A BYLAW OF THE CITY OF LEDUC IN THE PROVINCE OF ALBERTA, TO ADOPT THE AREA STRUCTURE PLAN FOR NW 1/4 35-49-25-4, Lots 1, 2, 3 Plan 922 3395, NW 1/4 34-49-25-4, and NE 1/4 33-49-25-4

The Municipal Government Act, R.S.A. 2000, Chapter M-26, as amended (the "Act"), grants a Municipality the authority to adopt by Bylaw an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of an area of land in a municipality.

**WHEREAS**, NW  $\frac{1}{4}$  35-49-25-4, Lots 1, 2, 3 Plan 922 3395, NW  $\frac{1}{4}$  34-49-25-4, and NE  $\frac{1}{4}$  33-49-25-4 Area Structure Plan addresses the requirements of an Area Structure Plan as outlined in the Act;

**WHEREAS**, notice of intention to pass this bylaw has been given and a public hearing has been held in accordance with the Act;

**THEREFORE**, the Council of the City of Leduc in the Province of Alberta duly assembled hereby enacts as follows:

- 1. this Bylaw is to be cited as the 65th Avenue Area Structure Plan Bylaw.
- 2. Bylaw No. 212-91, Bridgeport Area Structure Plan, and its amendments, is repealed.
- 3. this Bylaw shall come into force and effect when it receives Third Reading and is duly signed.

# Bylaw No. 1058-2020

## PAGE 2

	0000
READ A FIRST TIME IN COUNCIL THISth DAY OF	, 2020.
READ A SECOND TIME IN COUNCIL THIS	, 2020.
READ A THIRD TIME IN COUNCIL AND FINALLY PASSED T 2020.	THISth DAY OF,
	Bob Young MAYOR
	Sandra Davis CITY CLERK
, 2020	
Date Signed	

# 65<sup>th</sup> Avenue Area Structure Plan

November 4, 2020







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# 1. INTRODUCTION

## 1.1 Context

The 65<sup>th</sup> Avenue Area Structure Plan (ASP) encompasses approximately 227 hectares (ha) (561 acres) and is located in the northwest portion of the City of Leduc, just south of the Edmonton International Airport (EIA). The plan area is bounded by 65<sup>th</sup> Avenue to the north, the Queen Elizabeth 2 (QEII) Highway to the east, the Bridgeport and Deer Valley neighbourhoods to the south, and the West ASP to the west. The 65<sup>th</sup> Avenue ASP area is illustrated within *Figure 1: Location*. Land ownership in the ASP area is identified in *Figure 2: Ownership*.

# 1.2 Purpose

The ASP provides direction for the development of residential, commercial, and employment uses in the plan area, in a manner that is consistent with the City of Leduc and County of Leduc Intermunicipal Development Plan (IDP), the City of Leduc Municipal Development Plan (MDP), and the Edmonton Metropolitan Region Growth Plan (EMRGP). The Aerotropolis Viability Study (AVS) also provides a vision and understanding of opportunities related to the EIA which are incorporated into the ASP.

In order to clarify, communicate, and protect the vision of future development for the 65<sup>th</sup> Avenue area, the ASP includes the following:

- Office, business, and employment uses which leverage proximity to the EIA and provide opportunities for airport-connected development;
- Commercial uses which serve the needs of residents and employees in the plan area and regionally;
- A mixed-use node with vertically or horizontally integrated commercial and residential uses;
- Stormwater management facilities designed as both utilities and recreation opportunities;
- A greenway buffer between residential and non-residential uses, providing separation space, a multiway path, and wildlife corridor;
- Low and medium density residential with a diversity of housing types and connections to adjacent residential neighbourhoods; and
- 65<sup>th</sup> Avenue and Grant MacEwan Boulevard as major arterials to connect the neighbourhood with the future 65<sup>th</sup> Avenue / QEII Interchange, the EIA, and the rest of Leduc.

