes	Yes
<p>Promote Success Stories from Developers and Include High Profile Investments</p>	N/A	Yes	Yes
<p>Resident-focused community profile outlining Leduc County’s value proposition online for download and printable for developer use.</p>	Yes	Yes	Yes
<p>Develop a Photography and Video content bank for specific sectors and certified target sites</p>	Yes	Yes	Yes
<p>Develop a comprehensive media contact list and begin developing a rapport with relevant media contacts for the press release and critical message distribution</p>	Yes	Yes	
<p>Resident-focused community profile outlining Leduc County’s value proposition online for download and printable for developer use.</p>	Yes	Yes	Yes



GUIDELINES	RESIDENTIAL	INDUSTRIAL/ AG HUBS	COMMERCIAL
Develop a Photography and Video content bank for specific sectors and certified target sites	Yes	Yes	Yes
Develop a comprehensive media contact list and begin developing a rapport with relevant media contacts for the press release and critical message distribution	Yes	Yes	Yes
Externally Focused Marketing Materials should include maps or references to Edmonton to showcase location	Yes	Yes	Yes



8. Appendix A – Vacant and Underutilized Properties – Nisku Area



9. Appendix B – Planning Policies and Procedures

- Biophysical Impact Assessment
- Land Use Bylaw Amendment Procedures
- Statutory Plan Procedures
- Subdivision Procedures
- Outline Plan Procedures
- Development Permit Process Chart



10. Appendix C – Nisku Spine Road Expansion Economic Impact Study



11. Appendix D – Marketing Materials

- Leduc County Community Profile
- Food Processing Sector Profile
- Agriculture Sector Profile
- Manufacturing Sector Profile
- Transportation and Logistics Sector Profile
- Energy Services Sector Profile

NO.	ADDRESS	ROLL NUMBER	ACRES	AREA/ASP	SERVICED	LAND USE
1	1611 13 ST	6322470	2.901	Blackmud Creek	Yes	Industrial
2	1615 13 ST	6322480	3.011	Blackmud Creek	Yes	Industrial
3	1302 17 AVE	6322490	3.369	Blackmud Creek	Yes	Direct Control
4	1607 13 ST	6322460	3.402	Blackmud Creek	Yes	Industrial
5	1501 SPARROW DR	6316009	0.603	Central Nisku	Yes	Industrial
6	2102A 8 ST	6304560	0.997	Central Nisku	Yes	Industrial
7	707 21 AVE	6304570	1.079	Central Nisku	Yes	Industrial
8	1405 10 ST	6319061	1.088	Central Nisku	Yes	Industrial
9	705 12 AVE	6313950	1.107	Central Nisku	Yes	Industrial
10	2331 5 ST	6354230	1.137	Central Nisku	Yes	Industrial
11	514 12 AVE	6316310	1.139	Central Nisku	Yes	Industrial
12	603 11 AVE	6316180	1.151	Central Nisku	Yes	Industrial
13	508 12 AVE	6316340	1.225	Central Nisku	Yes	Industrial
14	601 11 AVE	6316190	1.235	Central Nisku	Yes	Industrial
15	510 12 AVE	6316330	1.247	Central Nisku	Yes	Industrial
16	512 12 AVE	6316320	1.248	Central Nisku	Yes	Industrial
17	506 12 AVE	6316350	1.266	Central Nisku	Yes	Industrial
18	1106 8 A ST	6313870	1.273	Central Nisku	Yes	Industrial
19	516 12 AVE	6316300	1.407	Central Nisku	Yes	Industrial
20	603 12 AVE	6316140	1.463	Central Nisku	Yes	Industrial
21	601 12 AVE	6316150	1.474	Central Nisku	Yes	Industrial
23	2308 SPARROW DR	6300220	1.497	Central Nisku	Yes	Service Commercial
24	1103 8 A ST	6313270	1.511	Central Nisku	Yes	Industrial
25	1101 8 A ST	6313280	1.511	Central Nisku	Yes	Industrial
26	1102 7 ST	6314060	1.525	Central Nisku	Yes	Industrial
27	2903 5 ST	6364550	1.583	Central Nisku	Yes	Industrial
28	2901 5 ST	6364540	1.601	Central Nisku	Yes	Industrial
29	2106A 7 ST	6304180	1.605	Central Nisku	Yes	Industrial
30	1203 8 A ST	6313230	1.705	Central Nisku	Yes	Industrial
31	2720 5 ST	6364200	1.747	Central Nisku	Yes	Industrial
32	2809 5 ST	6364530	1.79	Central Nisku	Yes	Industrial
33	2718 5 ST	6364190	1.816	Central Nisku	Yes	Industrial
34	1107 4 ST	6316710	1.829	Central Nisku	Yes	Industrial
35	1109 4 ST	6316720	1.829	Central Nisku	Yes	Industrial
36	1104 5 ST	6316820	1.83	Central Nisku	Yes	Industrial
37	1106 5 ST	6316810	1.831	Central Nisku	Yes	Industrial
38	2902 5 ST	6364250	1.845	Central Nisku	Yes	Industrial
39	1205 4 ST	6316750	1.854	Central Nisku	Yes	Industrial
40	404 11 AVE	6316830	1.855	Central Nisku	Yes	Industrial
41	1205 8 A ST	6313220	1.901	Central Nisku	Yes	Industrial
42	608 19 AVE	6310020	1.948	Central Nisku	Yes	Industrial
43	1203 17 AVE	6322340	1.992	Central Nisku	Yes	Industrial
44		6302190	1.998	Central Nisku	Yes	Industrial
45	1206 7 ST	6314080	1.998	Central Nisku	Yes	Industrial
46	1201 17 AVE	6322330	2.001	Central Nisku	Yes	Industrial
47	2004 6 ST	6302111	2.037	Central Nisku	Yes	Industrial
48	1205 6 ST	6316290	2.04	Central Nisku	Yes	Industrial
49	2222 SPARROW DR	6206000	2.062	Central Nisku	Yes	Service Commercial
50	605 13 AVE	6316450	2.062	Central Nisku	Yes	Industrial
51	607 13 AVE	6316460	2.065	Central Nisku	Yes	Industrial
52	1110 4 ST	6339040	2.198	Central Nisku	Yes	Industrial

NO.	ADDRESS	ROLL NUMBER	ACRES	AREA/ASP	SERVICED	LAND USE
53	2002 6 ST	6302110	2.2	Central Nisku	Yes	Industrial
54	2220 SPARROW DR	6204011	2.224	Central Nisku	Yes	Service Commercial
55	1410 6 ST	6317340	2.252	Central Nisku	Yes	Industrial
56	505 12 AVE	6316530	2.265	Central Nisku	Yes	Industrial
57	510 11 AVE	6316600	2.266	Central Nisku	Yes	Industrial
58	610 19 AVE	6310030	2.291	Central Nisku	Yes	Industrial
59	702 19 AVE	6310040	2.291	Central Nisku	Yes	Industrial
60	1408 6 ST	6317360	2.324	Central Nisku	Yes	Industrial
61	1204 7 ST	6314090	2.336	Central Nisku	Yes	Industrial
62	1505 SPARROW DR	6316005	2.382	Central Nisku	Yes	Industrial
63	1401 SPARROW DR	6316010	2.464	Central Nisku	Yes	Industrial
64	1405 6 ST	6317180	2.475	Central Nisku	Yes	Industrial
65	1407 6 ST	6317170	2.534	Central Nisku	Yes	Industrial
66	1204 4 ST	6339050	2.547	Central Nisku	Yes	Industrial
67	1610 13 ST	6322320	2.578	Central Nisku	Yes	Industrial
68	402 13 AVE	6316850	2.654	Central Nisku	Yes	Industrial
69	1901 4 A ST	6307370	2.809	Central Nisku	Yes	Industrial
70	1503 7 ST	6313060	2.822	Central Nisku	Yes	Industrial
71	503 19 AVE	6307180	2.863	Central Nisku	Yes	Industrial
72	601 19 AVE	6307200	2.863	Central Nisku	Yes	Industrial
53	2002 6 ST	6302110	2.2	Central Nisku	Yes	Industrial
54	2220 SPARROW DR	6204011	2.224	Central Nisku	Yes	Industrial
55	1410 6 ST	6317340	2.252	Central Nisku	Yes	Industrial
56	505 12 AVE	6316530	2.265	Central Nisku	Yes	Industrial
57	510 11 AVE	6316600	2.266	Central Nisku	Yes	Industrial
58	610 19 AVE	6310030	2.291	Central Nisku	Yes	Industrial
59	702 19 AVE	6310040	2.291	Central Nisku	Yes	Industrial
60	1408 6 ST	6317360	2.324	Central Nisku	Yes	Industrial
61	1204 7 ST	6314090	2.336	Central Nisku	Yes	Industrial
62	1505 SPARROW DR	6316005	2.382	Central Nisku	Yes	Industrial
63	1401 SPARROW DR	6316010	2.464	Central Nisku	Yes	Industrial
64	1405 6 ST	6317180	2.475	Central Nisku	Yes	Industrial
65	1407 6 ST	6317170	2.534	Central Nisku	Yes	Industrial
66	1204 4 ST	6339050	2.547	Central Nisku	Yes	Industrial
67	1610 13 ST	6322320	2.578	Central Nisku	Yes	Industrial
68	402 13 AVE	6316850	2.654	Central Nisku	Yes	Industrial
69	1901 4 A ST	6307370	2.809	Central Nisku	Yes	Industrial
70	1503 7 ST	6313060	2.822	Central Nisku	Yes	Industrial
71	503 19 AVE	6307180	2.863	Central Nisku	Yes	Industrial
72	601 19 AVE	6307200	2.863	Central Nisku	Yes	Industrial
73	505 19 AVE	6307190	2.868	Central Nisku	Yes	Industrial
74	603 19 AVE	6307210	2.869	Central Nisku	Yes	Industrial
75	2310 5 ST	6354130	2.905	Central Nisku	Yes	Industrial
76	1004 14 AVE	6319070	2.913	Central Nisku	Yes	Industrial
77	2502 SPARROW DR	1495020	2.93	Central Nisku	Yes	Service Commercial
78	1507 7 ST	6313080	2.936	Central Nisku	Yes	Industrial
79	1505 7 ST	6313070	2.941	Central Nisku	Yes	Industrial
80	1202 17 AVE	6322380	3.009	Central Nisku	Yes	Industrial
81	1509 SPARROW DR	6316000	3.022	Central Nisku	Yes	Industrial
82	1207 7 ST	6313710	3.031	Central Nisku	Yes	Industrial
83	2905 5 ST	6364560	3.09	Central Nisku	Yes	Industrial
84	707 19 AVE	6310150	3.149	Central Nisku	Yes	Industrial

NO.	ADDRESS	ROLL NUMBER	ACRES	AREA/ASP	SERVICED	LAND USE
85	705 19 AVE	6310160	3.152	Central Nisku	Yes	Industrial
86	402 24 AVE	6354410	3.177	Central Nisku	Yes	Industrial
87	2106 8 ST	6304450	3.207	Central Nisku	Yes	Industrial
88	2108 8 ST	6304460	3.214	Central Nisku	Yes	Industrial
89	2509 5 ST	6364340	3.267	Central Nisku	Yes	Industrial
90	2715 5 ST	6364480	3.406	Central Nisku	Yes	Industrial
91	2507 5 ST	6364330	3.448	Central Nisku	Yes	Industrial
92	1807 5 ST	6307170	3.654	Central Nisku	Yes	Industrial
93	2103 6 ST	6302180	3.678	Central Nisku	Yes	Industrial
94	2305A 8 ST	6352020	3.768	Central Nisku	Yes	Industrial
95	2709 5 ST	6364470	3.769	Central Nisku	Yes	Industrial
96	1209 8 A ST	6313201	3.782	Central Nisku	Yes	Industrial
97		6327040	3.843	Central Nisku	Yes	Agricultural
98	2601 5 ST	6364350	3.925	Central Nisku	Yes	Industrial
99	2707 5 ST	6364450	3.966	Central Nisku	Yes	Industrial
100	606 17 AVE	6310300	4.097	Central Nisku	Yes	Industrial
101	1810 5 ST	6307020	4.177	Central Nisku	Yes	Industrial
102	1205 5 ST	6316400	4.188	Central Nisku	Yes	Industrial
103	2010 SPARROW DRIVE	6204020	4.241	Central Nisku	Yes	Service Commercial
104	1204 17 AVE	6322390	4.277	Central Nisku	Yes	Industrial
105	505 18 AVE	6307350	4.28	Central Nisku	Yes	Industrial
106	604 17 AVE	6307310	4.323	Central Nisku	Yes	Industrial
107	2110 SPARROW DR	6204010	4.526	Central Nisku	Yes	Service Commercial
108	1705 5 ST	6307340	4.607	Central Nisku	Yes	Industrial
109	604 21 AVE	6304090	4.711	Central Nisku	Yes	Industrial
110	1804 5 ST	6307050	4.765	Central Nisku	Yes	Industrial
111	2711 5 ST	6364460	4.897	Central Nisku	Yes	Industrial
112	2106 5 ST	6301070	5.008	Central Nisku	Yes	Industrial
113		6316030	5.167	Central Nisku	Yes	Industrial
114	505 23 A AVE	6354300	5.585	Central Nisku	Yes	Industrial
115	U1-2 1306 7 ST	6313520	5.848	Central Nisku	Yes	Industrial
116	2201 5 ST	6302140	6.549	Central Nisku	Yes	Industrial
117	2120 SPARROW DR	6204000	6.582	Central Nisku	Yes	Service Commercial
118	2001 4 ST	6301020	6.65	Central Nisku	Yes	Industrial
119	2609 5 ST	6364390	6.775	Central Nisku	Yes	Industrial
120	1903 8 ST	6310310	6.802	Central Nisku	Yes	Industrial
121	2130 SPARROW DR	6204001	6.985	Central Nisku	Yes	Service Commercial
122	2302 5 A ST	6354170	7.16	Central Nisku	Yes	Industrial
123	2108 SPARROW DR	6204009	7.319	Central Nisku	Yes	Service Commercial
124	2310 SPARROW DR	6300230	7.32	Central Nisku	Yes	Service Commercial
125		6319110	7.384	Central Nisku	Yes	Industrial
126	1102 16 AVE	6322280	7.467	Central Nisku	Yes	Industrial
127	2105A 8 ST	6304530	7.525	Central Nisku	Yes	Industrial
128		6359000	8.134	Central Nisku	Yes	Agricultural
129	602 25 AVE	6366000	8.496	Central Nisku	Yes	Industrial
130	1011 16 AVE	6322200	8.769	Central Nisku	Yes	Industrial
131	1806 5 ST	6307040	8.946	Central Nisku	Yes	Industrial
132	1802 8 ST	6310130	9.162	Central Nisku	Yes	Industrial
133	1302 SPARROW DR	6340000	9.985	Central Nisku	Yes	Service Commercial
134	1403 7 ST	6313750	10.404	Central Nisku	Yes	Industrial
135	2301 5 A ST	6354310	11.061	Central Nisku	Yes	Industrial

NO.	ADDRESS	ROLL NUMBER	ACRES	AREA/ASP	SERVICED	LAND USE
136	2705 5 ST	6364410	12.503	Central Nisku	Yes	Industrial
137	1006 15 AVE	6318090	15.61	Central Nisku	Yes	Industrial
138	1402 9 ST	6314110	18.93	Central Nisku	Yes	Industrial
139	701 25 AVE	6350100	19.288	Central Nisku	Yes	Industrial
140		6361000	19.363	Central Nisku	Yes	Industrial
141	1511 4 ST	6349000	21.041	Central Nisku	Yes	Industrial
142	2604 9 ST	6360000	23.258	Central Nisku	Yes	Direct Control
143	1509 5 ST	6316020	23.545	Central Nisku	Yes	Industrial
144	2305 9 ST	6323060	25.988	Central Nisku	Yes	Light Industrial
145	908 29 AVE	6327060	26.971	Central Nisku	Yes	Agricultural
146	2304 8 ST	6353000	28.077	Central Nisku	Yes	Industrial
147	2306 8 ST	6352000	29.106	Central Nisku	Yes	Industrial
148	2307 4 ST	6354000	30.517	Central Nisku	Yes	Industrial
149	2002 4 ST	6354020	30.797	Central Nisku	Yes	Industrial
150	1802 11 ST	6320000	30.828	Central Nisku	Yes	Industrial
151	1401 12 ST	6319200	31.303	Central Nisku	Yes	Industrial
152	2502 5 ST	6364000	41.516	Central Nisku	Yes	Industrial
153	1701 9 ST	6321000	74.526	Central Nisku	Yes	Industrial
154	706 25 AVE	6363000	78.106	Central Nisku	Yes	Industrial
155	605 17 AVE	6311000	78.343	Central Nisku	Yes	Industrial
156	1201 10 ST	6326000	124.696	Central Nisku	Yes	Industrial
157	1500 SPARROW DR	6345010	130.835	Central Nisku	Yes	Service Commercial
158		6336010	136.983	Central Nisku	Yes	Service Commercial
159	3201 4 ST	6369000	14.33	North Major	No	Direct Control
160	3135 4 ST	6370010	19.715	North Major	Yes	Industrial
161	3075 4 ST	6370020	19.717	North Major	Yes	Industrial
162	3175 4 ST	6370000	19.718	North Major	Yes	Industrial
163	1026 30 AVE	6368010	37.33	North Major	Yes	Industrial
164	3059 4 ST	6370030	38.571	North Major	Yes	Industrial
165	950 30 AVE	6368020	51.75	North Major	Yes	Industrial
166		6376000	55.05	North Major	No	Industrial
167	1126 30 AVE	6368000	56.65	North Major	No	Industrial
168		6367065	35.64	QE2 Bus. Park	Yes	Industrial

Department: Planning & Development	Section: Long Range Planning
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LR-xx Biophysical Impact Assessment

Policy statement

Leduc County believes that procedures are necessary to assess and prioritize lands with natural value and essential biological diversity. Leduc County will use the results of a biophysical assessment for prioritizing and dedicating Environmental Reserve, Environmental Reserve Easement, Municipal Reserve, Conservation Reserve and Conservation Easement lands based on municipal, community, and environmental needs.

The objectives of the BIA framework are:

- Establish requirements and expectations of developers (project proponents) and communicate them to all stakeholders.
- Provide clear and consistent guidelines for identifying, evaluating, predicting and mitigating potential environmental impacts associated with development on/or adjacent to an Environmental Reserve (ER) / ESA. Note: A policy of defining how the County evaluates and accepts ER will be developed at a later date.
- Ensure projects receive equitable and appropriate level of review.
- Ensure compatibility of proposed BIA with federal and provincial environmental impact assessment regulation.
- Establish regulatory philosophies for the BIA framework, as follows:
 - apply a risk-based approach to tailor the requirements to the risk posed to ecologically diverse and environmentally significant areas by the project
 - consider the life cycle of a project (from design to completion)
 - apply a goal-oriented approach rather than prescriptive
 - consider integrated decision-making
- establish criteria to determine whether an Environmental Screening (ES) is required, or a more detailed, high quality BIA that ensure adequate protection of ecologically diverse and environmentally significant areas and minimization or avoidance of adverse environmental effects
- ensure County Council has adequate information to make an informed decision
- ensure clear, transparent, predictable, efficient processes
- Establish review timelines for transparency/accountability (15 days for ES approvals, 30 days for BIAs).
- Establish a seasonal requirement of when ES and BIA are to be conducted inclusively capturing the seasonal dependent flora and fauna.

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Definitions

- *Area Structure Plan (ASP) or Local Area Structure Plan (LASP)* means a statutory plan adopted by a municipal council by bylaw that provides a framework for future subdivision and development of a defined area in accordance with Section 633 of the Municipal Government Act. Area Structure Plans are typically adopted to guide future subdivision and development in greenfield areas. Policies that apply to Area Structure Plans generally also apply to Local Area Structure Plans and Area Redevelopment Plans.
- *Aquatic Resources* means the component of the overview consisted of conducting a desktop study as well as a field survey to identify waterbodies and potential aquatic resources concerns. The resources are divided in two parts: 1. Surface Hydrology 2. Fish and fish habitat.
- *Biophysical Impact Assessment (BIA)* means an assessment of the biological and physical elements of an ecosystem, including geology, topography, hydrology and soils.
- *Canada Wildlife Act* means an act administered by the Federal Minister of the Environment. It establishes statutes responsible for wildlife within Canada, all Provinces, and the Territories. The Act defines the powers, duties and functions of the Minister respect to all wildlife that is wild by nature and the habitat of any such animal, plant, or organism, including any waters on or flowing through the lands. The Act governs the management and protection of endangered wildlife and habitat. The Act stipulates that the Minister may take actions such measures as deemed necessary for the protection of any species of wildlife in danger of extinction, including the acquisition of lands for the purposes of research, conservation, and interpretation. Any wildlife or habitat categorized as endangered within the development area would be subject to the Canada Wildlife Act.
- *Conservation Easement Agreement* means a binding voluntary legal agreement between Leduc County and a landowner for the purposes of conserving biological diversity. The agreement is registered on the title of the land in perpetuity.
- *Cumulative Effects Assessment* means a description of potential positive and negative environmental, social, economic and cultural impacts of the proposed activity, including cumulative, regional, temporal and spatial considerations. The elements of the cumulative effect assessments include:
 - Issues and Valued Ecosystem Components (VECs) identification, spatial and temporal scales as well as past, existing and proposed projects.
 - Impact characterization.
 - Significance evaluation and determination
 - Wetland Conservation Plan means a set of policies to ensure that there is No Net Loss of Wetlands.
- *Environmentally Significant Area (ESA)* means a natural area site that has been inventoried prior to potential development and which, because of its features or characteristics, is significant from an environmental perspective to Leduc County, and has the potential to remain viable in an urban environment. A site is listed as an Environmentally Significant Area on the basis of meeting one or all of the criteria as listed:
 - Quality of Biotic Community: Biotic communities of high quality with minimal disturbance and/or diversity for a specific habitat type.

