NISKU MAJOR EMPLOYMENT CENTRE AREA STRUCTURE PLAN BYLAW NO. 14-21

LEDUC COUNTY

A BYLAW FOR THE ADOPTION OF THE NISKU MAJOR EMPLOYMENT CENTRE AREA STRUCTURE PLAN.

WHEREAS

pursuant to Section 630 of the Municipal Government Act, being Chapter M-26, Revised Statutes of Alberta, 2000, and amendments thereto, the council of Leduc County wishes to adopt an Area Structure Plan Bylaw for the purposes of directing the use and development of lands within the County.

NOW THEREFORE

be it resolved that the council of Leduc County, duly assembled, enacts as follows:

- 1. That the Nisku Major Employment Centre Area Structure Plan be adopted by council as per the attached "Schedule A" forming part of this bylaw.
- 2. This bylaw shall take effect on the date of third reading.

Read a first time this 22nd day of June, A.D. 2021.

COUNTY MANAGER

Read a second time this 13th day of July, A.D. 2021.

MAYOR

COUNTY MANAGER

Read a third time and finally passed this 28th day of September, A.D. 2021.

MAYOR

COUNTY MANAGER







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1.0 INTRODUCTION

Purpose

The goals of the Nisku Major Employment Centre Area Structure Plan (Nisku MEC ASP) are to guide and direct development of local area structure plans and local area redevelopment plans, to accommodate new and future business while supporting existing industry, and to provide a framework for land use and development over the next 30-year horizon. The Nisku MEC ASP will achieve these goals by outlining the following:

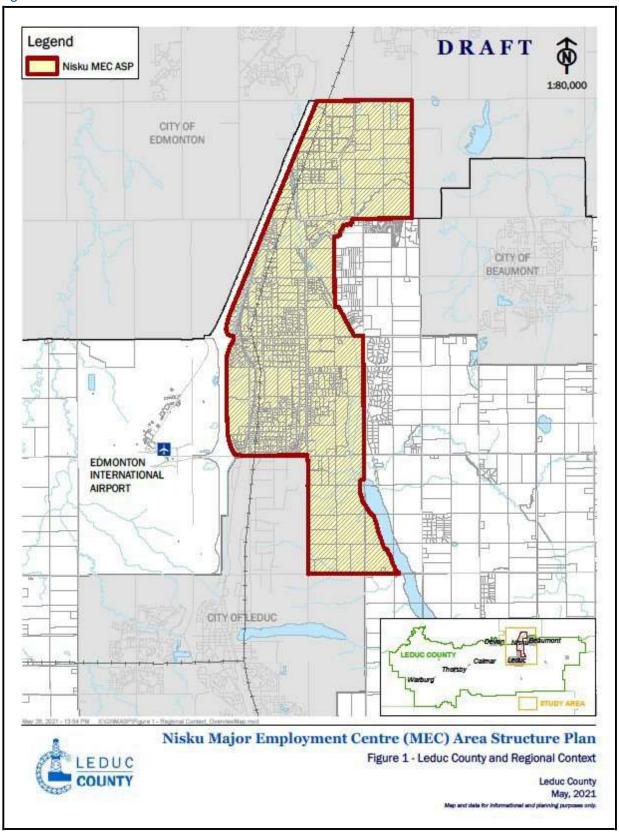
- general objectives and policies for land uses;
- environmental features and natural areas;
- transportation and utility networks; and
- implementation and staging plans for development within the plan area.

Location

The Nisku MEC ASP plan area is approximately 3,782 hectares (9,345 acres) in size. The Nisku Business Park is ideally located with the City of Edmonton to the north, the City of Beaumont to the east, the City of Leduc to the south, and the Edmonton International Airport (EIA) to the west (see Figure 1: Plan Location).

The plan area is serviced by the Canadian Pacific Rail line which offers spur lines to various parcels of the plan area. In addition, the Queen Elizabeth II Highway, Highway 625, and local and arterial collector roads provide direct access to the City of Edmonton, the Edmonton International Airport (EIA) and the surrounding region.

Figure 1: Plan Location

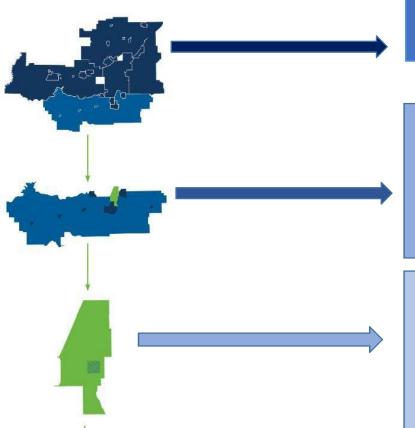


1.1 The Plan Area Vision

The Nisku MEC ASP will ensure the plan area is developed as a sustainable and economically diverse employment area that provides goods and services locally, regionally and globally. The plan area will convey prosperity through visually attractive entranceways and main corridors. It will also provide a desirable environment for businesses through efficient and effective infrastructure, transportation and services, and will serve the community by providing amenities such as green space and public transit.

2.0 Planning Context

Planning Hierarchy



Regional Planning Level

Regional plans define where and how municipalities in the region can grow and promotes complete communities.

Each municipality should align with the goals, objectives and policies of a regional plan.

MDP Planning Level

The Municipal Development Plan is the county's principal planning document. It provides strategic growth direction, overall guidance for land use and service delivery polices.

Major ASP Planning Level

Major area structure plans are highlevel plans to guide the long-term growth and development of larger areas of land. They provide strategy for development of land in the county.

Local Area Structure Planning Level

Local area structure plans or redevelopment plans build on what has been outlined in the major area structure plans providing more specific detail and information about the plan growth and development within the area.

2.2 Provincial Legislation, Acts, and Regulation

The Nisku MEC ASP is consistent with applicable provincial legislation, acts, and regulations as follows:

Alberta Municipal Government Act

Area structure plans are regulated under Section 633 of the *Municipal Government Act*. It states that an area structure plan must describe the sequence of development proposed for the area; the land uses proposed for the area; and the general location of major transportation routes and public utilities. An area structure plan must be consistent with all higher-order plans, including the Municipal Development Plan and intermunicipal development plans.

Alberta Land Stewardship Act

The Land Stewardship Act is the enabling legislation for the Land Use Framework.

Land Use Framework

The Land Use Framework was adopted in 2008 by the Government of Alberta and established the underlying approach to regional planning. The framework contains seven strategies, one of which is to create seven regional land use plans. Each regional plan will be unique according to the local context and will provide the basis for land use decision-making in the region. All authorities, plans and policies must be consistent with this plan. Leduc County is located within the North Saskatchewan Region Plan.

North Saskatchewan Region Plan

The North Saskatchewan Region Plan is not yet complete. Upon completion, the plan will provide high level direction for regional land use and decision-making.

Edmonton Metropolitan Region Growth Plan (2017)

The guiding principles of the Edmonton Metropolitan Region Growth Plan are to promote global economic competitiveness and regional prosperity; protect natural living systems and environmental assets; integrate land use and infrastructure; achieve compact growth that optimizes the infrastructure investment; ensure effective regional mobility; and ensure the wise management of prime agricultural resources.

Airport Vicinity Protection Area (AVPA)

The Edmonton International Airport Vicinity Protection Area *Regulation 55/2006* regulates land use surrounding airports to limit the impacts resulting from aircraft flying over communities as they arrive or depart.

2.3 Leduc County Plans and Strategies

The direction of the Nisku MEC ASP was informed by the following county plans:

Leduc County 2018-2021 Strategic Plan

The Nisku MEC ASP is aligned with council's strategic plan and Adheres to the vision statement "Leduc County offers an economic advantage, sustainable agriculture networks, environmental leadership and unsurpassed quality of life."

City of Leduc/Leduc County Intermunicipal Development Plan

Portions of the Nisku MEC ASP fall within City of Leduc/Leduc County IDP. The IDP is based upon five pillars of sustainability, which include: smart growth; creating vibrant communities; environmental stewardship; economic development and responsible governance and the Nisku MEC ASP aligns with these values.

Intermunicipal Planning Framework

While not a statutory plan, Leduc County, the City of Edmonton and the City of Beaumont entered into agreement to work together to address growth along their shared boundaries. The Intermunicipal Planning Framework guides existing and future land use, transportation, water, wastewater and stormwater servicing across the municipal boundaries.

Municipal Development Plan

The Nisku MEC ASP falls within the Nisku Area of the Municipal Development Plan (MDP). The MDP provides the direction for the Nisku Area's growth by promoting a concentrated and diverse mix of responsible and sustainable development. The objectives of the Nisku Area are:

- To attract a share of regional growth in employment and new industrial and commercial development through a competitive environment for investment, business incubation, and employment.
- 2. To build economic resilience through diversification and adaptation to changing economic conditions.
- 3. To support the growth and development of Edmonton International Airport and surrounding area through the implementation of the Aerotropolis Viability Study and Inter-Jurisdiction Cooperation Accord.
- 4. To encourage the development of agribusiness and value-added agriculture.
- To promote the Major Employment Area as a prosperous business/industrial park by creating aesthetically pleasing major roadway and thoroughfare landscapes.

Numerous other plans, strategies, and studies not listed above also informed the Nisku MEC ASP including the Investment Readiness and Implementation Strategy (IRIS), Aerotropolis Viability Study, Blackmud/Whitemud Surface Management Plan, and Leduc and Nisku Wildlife Corridor Studies.

2.4 Public participation

Stakeholders and the public were engaged throughout the preparation of the Nisku MEC ASP. A public participation campaign ran from October 20 to November 30, 2020 to inform stakeholders of the project and gather feedback and information on the plan area. The plan was also referred out to adjacent municipalities and agencies, and went through the Edmonton Metropolitan Region Board referral and approval process. The public participation for the project concluded with a public hearing on July 13. 2021.

3.0 Development Considerations

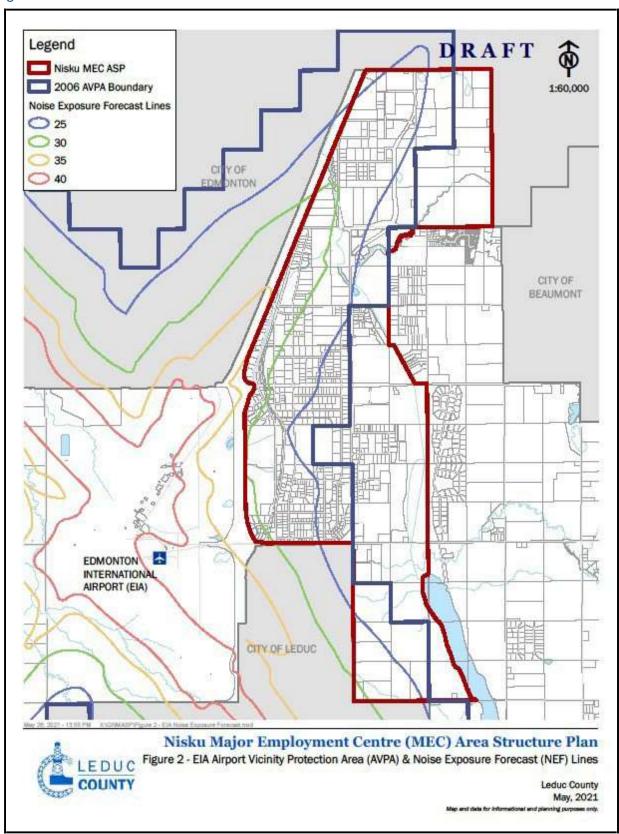
3.1 Edmonton International Airport and Vicinity Protection Area (AVPA)

The Nisku MEC ASP plan area is located adjacent to the Edmonton International Airport (EIA). The airport provides a centre for logistics and manufacturing that serves as a transportation hub to and from Leduc County, the region, and beyond.