Legend

Plan Area



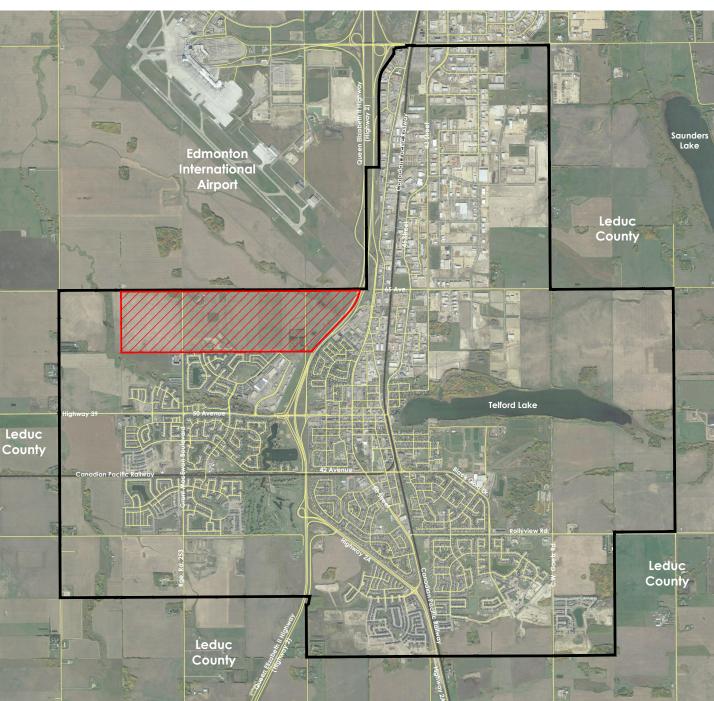


FIGURE 1

LOCATION



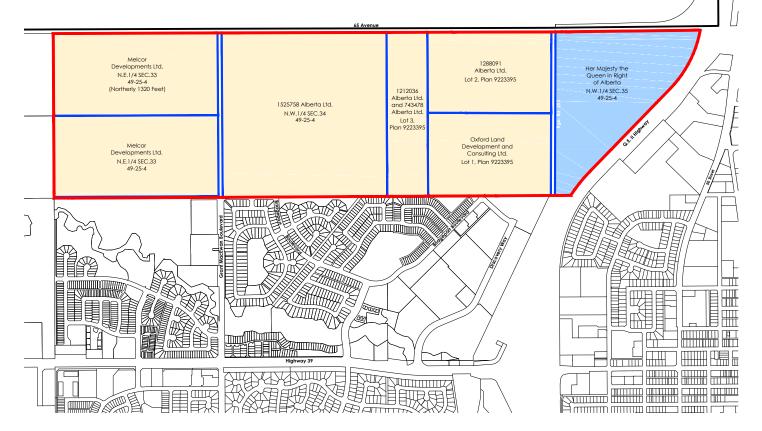


## Legend

65th Avenue ASP Boundary
Private Lands
Public Lands



#### Edmonton International Airport



# FIGURE 2

LAND OWNERSHIP





# 1.3 Stakeholder and Public Engagement Process

Landowners within the plan area, members of the public, and other stakeholders were involved in the creation of this plan throughout the process. Public engagement events and stakeholder/landowner meetings were held at two key points: Project Initiation / Visioning and Draft ASP Review. Public and stakeholder feedback was taken into consideration during the initial planning process and revisions to the 65<sup>th</sup> Avenue ASP.

#### 1.3.1 Project Initiation / Visioning

Early in the planning process, stakeholders were invited to have one-on-one meetings with the project team to discuss the vision and principles of the plan. Stakeholders provided input on the high-level land use concept, targeted development types and economic clusters, major roadway alignments, and the planned development of the 65<sup>th</sup> Avenue interchange.

A public open house was held on October 25, 2018 at the Civic Centre. Through story boards and discussions with the project team, members of the public were informed about the project context, purpose, process, and next steps. Input was sought on what types of development and amenities should be included in the plan, how the plan should transition between houses and business areas, and any other elements to consider. Approximately 60 people attended the open house and were invited to provide input through comment cards and sticky notes. An online survey form was also publicly available to collect feedback. Public input indicated that noise and light impacts from the airport and roadways should be addressed, natural area preservation and maintaining open spaces should be emphasized, transitional land uses provided adjacent to existing residences, and major transportation routes should be planned to avoid residential areas.