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- Ecological Function: The area is important for the healthy maintenance of a natural system beyond its boundaries by maintaining biodiversity and/or acting as staging area or corridor for wildlife within the system.
- Distinctive and/or Unusual Land Form: The area possesses a distinctive and/or unique land form (geologic and geographic).
- Uniqueness: The habitat or ecosystem component has limited representation within the municipality; and/or the area provides representative habitat for wildlife of recognized importance.
- *Geology/ Geomorphology* means a description of surficial and, if possible, sub- surficial geological features at the site and its immediate environment; identified glacial land forms and stability issues should be included in the preliminary site report.
- *Historical land and resource use* mean existing historical, interpretive, or recreational features; includes the potential for developing recreational, interpretive, or educational facilities at the site when completed.
- *Hydrology* means the listing of all standing water features, water courses, or other natural hydrological sources, surficial drainage patterns, depth to water table, and other features.
- *Rare species/Species at Risk Strategy* means mitigative measures for rare species/Species at Risk communities within the project area. The measures may include but not limited to the following activities:
 - Avoidance and realignment of pathways and structures
 - Collection of seeds and/or cuttings, where appropriate, for future propagation and as a seed source
 - Transplanting and augmenting existing populations within Leduc County where protection is guaranteed
 - Collection and retention of viable specimens for future remediation projects
- *Species at Risk Act* means an act administered by the Federal Ministers of Environment; Fisheries and Oceans; and Canadian Heritage. It was enacted to prevent the extirpation or extinction of species that are of special concern, endangered, or threatened. The Act legislates protection of these species and any existing critical habitats through agreements and permits, enforcement measures, and public registry. Stewardship action plans and recovery strategies are also outlined within the Act.
- *Topography* means a physical description of existing land form, slope, aspect, and position within the landscape; in most cases this may require presentation of a survey.
- *Waterbody* as defined by the Alberta Environmental Protection and Enhancement Act means a waterbody/watercourse as:
 - the bed and shore of a river, stream, lake, creek, lagoon, swamp, marsh or other natural body of water, or
 - a canal, ditch, reservoir or other artificial surface feature made by humans, whether it contains or conveys water continuously or intermittently.
- *Wetland Functional Assessment* means a component of the BIA requirement as part of any wetland mitigation where residual impacts requiring compensation. The assessment will be used as a means of evaluating the roles and benefits of the wetland on the basis of its ecological,

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hydrological and socio-economic functions. These functions will then provide a basis for determining appropriate mitigation.

- *Water Act* as administered by the Government of Alberta, identifies all water bodies within the Province of Alberta as Crown Property and defines regulations pertaining to rights, restrictions, and resource managements in relation to all water resources within provincial boundaries. The Act also addresses the disposition, diversion, or alteration of any waterbody within Alberta, which may or may not impact water flows, wetlands, and stream diversions which influence or interfere with water quantity and quality within the Province of Alberta require statutory authorization

Policy standards

During the Area Structure Plan, Local Area Structure Plan, Outline Plan, and/or subdivision application process, each property will require a Biophysical Assessment to identify potential Conservation Reserve, Conservation Easement, Environmental Reserve (ER), Environmental Reserve Easement, and Municipal Reserve (MR).

Two land evaluation tools will be used to accomplish the goal of this policy. Part 1 is a worksheet that may lead to a subsequent environmental screening report, and Part 2 is a scoped BIA report by a qualified professional. The outline below describes when Parts 1 or 2 is required.

1. PART 1: INITIAL PROJECT SCREENING (PRELIMINARY NATURAL SITE ASSESSMENT (PNSA) AND ENVIRONMENTAL SCREENING)
 - a. The initial project review provides an overview of the proposed project and the existing environment to determine the level and extent of any further requirements for environmental review. The checklist is divided into two distinctive categories – Project Description and Baseline Information and Potential Environmental Effects. Project Description and Baseline Information is used to collect relevant information on the existing environmental elements found within the project site and provide direction for further environmental assessments and reports required. Potential Environmental Effects category is used to document the potential project effects of the biophysical elements – if there are any project interaction; brief description of the interactions; level of interaction; the type of interaction and brief description of potential adverse environmental effect.
 - b. The project proponent conducts a PNSA and completes an impact checklist (Table 2). Air photos, concept drawings, and site checks will be required. The County’s Planning and Development Department reviews the PNSA report and advises the proponent on the level of environmental review required: no further study required (with or without conditions); Environmental Screening; or Biophysical Impact Assessment (Level 2).
 - c. The PNSA can be used by project managers and project proponents as a preliminary decision-making tool to assist in determining the need to prepare BIAs. A series of “decision-tree” flowcharts have been produced for the PNSA to guide project proponents in a more streamlined decision-making whether the need for further environmental assessment is required. These flowcharts namely, Environmentally Significant Area (ESA), Waterbody,

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Wetland, Known Contaminated Site and Species at Risk are to be referenced when answering the specific environmental element categories.

- d. The description of the biophysical elements should provide sufficient baseline information for environmental setting/context as well as to evaluate the need for further levels of BIA assessments. The information should include at a minimum the following:
 - i. Physical landscape assessment – topography, soil and geology;
 - ii. Hydrology – presence of wetlands and waterbodies such as drainage corridors, streams, creeks, and rivers;
 - iii. Habitat types;
 - iv. Landscape Ecology assessment – wildlife corridors, habitat connections, and unique features;
 - v. ANHIC, FWMIS, database research results on the potential presence of listed species at risk, species of special status or rare communities.

The distance to the biophysical indicator categories listed should be given in meters. The measurement should be taken from the actual project activity location to the edge of the biophysical element. The distance threshold of 50 meters is employed for decision-making purposes in deciding for further levels of BIA assessments, including Environmental Screening.

- e. The Environmental Screening (ES) Report provides a screening level of study describing the project impacts, including project alternatives, in a manner that ensures mitigation of known or suspected impacts to the environment. The need for the ES report will be determined through the PNSA reporting process. A sample ES report Table of Contents is listed in Table 3. The ES report will:
 - i. outline the rationale for the project;
 - ii. explore the alternatives that have been investigated;
 - iii. describe the existing environment including the biophysical and socio-economic elements; and
 - iv. describe both short- and long-term environmental effects and mitigation measures.
- f. The Planning and Development Department will review the PNSA and ES report; and recommends approval to Council with or without conditions depending on report quality, and acceptance of the recommended mitigation measures.

2. PART 2: SCOPED BIOPHYSICAL IMPACT ASSESSMENT

- a. The Scoped BIA provides a detailed study and review of a project including project alternatives, and recommended mitigation measures. It predicts, interprets and evaluates impacts and identifies mitigation measures to avoid, minimize or compensate for these impacts. A BIA report must:
 - i. describe the proposed activity and provide rationale, including alternatives considered;
 - ii. describe the existing environment;

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- iii. recommend mitigation measures that would avoid, minimize or compensate for the environmental impacts of the activity; and
- iv. describe how mitigation measures will be monitored over time to ensure effectiveness.

It is important for the BIA to provide a clear assessment methodology that will lead to specific recommendations. Tools should be employed that will provide demonstrable rationale for recommending specific mitigation measures. Examples include but not limited to matrix evaluation, checklist evaluation, ecological land classification and valued ecosystem components.

- b. A sample Table of Contents for a BIA report is listed in Table 4. Draft reports are submitted to the County Planning and Development Department for review, technical circulation (if required) and approval. All Scoped BIAs are project specific and will vary in the issues and project needs to be addressed. Contents are generally similar to those included in an environmental screening report, except that the Scoped BIA will provide more detailed information and requiring an environmental protection plan.
- c. The Planning and Development Department, with the assistance of the County’s Parks and Recreation Department reviews the report and recommends approval to Council, with or without conditions depending on report quality, acceptance of the recommended mitigation measures.
- d. The various levels of BIAs require the expertise of qualified Environmental Consultant or Biologist to capture the biophysical elements and outline the potential impacts and the mitigation strategies to offset the project impacts. A Qualified Environmental Consultant or Biologist should be enlisted to undertake the assessment employing their knowledge and expertise in biophysical inventory and delineating potential project impacts. A Qualified Environmental Consultant or Biologist must be able to:
 - i. Identify biophysical elements within the project areas with accuracy.
 - ii. Identify the potential project impacts and mitigation measures to prevent or minimize project impacts.
 - iii. Undertake the required BIA assessments within Appropriate Assessment Periods
 - iv. Submit BIAs to Leduc County for review and approval.
 - v. Revise changes to the BIA reports as required based on the comments and response relayed by the approving authority.
 - vi. Submit reports in hard copy as well as electronic version (i.e. MS Word or Adobe PDF).
 - vii. Implement the mitigation measures throughout the duration of project.
- e. All biophysical assessments are to be conducted during the growing season from May to September to ensure that the data acquired are representative of the biophysical feature and capture adequate information on the seasonally- dependent species such as the rare species and/or species at risk within the project area. The Preliminary Natural Site Assessment can be prepared outside the growing season with synthesis of existing background information on the particular project site and a desk-top research. The Scoped BIA will require in-depth biophysical inventories and assessments conducted during the

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appropriate season to ensure that the required information and data are captured accurately.

3. WETLAND FUNCTIONAL ASSESSMENT

- a. A Wetland Functional Assessment will be required as a part of a BIA report to address wetland mitigation where there are impacts requiring compensation. The assessment will be used as a means of evaluating the roles and benefits of the wetland on the basis of its ecological, hydrological and socio-economic functions. These functions will then provide a basis for determining appropriate mitigation.

“Function” in this context refers to properties and processes (physical, chemical and biological) that occur within a wetland. Processes can include water storage, creation of biomass, nutrient uptake, and the provision of wildlife habitat. Wetland function can be broadly grouped into the following categories:

- i. Biological (e.g., habitat supply, species diversity);
- ii. Hydrological (e.g., surface water storage, groundwater recharge, water quality improvement); and
- iii. Socio-economic (e.g., bird watching, hunting, fishing, aesthetic value);

Not all wetlands will perform all of these functions, nor will all wetlands perform all functions equally well. Many factors influence a wetland’s performance, including:

- long-term and short-term climatic conditions;
- water quality and quantity;
- position in the landscape/watershed;
- surrounding land use;
- human disturbances to the wetland or adjacent upland; and
- species diversity/presence of non-native species.

As a general rule, environmentally significant wetlands are assumed to possess a higher degree of function than those of less significance.

- b. There are several accepted methodologies for assessing wetland function, including the Ontario Wetland Evaluation System and the Canadian Wetland Evaluation Guide. Developing a single, comprehensive method for assessing the functions of a wetland is no trivial task. There is an inherent degree of uncertainty and risk in wetland mitigation. The science of understanding, describing and, ultimately replacing wetland ecosystems is not yet well developed. It can be very time consuming to fully understand all the functions of a wetland ecosystem. That having been said, decisions must be made based upon the best science available.

Furthermore, a wetland assessment method must not only provide for a means of understanding the value of a given wetland relative to others, but it must also be used to provide guidance in evaluating the effectiveness of proposed mitigation measures.

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- c. An understanding of wetland function and values will form the basis of any mitigation negotiations. As a rule, environmentally significant wetlands do provide a greater degree of wetland function, however, not all wetlands function at equivalent levels. In some cases, an environmentally significant wetland may be less functional in certain respects than a non-significant wetland. Furthermore, it is generally well accepted that some wetland functions can be more easily replaced than others.
- d. Mitigation decisions should be considered on a case-by-case basis using a Functionality Assessment. The functional values of a particular wetland should be evaluated, and any subsequent mitigation work be approached with the goal of ensuring No Net Loss of those functions.

The wetland evaluation system will be developed based upon the following broad categories of wetland function:

- i. Biological function (e.g. species diversity, breeding habitat, habitat use, species at risk);
- ii. Hydrological (e.g. flood attenuation, water quality treatment, groundwater discharge);
- iii. Socio-economic (aesthetic value, recreational potential, educational/scientific value).

A list of functional, measurable attributes will be determined for each of the above categories based upon existing literature and consultation with appropriate specialists in each field. An aggregate ranking system will be developed that weighs all these factors to determine the overall functionality of the wetland.

- e. All development applications with a potential to affect a wetland must be evaluated under the Mitigation Process. Avoidance and minimization of impact must always be considered first.

A Wetland Functional Assessment must be conducted by a Qualified Wetland Specialist. The need for an assessment and the scope of the study must be determined in consultation with the County Planning and Development Department.

A Wetland Functional Assessment will be required for all wetlands requiring mitigation. Where impacts to a wetland are considered unavoidable, minimization of impacts will be determined based upon the described functions and values of the wetland. The purpose of the mitigation process will be to ensure the retention and continuation of the functions of that system – not to determine a dollar value for the wetland functions.

- f. The overall wetland objective for the County in the Conservation Plan is no net loss of function. To strive for this objective, the County has placed a priority on protecting all Class III to VI wetlands, using the Stewart and Kantrud (1971) classification system, where feasible, and is currently working towards an overall plan that identifies specific Class III to VI wetlands that must be avoided or, if there is an impact, how the impact can be minimized. Currently, the major wetland functions that the County is most interested in and that are

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highlighted in the Conservation Plan are: life support, hydrology, water quality, and socio-economic.

In support of this objective, the Wetland Planning Tool will work towards defining a threshold of wetland functions against which any impacts on wetland functions are assessed and identified so impacts can be mitigated, restored, and/or compensated to achieve no net loss of function.

The Wetland Planning Tool will furnish the County, proponents and their consultants with a responsible, transparent process for decision-making on wetland protection and wetland compensation that can be consistently applied. Its immediate utility will provide proponents and their consultants a measure of the level of effort required to address wetland assessments, scoring, and compensation.

- g. The Wetland Functions Scoring Form (Scoring Form) is one step in the Wetland Planning Tool process leading towards agreements for appropriate wetland protection or compensation. The Scoring Form recognizes functions based on the presence or absence of wetland attributes. The rationale is that cost to compensate will be positively correlated with increasing quality of function, which is captured during a Biophysical Impact Assessment (BIA). The scoring considers presence or absence in relation to expected Attributes of all wetland classifications.

Policy authority

- 1. Legislative implications:
 - Canada Wildlife Act (Canada)
 - Fisheries Act (Canada)
 - Migratory Birds Convention Act (Canada)
 - Species at Risk Act (Canada)
 - Water Act (Alberta)
- 2. Bylaw implications
 - Municipal Development Plan, Section 6.4

Policy responsibilities

- 1. Council responsibilities
 - a. Council is responsible for the adoption or repealing of this Policy and approving and major revisions to the Policy.

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2. Administration responsibilities
 The Planning and Development, Agricultural, and Parks and Recreation Departments are responsible for:
 - a. the development, implementation, and monitoring of this policy.
 - b. reviewing this policy to ensure that it complies with all current, relevant legislation, and municipal policies.
 - c. maintaining, updating, and adhering to this policy.

Monitoring and updating

1. This policy will be available for public inspection and will be posted on Leduc County’s website.
2. This policy will be reviewed at least once every four (4) years.

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Table 1: Project Examples Requiring Differing Levels of Review

Level of Environmental Review	Type of Project	Nature of Existing Environment	Examples
No Environmental Review Required	Minor maintenance or upgrading projects which imply no change in existing use	In previously disturbed areas. Project is not foreseen to have significant environmental effects	Minor amenity replacements; repairs to granular trails
Initial Project Review Required - PNSA	Minor maintenance, upgrading or construction projects which imply no change in existing use	In potentially sensitive areas (e.g., vegetative cover, wildlife corridor). Potential impacts are small and easily mitigated	Regional pathway upgrade in a Park.
Environmental Screening Report Required	Maintenance or construction which may imply a change in existing use	In potentially sensitive areas. Environmental effects and mitigation measures may be unknown	ASP, ARP & Outline Plans, Park Management Plan
Biophysical Impact Assessment Required	Large-scale capital works, excavation, new construction that implies a change in existing use	In potentially sensitive areas. Environmental effects and mitigation measures may be unknowns	Large Capital Projects, Outline Plans, Federal and Provincially funded Projects

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Table 2: Preliminary Natural Site Assessment Checklist (4 pages)

Project Description and Baseline Information				
Project Scope	Project Name		Project Size (hectares)	
	Project Description			
	Location (quarter section or street address) Provide map, air photos			
	Project Purpose			
Project Administration	Proposed Construction Date		Estimated Completion Date	
			PNSA Date	
			PNSA Performed By	
	Internal Projects			
	Project Manager/Engineer			
	Department			
Estimated project		Project Funded By		
Project Biophysical Information	Description of Biophysical Elements			
	Location of Project in proximity to (metres):	(Refer to ESA chart)		
	<ul style="list-style-type: none"> • Environmentally Significant Area <ul style="list-style-type: none"> o Patch of native vegetation o Streams o Wetland 	(Refer to Waterbody chart)		
		(Refer to Wetland chart)		
	<ul style="list-style-type: none"> ▪ Spatially continuous wildlife corridor ▪ Unique landscape feature ▪ Known contaminated site 			
		(Refer to Contaminated Site chart)		

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	Presence of listed species at risk or species of special status (plant and/or wildlife) or habitat located within the project area (ANHIC/EC).	(Refer to Rare Species/Species At Risk chart)
Regulatory Information	Has the proponent consulted with relevant municipal, provincial, and/or federal departments/ agencies? Are there issues of concern? (explain)	(If Yes, Scoped BIA required)

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Potential Biophysical Impacts					
Environmental Element	Project Interaction? Y/N/U	Description of Interaction (How, When, Where)	Significance Rating High / Med / Low	Type of Potential Effect	Potential Adverse Environmental Effect
Topography					
Hydrogeology					
Aquatic Resources					
Geology / Geomorphology					
Soils and terrain					
Vegetation					
Wildlife and wildlife habitat					
Fish and fish habitat					
Species of Special Status (provincial, territorial, local)					
Species at Risk (Federal - SARA)					
Historical & Archaeological					
Land and resource use					

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Further Biophysical Assessments Matrix

No further Biophysical Impact Assessments Required	Yes/No	Level 2 Required (Scoped BIA)	Yes/No
Wetland Functional Assessment Required	Yes/No		

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Table 3: Environmental Screening Sample Table of Contents

<p>EXECUTIVE SUMMARY</p> <p>1. INTRODUCTION</p> <ul style="list-style-type: none"> ▪ Project Overview ▪ Regulatory Information Requirements ▪ Environmental Assessment Scope ▪ Related Documents and Plans <p>2. PROJECT DESCRIPTION</p> <ul style="list-style-type: none"> ▪ Project Need ▪ Project Setting / Site Description (location, surrounding land use, etc.) ▪ Scope of Work (design considerations, extent of alteration/construction, duration or work) ▪ Alternatives (concept/design alternatives and location) <ul style="list-style-type: none"> ○ Review of Project Alternatives ○ Impact Assessment of Project Alternatives ○ Evaluation of the Recommended Alternative with the Least Environmental Impacts <p>3. EXISTING ENVIRONMENT</p> <ul style="list-style-type: none"> ▪ General Description ▪ Biophysical Inventory: vegetation; wildlife and wildlife habitat; aquatic resources; fish and fish habitat; geology/geomorphology; soils and terrain; hydrogeology ▪ Heritage resources; land use; traditional land and resource use; visual resources <p>4. IMPACT ASSESSMENT METHODS</p> <ul style="list-style-type: none"> ▪ Approach to the Assessment ▪ Scoping the Assessment ▪ Spatial and Temporal Extents ▪ Assessment of Effects ▪ Determining Significance of Effects 	<p>5. MITIGATION MEASURES</p> <ul style="list-style-type: none"> ▪ Accepted methods – Avoidance and/or Best Management Practices ▪ Recommended Mitigation Measures <p>6. ENVIRONMENTAL MONITORING AND FOLLOW-UP</p> <ul style="list-style-type: none"> ▪ Environmental Monitoring (monitoring during construction, routine operations monitoring) ▪ Follow-up Programs – preparation of Restoration Plans <p>7. ENVIRONMENTAL PROTECTION PLAN</p> <ul style="list-style-type: none"> ▪ Environmental Protection Plan may be required if ESA is impacted by the project <p>8. CONCLUSION AND RECOMMENDATIONS</p> <ul style="list-style-type: none"> ▪ Summary of Significant Environmental Impacts, Recommended Project Alternatives and Recommended Mitigation Measures ▪ Summary of Outstanding Issues and Concerns <p>APPENDICES</p> <ul style="list-style-type: none"> ▪ Preliminary Natural Site Assessment ▪ Technical Data (i.e., fish, vegetation sampling data) ▪ Restoration Plan ▪ Erosion and Sediment Control Plan ▪ Photographs, Maps, Illustrations ▪ Historical Resources Impact Assessment
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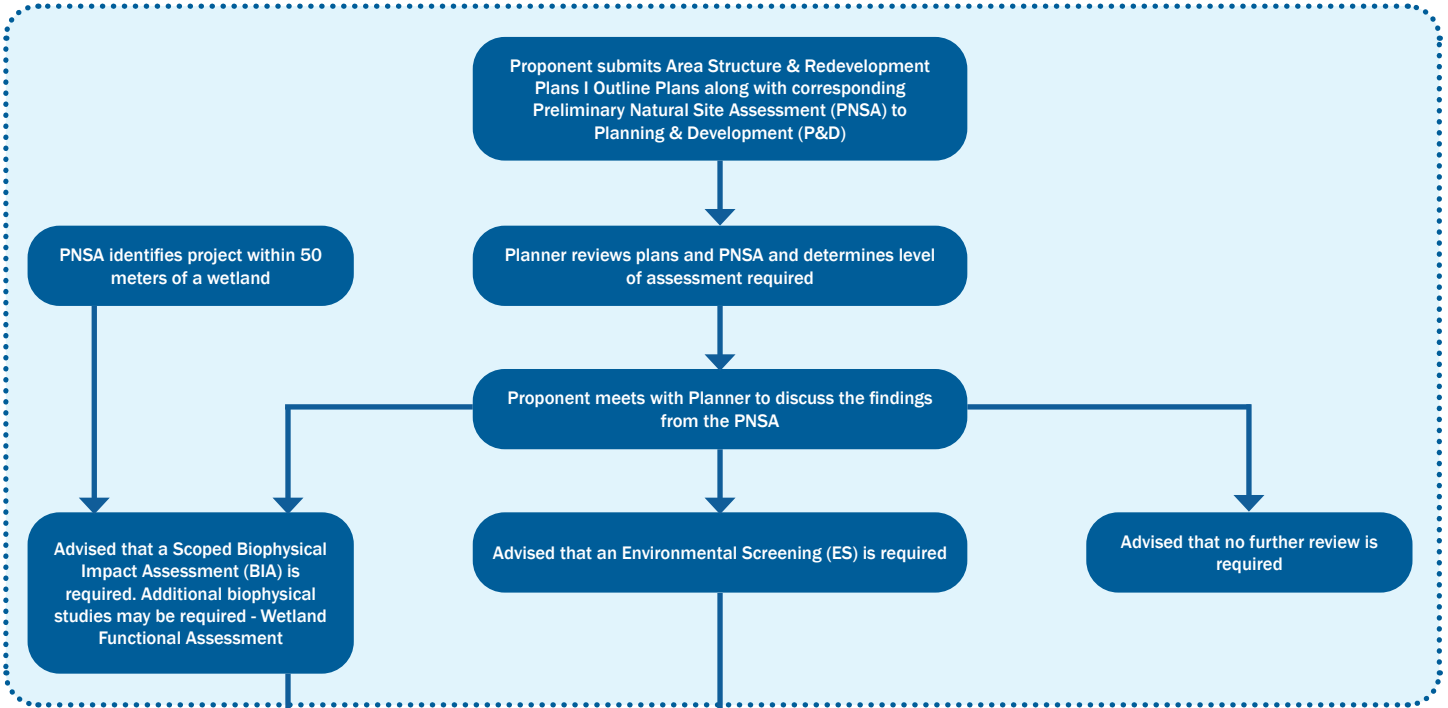
Table 4: Scoped Biophysical Impact Assessment Sample Table of Contents