The Noise Exposure Forecast (NEF) system, which accounts for the noise of aircraft operating at an airport based on actual or forecast aircraft movement by runways and the time of night and day of movements, regulates the types and amount of development that can occur adjacent to an airport. The plan area is located within NEF zones 25 to 35 (see Figure 2: AVPA) and, therefore, has some prohibited uses. To minimize negative impacts on the operations of Edmonton International Airport the following shall be followed:

Development and land use shall comply with the Noise Exposure Forecast (NEF) system utilized by Transport Canada and have regard to the relevant Transport Canada regulations

Figure 2 -AVPA



3.2 Major Waterways (Blackmud Creek, Irvine Creek, Saunders Lake) and Floodways, AestheticViews, and Pipelines and Well Sites.

Major Waterways and Flooding

The protection and enhancement of waterways in the plan area is critical and proper setbacks of Saunders Lake and the Irvine and Blackmud Creeks shall be established by a qualified professional. In addition, the 1:100 year flood events and floodways and floodplains shall be protected, and no permanent structures shall be allowed in this area as defined by Alberta Environment and Parks:

Floodway

The portion of the flood hazard area where flows are deepest, fastest and most destructive. The floodway typically includes the main channel of a stream and a portion of the adjacent overbank area.

Flood Fringe

The portion of the flood hazard area outside of the floodway. Water in the flood fringe is generally shallower and flows more slowly than in the floodway.

Design Flood

The minimum design standard in Alberta is the 1:100 flood, which is defined as a flood whose magnitude has a one per cent chance of being equaled or exceeded in any year.

Due to the dangers in floodways and flood fringes and possible flooding on floodplains no permanent structures shall be built in these areas. In addition, no hazardous material shall be placed in the flood fringe. All development shall comply with Alberta Environment and Parks regulations and standards.

Aesthetic views

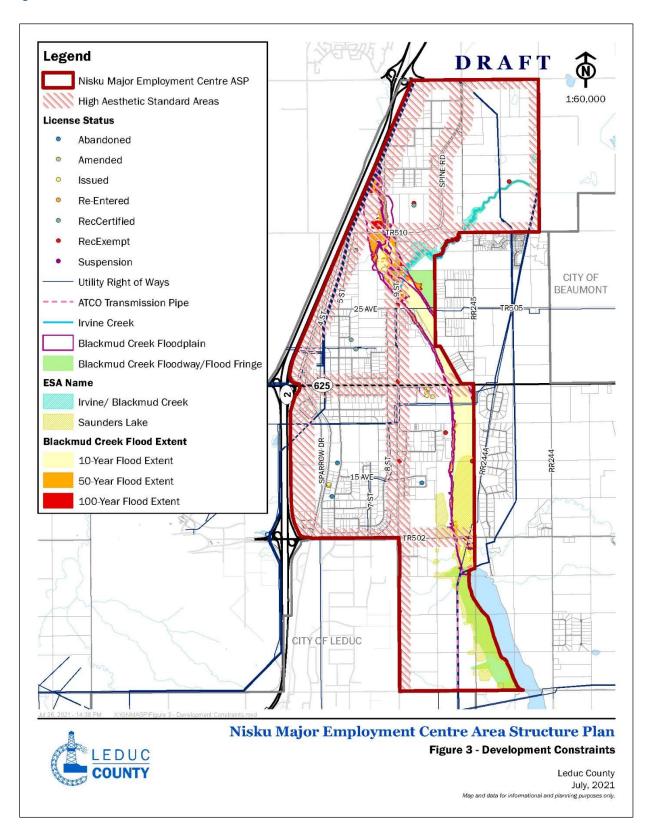
Aesthetic views shall be considered as shown on Figure.3 Local Area Structure Plans will develop specific methods for aesthetic views, but at minimum:

- 1. Employment Areas located adjacent to major transportation corridors, residential areas or country residential areas shall maintain a high aesthetic standard and limit noise, odour, visual, light, or other nuisance.
- Outdoor storage should not be permitted, unless it is for temporary inventory storage and accessory to a primary use. In this instance then said storage shall be fully screened.
- 3. Noise attenuation features, buffers, or landscaping will be required along the abutting or adjacent property lines to reduce any impacts on adjacent residential or business use.

Pipelines and Well Sites

Throughout the project area there are both active wells and pipelines as well as abandoned or reclaimed wells and pipelines (see Figure 3: Constraints). It is the responsibility of the developer to ensure all wells and pipelines are shown and if necessary setbacks are followed as per the Alberta Energy Regulator (AER).

Figure 3 – Constraints



3.3 Residential Areas

There are residential areas within and adjacent to the plan area, with the majority of residential lands being located to the east. In addition, within the Nisku MEC ASP there is a small area located in the Nisku Central (Hamlet of Nisku) area which also contains several residential parcels. Leduc County supports the continued use of these parcels for residential purposes until they are converted into industrial or commercial uses. Development shall mitigate noise, light, odour, and other nuisances respecting these residential areas.

4.0 Plan Policies and Objectives

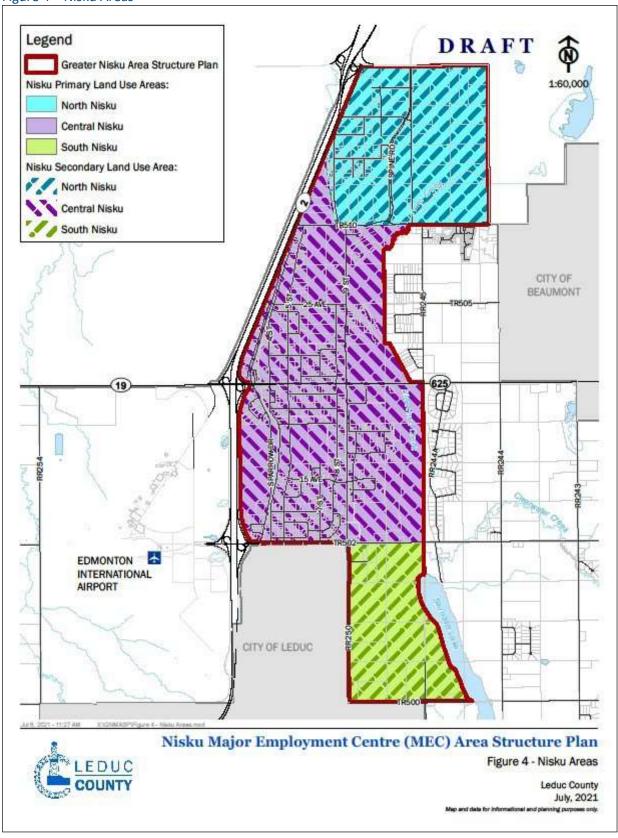
4.1 Land-use Concepts

Within the Nisku MEC ASP plan area the land uses are divided into primary and secondary developments and are defined as:

- <u>Primary developments</u> are land uses or developments that are the preferred uses and are highly supported within the area; and
- <u>Secondary developments</u> Are land uses or developments that may support primary uses or developments and their employees. These developments should be located along major corridors or intersections. However, they can also be located within the plan area if they can provide evidence to support another location that is acceptable to Leduc County.

The Nisku MEC ASP provides direction to achieve cohesion of the overall area. The plan area is divided into three main areas, with both primary and secondary land uses and development types listed (see Figure 4: Nisku Areas).

Figure 4 – Nisku Areas



4.2 General Objectives

- 1. The three primary areas function to ensure a clear vision for development that is understandable and focused. Each area focuses on specific business types to assist in the colocation of like development and infrastructure, which can foster business growth while aiding in reducing potential conflicts within the plan area.
- 2. That intermunicipal cooperation including Intermunicipal Development Plans and/or Intermunicipal Planning Framework Agreements are included in all levels of planning documents to assist in regional and sub-regional development and to reduce duplication of services.

4.3 General Policies

- The Nisku MEC ASP encourages redevelopment and infill of brownfields or under-utilized properties and the reuse of structures. A 'leap frog' approach to development is not supported.
- Buffers or transitional land uses are required for non-residential development adjacent to
 the Vistas or other populated areas to minimize nuisances. Any potential nuisance adjacent
 to the residential area shall be mitigated through site design or other mitigation measures.
 All development shall ensure adequate separation and buffers between conflicting land
 uses.
- 3. No new heavy industrial development shall be allowed within the Nisku MEC ASP area.
- 4. Development shall follow architectural and landscape design guidelines along key entrances, roadways and nodes.
- 5. All future development in the Nisku MEC ASP plan area shall be supported by technical studies undertaken by certified professionals to the satisfaction of the County.
- 6. A local area structure plan (LASP) or local area redevelopment plans (LARP) is required prior to development in order to provide more specific and detailed information in support of a localized vision. These plans should include, at minimum:
 - · objectives;
 - policies;
 - transportation andinfrastructure;
 - environment constraints;
 - parks and recreation;
 - staging and development pattern(s);
 - public engagement;
 - outline plan requirements; and
 - any other requirements the County may deem necessary including, but not restricted to, floor area ratios to maximize building sites, relevant statistical data and specific background information.

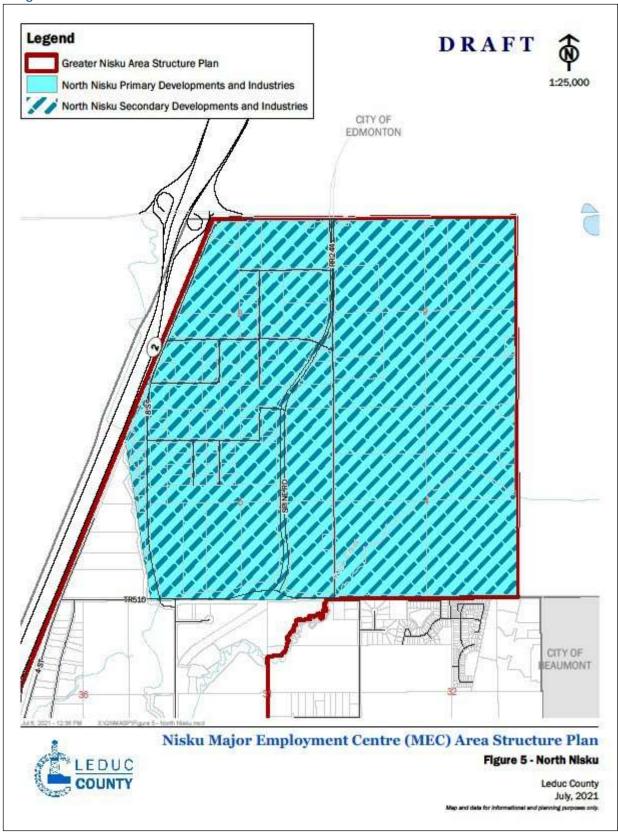
4.4 Nisku North Area

Nisku North (see Figure 5: Nisku North) shall be anchored by warehousing and logistics and agribusiness development which comprises a major portion of northern plan area. Warehousing and logistics are primary developments which are highly encouraged to develop in Nisku North.