#### 1.3.2 Draft ASP Review

A public open house was held on January 29, 2020 at the Civic Centre. Through story boards and discussions with the project team, members of the public were provided the opportunity to review and comment on the draft 65<sup>th</sup> Avenue ASP. Approximately 30 people attended the open house and were invited to provide input through comment cards. Public input indicated that open space within the plan area was of high-priority, the variety of housing choices presented within the ASP would be beneficial to the community, concerns about the potential increase in traffic to the roadway network, and impacts from noise created by the airport and arterial roadways.

## 1.3.3 Public Hearing

In accordance with the *Municipal Government Act*, a public hearing was held to hear representations made by parties affected by the proposed bylaw.

# 1.4 Interpretation

Policies are written using shall, will, should, or may statements, and can be interpreted as follows:

- A statement containing shall or will denotes mandatory compliance or adherence to direction.
   Where a shall or will statement proves impractical, premature, unnecessary, or impossible to achieve, an amendment to the plan may be required.
- A statement containing should is an advisory statement and indicates the preferred principle, policy, and/or implementation strategy. If the should statement is not followed because it is impractical, premature, unnecessary, or impossible to achieve, the intent of the policy may be met through other agreed-upon means.
- A statement containing may denotes discretionary adherence or choice.

All map symbols, locations, and boundaries contained within the ASP shall be interpreted as approximate unless otherwise specified within the Plan or coinciding with clearly recognizable physical features or fixed (i.e. legal) boundaries.

# 1.5 Monitoring and Amendments

Policies, text, and mapping information contained within this document may be amended from time to time, by Council approved bylaw, in order to respond to and remain current with planning and development trends affecting suburban and airport-connected development, as well as more specific issues affecting the neighbourhood.

Amendments to the 65<sup>th</sup> Avenue ASP document involving policies, text, or mapping shall be completed in accordance with the *MGA*, Edmonton Metropolitan Region (EMRB) Growth Plan, City of Leduc – Leduc County IDP, City of Leduc MDP, and all other applicable bylaws, policies, and procedures.

## 2. PLANNING CONTEXT

# 2.1 Municipal Government Act

Part 17 of the *Municipal Government Act (MGA)* empowers municipalities to adopt ASPs and describes the elements which are required. This ASP has been prepared in accordance with the requirements of the *MGA*, including that the ASP must describe:

- The sequence of development proposed for the area,
- The land uses proposed for the area, either generally or with respect to specific parts of the area,
- The density of population proposed for the area either generally or with respect to specific parts of the area, and
- The general location of major transportation routes and public utilities.

The MGA also requires that ASPs must be consistent with any IDP and MDP in effect for the ASP area.

# 2.2 Edmonton Metropolitan Region Growth Plan

Approved in 2017, the Edmonton Metropolitan Region Growth Plan (EMRGP) guides the work of the Edmonton Metropolitan Region Board (EMRB) and puts forward policies that support the long term economic prosperity and quality of life for all residents in the Region.

The following guiding principles shape the policies of the EMRGP:

- 1. Collaborate and coordinate as a Region to manage growth responsibly.
- 2. Promote global economic competitiveness and regional prosperity.
- 3. Recognize and celebrate the diversity of communities and promote an excellent quality of life across the Region.
- 4. Achieve compact growth that optimizes infrastructure investment.
- 5. Ensure effective regional mobility.
- 6. Ensure the wise management of prime agricultural resources.
- 7. Protect natural living systems and environmental assets.