EXECUTIVE SUMMARY	
<p>1. INTRODUCTION</p> <ul style="list-style-type: none"> ▪ Project Overview ▪ Environmental and Land Use Overview ▪ Regulatory Information Requirements ▪ Environmental Assessment Scope ▪ Related Documents and Plans <p>2. PROJECT DESCRIPTION</p> <ul style="list-style-type: none"> ▪ Project Need ▪ Project Setting / Site Description (location, surrounding land use, etc.) ▪ Scope of Work (design considerations, extent of alteration/construction, duration or work) ▪ Environmental Constraints ▪ Alternatives (concept/design/location) <p>3. REGULATORY APPROVALS</p> <ul style="list-style-type: none"> ▪ Federal and Provincial Regulatory Approvals <p>4. EXISTING ENVIRONMENT</p> <ul style="list-style-type: none"> ▪ General Description ▪ Biophysical Inventory: vegetation; wildlife and wildlife habitat; aquatic resources; fish and fish habitat; geology/geomorphology; soils and terrain; hydrogeology ▪ Heritage resources; land use; traditional land and resource use; visual resources <p>5. CONSTRUCTION AND ENGINEERING</p> <ul style="list-style-type: none"> ▪ General Description (including methods of construction, duration) ▪ Options Alternatives (concept/design alternatives and location) <ul style="list-style-type: none"> ○ Review Project Alternatives ○ Impact Assessment of Project Alternatives ○ Evaluation of the Recommended Alternatives with the Least Environmental Impacts ▪ Proposed Construction Components and Techniques (including site preparation, access, lighting) ▪ Proposed Scheduling (including timing, phasing) 	<p>6. ASSESSMENT METHODS</p> <ul style="list-style-type: none"> ▪ Approach to the Assessment ▪ Scoping the Assessment ▪ Spatial and Temporal Extents ▪ Assessment of Effects ▪ Determining Significance of Effects ▪ Cumulative Effects in relation to the lands within the Regional Context Study area ▪ Follow-up and Monitoring ▪ Environmental Protection Plan Development <p>7. MITIGATION MEASURES</p> <ul style="list-style-type: none"> ▪ Accepted methods – Avoidance, Minimization, Compensation and/or Best Management Practices ▪ Recommended Mitigation Measures – Based on site-specific requirements <ul style="list-style-type: none"> ○ Wetlands – No Net Loss of Wetland Function ○ Conservation Design ○ Slope Adaptive Designs ▪ Monitoring of Mitigation Measures <p>8. ENVIRONMENTAL MONITORING AND FOLLOW UP</p> <ul style="list-style-type: none"> ▪ Environmental Monitoring (monitoring during construction, routine operations monitoring) ▪ Follow-up Programs <p>9. ENVIRONMENTAL PROTECTION PLAN</p> <ul style="list-style-type: none"> ▪ Summary of the plan to demonstrate the minimization of project impacts ▪ Tree Protection Plan for Parks and ESAs ▪ Environmental Protection Plan may be required the project is within 50 m of or within the ESA <p>10. CONCLUSION AND RECOMMENDATIONS</p> <ul style="list-style-type: none"> ▪ Summary Significant Environmental Effects and Recommended Mitigation Measures ▪ Summary of Outstanding Issues and Concerns <p>APPENDICES</p> <ul style="list-style-type: none"> ▪ Technical Data (i.e., flora and fauna sampling data) ▪ Wetland Delineation and Classification Report ▪ Restoration Plan ▪ Photographs, Maps, Illustrations ▪ Historical Resources Impact Assessment

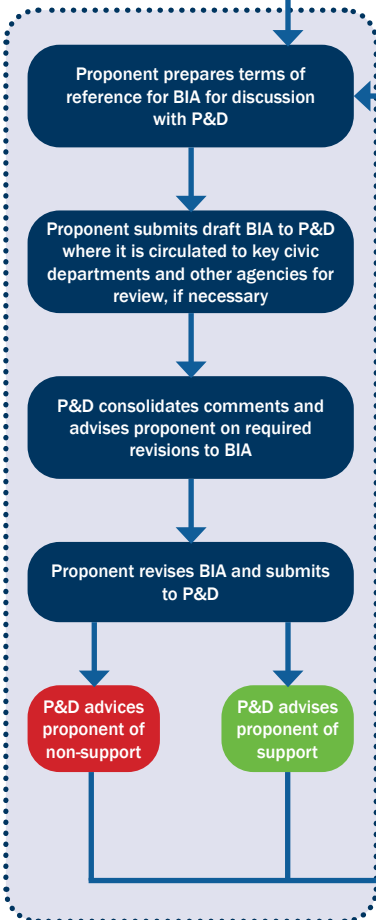
BIA FRAMEWORK PROCESS

Flowchart 1. Proposed Environmental Review Process for ASPs and Outline Plans

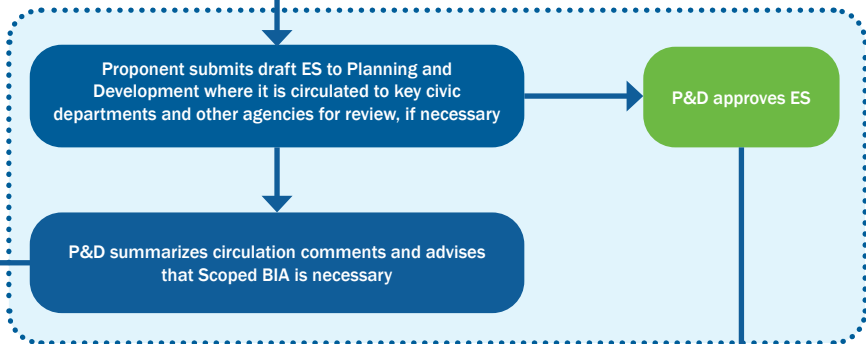
LEVEL 1: INITIAL PROJECT REVIEW



LEVEL 2: SCOPED BIA



LEVEL 1: ENVIRONMENTAL SCREENING

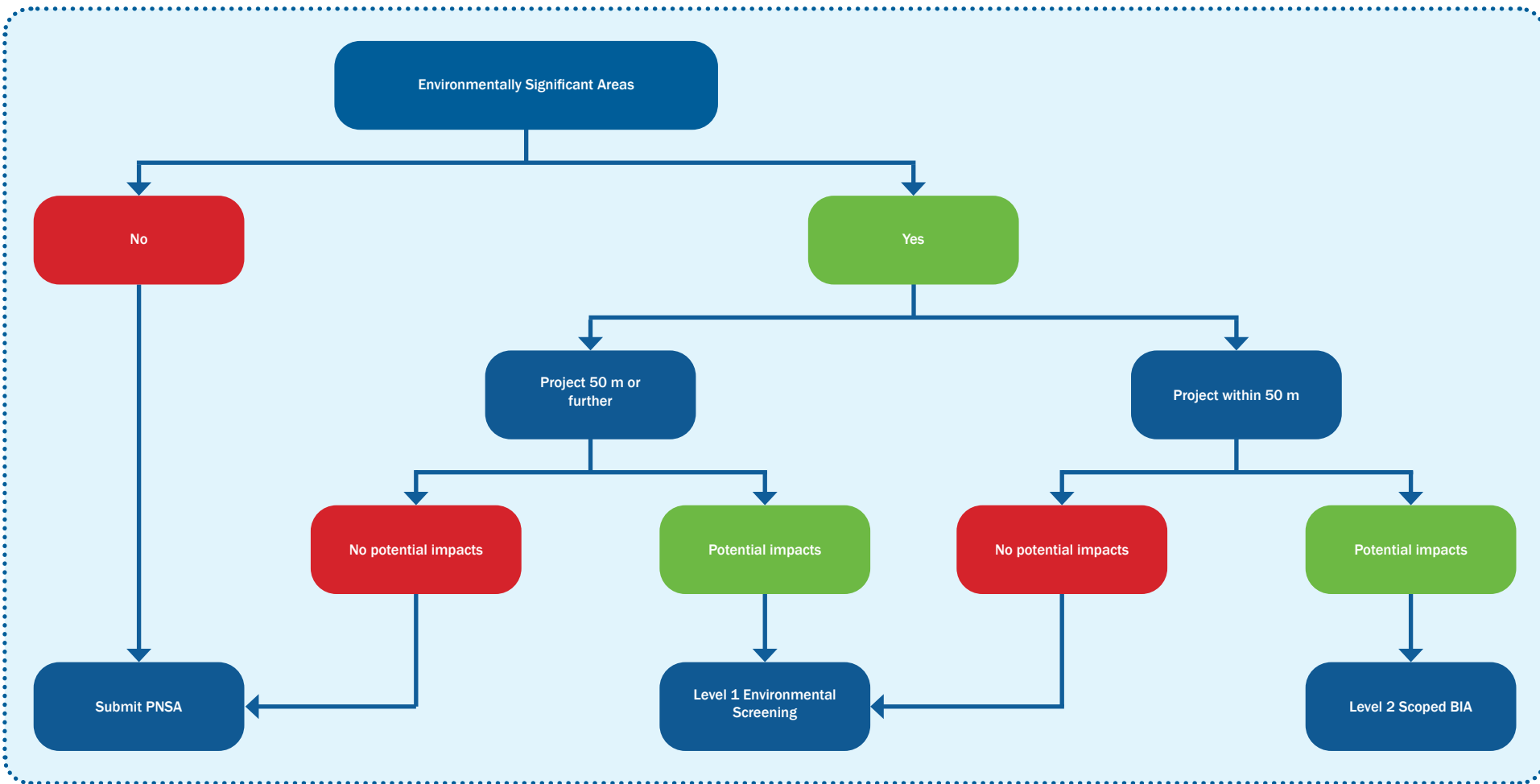


Issues resolved prior to presentation to County Council

BIA FRAMEWORK PROCESS

Decision-making Flowcharts for Further Biophysical Impact Assessment Requirements

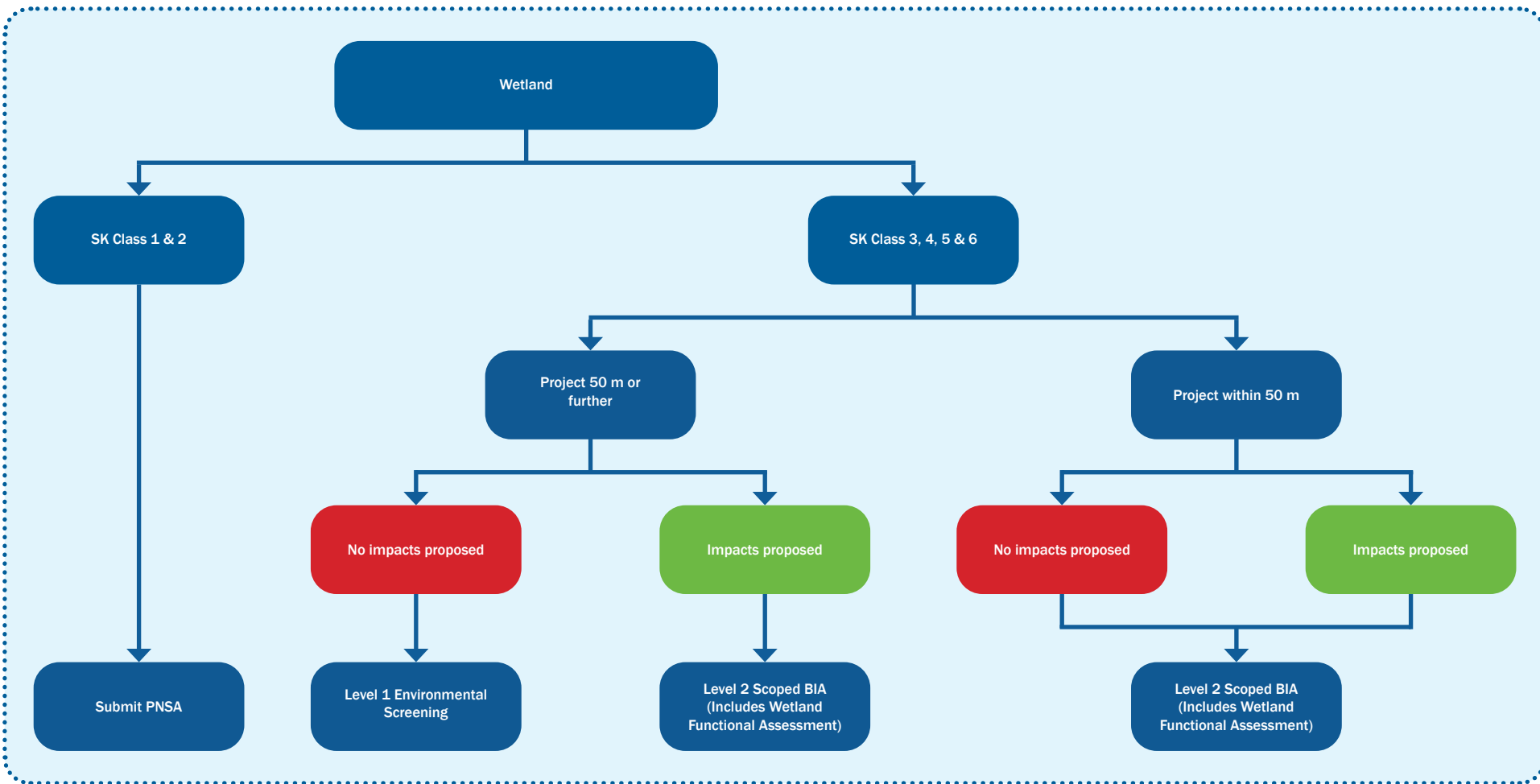
ENVIRONMENTALLY SIGNIFICANT AREAS



BIA FRAMEWORK PROCESS

Decision-making Flowcharts for Further Biophysical Impact Assessment Requirements

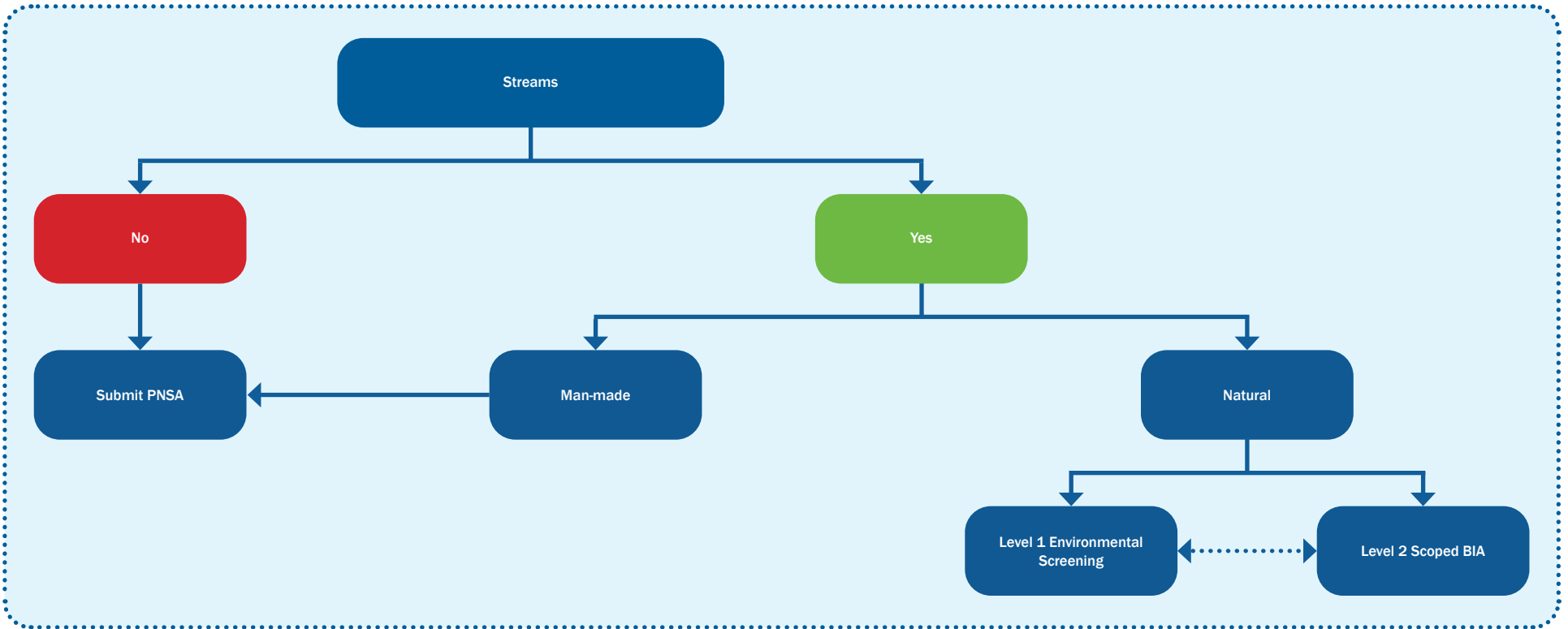
WETLAND



BIA FRAMEWORK PROCESS

Decision-making Flowcharts for Further Biophysical Impact Assessment Requirements

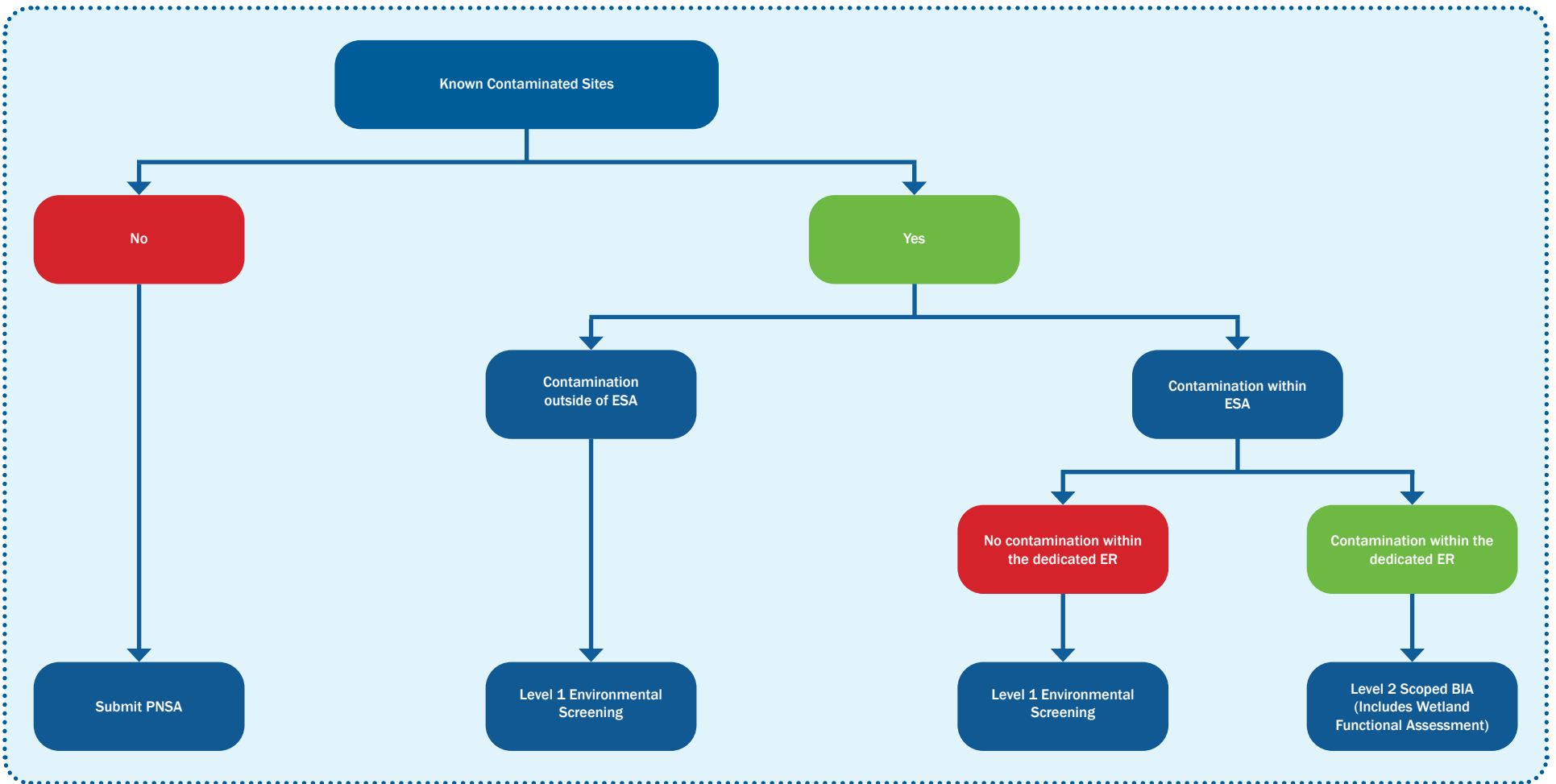
STREAMS



BIA FRAMEWORK PROCESS

Decision-making Flowcharts for Further Biophysical Impact Assessment Requirements

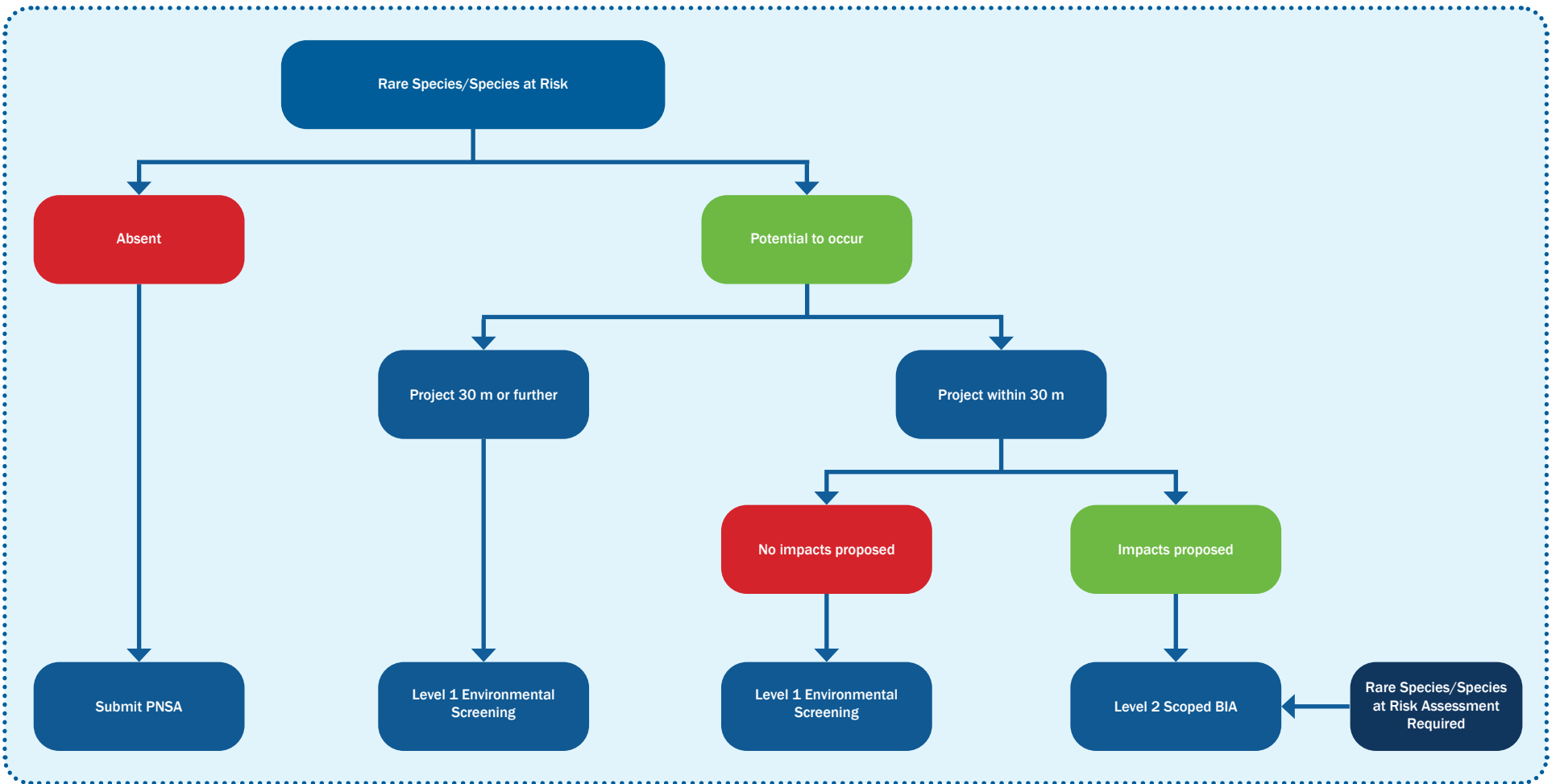
CONTAMINATED SITES



BIA FRAMEWORK PROCESS

Decision-making Flowcharts for Further Biophysical Impact Assessment Requirements

RARE SPECIES/SPECIES AT RISK



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LR-xx Land Use Bylaw Amendment Applications (Procedure)

Policy statement

Leduc County ensures that Council can consider and address the social, financial and/or environmental impacts of a Land Use Amendment Bylaw and whether the Bylaw conforms to the Municipal Development Plan.