However, secondary developments such as, commercial, retail and hospitality are also encouraged along major Highways such as the Queen Elizabeth II Highway and along major arterial roads such as the Nisku Spine Road, intermunicipal boundaries such as 41st Avenue SW and Range Road 243, and where the plan area abuts residential areas such as along Township Road 510. Secondary uses may also develop in other areas of Nisku North as long as they do not pose a negative impact on the primary uses.

If a Greenfield or infill area does not have local area structure plans or redevelopment plans, one shall be completed prior to any further development.

Figure 5 – Nisku North



4.4.1 Objectives

Priority Development Objectives:

1. To encourage the organized development and expansion of warehousing and logistics and agribusiness as primary uses, supported by suitable commercial development.

Design Objectives:

- 1. To encourage compatible development, which support the sharing of information, products, and supply chain linkages in the planarea.
- 2. To encourage a connected cohesive community through a designated trail system and sidewalks providing walkability networks to, from, and within employment areas, open spaces, and environmentally sensitive areas.
- To ensure architectural design and landscaping requirements within the district are followed and that the Queen Elizabeth II Highway, Nisku Spine Road and Township Road 510 corridors are developed to a high aesthetic standard.

4.4.2 Land Use Policies

Priority Development Policies:

 Development in North Nisku shall not negatively impact or interfere with existing or future warehousing, logistics or commercial and office development and where possible should be placed to maximize linkages and logistic to other developments.

Design Policies:

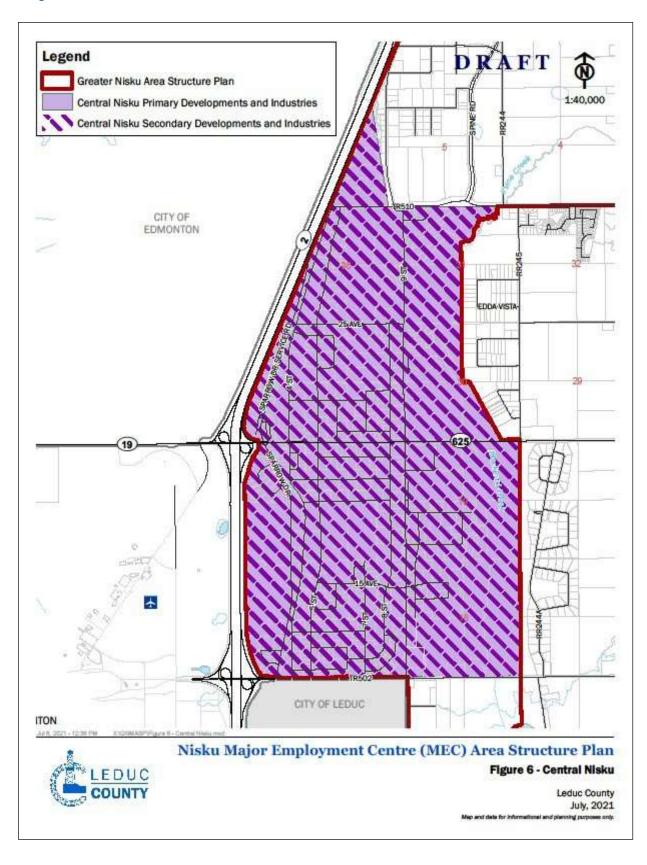
- 1. Parcel size may be flexible to meet the needs of both primary and secondary uses as long as the uses are compatible and meet safety and engineering standards.
- 2. Walkable connections such as sidewalks and trails shall be integrated into new developments to provide linkages to open spaces, green spaces, commercial and retail nodes, and other key areas for employee's enjoyment and community development. Further detail shall be provided through local area structure plans or redevelopment plans.
- 3. Businesses shall operate in such a way as to limit disturbance outside of the enclosed buildings or property. Buffers and/or transitional land uses to minimize conflicts and nuisances between uses shall be identified in local area structure plans or redevelopment plans.
- 4. No outdoor storage areas shall be allowed as a primary use. Outdoor storage may be allowed as a secondary use in support of a primary use so long as the storage is minimized in size, and duration. Any outdoor storage shall be fully screened.
- 5. Commercial and retail services are encouraged to locate in high-visibility areas and shall have access to local and major transportation networks. Developments in these areas shall have a higher standard of site and landscaping standards and shall have limit outdoor storage for the use of inventory and building materials only.

4.5 Nisku Central Area

The Central Nisku Area (see Figure 6: Central Nisku) is the historic core of the Major Employment Centre, and the primary developments are the energy sector, manufacturing, and light to medium industrial developments. However, secondary developments such as, commercial, retail and hospitality are also encouraged along major Highways such as the Queen Elizabeth II Highway and Highway 625, along major arterials and intermunicipal boundaries such as Airport Road, and where the plan area abuts residential areas such as areas adjacent to the Blackmud Creek and the country residential areas to the east (the Vistas). Secondary uses may also develop in the central area as long as they do not pose a negative impact on the primary uses.

The Nisku Central Area is the subject of the forth coming Central Nisku Local Area Redevelopment Plan.

Figure 6 – Central Nisku



4.5.1 Objectives

Priority Development Objectives:

- 1. To encourage the development, expansion and support of current and future energy, light industrial, commercial, retail, and hospitality sectors.
- 2. To promote, diversify and optimize underutilized brownfields and vacant parcels in order to maximize the floor area ratios within the Nisku Central area.
- 3. To encourage the relocation of outdoor storage uses to other planned areas of the county as defined by the Municipal Development Plan.

Design Objectives:

- 1. To encourage compatible developments, which support the sharing of information, products and supply chain linkages in the planarea.
- 2. To mitigate or eliminate noise, odour, light and industrialized sights using design standards and techniques.
- 3. To ensure new developments are compatible with adjacent land uses and municipalities.
- 4. To encourage connections through designated trails, sidewalks, open spaces and to use a variety of transportation methods to provide linkages for employees, residents and visitors.
- 5. To ensure that current and future developments adhere to the architectural and landscaping guidelines within nodal areas (as determined in LASP's or LARP's), areas adjacent to other municipalities, major arterial roadways and highways.

4.5.2 Policies

Priority Development Policies:

- 1. Diversification of industrial development opportunities within the Central Nisku area shall be supported.
- In addition, infill development and the development of brownfield or under-utilized properties is encouraged; and compatible developments, which could support the sharing of information, products and linkages, is also highly encouraged.

Design Policies:

- Industrial or commercial development shall follow the architectural and landscape design guidelines within the Central Nisku Local Area Redevelopment Plan. Key nodes and areas may include, but are not limited to; the Nisku Spine Road, Queen Elizabeth II Highway, Highway 625, Airport Road, Sparrow Drive and 30th Avenue.
- Parcel size and land use districts may be flexible to the needs of development and market demands as long as the uses are compatible with one another and meet safety and engineering standards.
- Walkable connections such as sidewalks and designated trails shall be considered as well
 as public transportation linkages and connections in new developments and redeveloping
 areas to provide connectivity to key areas for employee's enjoyment and community

development.

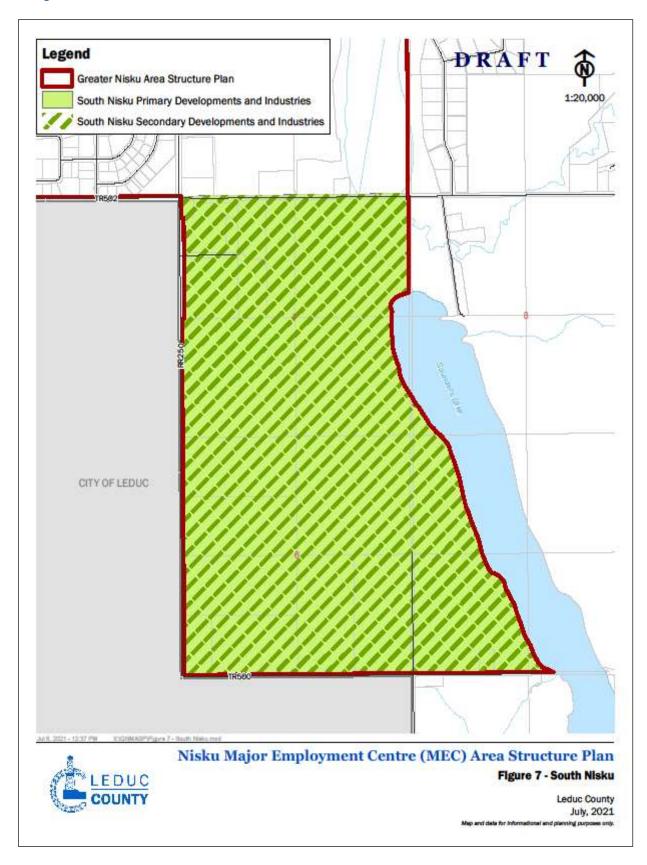
- 4. The use of buffers or transitional land uses shall be required to minimize conflicts between industrial and residential developments.
- 5. All future or altered structures, parking lots and buffer/transitional areas shall conform to Leduc County architectural and landscaping guidelines. Specifically, in cases in which developments face or abut residential uses, consultation shall occur with adjacent residences and Leduc County prior to development occurring.
- Commercial and retail services are encouraged in high-visibility areas and shall have access
 to local and major transportation networks. Developments in these areas shall have higher
 site and landscaping standards.

4.6 Nisku South Area

Nisku South (see Figure 7: Nisku South) should be anchored by light industrial and agribusiness developments. These types of developments are seen as primary developments which are highly encouraged to develop in Nisku South. However, secondary developments such as, commercial, retail and hospitality development are also encouraged along major arterials and intermunicipal boundaries such as Airport Road, the Nisku Spine Road and 65th Avenue.

Nisku South is comprised of the North West Saunders Lake Local Area Structure Plan.

Figure 7 – Nisku South



4.6.1 Objectives

Priority Development Objectives:

- 1. To encourage the development and expansion of light industrial, business, and agribusiness development.
- 2. Further residential development or residential redistricting is not supported, and shall be directed to locate to more appropriate areas of the county.

Design Objectives:

- 1. To encourage compatible development, which support the sharing of information, products and supply chain linkages in the plan area.
- 2. To ensure that that local area structure plans and local area redevelopment plans indicate where appropriate buffering is to be provided to mitigate any negative impacts on adjacent and nearby urban communities.
- 3. To encourage a connected cohesive community through a designated trail system and sidewalks providing walkability networks to, from, and within employment areas, open spaces, and environmentally sensitive areas.
- To ensure architectural design and landscaping requirements within the Nisku South area are followed and that the Nisku Spine Road and Airport Road corridors are developed to a high aesthetic standard.

4.6.2 Policies

Priority Development Policies:

- 1. Within the South Nisku area, a variety of development and uses are supported, and compatible developments is encouraged.
- 2. Development is encouraged to provide trails and connections to Saunders Lake where possible.