The 65<sup>th</sup> Avenue ASP supports these principles and facilitates the following objectives of the EMRGP:

• 1.1 – Promote global economic competitiveness and diversification of the regional economy;

- 1.3 Enhance competitiveness through the efficient movement of people, goods and services to, from and within the Region;
- 1.4 Promote the livability and prosperity of the Region and plan for the needs of a changing population and workforce;
- 3.1 Plan and develop complete communities within each policy tier to accommodate people's daily needs for living at all ages;
- 3.2 Plan for and promote a range of housing options;
- 4.3 Plan and develop greenfield areas in an orderly and phased manner to contribute to complete communities;
- 4.6 Prioritize investment and funding of regional infrastructure to support planned growth;
- 4.7 Ensure compatible land use patterns to minimize risks to public safety and health; and
- 5.4 Support the Edmonton International Airport as northern Alberta's primary air gateway to the world.

# 2.3 EIA Vicinity Protection Area Regulation

Due to its proximity to the EIA, the 65<sup>th</sup> Avenue ASP has specific land use constraints that must be considered. The Province of Alberta's Edmonton International Airport Vicinity Protection Area (AVPA) Regulation (AVPA; AR 55/2006) identifies certain limits on types of development which are not suitable to the functional requirements and noise impacts of the airport.

Noise exposure forecast contours provide a model of predicted noise impacts of aircraft, and define the boundaries within which certain land uses are restricted. As shown in Schedule 2 of the AVPA, the 65<sup>th</sup> Avenue ASP Area contains land within the following contour areas: NEF 25-30, NEF 30-35, NEF 35-40, and NEF 40+. Prohibited uses increase with the increasing NEF number. As a result, potential land uses for the Plan area, particularly in the NEF 35-40 and NEF 40+ areas, are limited. Residential uses may only be located within the NEF 25-30. Details are provided in Appendix A.

The ASP recognizes the necessity of sensitive land use restrictions to protect the continued successful operation of the EIA. The Plan carefully considers the NEF contour lines in the land use concept, and conforms with the AVPA.

# 2.4 EIA Zoning Regulations (C.R.C., c.81)

The Edmonton International Airport Zoning Regulations are set out in the Consolidated Regulations of Canada, Chapter 81 (C.R.C, c.81), as enabled by the Aeronautics Act. Zoning Regulations indicate that for most of the plan area, building heights up to 45 metres are permitted, while a small portion of the plan area limits building heights to 9 metres.

# 2.5 Intermunicipal Development Plan

In 2011, the City of Leduc and Leduc County adopted the Intermunicipal Development Plan Bylaw No. 772-2011, a collaboratively prepared plan for development of land near the boundaries of the two municipalities, as required by the *Municipal Government Act*. As amended since its adoption through Bylaws 871-2014 and 933-2016, the IDP applies to the 65<sup>th</sup> Avenue ASP area due to its proximity to the City of Leduc Boundary.

The Guiding Principles of the IDP are regional in scope and are based upon five Sustainability Pillars:

- Smart Growth
- Creating Vibrant Communities
- Environmental Stewardship
- Economic Development
- Responsible Governance

As shown in *Figure 5: IDP*, The IDP identifies long term development (planned to 2044) of commercial/industrial uses in the north portion of the plan area (Policy Area E1 – West Business Industrial), and mixed use transitions in the south portion (Policy Area C – Transitional Residential Mixed Use). It also identifies a future municipal water reservoir and water main within the plan area and a future major roadway and potential transportation and utility corridor along the north boundary.

## 2.6 Municipal Development Plan

The City of Leduc MDP was adopted in 2012 (Bylaw 773-2011) and has been subsequently amended in 2015 (Bylaw 870-2014) and 2017 (Bylaw 934-2016). Setting out a vision of "building a community of integrity, unity, and strength," the MDP provides a framework for development within the City looking forward to 2035. The Plan focuses on five sustainability principles:

- 1. Environment and Infrastructure Safe and sustainable systems
- 2. Economy and Tourism Sustainable prosperity
- 3. Social Wellness and Safety High quality protective and people services
- 4. Recreation and Culture Engaged and active community
- 5. Governance Responsible, visionary leadership

As shown in *Figure 4: MDP*, The 65<sup>th</sup> Avenue ASP area consists of three policy areas within the MDP. The north portion is designated Aerotropolis Business Industrial, the southeast portion is designated Transitional Business Mixed Use, and the southwest portion is designated Transitional Residential Mixed Use. The boundary between the two types of transitional land uses is defined by the NEF 30 contour line, due to the restrictions on land uses within it.