Definitions

- Building Location Plan – means a document prepared by an Alberta Land Surveyor that clearly illustrates the location of significant visible improvements relative to proposed and existing property boundaries.
- Development Agreement – means an agreement which a landowner enters into with the County pursuant to the Municipal Government Act (MGA).
- Director means the Director of the Planning & Development Department.
- Endorsement – means the final County approval of a subdivision once all the conditions of a Notice of Decision have been completed to the County’s satisfaction.
- Land Use Bylaw (LUB) means a Bylaw adopted by Council to prohibit or regulate and control the use and development of land and buildings in Leduc County.
- Municipal Development Plan (MDP) means a statutory plan adopted by Council, and approved by the Edmonton Metropolitan Region Board, to establish land use planning policies for Leduc County.
- Offsite Development Levy means a levy set by Council by Bylaw pursuant to the Municipal Government Act imposing payments to be made by an applicant or developer for the provision of municipal and utility services.
- Pre-Application Meeting means the required meeting between County staff and an applicant and their representatives prior to making an application submission for a proposed statutory plan, statutory plan amendment or Public Engagement Program.
- Statutory Plan means an Area Redevelopment Plan or Area Structure Plan, as defined by County Policy (LR-xx).
- Subdivision means the division of a parcel of land by an instrument.

Policy standards

1. Statutes Policies, and Regulations
 - a. Land Use Amendment Bylaws must address the manner in which the proposed Bylaw:
 - i. Meets the goals of the County’s Strategic Plan;

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- ii. Conforms to the policies of the Municipal Development Plan, including Section 10.1 – Land Use Bylaw Amendments; and
 - iii. Meets the requirements of the Land Use Bylaw.
 - b. The Public Hearing required as part of the Land Use Amendment process shall be in accordance with the Municipal Government Act and County Policy.
 - c. The lands that are the subject of a Land Use Bylaw Amendment may be subject to federal or provincial statutes, regulations, licenses or codes or standards of practice. It is the responsibility of the applicant to ensure that a Land Use Amendment Bylaw complies with federal or provincial statutes regulations, licenses or codes or standards of practice.
- 2. Amendment Required
 - a. A Land Use Amendment Bylaw is required to change the land use district (i.e. zoning) as identified in the Land Use Bylaw in order to facilitate a subdivision and/or development proposal.
 - b. The County will not accept as complete a Land Use Bylaw Amendment application which proposes to district a portion of an existing or proposed lot rather than the entire existing or proposed lot, except if at the discretion of the Director of Planning & Development there are unique or special circumstances that warrant acceptance of an application.
- 3. Pre-application Submission
 - a. A pre-application meeting shall be held prior to submission of a Land Use Bylaw Amendment application.
 - b. The representative of Planning & Development shall conduct the pre-application meeting and shall advise of any additional application requirements or studies to be submitted as part of a complete application.
- 4. Other Planning Applications
 - a. A Land Use Bylaw Amendment application can be considered concurrently with a subdivision application; however, the Land Use Bylaw Amendment would require that two readings be given prior to a subdivision application being considered for approval. In this situation, the subdivision approval shall include a condition of approval that the third reading of the amendment bylaw be given prior to endorsement of the subdivision.
- 5. Application
 - a. An application will be deemed complete once the required application and fee, as well as any required report, drawing or study have been submitted to the satisfaction of the County.
 - b. Administration must advise in writing or by e-mail within one week of submission that an application is incomplete and indicate what information is

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required, or that an application is complete and is in circulation. An incomplete application may be returned to the applicant.

- c. Any report, drawing or study required in support of an application is to be provided at the applicant’s expense.
- d. The County’s point of contact regarding the application will be the person named as the applicant, and any additional person authorized in writing by the owner of the subject property. In a situation where the applicant is different from the owner of the subject property, it is the applicant’s responsibility to communicate with the owner of the subject property regarding the application.

6. Direct Control Applications

- a. Land Use Bylaw Amendment applications for Direct Control Districts shall comply with Section 641 of the Municipal Government Act, Section 10.1 of the Municipal Development Plan, and Section 9.19 of the County Land Use Bylaw.
- b. In addition to Section 5, applications for a Direct Control District shall include the following information:
 - i. support rationale explaining why the Direct Control District is desirable for the site;
 - ii. a list of uses proposed for the site;
 - iii. a narrative documenting the opinions and concerns of surrounding landowners and residents obtained through a Public Engagement Program, and how the proposed development responds to those concerns, together with a summary of the methods to obtain such input;
 - iv. plans and elevations, where applicable, that would help to substantiate the need for the Direct Control District; and
 - v. any other information as directed by the Director of Planning & Development.

7. Circulation, Notification, Sign Requirements

- a. A complete application shall be circulated to internal County departments and external agencies for comment. Upon receipt of comments from internal departments and external agencies, Administration must review, resolve potentially conflicting comments, summarize them and provide them to the applicant in writing. If necessary, a meeting will be scheduled with the applicant and their consultants to review, discuss, and where necessary, resolve any issues arising out of the comments.
- b. The public and adjacent property owners shall be notified of the Public Hearing regarding a Land Use Bylaw Amendment application in accordance with the MGA and County policy regarding notification. In a situation where a Land Use Bylaw Amendment and Subdivision application are being processed concurrently, the notification required for the subdivision can also include a statement indicating that a Land Use Amendment application has also been submitted and that the recipient of the letter will receive notification of the required Public Hearing.
- c. When Administration determines that the proposed application conforms to

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County requirements and all comments and concerns from internal and external departments have been, or can be resolved, Administration shall refer the proposed Land Use Bylaw Amendment to County Council for consideration.

- d. If the proposed application does not conform to County requirements and there are outstanding issues that cannot be resolved to Administrations satisfaction, Administration will not support the proposed application when the application is referred to County Council for consideration.
 - e. Signage related to the proposed Land Use Bylaw Amendment application shall be in accordance with the LUB and be provided at the applicant’s expense.
8. Council Process and Approval
- a. Council decisions on Land Use Bylaw Amendments must consider the social, financial and environmental impacts of the proposed land use amendment to ensure that the application will provide a net benefit to the community.
 - b. Municipal improvements required due to a Land Use Amendment Bylaw represent the financial costs of a change in land use. Council requires the financial considerations be addressed by the applicant at the time of Land Use Bylaw Amendment through a development agreement, prior to considering third reading of a Land Use Amendment Bylaw.
 - c. Council will hold a Public Hearing following first reading on a proposed Land Use Amendment Bylaw. After the Public Hearing, Council may:
 - i. Defeat the Bylaw at first reading;
 - ii. Give second and third reading to the Bylaw if the required Development Agreement has been negotiated and executed;
 - iii. Give second reading to the Bylaw and then refer the Bylaw back to Administration to negotiate and execute the required development agreement, and/or
 - iv. Refer the Bylaw back to Administration for further review and to consider comments and concerns presented at the Public Hearing.
 - d. A Land Use Amendment Bylaw that does not involve the construction or installation of municipal improvements or the payment of off-site levies or other contributions may be exempt from the requirement for a Development Agreement prior to third reading.
 - e. Where a developer would like to name a development area, roads, parks and public facilities, the proposed names must be brought forward to Council for adoption prior to third reading of a Land Use Amendment Bylaw. The naming of a development area etc. shall adhere to County policy.
9. Development Agreement
- a. An Applicant shall provide preliminary engineering cost estimates for the municipal improvements to Planning & Development Services to initiate the Development Agreement process.
 - b. A Development Agreement must be negotiated and executed, proof of insurance provided, and approval and inspection fees submitted before Administration will take the Development Agreement and the related Land Use Amendment Bylaw to

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Council for consideration of third reading.

10. Re-Application

- a. When a Land Use Amendment Bylaw has been defeated by Council, another application for the same or substantially the same Land Use Amendment Bylaw shall not be considered within one year of the date on which the Bylaw was defeated.
- b. Despite 8(a), if a Land Use Bylaw Amendment is defeated by Council, and the applicant addresses and resolves the issues that were of concern to Council and/or Administration and/or the public to the satisfaction of the Director of Planning & Development Services, and the Land Use Amendment Bylaw would be substantially different from the one that was defeated, a new application may be considered within one year of the date on which the original Bylaw was defeated.

11. Additional Considerations

- a. When the County is considering the adoption of a new MDP and/or Land Use Bylaw, adoption of either document has the potential to affect a Land Use Bylaw Amendment application in progress. Council shall consider how the Land Use Bylaw Amendment application conforms to the draft MDP and/or Land Use Bylaw.
- b. A Land Use Amendment Bylaw that goes to a Public Hearing shortly before a municipal election may be affected by the outcome of the election as the only Councilors that can vote on a Bylaw at third reading are those who were present for the Public Hearing. Election results may mean that there is no longer a quorum of Council to consider third reading for a particular Bylaw and if that is the case, the Amending Bylaw must proceed through the Council bylaw reading process, including the holding of a new Public Hearing.

Policy authority

- 1. Legislative implications:
 - Municipal Government Act (sections 639-643)
- 2. Bylaw implications
 - Municipal Development Plan, Section 10.1

Policy responsibilities

- 1. Council responsibilities
 - Council is responsible for the adoption or repealing of this Policy and approving and major revisions to the Policy.
- 2. Administration responsibilities
 - Administration is responsible for the development, implementation, and monitoring of this policy.

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- Administration will review this policy to ensure that it complies with all current, relevant legislation, and municipal policies.
- Maintain, update, and adhere to this policy.

Monitoring and updating

1. This policy will be available for public inspection and will be posted on Leduc County’s website.
2. This policy will be reviewed at least once every four (4) years.

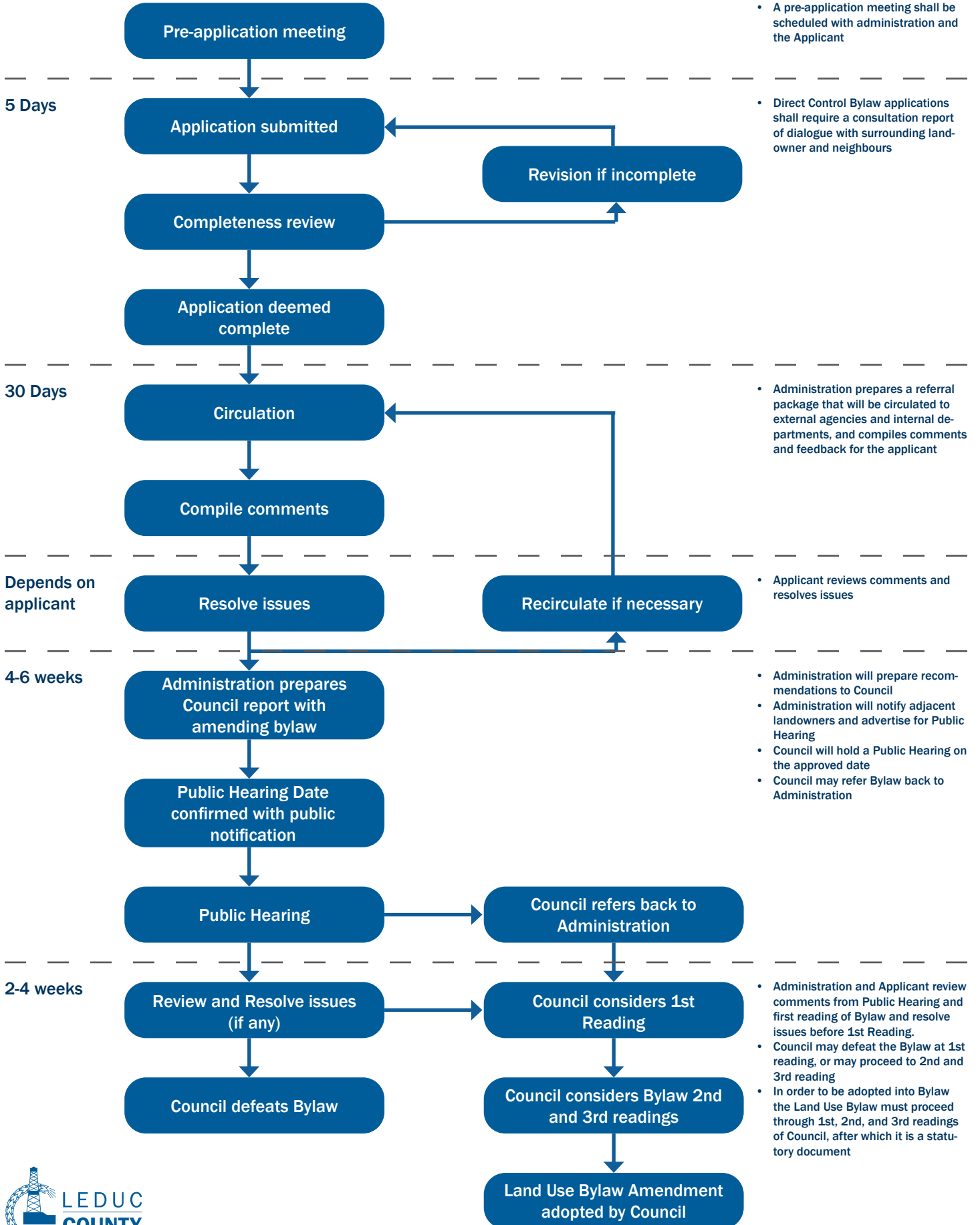
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LAND USE BYLAW AMENDMENT PROCESS

Timing

Process Flow

Application Procedures



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LR-xx Statutory Plans (Procedure)

Policy statement

Leduc County believes that it is the responsibility of the applicant to ensure that a proposal for a statutory plan or statutory plan amendment complies with all applicable federal and provincial statutes and regulations, in addition to County policies, standards, directives, and requirements.

Definitions

- Area Redevelopment Plan (ARP) means the definition given by the Municipal Government Act, summarized as a statutory plan adopted by a municipality by bylaw to provide a framework for the future redevelopment of a defined area of land. Local Area Redevelopment Plans which fall within an Area Structure Plan or an Area Redevelopment Plan are subordinate to the Area Structure Plan or Area Redevelopment Plan.
- Area Structure Plan (ASP) means the definition given by the *Municipal Government Act*. Local Area Structure Plans which fall within an Area Structure Plan are subordinate to the Area Structure Plan.
- Director means the Director of the Planning & Development Services Department.
- Edmonton Metropolitan Region Board - means the regional growth management board that consists of representatives from 13 municipalities mandated by the Province to implement the region's 30-year Growth Plan and to create a regional metro servicing plan.
- Edmonton Metropolitan Region Growth Plan (EMRGP) - means an integrated growth management plan for the Edmonton Metropolitan Region, including any amendments to that plan, approved under section 708.1 of the *Municipal Government Act*.
- Public Participation Program means the document which describes the strategy for public engagement and outlines the opportunities for landowners, residents and stakeholders to review and make suggestions and representations on a proposed plan or amendment. Public Participation Programs shall comply with County Policy CC-01 Public Participation.
- Pre-Application Meeting means the required meeting between County staff and an applicant and their representatives prior to making an application submission for a proposed statutory plan, statutory plan amendment or Public Participation Program.
- Statutory Plan - means anything defined as a statutory plan by the *Municipal Government Act*, and includes an Intermunicipal Development Plan, a Municipal Development Plan, an Area Structure Plan and an Area Redevelopment Plan adopted by a municipality. For Leduc County, this also includes a Local Area Redevelopment Plan or a Local Area Structure Plan.

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Policy standards

1. A Statutory Plan is required:
 - a. As indicated in the *Municipal Government Act* (MGA);
 - b. As indicated in the Edmonton Metropolitan Region Growth Plan (EMRGP);
 - c. As indicated in the Municipal Development Plan (MDP);
 - d. In the case of a Local Area Structure Plan (LASP) or Local Area Structure Plan (LARP), as indicated in an adopted Area Structure Plan (ASP) or Area Redevelopment Plan (ARP); or
 - e. As determined by the Director for any proposed rezoning, subdivision, or development where:
 - i. it is necessary due to the scale, intensity, potential impacts on servicing capacity or infrastructure; or
 - ii. it is necessary due to the need to co-ordinate planning with adjacent lands.
 - f. If the applicant believes the requirement for a statutory plan or statutory plan amendment is not warranted for their specific proposal:
 - i. they can make a written request to waive the requirement for a statutory plan or statutory plan amendment to the Director;
 - ii. the Director shall determine whether a particular circumstance warrants the recommendation of a waiver to County Council; and
 - iii. the Director may present the written request to waive the requirement for a statutory plan or statutory plan amendment to County Council.

2. Statutory Plan Application Submission
 - a. A pre-application meeting shall be held prior to submission of a Public Participation Program, a proposed statutory plan application submission, or a proposed statutory plan amendment application submission.
 - b. A Public Participation Program is required for a proposed ASP, ARP, LASP, LARP or a proposed amendment to a statutory plan;

3. Circulation and Notification
 - a. Administration shall notify the Applicant in writing or by e-mail, within five (5) working days of submission that an application is complete or incomplete;
 - b. Complete application submissions shall be determined as outlined by within this Policy.
 - c. Circulation and notification shall include the submission materials and follow the process as outlined in this policy.

4. External Consultation and Referrals

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- a. A new IDP shall be referred as part of the circulation to add adjacent municipalities.
- b. A new MDP shall be referred as part of the circulation to all adjacent municipalities.
- c. Any new statutory plan or statutory plan amendment shall be referred as part of the circulation to all municipalities within 1.6 kilometres of the plan area, or further, as determined by the Director.
- d. Any statutory plan amendments shall be referred as part of the circulation to all federal and provincial government, and resource agencies within 1.6 kilometres of the plan area, or further, as determined by the Director.
- e. The County shall submit Regional Evaluation Framework (REF) Applications to the Edmonton Metropolitan Region Board, where applicable, following Council's first reading of the proposed bylaw and before third reading.

5. Inactive Application

- a. If there has been no progression of an application submission to conclusion for at least six (6) consecutive months, a file closure letter may be sent to the applicant any time after the six (6) months advising that an application will be closed. File closure will be at the discretion of the Director.

6. Re-application

- a. Where a Bylaw to adopt a proposed statutory plan or proposed statutory plan amendment has been defeated by Council, an application submission that is in the opinion of the Director the same, or substantially the same, shall not be accepted for consideration until after one (1) year of the date on which the Bylaw was defeated; or
- b. An application submission may be accepted for consideration within one (1) year of the date on which the original Bylaw was defeated if:
 - i. the issues that were of concern have been addressed to the satisfaction of the Director; or
 - ii. the Director determines that the application submission is substantially different from the one that was defeated.

7. Other Planning Applications

- a. An application for a proposed Land Use Bylaw amendment may be applied for and considered concurrently with a proposed statutory plan or statutory plan amendment; however, the proposed Land Use Bylaw amendment shall not be considered by County Council prior to consideration of the proposed statutory plan or statutory plan amendment, and third reading of the proposed Land Use Bylaw amendment shall not be given prior to third reading of the proposed statutory plan or statutory plan amendment.

Policy authority

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1. Legislative implications:
 - Municipal Government Act (section 633)
2. Bylaw implications
 - Municipal Development Plan

Policy responsibilities

1. Council responsibilities
 - Council is responsible for the adoption or repealing of this Policy and approving and major revisions to the Policy.
2. Administration responsibilities
 - Administration is responsible for the development, implementation, and monitoring of this policy.
 - Administration will review this policy to ensure that it complies with all current, relevant legislation, and municipal policies.
 - Maintain an, update, and adhere to this policy.