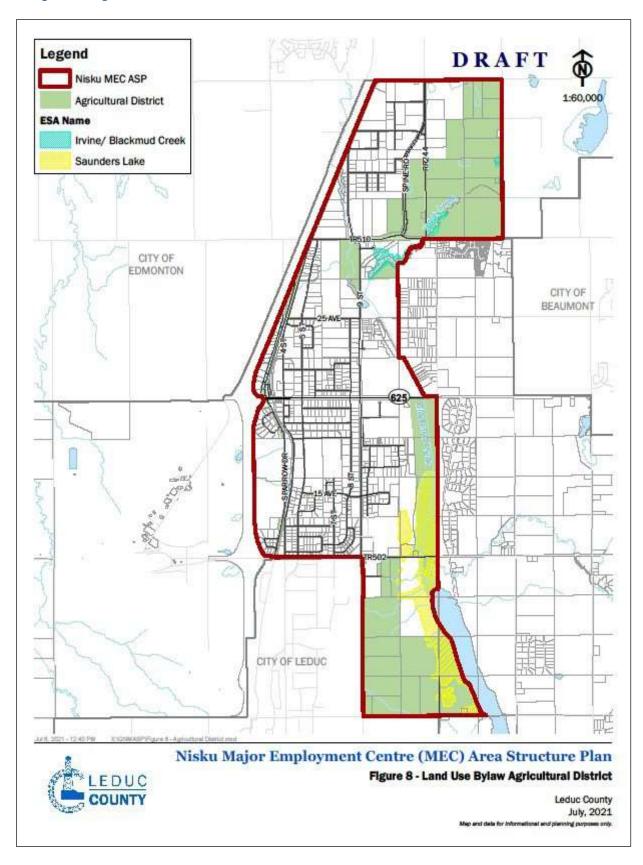
Design Policies:

- 1. Vehicular access to the lake will be limited to certified points within the plan area.
- 2. Buffers or transitional land uses shall be required to minimize conflicts between land uses or developments.
- 3. Connections such as sidewalks, designated trails, bikes lanes or trails and public transportation stops shall be located near local parks, Saunders Lake, and other natural areas for employees, residents and the general public to enjoy the area.
- 4. Commercial and retail services are encouraged to locate in high-visibility areas and shall have access to local and major transportation networks. Developments in these areas shall have higher site and landscaping standards and shall have minimal outdoor storage, if any.

4.7 Agriculture

Within the greater Nisku area, the importance of agriculture is recognized. While all agricultural lands within the greater Nisku area are planned for future conversion to employment uses, development shall be staged in a manner that maintains higher capability land in production for as long as practically possible (see Figure 8: Agriculture Areas).

Figure 8 – Agriculture Areas



4.7.1 Objectives

- 1. To maintain agricultural land in agricultural production until it is required to accommodate future development.
- 2. To ensure access for machinery and other farm implements into and out of agricultural areas.
- 3. To ensure subdivision and development is limited on agricultural lands until the lands are needed for employment growth.
- 4. To promote diversity and encourage value-added agriculture and agribusiness.
- 5. To encourage maintaining large parcel sizes to support ongoing agricultural operations.
- 6. To ensure agricultural lands are properly planned for and considered within local area structure plans or redevelopment plans.
- 7. To ensure soil is maintained, managed and used appropriately within the plan area.
- 8. To ensure the development of aesthetic standard and/or low nuisance uses and development occur on agricultural lands until such a time as the lands are prepared to development into the surrounding business commercial or industrial developments.

4.7.2 Policies

- 1. Agricultural lands shall be addressed in local area structure plans or redevelopment plans.
- 2. Access to agricultural parcels shall be maintained until such time as those lands are required for employment uses.
- 3. Agricultural parcels shall be maintained in agricultural use until an employment need is deemed necessary as outlined in the Nisku MEC phasing plan.
- 4. No further subdivision of agricultural parcels shall be allowed until a local area structure plan or redevelopment plan is approved.
- 5. Best management practices are encouraged when agricultural lands are adjacent to environmentally significant areas such as Saunders Lake and Irvine and Blackmud Creeks.
- 6. Value added agriculture and agri-business development is encouraged within the plan area.
- 7. All local area structure or area redevelopment plans shall include an Agricultural Impact Assessment (AIA) and shall conform to all local and regional standards.
- 8. Soil is a limited, non-renewable resource and shall be managed accordingly. This should include, if possible, the reuse and recycling of the resource within the plan area.
- 9. A soil management plan shall be required in local area structure plans or redevelopment plans that contain agricultural areas.

4.8 Natural Environment and Open Spaces

Environmentally Significant Areas (ESA), open spaces, parks and designated trails systems or connections shall be included in local area structure plans and local area redevelopment plans (see Figure 9: Reserves, Open Space and Parks, Trails and Corridors/Linkages). These spaces will allow for nature to grow and provide habitat for a variety of species. In addition, these areas play an important ecological and social role in the development of communities in Leduc County.

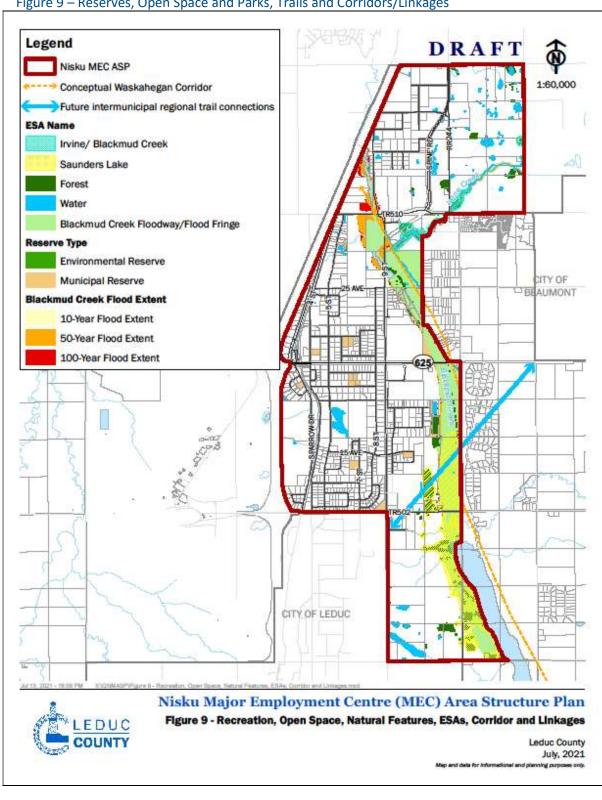


Figure 9 – Reserves, Open Space and Parks, Trails and Corridors/Linkages

4.8.1 Objectives

- 1. To mitigate airborne contaminants, vibration, light and noise emissions within the plan area.
- 2. To minimize the adverse impacts of development on environmentally significant areas.
- 3. To protect, and ensure proper setbacks of the Blackmud and Irvine Creek floodways and floodplains as per the recommendations of the Leduc County Environmentally Significant Areas Study and the Government of Alberta.
- 4. To ensure the protection of the top of bank, steep slopes and adjacent flora and fauna of Saunders Lake and other waterbodies and watercourses as per the Leduc County Environmentally Significant Areas Study and Alberta Environment and Parks regulations.
- 5. To ensure connectivity and community development through the use of pedestrian linkages, environmentally significant areas, open spaces, designated trails, wildlife corridors, and recreation areas.
- 6. To encourage the planning and intermunicipal collaboration of trail networks, amenities and services that can support diverse modes of Transportation and Mobility Hubs on a regional or sub-regional level.
- 7. To ensure that watercourses, waterbodies, wetlands and habitat adjacent to development are protected where possible.
- To ensure that local area structure plans, local area redevelopment plans and outline plans refer
 to the Strawberry Watershed Riparian Assessment study and include mitigation methods as to
 not further degrade the watershed.
- 9. To encourage recreational uses in the plan area where they can be accommodated and fit adjacent land uses.
- 10. To implement the recommendations of the Nisku Wildlife Corridor Report and Leduc Wildlife Corridor Study.
- 11. To ensure mitigation methods are used, reducing the effects of development on the environment.
- 12. To ensure development considers the cumulative effects on surface water and groundwater as per Leduc County standards and provincial regulations.

4.8.2 Policies

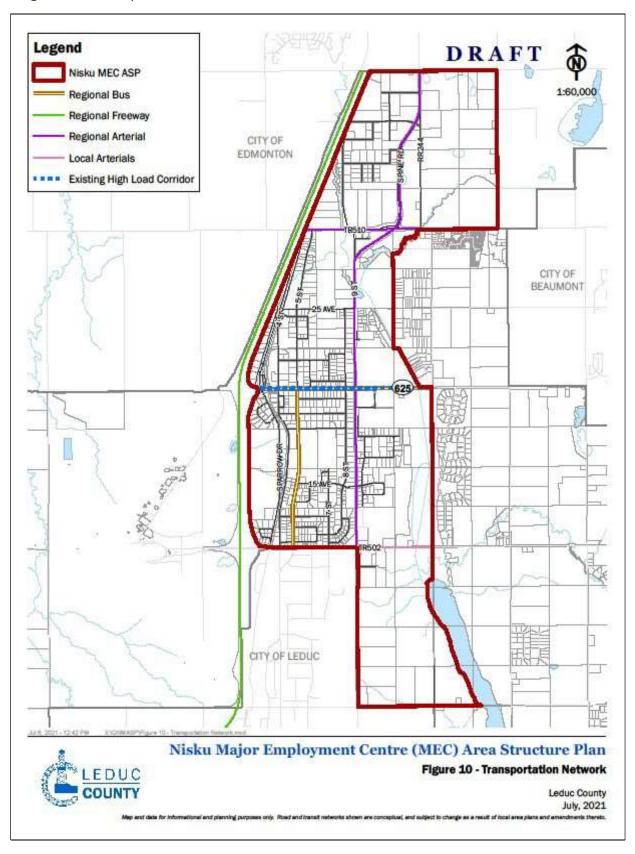
- 1. Leduc County's Environmentally Significant Areas, Nisku Wildlife Corridor Report and Leduc Wildlife Corridor Study shall be considered when subdivision and development projects are proposed.
- 2. The protection of natural areas and environmentally significant areas shall be through environmental reserve, municipal reserve, and conservation reserve dedication or easements.
- 3. The dedication of municipal reserve within the plan area shall emphasize taking money in place of land where park sites are not deemed necessary.
- 4. Municipal reserve credit shall not be given for utility corridors or public utility lots.
- 5. All required studies, reports and information supporting the proposed development shall be completed by a qualified professional.
- 6. All local area structure plans or redevelopment plans shall include an Environmental Impact Assessment level one.
- 7. Top of bank, setbacks, 1:100 year floodplains and floodways and other natural constraints shall be established by a qualified professional to ensure public safety, conservation of the natural environment, and to safeguard aesthetic views.
- 8. Local area structure and redevelopment plans shall identify mitigation methods for pollution, which may include but are not limited to, light, sound, dust, and noise.

- 9. Environmental or municipal reserve lots or utility lots may be used as buffers between incompatible land uses.
- 10. Where possible, environmentally significant features shall be incorporated into development proposals.
- 11. Where possible, LEED, BUILT Green, low impact development, or other green building practices should be included in new development and redevelopment proposals.
- 12. Local area structure plans and local area redevelopment plans shall detail the mitigation, protection, and enhancement methods for environmentally significant areas, including setback requirements.
- 13. Local area structure plans and local area redevelopment plans may work in collaboration with neighboring municipalities to ensure environmentally sensitive areas, watersheds, watercourse, waterbodies and wetlands to include sub-regional studies and frameworks assessments, inventories, studies and policies in order to better integrate and restore the ecosystem and natural areas on a regional basis.
- 14. Local area structure plans and local area redevelopment plans shall support the regional and sub-regional trail networks and plan for such things as amenities, services, and playgrounds that are inclusive for all ages, sexes and abilities, where possible within the plan area.