The two transitional policy areas allow for commercial, light industrial, and business park development which buffer residential neighbourhoods from highway and airport noise. The Transitional Residential Mixed Use policy area aims to achieve a transition across a full range of housing types, including higher density residential closer to non-residential uses. Open spaces, berms, water bodies, and other elements are encouraged as tools to mitigate airport and highway impacts on residential areas.

The Aerotropolis Business Industrial policy area aims to take advantage of economic development opportunities presented by placing industrial uses such as logistics, warehouse, and distribution uses in proximity to the airport. Eco-industrial development, agri-business, and high-quality office park uses are also promoted.

The MDP also directs the future transportation network for the City, including future arterial and collector roads through the plan area and a future interchange at 65<sup>th</sup> Avenue and the QEII Highway.

The MDP is currently under review. The review is being conducted with consideration for the 65<sup>th</sup> Avenue ASP, ensuring that the ASP will be in compliance with the MDP once it is updated. Therefore, a separate MDP amendment is not required for the adoption of this ASP.

# 2.7 Aerotropolis Viability Study (2015)

Between 2014 and 2015, MXD Development Strategists and Stantec prepared the Aerotropolis Viability Study (AVS) for the Leduc Partnership, comprised of the City of Leduc and Leduc County. The AVS aimed to provide a comprehensive plan and feasibility study for the development of an Aerotropolis, which includes land uses and economic industries that value connectivity to the Edmonton International Airport. With the creation of a new commercial and industrial hub, development is anticipated to generate approximately 55,500 new regional jobs when fully implemented (estimated by 2044).

Four priority areas are identified in the AVS for future commercial and industrial growth. As depicted in *Figure 3: AVS Priority Areas*, the priority areas total about 2,345 ha (5,795 acres) of primarily developable greenfield land. The 65<sup>th</sup> Avenue West area, which contains the 65<sup>th</sup> Avenue ASP area, contains 140 ha (345 acres) of developable land.

The AVS indicates that due to its direct proximity to EIA, the 65<sup>th</sup> Avenue West priority area provides the highest viability for uses that are time-sensitive and require direct transportation connections.

Economic cluster focus areas identified for the 65<sup>th</sup> Avenue West priority area are:

- Aerospace and Aviation
- Education
- General Business
- Information Communication Technology (ICT)
- Life Sciences
- Retail
- Transit-Oriented Development
- Transportation, Logistics, and Distribution

The land use allocations for the 65<sup>th</sup> Avenue West priority area planned in the AVS provide for 7,398 direct new jobs by 2044, spread across the sectors identified above. Catalyst projects identified for the area include a Discovery Park Incubator, Aerotropolis Campus, Distillery and Dining District, Aerospace Research Park, and Retail Fulfillment Hub.

From a transportation and accessibility perspective, the 65<sup>th</sup> Avenue / QEII Interchange is identified as a catalyst project, along with 65<sup>th</sup> Avenue, an east-west arterial along the north edge of the 65<sup>th</sup> Avenue ASP area. A potential higher order transit line is also identified to terminate in the ASP area.

# 2.8 Economic Sector Diversification Analysis (2018)

Building upon the findings of the Aerotropolis Viability Study, an Economic Sector Diversification Analysis was conducted in 2018 to identify current and emerging economic sectors in the province and region, targeted to inform the 65<sup>th</sup> Avenue ASP.

## 2.8.1 Information, Communications, and Technology (ICT)

The analysis found that the ICT cluster is rapidly evolving, with significant recent investments in the Edmonton Metropolitan Region. Immediate development of ICT-related opportunities was recommended, to take advantage of the proximity to the EIA and low costs of business relative to downtown Edmonton and the University of Alberta. Immediate focus could be on uses that require larger and more affordable spaces than what is available in the Edmonton market.