Monitoring and updating

1. This policy will be available for public inspection and will be posted on Leduc County's website.
2. This policy will be reviewed at least once every four (4) years.

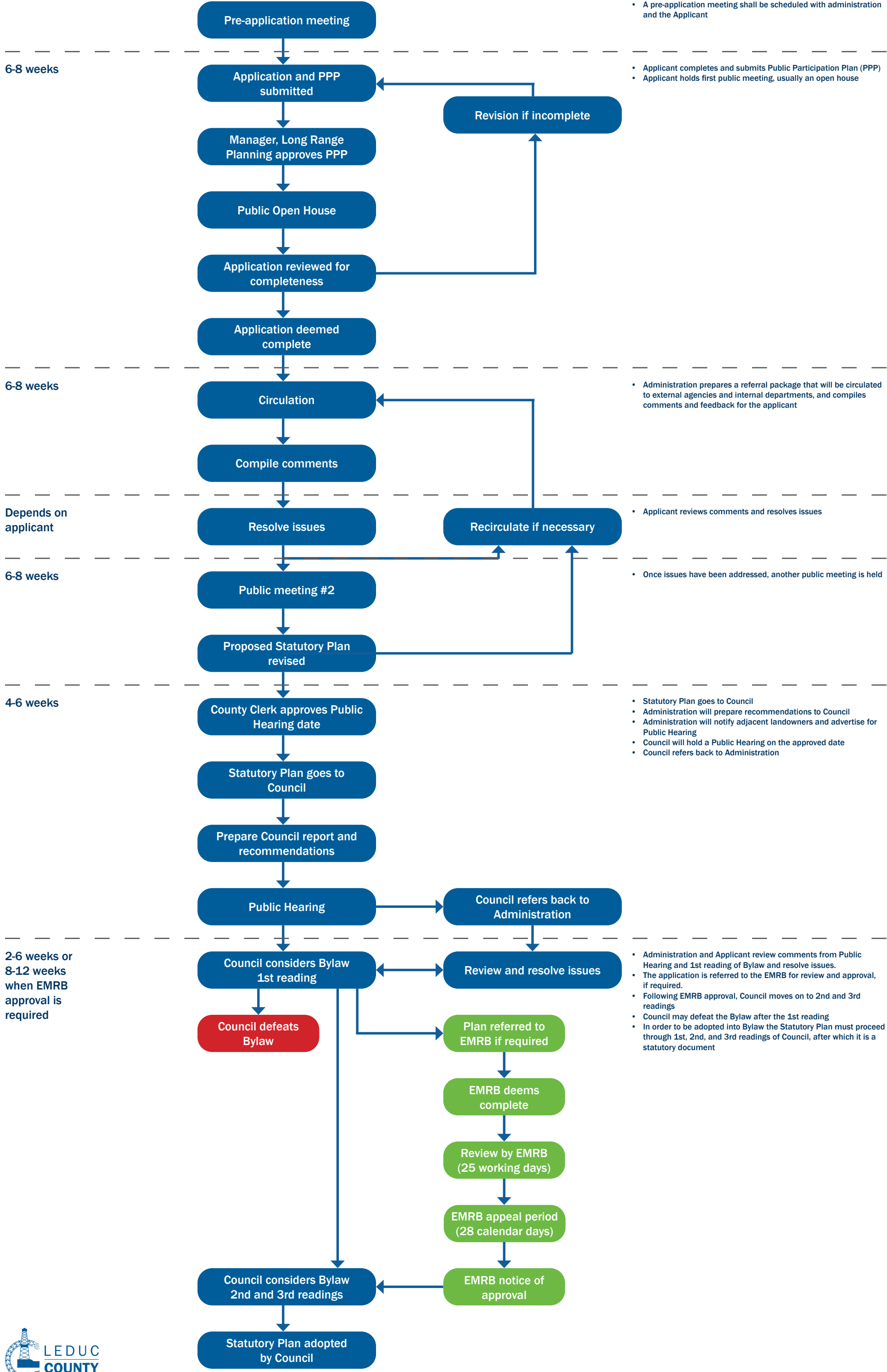
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STATUTORY PLAN PROCESS

Timing

Process Flow

Application Procedures



- A pre-application meeting shall be scheduled with administration and the Applicant

6-8 weeks

- Applicant completes and submits Public Participation Plan (PPP)
- Applicant holds first public meeting, usually an open house

6-8 weeks

- Administration prepares a referral package that will be circulated to external agencies and internal departments, and compiles comments and feedback for the applicant

Depends on applicant

- Applicant reviews comments and resolves issues

6-8 weeks

- Once issues have been addressed, another public meeting is held

4-6 weeks

- Statutory Plan goes to Council
- Administration will prepare recommendations to Council
- Administration will notify adjacent landowners and advertise for Public Hearing
- Council will hold a Public Hearing on the approved date
- Council refers back to Administration

2-6 weeks or 8-12 weeks when EMRB approval is required

- Administration and Applicant review comments from Public Hearing and 1st reading of Bylaw and resolve issues.
- The application is referred to the EMRB for review and approval, if required.
- Following EMRB approval, Council moves on to 2nd and 3rd readings
- Council may defeat the Bylaw after the 1st reading
- In order to be adopted into Bylaw the Statutory Plan must proceed through 1st, 2nd, and 3rd readings of Council, after which it is a statutory document



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LR-xx Subdivision Applications (Procedure)

Policy statement

Leduc County believes that it is the responsibility of the applicant to ensure that a proposal for subdivision complies with all applicable federal and provincial statutes, regulations, licenses, codes, and standards of practice, in addition to County policies, procedures and requirements.

Definitions

- Building Location Plan – means a document prepared by an Alberta Land Surveyor that clearly illustrates the location of significant visible improvements relative to proposed and existing property boundaries.
- Development Agreement – means an agreement which a landowner enters into with the County pursuant to the Municipal Government Act (MGA).
- Director means the Director of the Planning & Development Services Department.
- Endorsement – means the final County approval of a subdivision once all the conditions of a Notice of Decision have been completed to the County’s satisfaction.
- Pre-Application Meeting means the required meeting between County staff and an applicant and their representatives prior to making an application submission for a proposed statutory plan, statutory plan amendment or Public Engagement Program.
- Real Property Report – means a legal document prepared by an Alberta Land Surveyor that clearly illustrates the location of significant visible improvements relative to property boundaries.
- Regulation – means the Provincial Subdivision and Development Regulation AR 43/2002, as amended.
- Statutory Plan means an Area Redevelopment Plan or Area Structure Plan, as defined by County Policy (LR-xx).
- Subdivision means the division of a parcel of land by an instrument.
- Subdivision Authority means the subdivision authority established by Council by bylaw to make decisions on subdivision applications and other subdivision-related matters.
- Tentative Plan of Subdivision means a document prepared by an Alberta Land Surveyor that illustrates the approximate location of all relevant existing and proposed improvements on a lot relative to existing and proposed lot boundaries and natural features.

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Policy standards

1. Pre-application Submission
 - a. A pre-application meeting should be held prior to submission of a Subdivision application.
 - b. The representative of the Subdivision Authority shall conduct the pre-application meeting and shall advise of any additional application requirements or studies to be submitted as part of a complete application.

2. Application Submission
 - a. A complete application for subdivision must include:
 - i. Completed application form;
 - ii. Sketch of the proposed subdivision;
 - iii. Letter stating reason for the proposed subdivision
 - iv. Studies or reports identified during the pre-application meeting.
 - b. Any report, drawing, or study required in support of an application is to be provided at the applicant’s expense.
 - c. The County’s point of contact regarding the application will be the person named as the applicant, and any additional person authorized in writing by the owner of the lot being subdivided. In a situation where the applicant is different from the owner of the lot, it is the applicant’s responsibility to communicate with the owner of the lot regarding the application.

3. Circulation, Notification, and Decision
 - a. A complete application shall be circulated to internal County departments and external agencies for comment. A comment response will be requested to be returned within 21 days of the circulation being sent. The circulation time frame may be reduced at the discretion of the Director.
 - b. Once all comments have been received and compiled, a consolidated comments response will be provided to the applicant. Any concerns that arise out of the comments must be resolved by the applicant.
 - c. Relevant interests registered on certificate of title shall be notified of the application.
 - d. As part of a Subdivision application, a landowner will be required to provide Administration with right of entry to the property subject to the proposed subdivision in order for Administration to conduct onsite review.
 - e. When Administration determines that there is sufficient information to render a decision on the application the application is forwarded to the Subdivision Authority for decision, however the Subdivision Authority may refer the subdivision application back to Administration for further review to consider comments and/or concerns that the Subdivision Authority has raised in considering the application.

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4. Endorsement Process
 - a. All endorsement requests must be accompanied by the required fee(s), levies, survey and any required reports, drawings, studies or agreements.
 - b. Endorsement may only be considered once all conditions of subdivision have been completed to the satisfaction of the Subdivision Authority.

5. Expiry
 - a. Subject to the discretion of the Subdivision Authority, may extend an approval or endorsement which has expired twice when requested in writing by the applicant. For any request received that exceeds policy 5 a., the Subdivision Authority shall refer the request to extend the approval to Council for its decision. The Subdivision Authority shall provide a report recommending approval or refusal of the request.

6. Re-application
 - a. The Subdivision Authority shall not accept a Subdivision application for a period of six months, where a previous application for the same parcel of land was refused by the Subdivision Authority, or Subdivision and Development Appeal Board.

7. Other Planning Applications
 - a. Administration will not accept a subdivision application on lands under a proposed new Statutory Plan, (as defined in Policy LR-xx) until the enabling bylaw can be supported by Administration for 3rd reading.
 - b. A Subdivision application can be submitted concurrently with a Land Use Bylaw amendment application; however, it is required that the Land Use Bylaw amendment application receives two readings prior to a subdivision application being considered for approval by the Subdivision Authority. In this situation, a Subdivision approval shall be conditioned that the third reading of the Land Use Bylaw amendment be given prior to endorsement of the subdivision.
 - c. A Subdivision application can be submitted concurrently with a Statutory Plan amendment application; however, it is required that the amendment application is adopted prior to a subdivision application being considered for approval by the Subdivision Authority.
 - d. Further to 7 b) and c) above, a subdivision application submitted concurrently with an Statutory Plan amendment or Land Use Bylaw amendment application may require a mandatory time extension agreement to provide additional time for processing, as the Statutory Plan amendment or Land Use Bylaw amendment applications may be subject to additional review by internal departments and external agencies and to the timeframes of the Statutory Plan amendment or Land Use Bylaw amendment process.
 - e. When required, a development agreement shall be executed prior to Subdivision endorsement.

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Policy authority

1. Legislative implications:
 - Municipal Government Act (sections 652-660)
2. Bylaw implications
 - Municipal Development Plan

Policy responsibilities

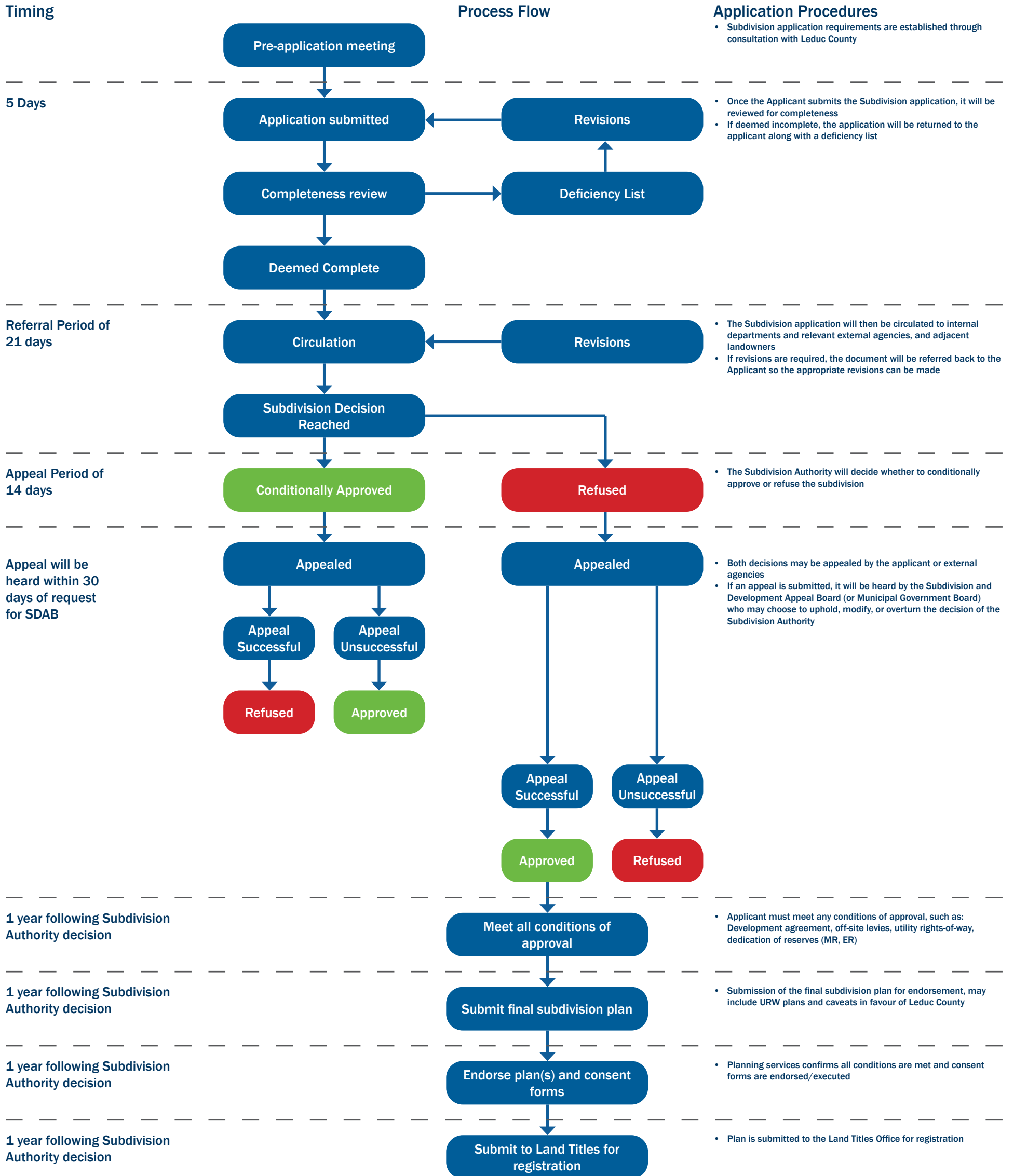
1. Council responsibilities
 - Council is responsible for the adoption or repealing of this Policy and approving and major revisions to the Policy.
2. Administration responsibilities
 - Administration is responsible for the development, implementation, and monitoring of this policy.
 - Administration will review this policy to ensure that it complies with all current, relevant legislation, and municipal policies.
 - Maintain, update, and adhere to this policy.

Monitoring and updating

1. This policy will be available for public inspection and will be posted on Leduc County’s website.
2. This policy will be reviewed at least once every four (4) years.

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SUBDIVISION APPROVAL PROCESS



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LR-xx Outline Plan Applications (Procedure)

Policy statement

Leduc County believes that an Outline Plan, where applicable is essential for the efficient sequencing of development, servicing, and transportation networks within the Plan Area of an Area Structure Plan or Local Area Structure Plan. The document is a non-statutory plan, which provides a framework for future subdivision and development of land.

Definitions

- Director means the Director of the Planning & Development Services Department.
- Pre-Application Meeting means the required meeting between County staff and an applicant and their representatives prior to making an application submission for a proposed statutory plan, statutory plan amendment or Public Engagement Program.
- Regulation – means the Provincial Subdivision and Development Regulation AR 43/2002, as amended.
- Statutory Plan means an Area Structure Plan (ASP) or Local Area Structure Plan (LASP), as defined by County Policy (LR-xx).
- Subdivision means the division of a parcel of land by an instrument.

Policy standards

1. Application Submission
 - a. A complete application for Outline Plan approval must include:
 - i. General engineering designs for transportation and servicing schemes;
 - ii. Geotechnical analysis of the Outline Plan area;
 - iii. Environmental analysis of the Outline Plan area;
 - iv. Report and plans which describe:
 1. Sequencing of development in the Plan Area;
 2. The proposed land uses and densities in specific terms;
 3. Municipal Reserve (MR) and Environmental Reserve (ER) dedication
 4. Transportation routes
 5. Infrastructure and facilities for water, wastewater, and stormwater servicing;
 6. Rights-of-way and/or easements required;
 7. Road closures needed (if any);
 - v. Any other studies that the County deems necessary

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as well as any other additional requirements pursuant to the applicable ASP or LASP.

- b. Any report, drawing, or study required in support of an application is to be provided at the applicant’s expense.
- c. The County’s point of contact regarding the application will be the person named as the applicant, and any additional person authorized in writing by the owner of the lot being subdivided. In a situation where the applicant is different from the owner of the lot, it is the applicant’s responsibility to communicate with the owner of the lot regarding the application.

2. Pre-application Submission

- a. A pre-application meeting shall be held prior to submission of an Outline Plan application.
- b. The representative of Planning & Development Services shall conduct the pre-application meeting and shall advise of any additional application requirements or studies to be submitted as part of a complete application.

3. Circulation, Notification, and Decision

- a. A complete application shall be reviewed by internal County departments, then circulated to external agencies for comment. A comment response will be requested to be returned within 21 days of the circulation being sent. The circulation time frame may be reduced at the discretion of the Director.
- b. Once all comments have been received and compiled, a consolidated comments response will be provided to the applicant. Any concerns that arise out of the comments must be resolved by the applicant.
- c. Relevant interests registered on certificate of title shall be notified of the application.
- d. As part of an Outline Plan application, a landowner will be required to provide Administration with right of entry to the property subject to the proposed subdivision in order for Administration to conduct onsite review.
- e. When Administration determines that there is sufficient information to render a decision on the application the application is forwarded to Council for decision, concurrent with any related applications under review.

4. Other Planning Applications

- a. An Outline Plan application may be submitted concurrent with a LASP or LASP amendment. Approval of the Outline Plan shall be subject to the timelines and processes for Statutory Plans (Policy LR-xx).
- b. An Outline Plan application may be submitted concurrently with a Land Use Bylaw amendment application; however, it is required that the Outline Plan be approved prior to Council giving first reading to the Land Use Bylaw amendment.
- c. Administration shall not accept a Subdivision application for lands requiring an approved Outline Plan, until both the Outline Plan and Land Use Bylaw Amendment have been approved by Council, along with any other concurrent applications.

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Policy authority

1. Legislative implications:
 - Municipal Government Act (Subdivision and Development Regulation, Section 5(e))
2. Bylaw implications
 - Municipal Development Plan

Policy responsibilities

1. Council responsibilities
 - Council is responsible for the adoption or repealing of this Policy and approving and major revisions to the Policy.
2. Administration responsibilities
 - Administration is responsible for the development, implementation, and monitoring of this policy.
 - Administration will review this policy to ensure that it complies with all current, relevant legislation, and municipal policies.
 - Maintain, update, and adhere to this policy.

Monitoring and updating

1. This policy will be available for public inspection and will be posted on Leduc County's website.
2. This policy will be reviewed at least once every four (4) years.