4.9 TRANSPORTATION

Transportation infrastructure supports local, regional, and global connectivity, as well as provides County residents with an efficient network that supports all activities within the municipality (see Figure 10: Transportation). The Leduc County Transportation Master Plan shall be used and referenced in all areas of the Nisku MEC ASP. In addition, The City of Leduc/Leduc County Intermunicipal Development Plan, the Inter-Jurisdiction Cooperation Accord and the Intermunicipal Planning Framework Agreement shall be referenced when coordinating and integrating infrastructure with adjacent regional partners where appropriate.

Figure 10 – Transportation



4.9.1 Objectives

- To ensure that local area structure plans and redevelopment plans incorporate details for public transportation, connected and autonomous vehicles, and passive transportation networks.
- 2. To ensure development with high traffic levels have proper access and signaling and are connected to transportation, utilities and priority infrastructure networks as determined by regional and Leduc County transportation and utilities masterplans.
- 3. To ensure the development of multi-model and inter-model hubs within local area structure plans and redevelopment plans.
- 4. To ensure in local area structure plans and redevelopment plans that regional connections, diverse modes of transportation, and transportation hubs are included and planned for.
- 5. To ensure local area structure plans and local area redevelopment plans include the recommendations of Intermunicipal Development Plans and/or Intermunicipal Planning Framework Agreements and associated studies with regards to transportation and infrastructure.
- 6. To create, internal road networks that provide a contiguous road pattern and allow traffic on highways, and collector roads to move effectively, efficiently and safely.
- 7. To encourage intermunicipal planning to assist in the reduction of the duplication and cost of transportation services.
- 8. To encourage cost sharing of transportation and infrastructure between intermunicipal partners, where it is deemed appropriate.
- 9. To support the planning and delivery of regional and local transportation by participating in regional transportation initiatives with the Edmonton International Airport, the Government of Alberta and neighbouring municipalities.
- 10. To ensure that county, regional, and provincial studies, plans and policies are addressed within local area structure plans and local area redevelopment plans.
- 11. To encourage new developments to locate close to existing developments to create synergies.
- 12. To partner with Edmonton International Airport to create the conditions necessary for it to continue to be a regional economicgenerator.
- 13. To encourage the maximization of access to the rail mainline and spur lines.
- 14. To support the expansion and exploration of additional transit service within the plan area.
- 15. To ensure parking be located onsite and is sufficient for employees, customers and deliveries.
- 16. To ensure that where permitted, off-site parking be provided to the satisfaction of the county and will not prohibit traffic flow or produce safety risks.

4.9.2 Policies

- 1. Developers shall meet with the Engineering and Utilities and Planning and Development departments to discuss transportation services prior to the development of a local area structure plan or local area redevelopment plan.
- 2. Transportation plans within local area structure plans and redevelopment plans shall include at minimum:
 - I. Details, connections and the type of transportation for how employees can travel from home to work and back;
 - II. How and where goods and services will be transported locally, regionally, provincially, nationally and/orglobally.
 - III. Connections to tourist, institutional, retail, commercial, residential and recreational areas within and adjacent to the planarea;
 - IV. Pedestrian and non-motorized connections to open spaces and environmentally sensitive areas;
 - V. Details on the types of transportation networks such as, designated trails, sidewalks, bike paths, roads, pullovers, and other network linkages.
- Local area structure plans and local area redevelopment plans shall include specific locations
 for transit, multi-modal and/or inter-modal transportation services, and shall prioritize
 locations of high demand to include alternative modes of transportation.
- 4. Local area structure plans and local area redevelopment plans shall include and support various methods of transportation and Mobility Hubs within the region as outlined in the Integrated Regional Transportation Master Plan.
- Leduc County shall collaborate with Edmonton International Airport, adjacent municipalities, and regional partners to support and enhance regional and global connectivity.
- 6. Leduc County shall confirm that developments ensure safety, efficiency, and cost-effectiveness of transportation services.
- 7. Transportation systems shall be constructed based on the recommendations provided by Leduc County plans and studies where applicable.
- 8. Developments in the plan area are to contribute proportionately to the construction and expansion of new and existing municipal roads. Exact contributions will be determined at the time of subdivision or development as specified in the Greater Nisku and Area Off-Site Levy Bylaw (30-17).
- 9. The construction of internal roads in the plan area shall comply with the County's municipal design standards. The locations of all internal collector and arterial roads shall comply with the locations as outlined in the Leduc County Transportation Master Plan.
- 10. New roads in the Nisku MEC ASP plan area shall be designed to minimize surface runoff from entering the stormwater system.
- 11. A review of the amount of traffic volume shall be completed ensuring engineering and safety standards are maintained as required by the County.
- 12. Appropriate traffic control devices shall be designed to manage traffic. Potential traffic control and calming devices include, but are not limited to, advisory, regulatory, directional and seasonal signage.
- 13. Roadside mailboxes, transit, and multi-modal and Inter-modal pullouts and stops will be incorporated at the local area structure plan or local area redevelopment plan level.
- 14. Joint planning or cost sharing Joint with intermunicipal partners may be established in the

- development of transit service or road and infrastructure development or expansion within the plan area, where possible.
- 15. Public transportation and connected and/or autonomous vehicle linkages and connections shall be considered in local area structure plans or redevelopment plans.
- 16. All development shall obtain any county or provincial permits to protect any right-of-ways or future road widening or infrastructure expansion.
- 17. Highway 625 is a regionally significant corridor system and shall function at a high load capacity to ensure traffic flow and regional connectivity is maintained.
- 18. No on-street parking is permitted within the Nisku MEC ASP plan area unless it can be demonstrated that it will not prohibit traffic flow or produce safety risks, to the satisfaction of Leduc County.

5.0 UTILITIES

Utility services promotes healthy living environments and business development. The county's regional wastewater systems along the Queen Elizabeth II Highway corridor and Township Road 510 and water services along Highway 2 serve the business community within the plan area (see Figure 11: Utilities). Future utilities should ensure developments have safe, reliable water and wastewater systems, and use environmentally responsible methods for dealing with stormwater and runoff. In addition, current and future development should ensure utility connections are connected and adhere to Leduc County standards.

5.1 Objectives

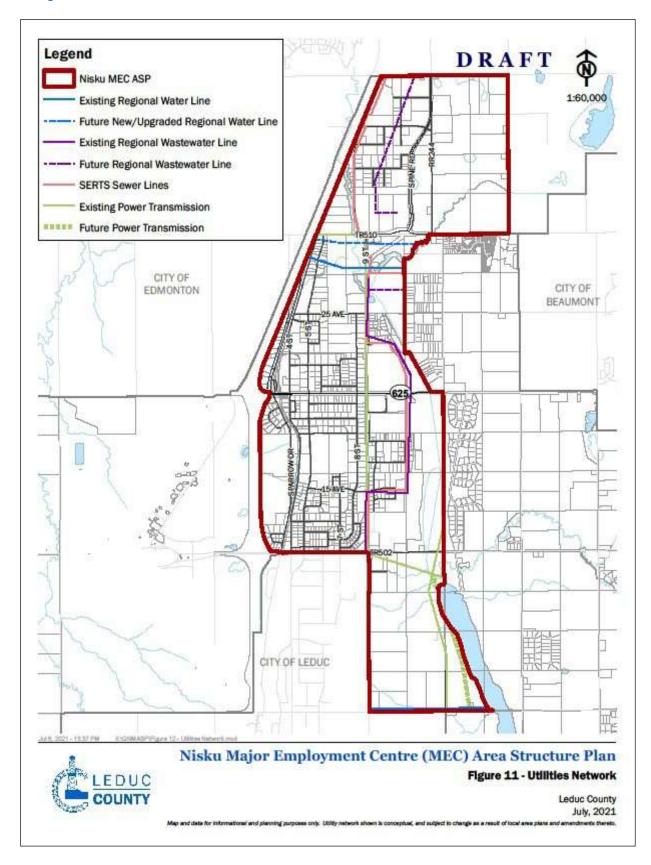
- 1. To ensure development follows Leduc County's utilities standards and requirements.
- 2. To ensure stormwater management facilities, utility lots, and right-of-ways are identified and included within local area structure plans or local area redevelopment plans.
- 3. To ensure water and waste water services are maintained and constructed to Leduc County's standards and provincial safety coderequirements.
- 4. To encourage the planning and possible cost sharing of utilities between intermunicipal partners, whereappropriate.
- 5. To ensure safeguard measures are in place to control runoff, and to ensure that leakages do not enter the environment degrading water quality and increasing water quantity.
- 6. To ensure the recommendations of Intermunicipal Development Plans and/or Intermunicipal Planning Framework Agreements and associated studies are included in lower level documents with regards to utilities and drainage.
- 7. To ensure future developments plan for, and are connected to, telecommunication systems.

5.1.2 Policies

- 1. Developers shall meet with the county's Engineering and Utilities and Planning and Development departments to discuss utility services prior to the development of a local area structure plan or local area redevelopment plan.
- 2. Non-agricultural parcels shall be fully serviced and connected to all infrastructure and utility systems. Verification and analysis of connections shall be completed and comply with Leduc County standards and practices prior to development.
- 3. All development shall follow Leduc County standardsto:
 - I. Serve as a guide to the extension of municipal water and waste water services and as a framework for stormwater management in the plan area;
 - II. Confirm that development meets current Alberta Safety Codes Council requirements for all utilityservices;
 - III. Plan all stormwater facilities, including public utility Lots, complete with drainage and grading plans; and
 - IV. Connect to telecommunication networks.
- 4. Developments shall control drainage and runoff so not to negatively affect the Blackmud and Irvine Creek systems, and ultimately the North Saskatchewan River. All plans must follow county, regional and provincial standards and recommendations.
- 5. Stormwater management facilities will be developed as per Leduc County standards and shall ensure that water quality runoff is improved prior to it being discharged into a watercourse or waterbody.

- 6. Local area structure plans and local area redevelopment plans shall include the recommendations of the relevant Intermunicipal Development Plans and/or Intermunicipal Planning Framework Agreement and associated studies, such as the Blackmud/Whitemud Creek Surface Water Management Study Final Report with regards to utilities and drainage.
- 7. Joint planning and possible cost sharing with intermunicipal partners may be established in the development of utilities or telecommunications in order to reduce duplication of service delivery across municipal boundaries.
- 8. Telecommunication networks shall be contiguous and installation of connections shall be operated in compliance with federal government and county requirements.
- 9. Future local area structure plans and local area redevelopment plans shall further detail utility services within the Nisku MEC ASP planarea.