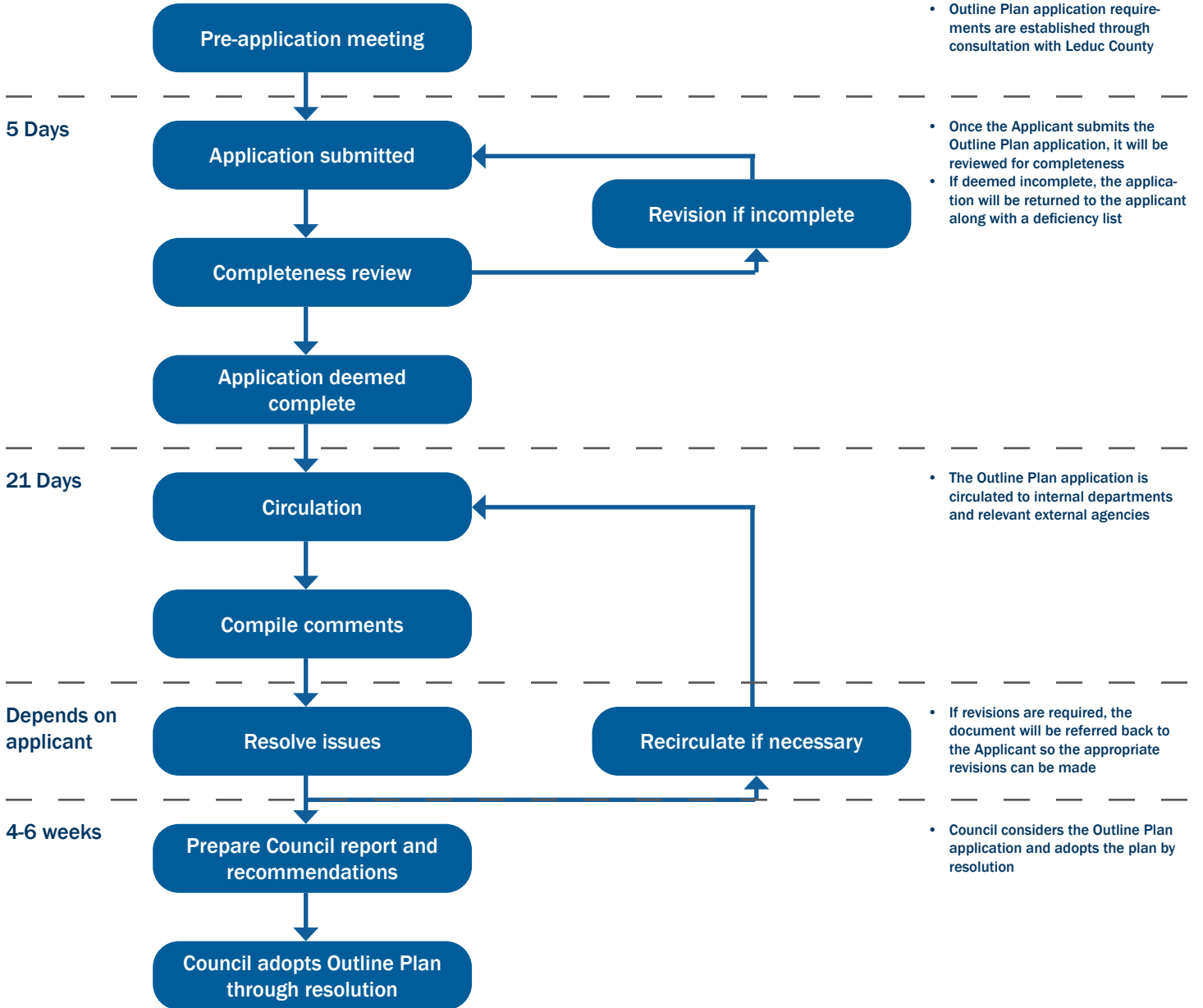
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OUTLINE PLAN APPROVAL PROCESS

Timing

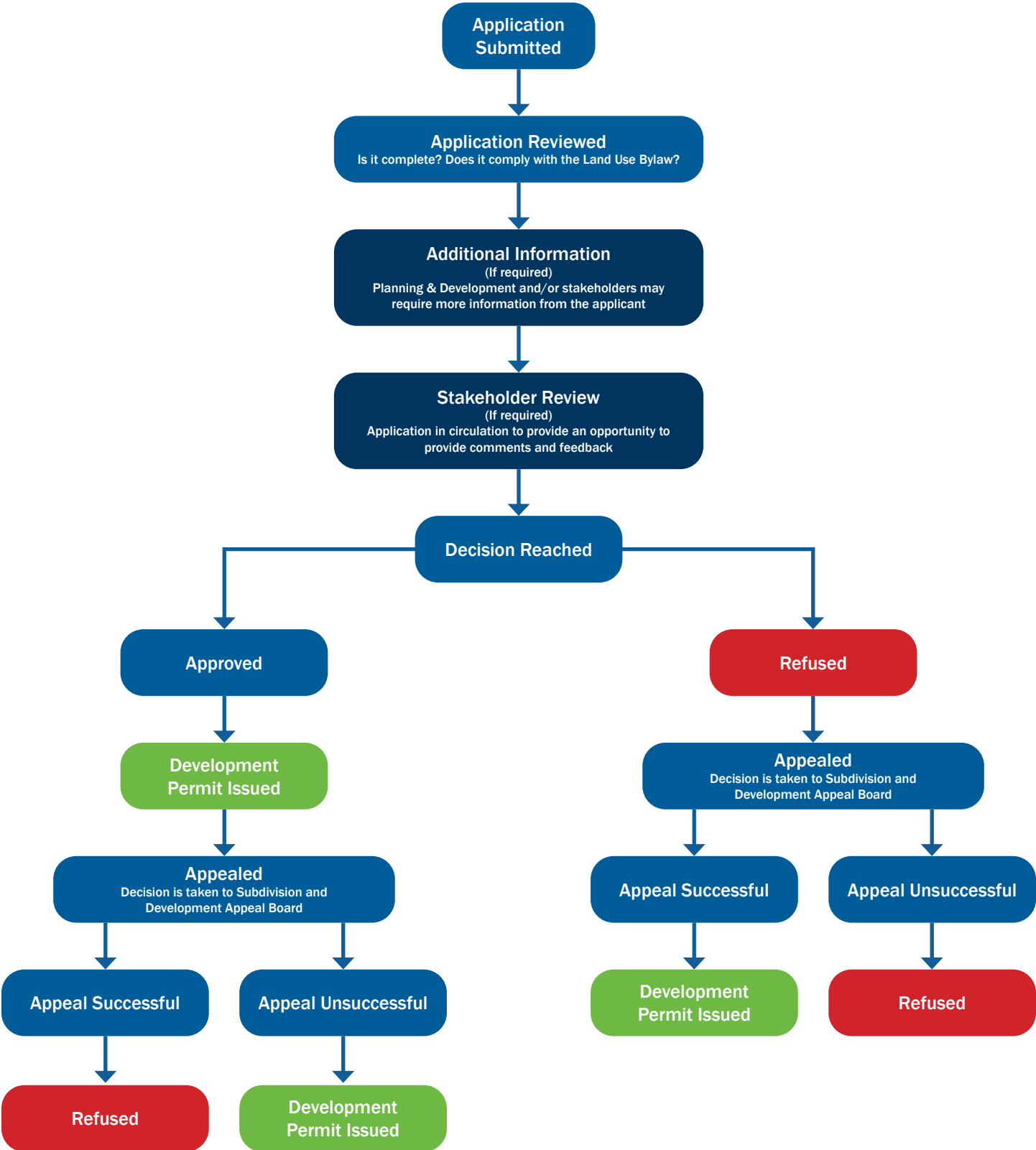
Process Flow

Application Procedures



DEVELOPMENT PERMIT PROCESS

Process Flow



Final

Nisku Spine Road Expansion Economic Impact Study

Leduc County, Alberta



Prepared for Leduc County
by IBI Group
January 22, 2021

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1 Introduction

IBI Group (“IBI”) was retained by Leduc County (“Leduc or County”) to complete an Economic Impact Study (“EIS”) for the proposed Nisku Spine Road expansion (“Spine Road”). The purpose of the EIS is to assess and quantify the short- and long-term economic impacts of the proposed Spine Road expansion and to provide support and input for the County’s Western Economic Diversification Canada grant application for the Canadian Coal Transition Initiative (“CCTI”).

The phasing out of coal-fired electricity is expected to have a negative impact on the County’s future property tax revenues. It is estimated that the eventual closure of the Genesee Generating Station will reduce the County’s property tax revenues by almost \$6 million.

To help mitigate the loss in revenue and to create future opportunities for economic diversification, the County has proposed the Spine Road expansion project to “unlock” new and existing lands for development and provide improved goods movement for the County. To quantify the magnitude of the impact of the Spine Road expansion project, IBI Group has estimated the short- and long-term economic impacts relating to GDP, labour income, tax generation, and job creation to highlight the benefits for the County, Provincial and Federal governments.

The proposed Spine Road expansion has the potential to assist in transforming the County’s economy through the provision of critical transportation linkages to the greater regional market and surrounding multi-modal hubs. The expansion is expected to unlock additional development lands to strengthen the County’s tax base and create opportunities to attract or expand new industries such as transportation and logistics, agri-food processing uses, and manufacturing uses. Additional opportunities such as connected vehicle infrastructure and the expansion of broadband internet will further increase economic activity within the Nisku Area.

1.1 Summary of Findings

The proposed Nisku Spine Road Expansion project will result in short- and long-term economic benefits for the County. The following summarizes the estimated qualitative and quantitative benefits of the Spine Road expansion:

- The development of the Spine Road expansion will complete one of the highest priority transportation projects in the region and will support interregional and multimodal connections to major employment areas including the Nisku Industrial Park, the CP Railway facility and the Edmonton International Airport.
- The development of the proposed Spine Road expansion will help in the accommodation of the County’s forecasted employment growth of 26,330 jobs to the 2044 planning horizon by unlocking new employment lands for development.
- The Spine Road expansion is anticipated to advance the County’s economic diversification strategy, as identified in the County’s Investment Readiness and Implementation Strategy, for further investment in the agriculture, energy, food processing, manufacturing and transportation and logistics sectors. These growth sectors are expected to build upon the County’s existing industry profile and support Edmonton International Airport and the greater regional market.
- Approximately 1,250 acres (505 hectares) of vacant lands are available within one quarter section (approximately 800m x 800m) of the proposed Spine Road expansion. At build-out, this could yield between 11.1 million and 22.1 million square feet of gross floor area.

- The proposed Spine Road expansion is expected to have positive economic impacts for the County, Province and Federal governments.
 - The short- term impacts associated with the construction of the Spine Road are anticipated to generate \$16.4 million in GDP, \$9.5 million in labour income, produce 127 person-years of employment and create \$300,000 in taxes for the County and the Province of Alberta.
 - The long-term economic impacts (build-out) associated with construction of the Spine Road and on the vacant lands adjacent to the Spine Road expansion are anticipated to generate from \$1.9 to \$3.8 billion in GDP, and from \$1.2 to \$2.3 billion in labour income. This would create between 16,467 and 32,806 person-years of employment and produce from \$136.3 to \$272.2 million in taxes for the County and the Province of Alberta.
 - At build-out, the function and operations of the development on vacant lands are estimated to create between 14,893 and 29,787 jobs and could generate between \$740.7 million and \$1.48 billion in annual labour income within the County.
- The current assessment base of the vacant parcels is estimated to generate a property tax revenue of \$11.1 million. Vacant parcel property tax revenue is estimated to total \$1.1 million. The net tax increase for the development of vacant parcels is estimated as follows:
 - **Low Impact:** The re-designation of agricultural lands and assignment of assessment values to “exempt” parcels could generate an additional \$2.04 million in tax revenue for the County.
 - **Medium Impact:** Development of 50% of the vacant parcels could generate an additional \$4.86 million in tax revenue for the County.
 - **High Impact:** The full build-out of the vacant parcels could generate an additional \$6.79 million in tax revenue for the County.
- The development of the vacant parcels within the study area will help to mitigate the lost property tax revenue associated with the phasing out of coal-fire electricity uses.

1.2 Project Location

The proposed Spine Road expansion is a north-south roadway which at full build-out, will run from 41 Ave. SW in the City of Edmonton to Highway 2A, south of the City of Leduc. The road currently consists of four lanes running from 41 Ave. in Edmonton south to Township Road 510 in Leduc County. **Figure 1** identifies the proposed route and the expected project phasing.

The Spine Road expansion will provide a critical connection between regional multi-modal transportation networks such as the Edmonton International Airport (“EIA”) and CP intermodal facility, and will connect the City of Edmonton to the Nisku Industrial Park and the City of Leduc. The proposed Spine Road expansion is ranked as one of the highest priority transportation projects in the region and is anticipated to open up new lands for development. This will allow the County to leverage and build on existing investments and provide significant industry attraction by encouraging new business development.

FIGURE 1: PROPOSED SPINE ROAD EXPANSION



Source: Leduc County, 2020

1.3 Report Overview and Methodology

To inform the grant application process and illustrate the transformative potential of the Spine Road expansion on the surrounding area, this study has been structured as follows:

- **Policy Directions:** A high level summary of the growth forecasts and employment policy directions for the Nisku Area is provided. See Section 2;
- **Demographic and Labour Profile:** A summary of population and labour force markets is provided based on the 2011 and 2016 Census data. See Section 2;
- **Vacant Land Analysis:** The identification of vacant lands for future development are identified with associated developable ground floor areas. See Section 3;
- **Economic Impacts:** Using the Interprovincial Input-Output model multipliers published by Statistics Canada, a summary of economic impacts related to jobs, labour income, GDP impacts and increase in taxes on production is provided for the construction of the Spine Road and the development of the vacant parcels. IBI also estimates the potential employment and annual labour income associated with the operations of the developed vacant lands. See Section 4;
- **Property Assessment Revenue:** Three impact scenarios are presented which outline the potential increase in tax revenues which could be expected based on various levels of development on vacant lands. See Section 5; and,
- **Summary of Stakeholder Consultations:** An overview of the results of stakeholder consultations conducted by MDB Insight is provided.

1.3.1 Approach and Limitations

IBI's analysis focuses on the economic benefits and development potential of identified vacant lands as they represent the parcels which are most likely to develop. IBI's conservative approach does not factor in an increase in land value for developed parcels that could be realized from the proposed Spine Road expansion. It also does not factor in any increase in land value of "intensification potential" parcels (See Section 3) which could redevelop at higher and more intense uses. These assessment generating opportunities could offer additional revenue sources to help mitigate the anticipated tax revenue losses and should be further explored.

This report does not constitute a market justification for the development of the vacant lands. The purpose of this report is to estimate development potential and economic benefits based on industry accepted assumptions, inputs and available data at the time of writing this report.

Further market justification focused on the absorption of space, the timing and phasing of development and the County's economic initiatives to attract investment will be required to ensure that the quantum of development can be supported by the market.

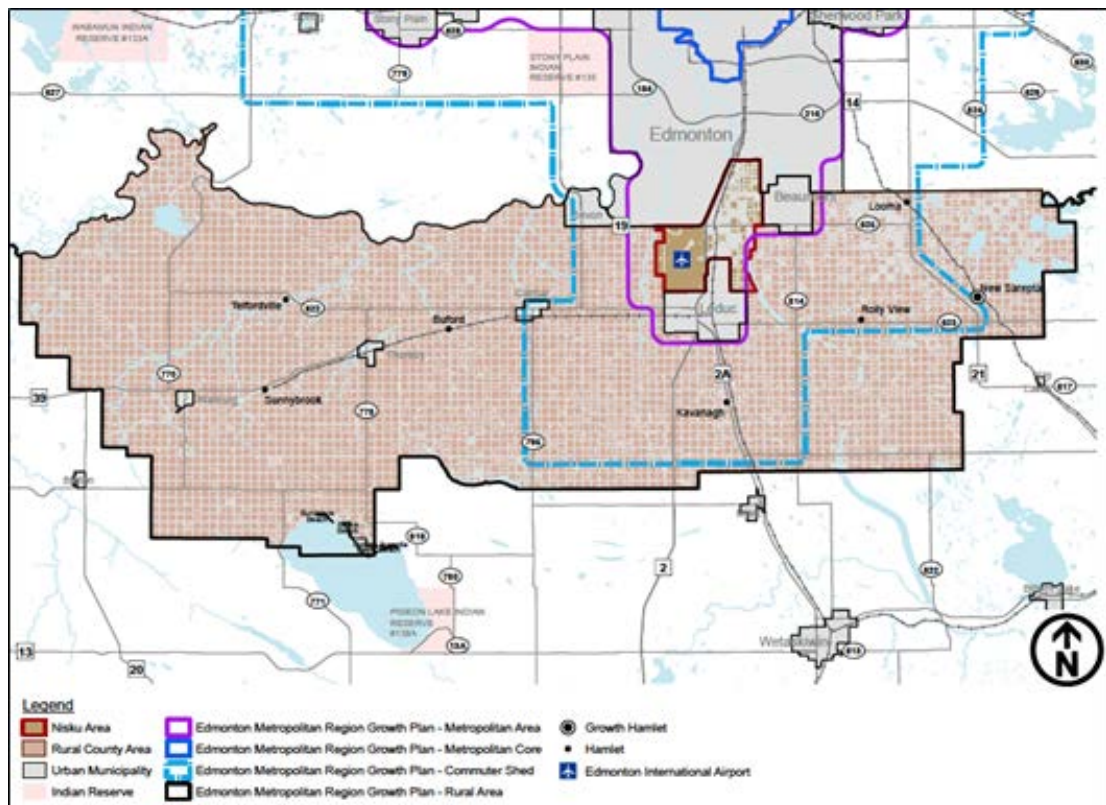
2 Existing Nisku Area Context

2.1 Vision to 2044

The Edmonton Metropolitan Region Board (“EMRB”) Growth Plan forecasts that the region will grow to 2.2 million people and 1.2 million jobs by 2044, representing an increase of 980,600 people and 471,800 jobs from 2014. Leduc County is anticipated to accommodate a portion of this growth, with a projected growth of 9,100 people and 26,330 jobs to 2044. Overall, this represents 1% of the region’s population growth and 6% of the region’s employment growth.

The Leduc County Municipal Development Plan (“MDP”) identifies the “Nisku Area” as a key policy area which will accommodate population and employment growth. Within the Nisku Area, Major Employment Areas, which include the Nisku Industrial Park and EIA, are intended to accommodate a large portion of the job growth through the creation of a competitive environment for investment, business incubation and employment. The provision of critical transportation connections between major employment hubs and the greater region will be important to maintain and enhance the County’s economic competitiveness, promote industry diversification and strengthen EIA as an import and export base for northern Alberta.

FIGURE 2: EMRB PLANNING STRUCTURE AND THE NISKU AREA



Source: Leduc County Municipal Development Plan

2.1.1 On-going Municipal Studies

To implement the policies and visions from the Growth Plan and MDP, the County has undertaken additional studies to strategically plan for the forecasted population and employment growth. The following provides a summary of the County’s on-going studies:

Investment Readiness and Implementation Strategy (IRIS)

The purpose of the Investment Readiness and Implementation Strategy (IRIS) is to identify economic diversification opportunities to accommodate the impending phase-out of coal-fired electricity generation uses. The strategy will identify land use opportunities, provide strategic directions and outline a marketing plan to allow the County to capitalize on future growth and development.

The County has completed Phase 1 of the project and is currently in Phase 2. It is anticipated that the findings of this EIS will help to inform policy initiatives as part of the study. Phase 2 of the project is anticipated to conclude in Q1 2021.

Greater Nisku Major Area Structure Plan

The Greater Nisku Major Area Structure Plan (ASP) is a priority project which will meet the needs of the County and the greater Nisku-area communities. The Greater Nisku Major ASP will guide the overall development of the Greater Nisku area, determining new boundaries among other goals.

The project is currently underway and is anticipated to go to Council in Q2 of 2021 for a first reading. It is anticipated that the findings of this EIS will help to inform the development of the Nisku Central Local Area Redevelopment Plan and the policy directions of the overall Greater Nisku ASP

2.2 Demographic Profile

Leduc County experienced modest population growth over the 2011 to 2016 period, growing by 239 people (1.8%). The County is predominantly comprised of a “working age” population, with residents aged 15-64 making up approximately 70% of the total population in 2016. This age segment has experienced a decline in population since 2011 of approximately 155 people (1.6%).

The population decrease in the working age population was offset by an increase in the 65+ cohort. This suggests that there is a need to attract the working age population to the County in order to support the development of employment sectors being targeted for growth. Additionally, the County has experienced an 8.5% increase in the number of households over the period and the average household income has increased by 25.1%.

FIGURE 3: DEMOGRAPHIC PROFILE

	2011	2016	Growth 11-16	% Increase
Total Population	13,541	13,780	239	1.8%
0-14	2,505	2,565	60	2.4%
15-64	9,395	9,240	-155	-1.6%
65+	1,635	1,980	345	21.1%
Households	5,494	5,960	466	8.5%
Average Household Size	2.7	2.7	--	--
Average Household Income	\$ 105,831	\$ 132,432	\$ 26,601	25.1%

Source: 2016 Census, Statistics Canada

2.3 Labour Profile

Leduc County’s labour force totalled 11,190 people in 2016 and had a participation rate of 73.4%. Of those participating in the labour force, 7,590 people were employed for an employment rate of 67.9%. From the 2016 Census, the County’s unemployment rate totalled 7.6%; an increase of 5.4% from the 2011 Census. It is anticipated that the Spine Road expansion project could help to create jobs through construction (short term) and through long term permanent employment uses which could help to reduce the unemployment rate.

FIGURE 4: LABOUR FORCE

	2011	2016	Growth 11-16
Total Labour Force (15 +)	11,080	11,190	110
In the labour force	8,530	8,205	-325
Employed	8,340	7,590	-750
Unemployed	190	620	430
Not in the labour force	2,545	2,975	430
Participation rate (%)	77	73.4	-3.6
Employment rate (%)	75.3	67.9	-7.4
Unemployment rate (%)	2.2	7.6	5.4

Source: 2016 Census, Statistics Canada

The County’s 2016 place of work data indicated that almost two-thirds (61.3% or 4,655 jobs) of the labour force were employed at a “usual place of work”. Of the remaining employed labour force, 21.9% or 1,660 jobs were categorized as “work at home” and the remaining 16.5% or 1,255 jobs were categorized as “no fixed place of work”. No fixed place of work (“NFPOW”) jobs are jobs which do not go from home to the same workplace location at the beginning of each shift. Examples of NFPOW include contractors, travelling salespersons and independent truck drivers.

FIGURE 5: PLACE OF WORK

	2016	% of Total
Total Employed Population (Age 15+)	7,590	
Worked at home	1,660	21.9%
Worked outside Canada	20	0.3%
No fixed workplace address	1,255	16.5%
Worked at usual place	4,655	61.3%

Source: 2016 Census, Statistics Canada

2.3.1 Economic Sector Analysis

From the 2016 Census, the County’s top five industries (by NAICS codes) were agriculture, construction, natural resources (mining, oil, gas), retail trade, and health care/ social assistance. **Figure 6** illustrates sectors of growth and decline from 2011 to 2016.

FIGURE 6: LABOUR FORCE BY INDUSTRY (NAICS CODE)

	2011	2016	Growth 11-16	% Increase
All industries	8,510	8,145	-365	-4.3%
11 Agriculture; forestry; fishing and hunting	1,260	1,205	-55	-4.4%
21 Mining; quarrying; and oil and gas extraction	620	705	85	13.7%
22 Utilities	120	65	-55	-45.8%
23 Construction	945	1,080	135	14.3%
31-33 Manufacturing	650	525	-125	-19.2%
41 Wholesale trade	445	280	-165	-37.1%
44-45 Retail trade	550	625	75	13.6%
48-49 Transportation and warehousing	460	410	-50	-10.9%
51 Information and cultural industries	60	70	10	16.7%
52 Finance and insurance	145	145	0	0.0%
53 Real estate and rental and leasing	220	140	-80	-36.4%
54 Professional; scientific and technical services	375	450	75	20.0%
55 Management of companies and enterprises	0	10	10	--
56 Administrative and support; waste management/rer	230	320	90	39.1%
61 Educational services	460	425	-35	-7.6%
62 Health care and social assistance	640	550	-90	-14.1%
71 Arts; entertainment and recreation	160	150	-10	-6.3%
72 Accommodation and food services	240	235	-5	-2.1%
81 Other services (except public administration)	595	460	-135	-22.7%
91 Public administration	345	295	-50	-14.5%
Industry not applicable	20	55	35	175.0%
Total	8,530	8,205	-325	-3.8%

Source: 2016 Census, Statistics Canada

From MDB Insight's "Leduc County Industry Sector Analysis" report, which was completed for Phase 1 of the IRIS project, it was recommended that the County focus on attracting further investment in the following five sectors: Agriculture, Energy, Food Processing, Manufacturing and Transportation and logistics.

Of the five identified growth sectors, only two sectors (agriculture and energy) were within Counties the top five industries in 2016. From the 2016 Census, the food processing/manufacturing and the transportation and logistics sectors were ranked 6th and 10th respectively. Opportunity exists for investment in these sectors to strengthen to attract employment and diversify the County's employment base.

Further detailed analysis on the County's growth sectors can be found in the Phase 1 background reports for the IRIS project.

3 Surrounding Parcel Assessment

IBI Group identified a “study area” surrounding the proposed Spine Road expansion to allow for a focused analysis on the anticipated area of influence. The study area generally encompasses the lands within one quarter section (approximately 800m x 800m) of the proposed alignment.

Using mapping provided by the County, work completed for the IRIS project and an aerial interpretation analysis, IBI Group classified the study area parcels into three primary classifications in order to assist in the assessment of future development potential as an input to the job, income and assessment analysis.

- **Developed:** Lands which are fully developed and are unlikely to redevelop as a result of the Spine Road expansion;
- **Intensification Potential:** Lands which are developed with limited buildings, typically categorized as uses with a large outdoor storage component. While there are no assurances that these uses will redevelop as a result of the expansion of the Spine Road, these sites could potentially redevelop or intensify with new highway access. Inclusion in this category does not imply underutilization or need for redevelopment;
- **Vacant:** Lands which do not have any development on site. Using the vacant land inventory from the IRIS Phase 1 “Land use and Economic Area Analysis” report, IBI Group identified the vacant parcels which fell within the study area. IBI then accounted for non-industrial/commercial land uses (e.g. agricultural zoned lands) to recognize the redevelopment potential of these parcels if they were rezone and develop with the appropriate infrastructure investments.

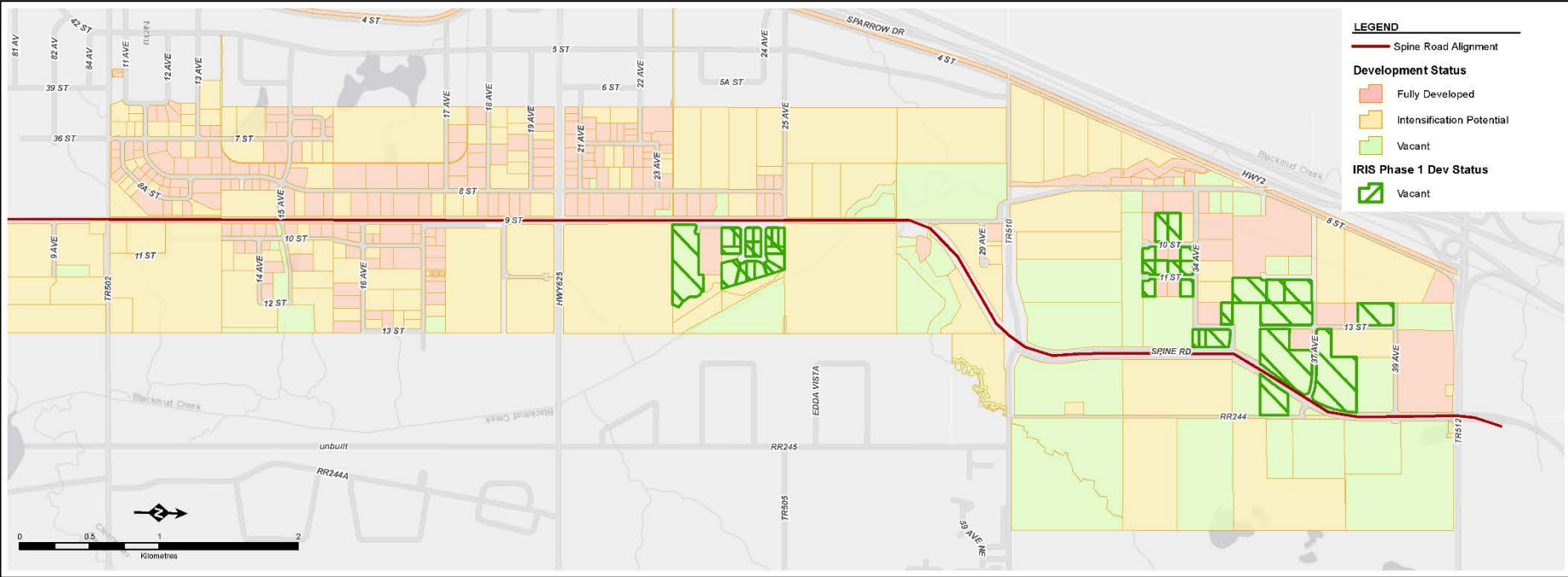
See **Figure 7** and **Appendix A** for the parcels and study area mapping.

3.1 Vacant Land Estimate of Potential Space

Focusing on the lands identified as vacant, IBI Group conducted an analysis to estimate the potential developable space on these sites. The analysis is based on the following assumptions/inputs:

- Lands designated/zoned for non-employment uses (e.g. agricultural lands) would be re-designated and rezoned to permit employment uses. IBI Group has assumed that all identified parcels will have the necessary servicing, access and physical capability to accommodate future development;
- A low and a high estimate for developable GFA are provided and are based on low (30%) and high (60%) building coverage ratios. These coverage’s were chosen based on typical building coverage’s of for various employment uses including manufacturing, goods processing and logistics/warehousing; and
- A gross to net ratio of 80% was assumed to account for parking, storage, and required servicing infrastructure (e.g. stormwater).

FIGURE 7: NISKU SPINE ROAD EXPANSION STUDY AREA



Source: IBI Group, 2020

In total, IBI Group has identified approximately 1,250 acres (505 hectares) of vacant land in the study area surrounding the proposed Spine Road expansion. If 50% of these lands were to be developed, between 6.5 million and 13.0 million square feet of developable space could be provided in the Nisku Area. At build-out, it is estimated that between 11.0 million and 22.1 million square feet of space could be realized.

FIGURE 8: ESTIMATE OF DEVELOPABLE SPACE

	Area (ac)	Low - Estimated Developable GFA (sf)	High - Estimated Developable GFA (sf)
50% Build-out	620	6,514,000	13,028,000
Full Build-out ¹⁾	1,250	11,074,000	22,147,000

1) 15% vacancy factored in

As previously stated, this assessment is not a market justification to justify the quantum of development that could be supported/absorbed by uses along the Spine Road corridor. Rather, the purpose of this assessment is to provide a high level estimate of potential building area which could be realized on vacant parcels based on observed development trends. Further market justification and demand analysis, which focuses on the absorption of space and the timing/phasing for development will be required to understand the demand for space by sector and the total amount of space which could be supported by the current and future markets.

3.2 Intensification Potential Lands

IBI Group has identified 141 parcels totalling 2,785 acres (1,125 hectares) in the intensification potential classification. Lands within this classification offer long term redevelopment opportunities to a more intensified employment use.

The redevelopment of these lands is not assured, and it is more likely that vacant parcels will be the source of new GFA, jobs and assessment revenue. However, there is future potential within the built-up Nisku Area to accommodate additional employment uses beyond the opportunities identified on the vacant parcels. In the long-term, the redevelopment of these sites could aid the County’s ongoing effort for economic diversification and help to mitigate any impacts from the phasing out of coal-fire electricity uses.

FIGURE 9: INTENSIFICATION POTENTIAL LANDS

Existing Zoning	Number of Parcels	Potential Intensification Sites (Acres)
Industrial	111	1,500
Business Park	1	0
Direct Control	10	342
Agricultural & Other	19	943
TOTAL	141	2,785

4 Economic Impacts

The development of the Spine Road will create economic benefits at all levels of government. At the County level, there will be increased property tax revenue for the County from the build-out of vacant parcels and associated housing development to accommodate employees, as well as job growth and additional spending in the local economy. The Spine Road will also provide a crucial goods movement corridor to support industry development in the County. At the provincial and federal level, there will be an increase in taxes collected, upstream employment growth, and a positive impact on GDP.

To demonstrate potential economic benefits, IBI Group estimated the economic impact that the expansion of the Nisku Spine Road could have on the Alberta and Canadian economy. This section focuses on provincial impacts, with the Canada-wide impacts identified in **Appendix B**. The potential economic impact identified covers the following areas and includes both capital costs, as well property tax and labour impacts associated with buildings developed on vacant parcels:

- **Nisku Spine Road Development:** Economic impacts are based on the estimated construction cost of the Spine Road as provided by Leduc County. These include both hard and soft costs but exclude costs associated with ROW acquisition. Economic impacts associated with the Spine Road development represent short term impacts.
- **Development Yield on Vacant Parcels:** The estimated construction value associated with the low and high development yields of vacant parcel identified in **Section 3** are used to estimate economic impacts. Economic impacts associated with building development represent long-term impacts.

4.1 Overview of the Input-Output Model

To quantify the potential economic impact of the Nisku Spine Road construction, IBI Group used the multiplier approach using multiplier tables from Statistics Canada Input-Output Modelling (I/O). IBI Group identified employment, GDP, taxes on production and labour income impacts as a result of the expenditures related to the construction of the Spine Road expansion and to the construction of buildings on vacant parcels. Direct, indirect and induced economic impacts have been accounted for.

Additional details on the methodology are outlined in **Appendix B**.

4.2 Economic Impact Attributed to Construction

Figure 10 provides a summary of the estimated capital costs related to the construction of the Nisku Spine Road and the estimated construction costs of buildings on vacant parcels. The estimated economic impacts are established by applying the appropriate multipliers to this costing. The low and high values reported are derived from the low and high building coverage ratios tested by IBI Group used to determine gross ground floor areas of buildings for the development of the vacant lands (see **Section 3** for further details). All dollar figures presented in this section are in constant 2020 dollars.

The estimated capital costs identified for the Spine Road expansion are based on estimates from Leduc County staff. Right-of-way (ROW) acquisition costs have been excluded as they are not anticipated to produce any economic benefits. Assuming funding is delivered, construction of the Nisku Spine Road is anticipated to reach substantial completion by October 2022.

FIGURE 10: CAPITAL COSTS INCLUDED IN I/O ANALYSIS IN 2020 DOLLARS

Item	Low	High
Nisku Spine Road ¹⁾	\$20,884,000	\$20,884,000
Buildings on Vacant Parcels ²⁾	\$2.364 billion	\$4.728 billion

- 1) Source: Leduc County Engineering Staff estimates.
 2) IBI Group estimate.

Figure 11 summarizes the estimated direct, indirect and induced impacts to the Alberta economy resulting from the construction of the Spine Road expansion and the build-out of the vacant parcels. A detailed breakdown of the figures presented in **Figure 11** and of the Canada wide impacts are provided in **Appendix B**.

The short-term economic impacts are represented by the GDP, employment, labour income and taxes produced by the construction of the Spine Road expansion. Due to the nature of construction, these economic benefits are more likely to be localized to the County and the Edmonton Region, but will have an impact on the overall Provincial economy.

The construction of the Spine Road is expected to generate \$16.4 million in GDP and \$9.5 million in labour income, create 127 person-years of employment, and produce \$300,000 in taxes for the province. These short-term estimated economic impacts are expected to occur by the time of completion of the Spine Road construction, which is anticipated in October 2022.

The long-term economic benefits associated with the construction of the Spine Road expansion and the build-out of the vacant lands in the study area are anticipated to have a large impact on the County, the regional area and the overall Alberta economy. At build-out, it is estimated that:

- The GDP impact will range from \$1.936 billion to \$3.856 billion.
- Construction will generate between 16,467 and 32,806 person-years of employment.
- The labour income impact, which is a subcomponent of GDP, is estimated to be between \$1.168 billion and \$2.328 billion.
- Taxes on production are expected to range between \$136.3 million and \$272.2 million.

FIGURE 11: CONSTRUCTION ECONOMIC IMPACTS (BUILD-OUT) ¹ - ALBERTA

	Short Term	Long Term		Total	
	Spine Road Construction	Building Construction - Vacant Land			
	Alberta	Low	High	Low	High
GDP Impact (\$millions) ²⁾	\$16.4	\$1,919.9	\$3,839.9	\$1,936.3	\$3,856.3
Employment Impact ³⁾	127	16,340	32,680	16,467	32,806
Labour Income (\$millions)	\$9.5	\$1,159.4	\$2,318.7	\$1,168.9	\$2,328.2
Taxes on Production (\$millions)	\$0.3	\$136.0	\$271.9	\$136.3	\$272.2

Source: Statistics Canada Interprovincial Input-Output Multiplier Table, 2017 (Table 36-10-0595-01), IBI Group Calculations.

- 1) Impact on construction and related industries and spin-off impact due to increased wage income.
 2) Price before taxes and subsidies on products.
 3) Represents person years of employment.

4.3 Economic Impact Attributed to Building Operation

IBI Group estimated economic impacts related to the function and operations of the buildings to be constructed on the vacant parcels. The economic impacts in this assessment include an estimate of the number of employees that could occupy the non-residential space and associated employment income. The analysis is supplemented by a property tax revenue assessment in **Section 5**.

At full build-out it is estimated that between 14,893 and 29,787 employees could be employed within the net non-residential GFA. Job creation of this magnitude would help the County to achieve its forecasted employment growth of 26,330 from the ERMB Growth Plan.

With respect to annual employment income, it is estimated that between \$740.70 million and \$1.481 billion could be generated at build-out. It is important to note that the realization of these jobs and employment income will rely on the success of County initiatives which would be aimed at attracting specific industries to the local market.

FIGURE 12: ESTIMATED NUMBER OF EMPLOYEES & ANNUAL INCOME AT BUILD-OUT

Existing Zoning	Number of Employees		Annual Income (\$ millions)	
	Low	High	Low	High
Industrial	2,646	5,293	\$159.0	\$318.0
Business Park	7,971	15,942	\$327.8	\$655.6
Direct Control	517	1,034	\$28.1	\$56.2
Agricultural & Other	3,759	7,518	\$225.8	\$451.6
TOTAL	14,893	29,787	\$740.7	\$1,481.4

5 Leduc Property Assessment Revenue

IBI Group conducted a property tax revenue analysis to estimate the increase in the County's assessment revenue due to the development of the vacant parcels within the study area. The following assumptions/data sources were used in the analysis:

- Assessment values are based on the County's 2020 Property Assessment Values. All calculated values are in constant 2020 dollars;
- IBI Group used the County's 2020 municipal operating tax rate for each assessment class to calculate the estimated property tax revenue; and
- The average assessment value/acre for each land use classification (i.e. developed, intensification potential, vacant) is based on the average of the current 2020 assessment values within the study area.

5.1 Existing Use Assessment Revenue

It is estimated that the existing uses within the study area have an overall assessment value of \$1.7 billion, which is estimated to generate approximately \$11.1 million dollars in operating tax revenue for the County. Vacant parcel property tax revenue is estimated to total \$1.1 million.

Figure 13 illustrates the existing estimated property tax revenue in the study area.

FIGURE 13: EXISTING USE PROPERTY TAX REVENUE

	Area (ac)	Current Assessment Value (\$) ¹⁾	Average Assessment Value (\$)/Acre	Estimated Property Tax Revenue (\$)
Developed	1,100	\$ 763,234,100	\$ 1,092,400	\$ 4,933,200
Intensification Potential	2,800	\$ 767,339,500	\$ 472,800	\$ 5,020,700
Vacant	1,250	\$ 160,470,100	\$ 359,700	\$ 1,119,200
Total	5,150	\$ 1,691,043,700		\$ 11,073,100

1) Based on 2020 Leduc County Assessment Values

5.2 Vacant Land Assessment Analysis

Using the vacant parcels identified in **Section 3** of this Report, IBI Group created three development scenarios to estimate the potential assessment revenues for the County which could be generated by future development.

5.2.1 Low Impact: Re-Zoning & Removal of Exemptions

The low impact scenario aims to establish a new baseline for revenue generation by testing the impact of the re-zoning of "agricultural" zoned lands to "industrial" and the application of an industrial assessment value/acre (\$359,700) to industrial zoned lands which do not have an assessment value or are "exempt" from property taxes. This scenario does not assume any new development of the lands.

The analysis resulted in an overall assessment value of \$488.85 million and an estimated property tax revenue of \$3.16 million. This represents an increase of \$2.04 million in assessment revenue for the County.

FIGURE 14: LOW IMPACT ASSESSMENT SCENARIO

	Area (ac)	Estimated Assessment Value	Current Property Tax Revenue	Estimated Property Tax Revenue	Difference
Industrial Zoning	750	\$ 312,651,900	\$ 1,111,000	\$ 2,020,800	\$ 909,800
Agricultural Zoning	500	\$ 176,201,700	\$ 8,200	\$ 1,138,900	\$ 1,130,700
Total	1,250	\$ 488,853,600	\$ 1,119,200	\$ 3,159,700	\$ 2,040,500

5.2.2 Medium Impact: 50% Development

Based on the new baseline established in the low impact scenario, the medium impact scenario assumed that 50% of the vacant lands would develop. Using the developed assessment value/acre (\$1,092,404) for the developed lands, the analysis resulted in an overall assessment value of \$925.08 million and an estimated property tax revenue of \$5.98 million. This represents an increase of \$4.86 million in assessment revenue for the County.

FIGURE 15: MEDIUM IMPACT ASSESSMENT SCENARIO

	Area (ac)	Estimated Assessment Value	Current Property Tax Revenue	Estimated Property Tax Revenue	Difference
Vacant Lands	625	\$ 244,426,800	\$ 1,119,200	\$ 1,579,900	\$ 460,700
Developed Lands	625	\$ 680,649,000	\$ -	\$ 4,399,400	\$ 4,399,400
Total	1,250	\$ 925,075,800	\$ 1,119,200	\$ 5,979,300	\$ 4,860,100

5.2.3 High Impact: Full Build-out

Based the new baseline established in the low impact scenario, the high impact scenario assumed the build-out of the vacant lands. It should be noted that “build-out” includes a 15% vacancy factor to account for irregular shaped parcels, infrastructure requirements and upgrades, and to allow for competition within the market.

Using the developed assessment value/acre (\$1,092,404) for the developed lands, the analysis resulted in an overall assessment value of \$1.2 billion and an estimated property tax revenue of \$7.91 million. This represents an increase of \$6.79 million in assessment revenue for the County

FIGURE 16: HIGH IMPACT ASSESSMENT SCENARIO

	Area (ac)	Estimated Assessment Value	Current Property Tax Revenue	Estimated Property Tax Revenue	Difference
Vacant Land	200	\$ 67,232,900	\$ 1,119,200	\$ 434,600	\$ (684,600)
Developed Land	1,050	\$ 1,157,103,200	\$ -	\$ 7,478,900	\$ 7,478,900
Total	1,250	\$ 1,224,336,100	\$ 1,119,200	\$ 7,913,500	\$ 6,794,300

6 Stakeholder Engagement

To provide additional context to the study, the MDB Insight team reached out to the regional developer and real estate community for their insights into the project. Both live and written responses were gathered in January 2021 with the stakeholders providing a wide variety of opinions. The following contains insights by MDB from their outreach.

Benefits of the Spine Road Expansion

Most stakeholders agreed that the Spine Road expansion would create opportunities for new investment in the region, with the most mentioned benefits being:

- Improved access to developable land and existing sites on the East side of Nisku.
- Seamless connection from businesses to residential areas (including Beaumont and South Edmonton).
- Reduced Stress on QE2 and corresponding overpasses, particularly during high traffic times.
- Providing a connection from North Nisku to the rest of the industrial areas and the City of Leduc.
- The connection should spur home development in South Edmonton and Beaumont.
- The line has the potential to support new investments that could support energy services transition to petrochemical and plastics support services.
- Newly open investment lands will draw food processing, agribusiness, and manufacturing firms out of South Edmonton.

Development Considerations

Several development considerations were raised and are summarized by the following points:

- There is the potential for drainage issues along the route. Through infill or redevelopment, the County may consolidate large parcels of land for development, with consideration being given to lands in the context of the floodplain¹.
- The proposed expansion may not necessarily expand the Leduc County tax base by a significant degree and may be a greater benefit to Edmonton and the City of Leduc. Development should be extended to expand access to the East Vistas.
- One stakeholder indicated they would like to see the County be more flexible regarding access points on and off the existing or future Spine Road.
- Some suggested the implementation of a carbon offset program, power, gas, 5G and fibre optic connectivity in terms of additional infrastructure.
- Stakeholders also suggested that the expansion should, if possible, minimally affect property taxes as it would reduce the County's value proposition.

¹ IBI has not reviewed the floodplain mapping as part of this study. Further review of the floodplain will be undertaken as part of the Spine Road Environmental Assessment, however if there are significant flood plain issues, it may affect the amount of developable area available.

Sectors Most Interested in Spine Road Expansion

The following comments were received with respect to the sectors most interested in the Spine Road expansion:

- For the most part, stakeholders agreed that the expansion would support the growing warehousing distribution, transportation, and logistics cluster that Amazon is now anchoring in North Nisku.
- Having the expansion completed will support users who require unimpeded access to their final destinations.
- Any businesses in south Edmonton in search of lower taxes, particularly agribusiness and food processing could look to Leduc County.
- Stakeholders indicated several businesses are currently considering the area at different stages, and the expansion would be a net benefit.

Specific Opportunities

When asked about specific opportunities for businesses, stakeholders identified the following:

- Large distribution and supply chain occupiers.
- Edmonton based businesses looking for lower taxes.
- Food and processing, including protein tech, based on pulses, lentils, chickpeas, and value add to grains.
- Energy including new forms of oil and gas production and the continued servicing of rigs and wells during the transition period from carbon-intensive to greener forms.
- Agribusiness, pharma, hemp, and cannabis connected to the Food Development Centre expansion.

7 Qualitative Benefits

Beyond the economic benefits identified in **Sections 4** and **5** above, the proposed Spine Road expansion will provide infrastructure investment which will support Leduc County in meeting their economic policy goals and accommodate new innovative opportunities. More specifically, the Spine Road expansion will:

- Complete one of the highest priority transportation projects in the region, which will support interregional and multimodal connections to major employment areas including Nisku Industrial Park, the CP Railway facility and the Edmonton International Airport;
- Support the growth forecasts of the EMRB Growth Plan and the County's MDP through the identification of a sizeable land base which could help to accommodate the significant employment growth to 2044;
- Further the County's economic diversification strategy, as identified in the County's IRIS project, for additional investment in the agriculture, energy, food processing, manufacturing and transportation and logistics. These growth sectors are expected to build upon the County's existing industry profile and support EIA and the greater regional market;
- Align with the policy directive to support EIA through the creation of greater connections to and from the airport. An increase in the warehouse and logistics sector, which would be aided by the increased capacity and access of the Spine Road expansion, would directly supported EIA;
- Provide an opportunity for the County to implement broadband connectivity through the Nisku Area;
- Provide the necessary infrastructure for the creation a Connected Vehicle (CV) corridor. Leduc County is in discussions with the University of Alberta, the Government of Alberta and some businesses in Nisku about incorporating the Nisku Spine Road into the Aurora Connected Vehicle Test Bed for commercial traffic; and,
- Help to mitigate the expected losses in tax revenue from the phasing out of coal-fired electricity uses in the County.