Figure 11 – Utilities

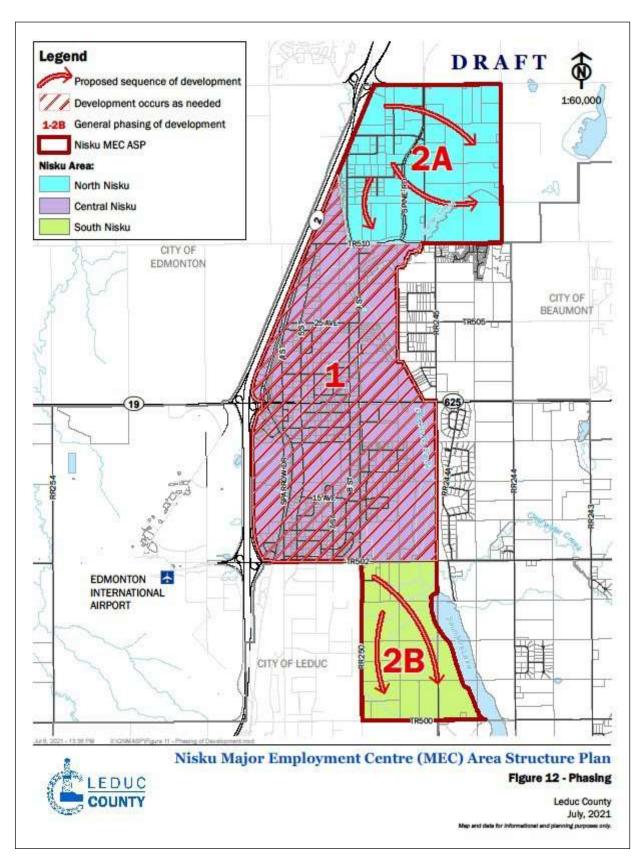


6.0 Plan Implementation and Phasing

Development staging and extension of infrastructure will be logical, efficient, and economical while having regard for potential environmental and ecological impacts (see Figure 11: Phasing of Development).

- 1. Implementation of this plan will occur through several processes, such as:
 - Review of existing statutory and non-statutory plans within the Nisku MEC ASP ensuring alignment and consistency;
 - II. The completion of new plans and policies to implement objectives of this plan;
 - III. Land-use redistricting, subdivision and development process; and
 - IV. Local Area Structure Plans and Local Area Redevelopment Plans and other statutory and non-statuary plans shall be referred to the appropriate municipalities for input and comments as per their Intermunicipal Development Plans, Intermunicipal Planning Frameworks and Accords.
- 2. Phasing of this plan will follow the phasing plan as shown on Figure 11 unless it can be demonstrated that it will not negatively affect the plan area in accordance with the policies of this plan.
- 3. The Nisku Central area is primarily a built-up brownfield area and infill development will occur throughout the area. Roads and utilities buildout will be limited in this area.

Figure 11 – Phasing of Development



6.1 Objectives

- 1. To ensure that the phasing of development follows the strategic goals set out in this plan.
- 2. To ensure that regulatory tools are developed to implement the plan's goals and objectives.
- 3. To ensure future plans are referred to municipalities as per Intermunicipal Development Plans and Intermunicipal Planning Frameworks.

6.1.2 Policies

- 1. Subdivision and development shall adhere to the development staging and phasing policies of this plan.
- 2. Development(s) shall follow logical and sound development patterns that account for:
 - I. Current and future transportation, communication, and other infrastructure plans as determined by Leduc County;
 - II. Current and future county statutory and non-statutory plans;
 - III. Current and future requirements of health and safety regulations.
- 3. To allow subdivision(s) and development(s) to proceed as the phasing of the area is described on Figure 11.
- 4. To mitigate and/or prevent negative impacts on environmentally significant areas, floodways and/orfloodplains.
- 5. Local Area Structure Plans, Local Area Redevelopment Plans shall be referred to the regional body and neighbouring municipalities as required by the regional growth plan and/or Intermunicipal Development Plans or Intermunicipal Planning Frameworks.
- 6. To accommodate subdivisions and/or developments that do not conform to the phasing plan, subject to the following criteria:
 - I. full municipal servicing;
 - II. Compliance with all applicable transportation plans;
 - III. Compliance with all other federal, provincial and county requirements;
 - IV. Compliance with all other policies of this major area structure plan; and,
 - V. That the subdivision and/or development is contiguous and Municipal Reserves have been addressed subject to the satisfaction of Leduc County.

7.0 Definitions

Active Transportation - Human-powered travel, including but not limited to: walking, cycling, skate boarding, inline skating and travel with the use of mobility aids, including motorized wheelchairs and other power-assisted devices moving at comparable speeds.

Agribusiness – The marketing and distribution of farm products that are related to cultivating, processing and distributing food, as well as the manufacturing and distribution of farm equipment and supplies, and the processing, storage, and distribution of farm commodities.

Concept Plan – A non-statutory land use plan that provides greater detail of the proposed development and/or subdivision.

Designated trails or Trail System - A path, track, or unpaved lane or roadway or series of paths, tracks, or unpaved lane or roadways as designated by the municipality or other governing body.

Environmentally Significant Area - A landscape element or area with important and/or unique environmental characteristics essential to the long-term maintenance of biological diversity, soil, water or other natural processes, both within the ESA and in a regional context.

Fiscal Analysis - Involves activities such as formulating budget and cost estimates to support plans, programs and activities. Fiscal Analysts review and evaluate budget requests, review requests for apportionment and allotments and review, control and report obligations and expenditures.

Flood Plain - A floodplain or flood plain is an area of land adjacent to a stream or river which stretches from the banks of its channel to the base of the enclosing valley walls, and which experiences flooding during periods of high discharge. The soils usually consist of clays, silts, and sands deposited during floods.

Floodway - The portion of the flood hazard area where flows are deepest, fastest and most destructive. The floodway typically includes the main channel of a stream and a portion of the adjacent overbank area.

Green Development – The practice of providing development and using processes that are environmentally responsible and resource-efficient throughout a development's life-cycle. Factors for consideration include siting to design, construction, operation, maintenance, renovation, and demolition.

Heavy Industrial – Industrial uses where risk and nuisance extends beyond the property line. Heavy Industrial uses include, but are not limited to refineries, asphalt facilities and large scale upgraders. Heavy Industrial Development requires a risk management assessment be completed and implemented in accordance with accepted leading practices.

High Aesthetic Standard(s) - the outcome of enhanced attention to the physical (design, materials, landscaping and siting) components of a development when compared with a basic development.

Industrialized sights — This includes items in clear view from a roadway, residential or business area and includes, but is not limited to such items as heavy equipment, industrialized stock such as metal, pipes, plastics and other large staging equipment or any other industrial inventory, surplus or equipment which is

not stored inside of a warehouse, garage or is screened off from public view.

Infill Development – The development of vacant lots within previously developed area.

Inter-modal hubs – Inter-modal hubs are the intersectional points between various modes of transportation in order to provide connection points between various transportation opportunities as well as to connect local transportation networks with regional offerings.

Light Industrial – Wholesale, warehousing, manufacturing and processing uses which do not create or generate nuisance factors outside an enclosed building. Outdoor storage is limited and completely screened from roads and adjacent properties.

Medium Industrial – - Wholesale, warehousing, manufacturing and processing uses, some of which have outdoor storage or activities, that are generally not located adjacent to residential areas because of potential nuisance factors including, but not limited to, smoke, gas, odor, dust, noise, vibration of earth, soot or lighting. Risk does not extend beyond the property line.

Multi-modal hubs- Multi-modal transportation is the availability or use of more than one form of transportation such as automobiles, walking cycling, transit, rail (commuter/freight), trucks, air and marine.

Outdoor Storage - means the accessory storage of equipment, goods, and materials in the open air where such storage of goods and materials does not involve the use of permanent structures or the material alteration of the existing state of the land.

Outline Plan - Outline plans are non-statutory documents used to obtain greater detail of the proposed development and its future impact on adjacent lands. An outline plan must comply with the overarching area structure plan.

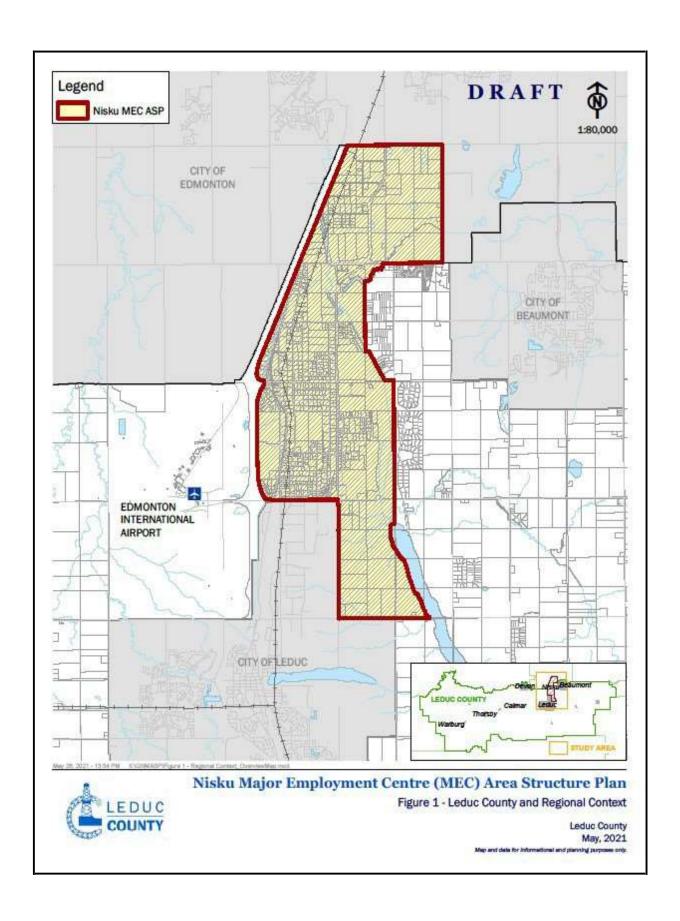
Open space – Passive and structured leisure and recreation areas in the region that enhance the aesthetic quality and conserve the environment.

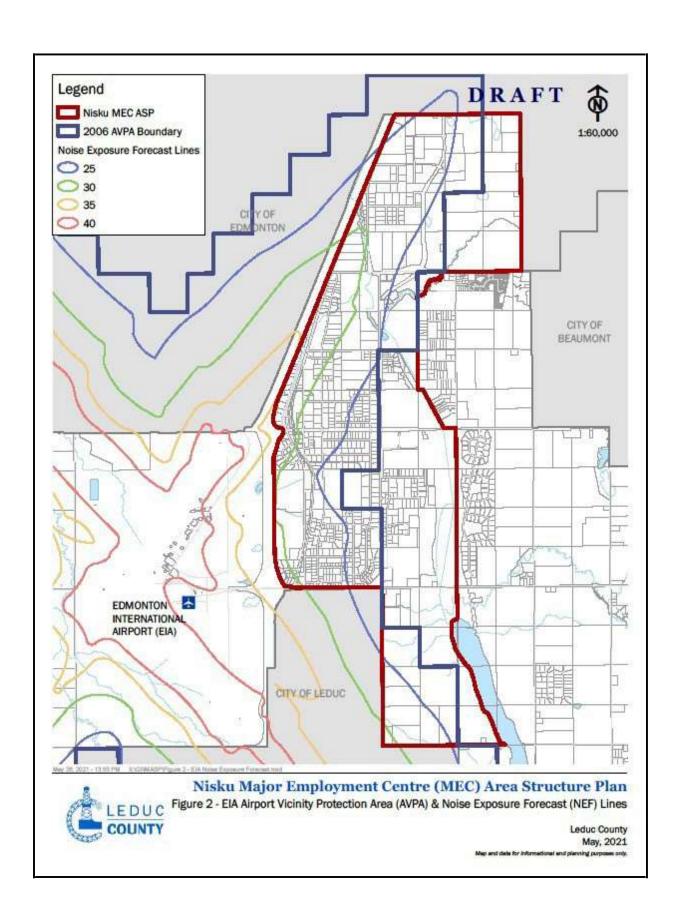
Redevelopment – Construction of new buildings in an urban area, typically after demolishing the existing buildings.

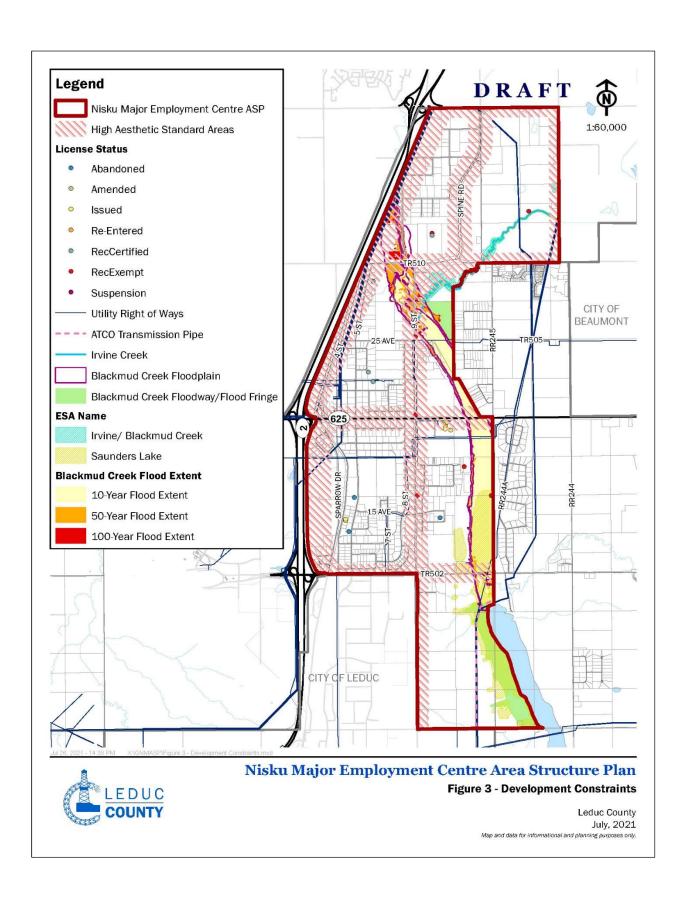
Redistricting – A change in the land use district of a land parcel as per the Leduc County Land Use Bylaw.

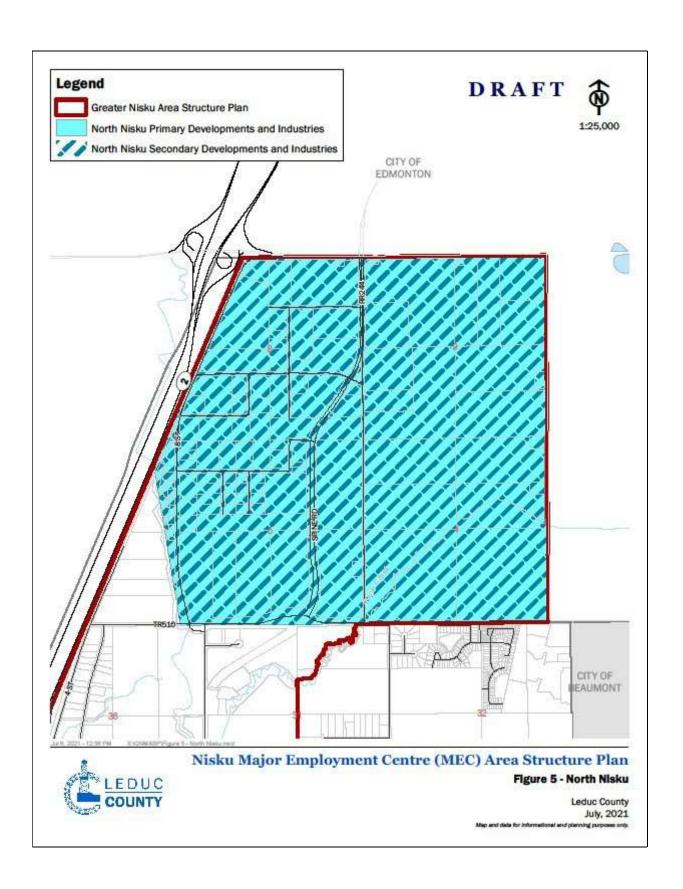
Subdivision - Means the division of a parcel of land by an instrument; as per the definition in the *Municipal Government Act*.