Appendix A – Study Area Mapping

FIGURE A-1: NISKU SPINE ROAD EXPANSION STUDY AREA (MAP 1 OF 3)

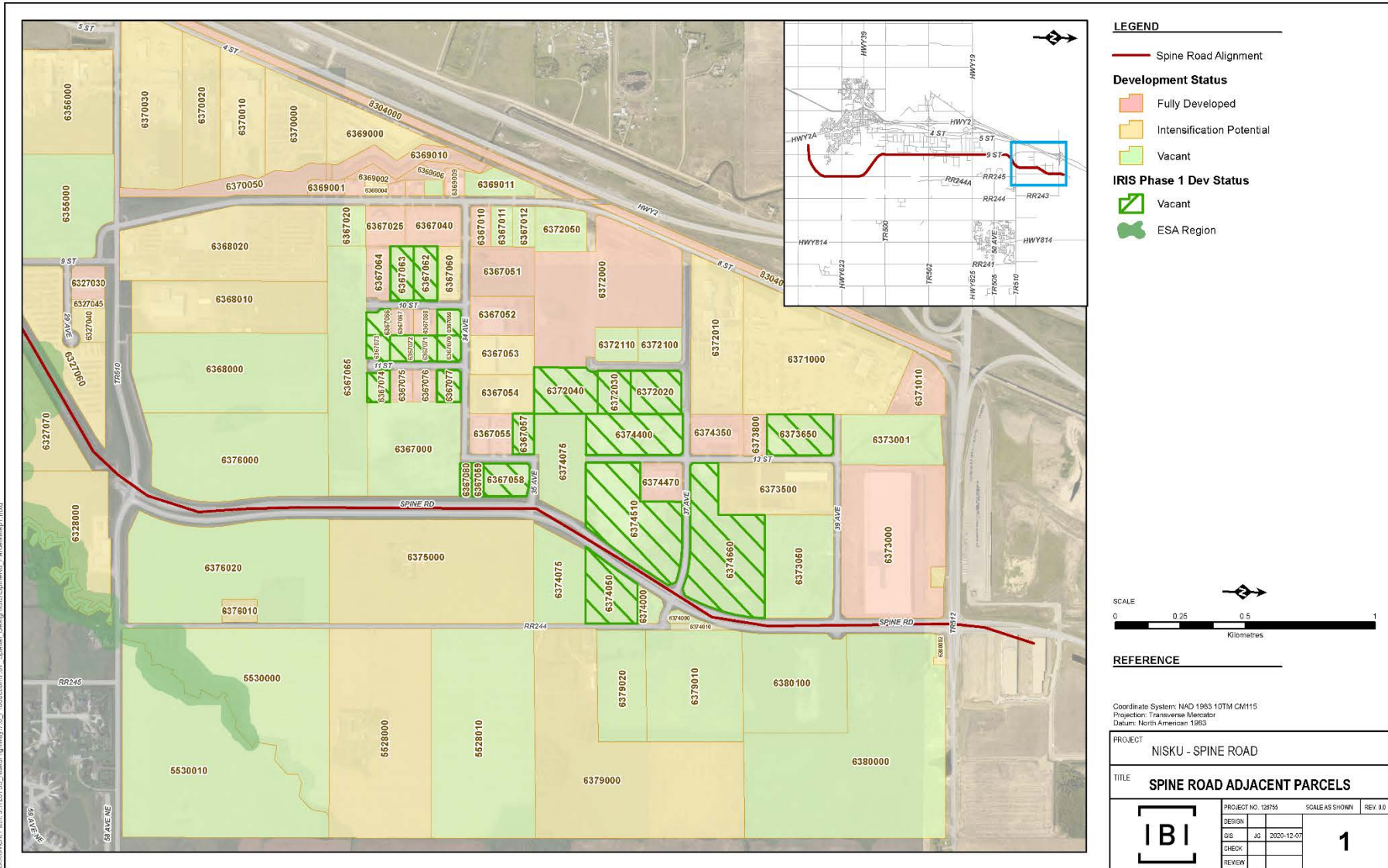


FIGURE A-2: NISKU SPINE ROAD EXPANSION STUDY AREA (MAP 2 OF 3)

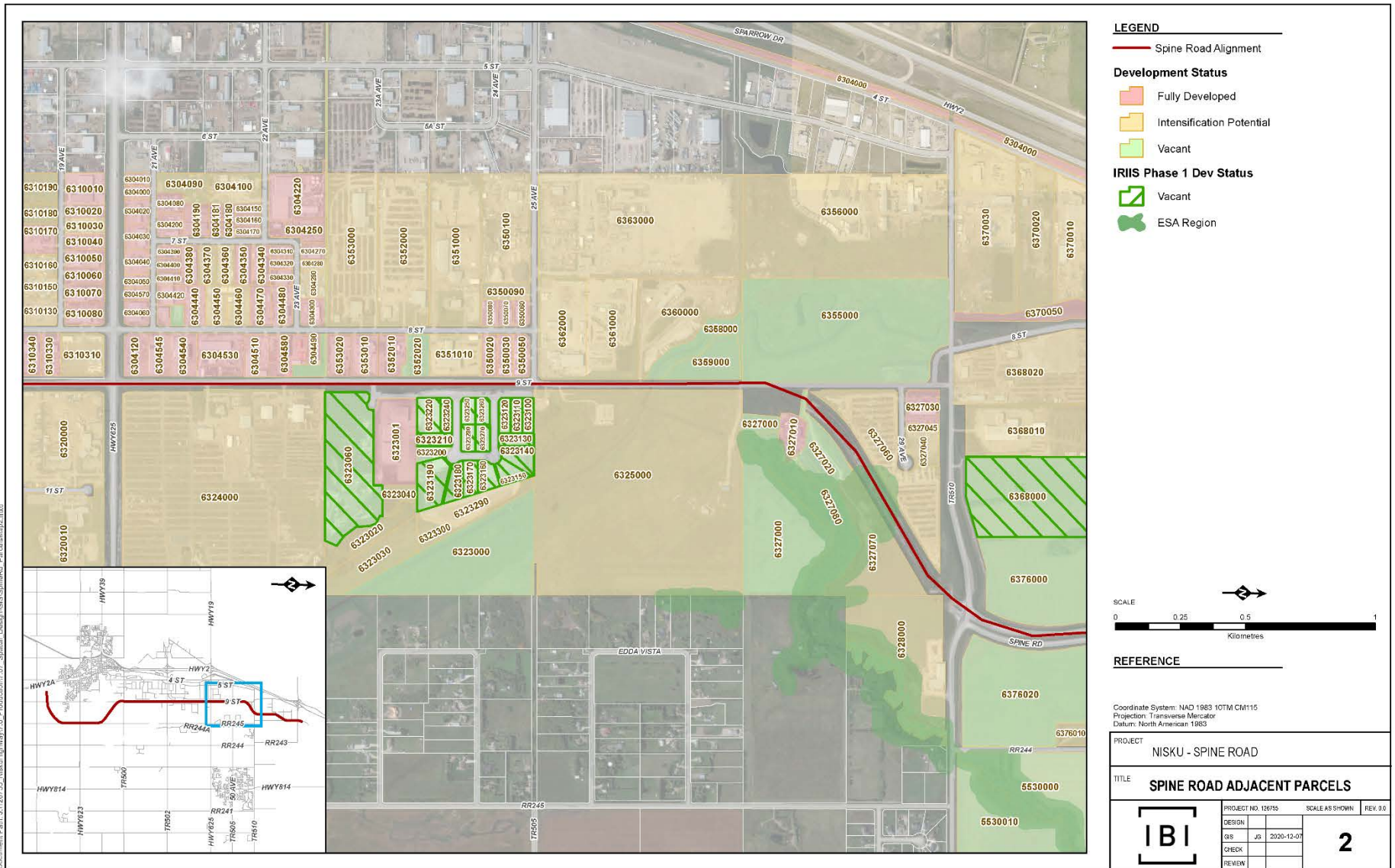
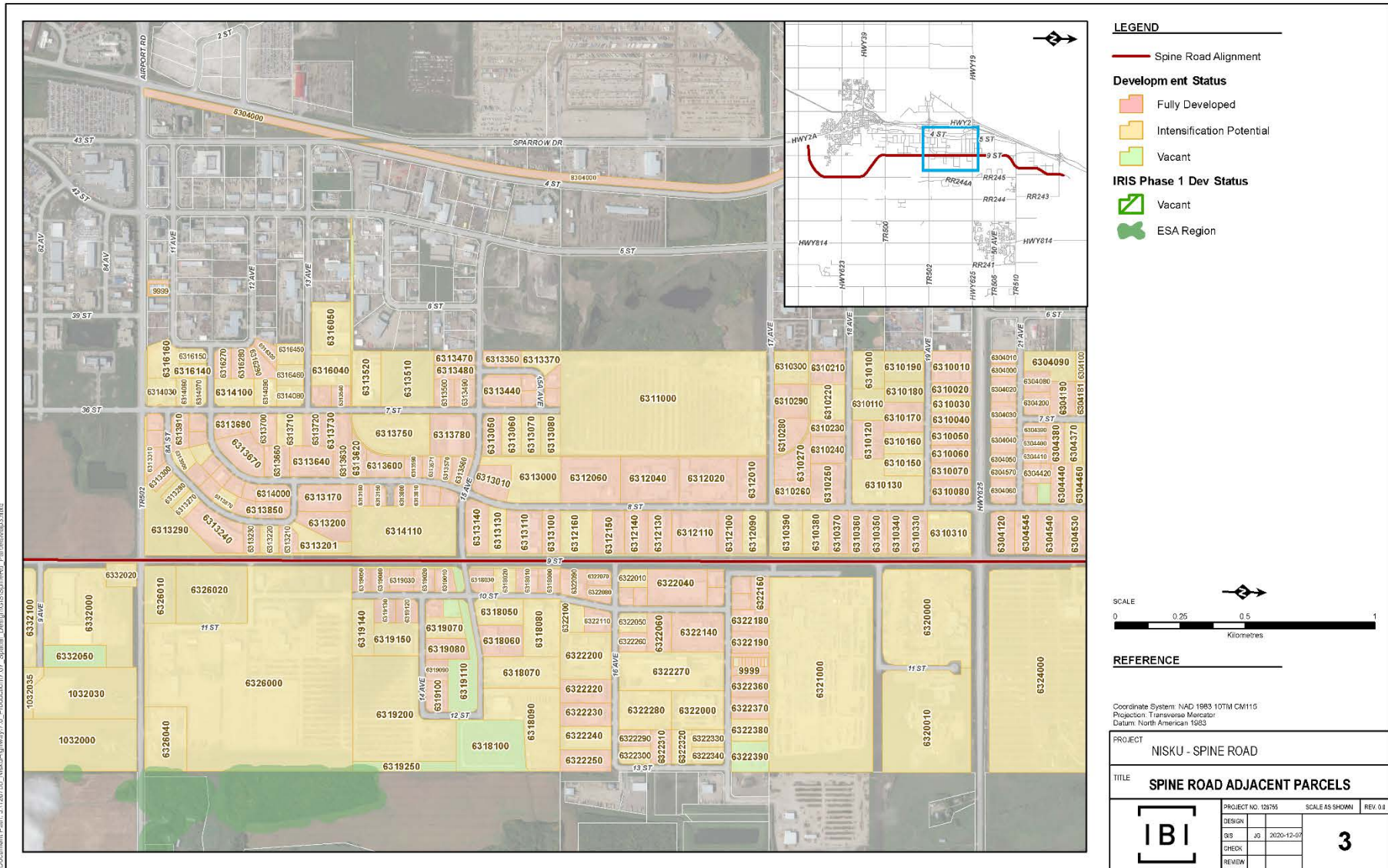


FIGURE A-3: NISKU SPINE ROAD EXPANSION STUDY AREA (MAP 3 OF 3)



Appendix B – Input/ Output Methodology

Overview of the Input-Output Model

To quantify the potential economic impact of the Nisku Spine Road construction, Input-Output modelling (“I/O”) was utilized for the assessment. The economic impact resulting from capital costs will occur one time during the construction phase, either at the time of Nisku Spine Road construction or construction of buildings on vacant parcels. Operating impacts are an ongoing economic impact focused on the number of employees and related annual employment income.

The I/O model used to undertake this assessment is the Interprovincial Input-Output Model published by Statistics Canada. This is a comprehensive and widely accepted I/O model in Canada. As part of the I/O model, Statistics Canada publishes multiplier tables to estimate economic impacts when data is limited or provided at a higher level. The basis of the multiplier tables is the aggregate production function of a particular industry. The multiplier tables separate the economy into a matrix of industries and commodities.

To complete this assessment, IBI Group used the multiplier table approach using Statistics Canada I/O Multiplier Tables to estimate economic impacts. The multiplier tables used are the most recent publicly available versions and are calibrated to the Canadian economy in 2017. This means that the commodity structure of industries in 2017 are the basis of the economic impacts identified.

IBI Group identified employment, GDP, taxes on production and labour income impacts as a result of the expenditures related to the construction of the Spine Road expansion and to the construction of buildings on vacant parcels. An overview of these metrics is provided below:

- **Employment Impact:** Estimates the number of jobs created in terms of person-years of employment. A person-year of employment is defined as one person working for a full year;
- **GDP Impact:** Measures the economic output resulting from the production of goods and services, reported in dollars. GDP impacts can be segmented into corresponding labour income, government revenues and income to businesses. This assessment reports separately on labour income, as well as overall GDP impact; and
- **Labour Income:** Estimates the total compensation paid to employees, which include wages, salaries, employer social contributions, bonuses, etc. Labour income is reported on in terms of dollars and is a subcomponent of the GDP impact.

Economic impacts are broken down further to identify the direct, indirect and induced impacts, which are explained below:

- **Direct Impacts:** Generated directly by the industry or entity being examined. This is based on an analysis of the employee base, payroll, taxes paid and increase between the value of purchased inputs and sales of products in an industry;
- **Indirect Impacts:** Generated by suppliers connected to the given industry that are further up in the supply chain. Those suppliers have their own employees and purchase commodities from other suppliers, which result in additional labour income, income to businesses or governments, and importing of goods from other jurisdictions in some cases; and

- **Induced Impacts:** Generated from spending by employees of their salaries and wages, which result from the direct and indirect impacts identified. This includes spending by employees in the direct industry, and by employees within the upstream supplier base. Induced impacts are affected by household spending decisions and ability to save among other variables. As such, induced impacts should be interpreted with caution.

Construction Capital Costs

Figure B-1 provides a summary of the estimated capital costs related to the construction of the Nisku Spine Road and the estimated construction of buildings on vacant parcels. The low and high values are derived from the low and high building coverage ratios tested by IBI Group to determine gross ground floor areas of buildings that could be constructed on vacant lands (see Section 3 for further details). Construction costs include both hard and soft cost estimates.

FIGURE B-1: CAPITAL COSTS INCLUDED IN I/O ANALYSIS IN 2020 DOLLARS

Item	Low	High
Nisku Spine Road	\$20,884,000	\$20,884,000
Buildings on Vacant Parcels	\$2,364,452,000	\$4,728,903,000

The estimated capital costs identified for the Nisku Spine Road are based on estimates from Leduc County staff. Right-of-way (ROW) acquisition costs have been excluded as they are not anticipated to produce any economic benefits. Assuming funding is delivered, construction of the Nisku Spine Road is anticipated to reach substantial completion by October 2022. As such, the associated economic benefits will occur from construction commencement to completion and represent the short-term economic impacts associated with the project.

The estimated construction costs for the development on vacant parcels is based on the “2020 Construction Cost Guide” prepared by Altus Group for the Edmonton area. These capital costs represent long term economic impacts and are anticipated to occur over the build-out of the area.

Economic Impact Attributed to Construction

Figure B-2 summarizes the estimated direct, indirect and induced impacts to the Alberta and Canadian economy resulting from the construction of the Nisku Spine Road. All dollar figures presented in this section are in constant 2020 dollars.

FIGURE B-2: ECONOMIC IMPACTS ATTRIBUTED TO NISKU SPINE ROAD CONSTRUCTION¹

	Alberta	Canada
GDP Impact (\$ millions)²		
Direct	\$6.0	\$6.0
Indirect and Induced	\$10.4	\$15.0
Total	\$16.4	\$21.0
Employment Impact (Person-Years of Employment)		
Direct	48	48
Indirect and Induced	78	122
Total	127	170
Labour Income (\$ millions)		
Direct	\$4.1	\$4.1
Indirect and Induced	\$5.4	\$8.0
Total	\$9.5	\$12.1
Taxes on Production (\$ millions)		
Direct	\$0.0	\$0.0
Indirect and Induced	\$0.3	\$0.5
Total	\$0.3	\$0.5

Source: Statistics Canada Interprovincial Input-Output Multiplier Table, 2017 (Table 36-10-0595-01), IBI Group Calculations.

- 1) Impact on construction and related industries and spin-off impact due to increased wage income.
- 2) Price before taxes and subsidies on products.

It is estimated that the construction of the Nisku Spine Road will have a GDP impact in excess of \$16.4 million in Alberta and \$21.0 million in Canada. This is anticipated to generate 127 person-years of employment in Alberta and 170 person-years of employment in Canada. As a major subset of GDP impact (approximately 58%), the labour income impact anticipated to be generated is approximately \$9.5 million in Alberta and \$12.1 million overall in Canada. As mentioned above, these estimated economic impacts are expected to occur by the time of the construction completion of the Nisku Spine Road, which is anticipated in October 2022 and represent short-term impacts.

Figure B-3 summarizes the direct, indirect and induced impact of building construction on vacant parcels to the Alberta and Canadian economy.

FIGURE B-3: ECONOMIC IMPACTS ATTRIBUTED TO THE CONSTRUCTION OF BUILDINGS ON VACANT PARCELS¹

	Alberta		Canada	
	Low	High	Low	High
GDP Impact (\$ millions)²				
Direct	\$970.2	\$1,940.4	\$970.2	\$1,940.4
Indirect and Induced	\$949.7	\$1,899.4	\$1,457.7	\$2,915.4
Total	\$1,919.9	\$3,839.9	\$2,427.9	\$4,855.8
Employment Impact (Person-Years of Employment)				
Direct	8,348	16,697	8,348	16,697
Indirect and Induced	7,991	15,983	12,999	25,998
Total	16,340	32,680	21,347	42,695
Labour Income (\$ millions)				
Direct	\$662.8	\$1,325.7	\$662.8	\$1,325.7
Indirect and Induced	\$496.5	\$993.1	\$791.3	\$1,582.6
Total	\$1,159.4	\$2,318.7	\$1,454.1	\$2,908.3
Taxes on Production (\$ millions)				
Direct	\$96.9	\$193.9	\$96.9	\$193.9
Indirect and Induced	\$39.0	\$78.0	\$58.3	\$116.6
Total	\$136.0	\$271.9	\$155.3	\$310.5

Source: Statistics Canada Interprovincial Input-Output Multiplier Table, 2017 (Table 36-10-0595-01), IBI Group Calculations.

- 1) Impact on construction and related industries and spin-off impact due to increased wage income.
- 2) Price before taxes and subsidies on products.

As illustrated in Figure B-3, it is estimated that the construction of buildings on vacant parcels will have a GDP impact in excess of between \$1.919 billion and \$3.839 billion in Alberta, and between \$2.427 billion and \$4.855 billion in Canada. This is anticipated to generate between 16,340 and 32,680 person-years of employment in Alberta and between 21,347 and 42,695 person-years of employment in Canada overall. As a major subset of GDP impact (approximately 60%), the labour income impact anticipated to be generated is between approximately \$1.159 billion and \$2.318 billion in Alberta and between \$1.454 billion and \$2.908 billion overall in Canada. This is estimated to result in between \$136.0 million and \$271.9 million in taxes on production in Alberta, and between \$155.3 million and \$310.5 million in taxes on production overall in Canada. As mentioned above, these economic impacts are expected over the long-term and are contingent on the attraction of industry to Leduc County.

Economic Impact Attributed to Operations

For the purposes of this analysis, IBI Group estimated economic impacts related to the operation of the buildings that could be constructed on vacant parcels. The economic impacts in this section are scoped to include the number of employees that could occupy the space and associated employment income.

Further economic impacts may be realized from other sources such as indirect and induced employment and labour income, leasing of the non-residential space, monthly servicing costs, among others but have not been included as this is beyond the scope of this study.

The potential employment during operations were estimated by IBI Group based on the net non-residential GFA at full build-out of the lands. Vacant land areas and associated potential developable non-residential GFA were parsed into categories based on the existing zoning. These categories included Industrial, Business Park, Direct Control and Agricultural/Other. The GFA was translated into a net non-residential floor area by using a net to gross ratio of 80%. Figure B-4 summarizes the estimated net ground floor area by land use.

FIGURE B-4: ESTIMATED NET DEVELOPABLE GROUND FLOOR AREA BY LAND USE

EXISTING ZONING	NET DEVELOPABLE GFA (FT ²)	
	LOW	HIGH
Industrial	3,440,405	6,880,810
Business Park	2,074,423	4,148,846
Direct Control	671,983	1,343,966
Agricultural & Other	4,886,767	9,773,534
TOTAL	11,073,578	22,147,156

Source: IBI Group

IBI Group then applied a floor space per worker ratio based on the land use to the total net developable GFA identified in Figure B-4 to estimate the number of employees that could occupy the space. The number of employees that could occupy the space in each land use category was then multiplied by a gross annual employment income associated with an appropriate North American Industry Classification for each use. The industry classifications examined generally align with the sectors that were recommended as part of the IRIS project. Figure B-5 provides a summary of the estimated number of employees resulting from the operations of buildings on vacant lands at full build-out, and Figure B-6 provides the estimated associated annual employment income.

FIGURE B-5: ESTIMATED EMPLOYEES WORKING AT FACILITIES AT BUILD-OUT

Existing Zoning	Number of Employees	
	Low	High
Industrial	2,646	5,293
Business Park	7,971	15,942
Direct Control	517	1,034
Agricultural & Other	3,759	7,518
TOTAL	14,893	29,787

FIGURE B-6: ESTIMATED ANNUAL EMPLOYMENT INCOME AT BUILD-OUT

Existing Zoning	Annual Income	
	Low	High
Industrial	\$158,981,920	\$317,963,839
Business Park	\$327,818,576	\$655,637,153
Direct Control	\$28,085,798	\$56,171,596
Agricultural & Other	\$225,818,620	\$451,637,239
TOTAL	\$740,704,914	\$1,481,409,827

Source: Statistics Canada Catalogue Number 98-400-X2016304, IBI Group Calculations.

As illustrated in Figure B-5, at full build-out it is estimated that between 14,893 and 29,787 employees could be employed within the net non-residential GFA. These employees would encompass both part-time and full-time employees. These jobs would be created as the buildings are constructed and the space is absorbed by tenants in the local market over the long-term horizon. At full build-out, it is estimated that there would be an annual employment income of between \$740.70 million and \$1.481 billion. Again, it is important to note that the realization of these jobs and employment income will rely on the success of County initiatives which would be aimed at attracting specific industries to the local market.