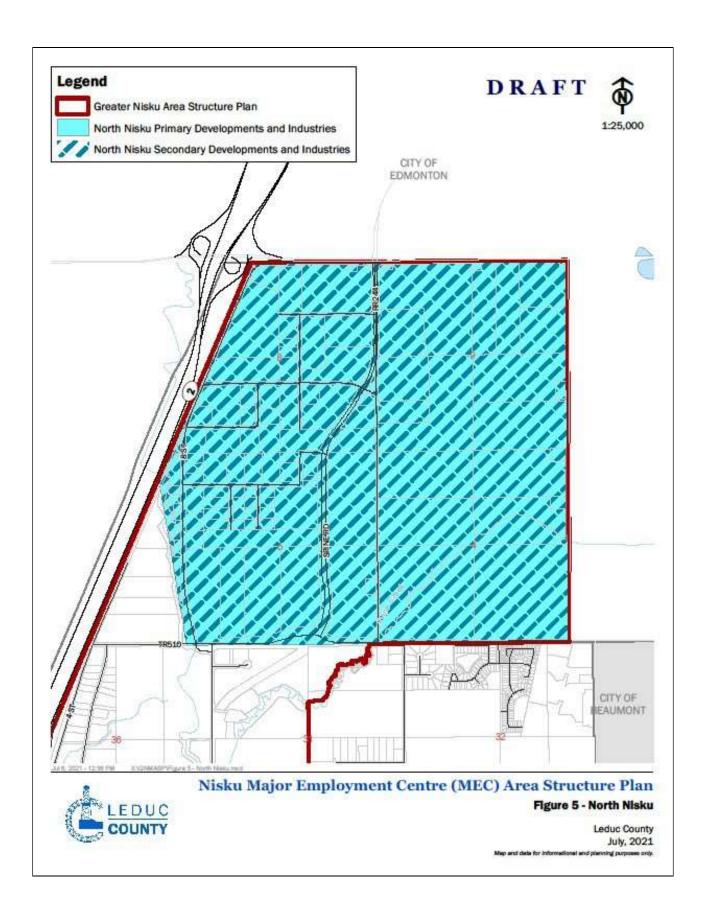
Appendix A MAPS

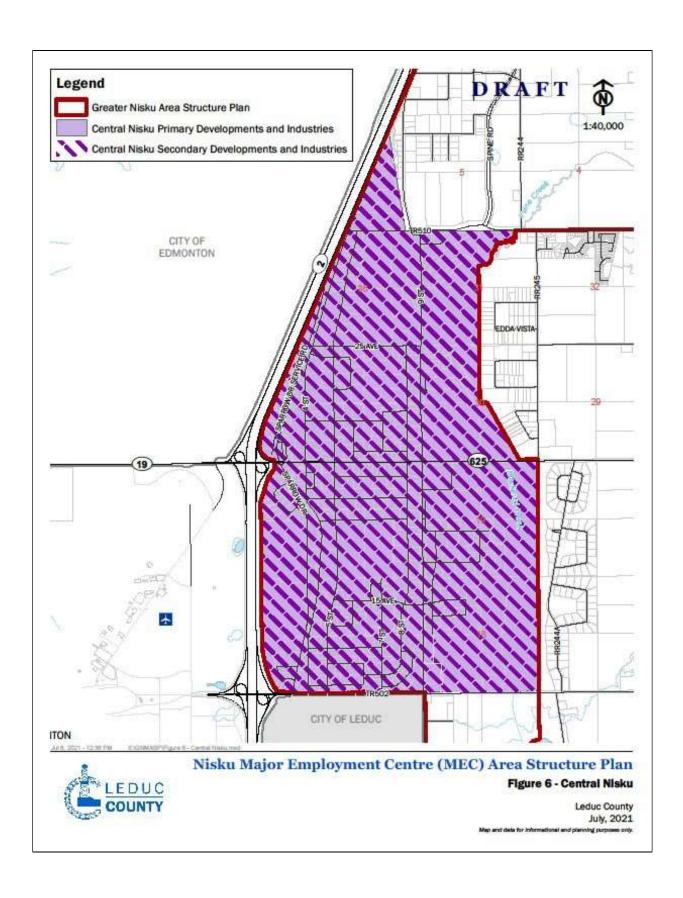


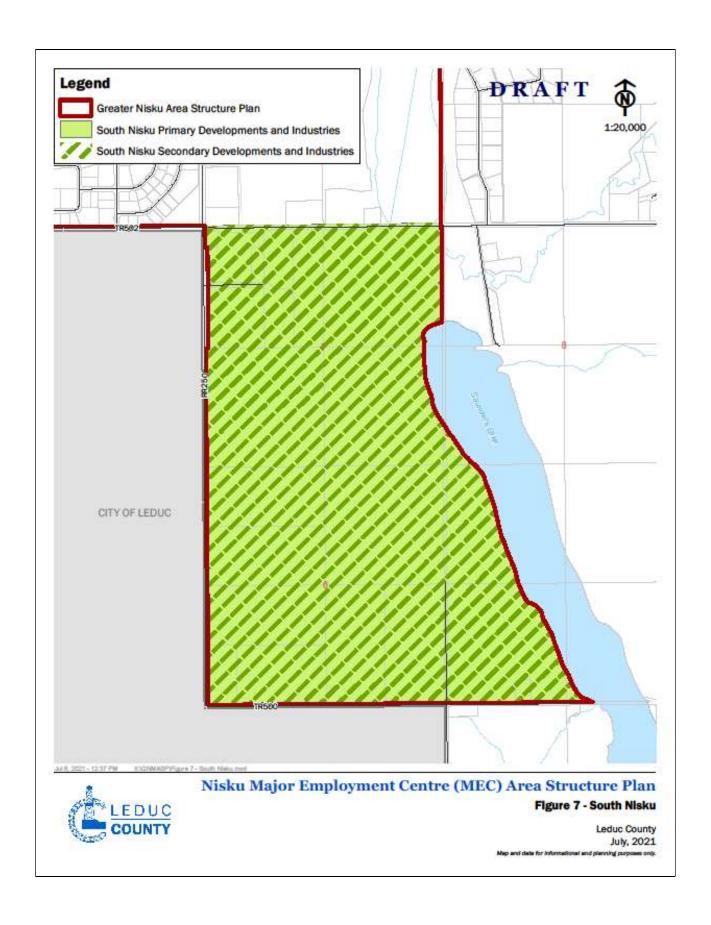


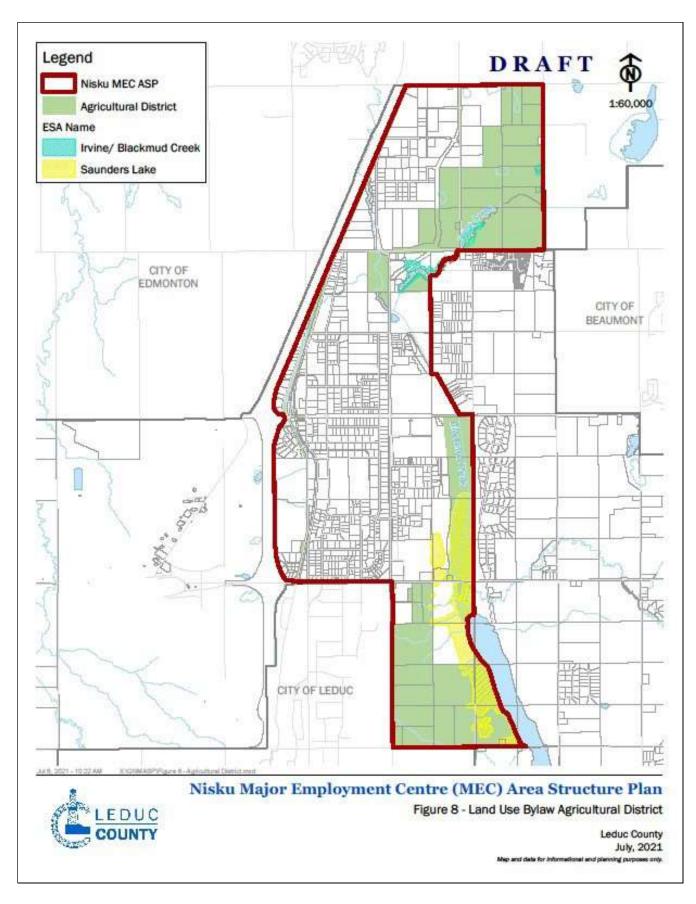


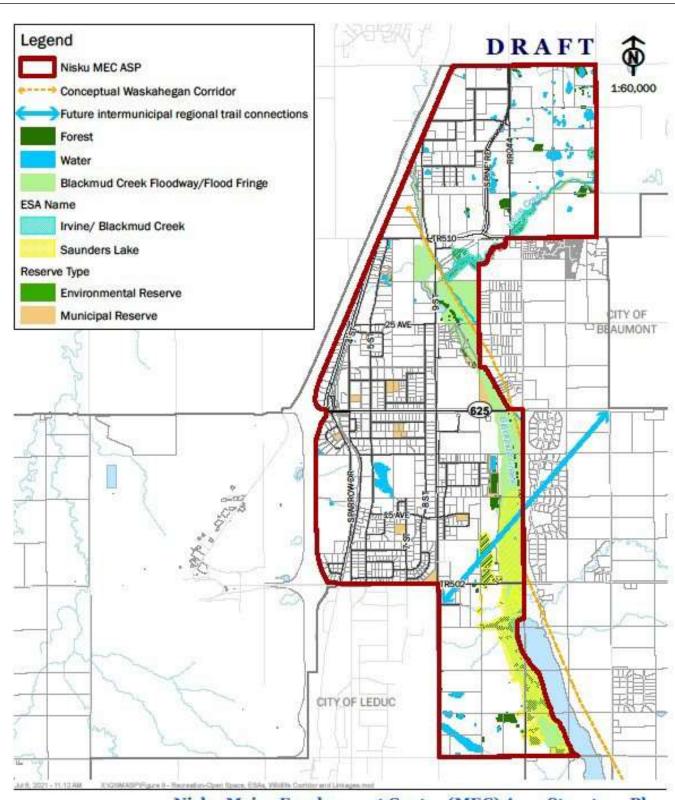














Nisku Major Employment Centre (MEC) Area Structure Plan

Figure 9 - Recreation, Open Space, Natural Features, ESAs, Corridor and Linkages

Leduc County July, 2021

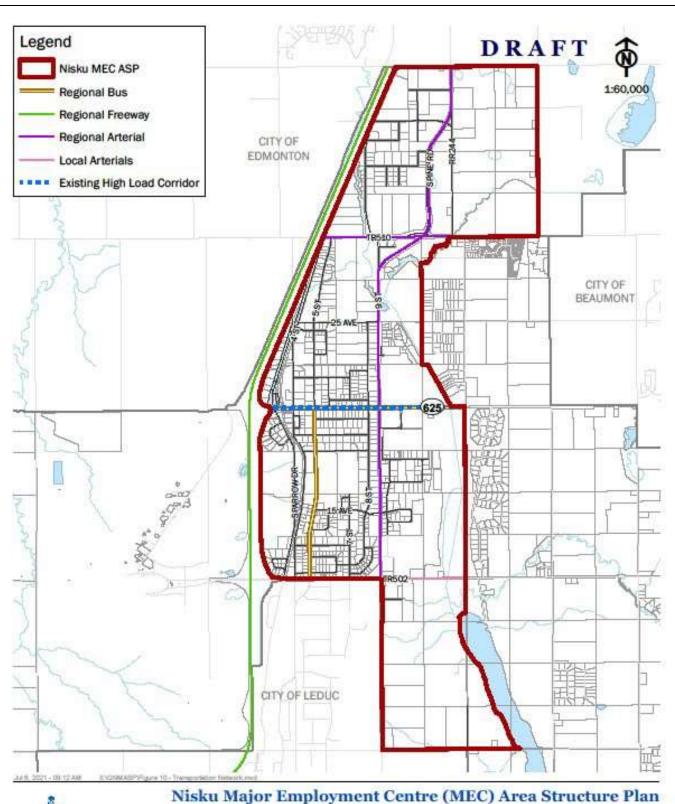


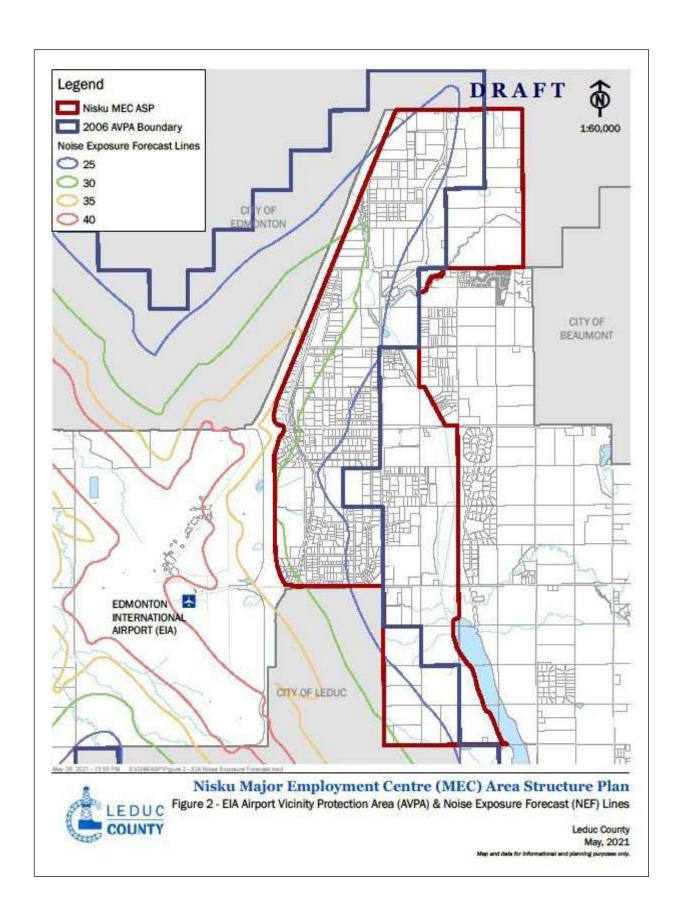


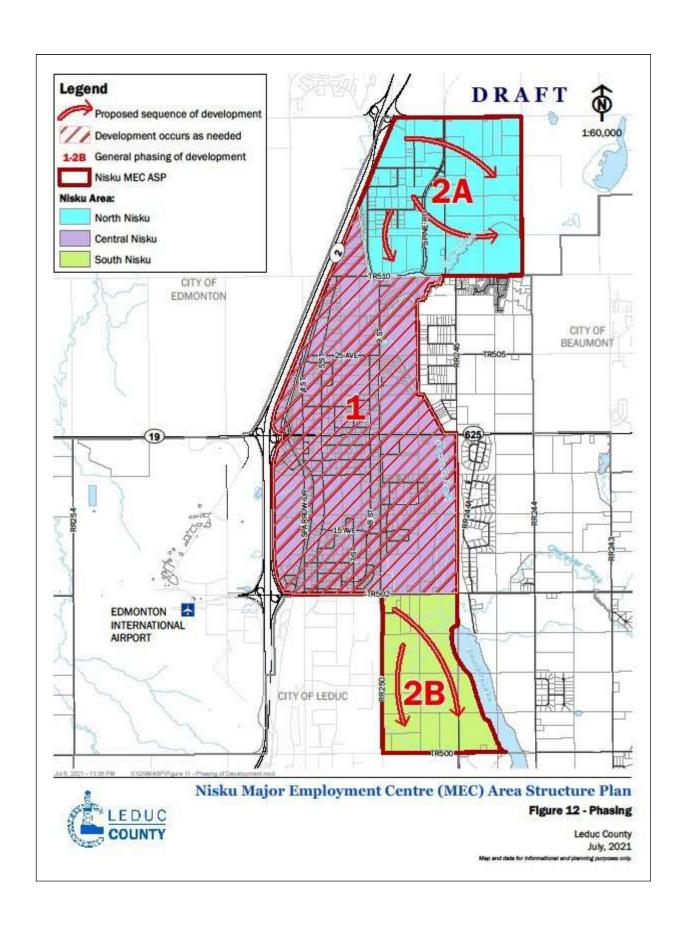
Figure 10 - Transportation Network

Leduc County

July, 2021

Map and data for informational and planning purposes only. Road and transit networks above are conceptual, and subject to change as a result of local area plans and amendments thereto.





Appendix B PUBLIC PARTICIPATION

Project title change

On Feb. 5, 2021, it was announced that the name of the Greater Nisku Major Area Structure Plan would be changed to the Nisku Major Employment Centre (MEC) Area Structure Plan as a result of the decision to remove the East Nisku portion of the plan area, and to better align with the terms as defined in the MDP.

What We Heard report

The input we received during the first stage of public participation for the project has been shared with administration and Council in the form of the What We Heard report on the following page.

July 13, 2021 public hearing and feedback

Leduc County followed legislated requirements for advertising the public hearing for the Nisku MEC ASP, as outlined by the *Municipal Government Act*, by publishing a notice of public hearing in the Leduc Representative for two consecutive weeks prior to the hearing date. As per the County's standard process, this content was also posted to the municipal website and shared at least once on the County's corporate social media channels. The public was given the opportunity to submit feedback on the draft ASP, or register to speak at the public hearing, by July 6, 2021. Comments from referral agencies were also solicited with a deadline of July 6, 2021.

Leduc County has received comments from three adjacent municipalities, two comments from the public (phone calls) and one follow up email were received. All questions from the municipalities or ratepayers were answered. In addition, three individuals have registered to speak at the public hearing. One individual did not attend, one refrained to speaking and the last was in favor of the plan, but wanted to ensure the proposed plan protects environmental areas. All other referral agencies had no response or no objection to the proposed plan





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