The following sub-clusters were highlighted:

- Data Science
- Artificial Intelligence & Machine Learning
- Robotics
- Financial Technology (FinTech)
- Cyber Security

- Software & App Development
- New Mobility Testing
- Research & Development (Assembly and Testing)
- Component Manufacturing

#### 2.8.2 Transportation and Logistics

The analysis found that as a result of its strategic position in the middle of Western Canada and as a gateway to Northern Canada, the Edmonton Metropolitan Region is uniquely positioned for development related to Transportation and Logistics. Further, the 65<sup>th</sup> Avenue ASP area provides easy access to the QEII Highway for trucking activity and the EIA for 24/7 air service and cargo capabilities.

Current trends toward single-day and overnight shipping have resulted in demand for distribution centres closer to consumers, while autonomous vehicles will greatly impact transportation options in the future. Although the presence of Transportation and Logistics will be limited to the northern portion of the ASP area due to proximity of established residential areas, the planned 65<sup>th</sup> Avenue / QEII

Interchange will serve to catalyze time-sensitive Aerotropolis uses requiring direct connections to the EIA and the QEII corridor.

The recommended sub-clusters for the ASP area are as follows:

- Third-Party Logistics (P3)
- Last Mile Logistics
- Packaging & Labeling
- Warehousing & Long-Term Storage
- Value-Added Logistics Providers

- Cold Chain Facilities
- E-Commerce Fulfillment & Retail Distribution
- Shipment Consolidation
- International Freight Forwarding

#### 2.8.3 Aerospace and Aviation

As the fastest growing airport in the country, the EIA is transforming into a growing hub for Aerospace and Aviation training, manufacturing, maintenance, and company headquarters. In particular, the Alberta Aerospace and Technology Centre (AATC), which was launched at the EIA in 2015, has established the region as an international flight training hub and centre of innovation.

The following sub-clusters are recommended for the ASP area:

- Robotics & Unmanned Aircraft Systems (UAS)
- Air Cargo Logistics
- Manufacturing, Maintenance, Repair, and Overall (MMRO)
- Telecommunications, Remote Sensing,
   & Avionic Systems
- Specialized Materials & Surface Engineering
- Aircraft Components
- Skills Training & Education
- Research & Development

#### 2.8.4 Life Sciences

With approximately 60% of Alberta's Life Sciences companies located in the Edmonton Metropolitan region, the cluster is well-established. Progress in technology related to Life Sciences, proximity to the EIA, and Leduc's growing bio-industrial and biotechnology industry present opportunities for Life Sciences in the ASP area, particularly in the following recommended sub-clusters:

- Bioscience Manufacturing
- Biotechnology & Bio-Industrial
- Pharmaceuticals

- Instruments & Medical Devices
- Diagnostics
- Health Research

# 2.9 Real Estate Market Overview (2018)

An overview of the current trends in the Edmonton region's real estate market was completed in 2018.

#### 2.9.1 Retail

The analysis found that retail vacancy increased to 5.5% in 2017, largely as a result of the Sears bankruptcy. Grocery and pharmacy anchored sites are in high demand with the growth of new neighbourhoods, while trends toward service-based retail and the introduction of the legal cannabis industry have changed market demand. Food and beverage and health & wellness are drivers for the retail market in new and existing retail centres.

#### 2.9.2 Industrial

With a resilient industrial market, Edmonton has seen rising lease rates and lower vacancy rates compared to many markets in North America. The Nisku-Leduc submarket has a positive absorption rate, particularly in response to any short-term economic upswings in the energy industry. Nevertheless, the oil and gas sector continues to create challenges for major industrial expansion in the Leduc area. Demand has been primarily focused towards small to medium size sites, particularly within the 1-5 acre range. Further, catalyst projects at the EIA have caused growth in the industrial market.

#### 2.9.3 Office

With an office vacancy rate of 16.35% for 2018, the office market has seen limited growth. High vacancies in downtown Edmonton limit the potential for office development in Leduc in the near future.

## 2.9.4 Implications for the ASP

The greatest opportunities in real estate development fall within the Flex Business and Aero Employment policy areas. Population growth near the ASP area and a healthy retail market indicate that opportunities also exist for retail, service, and food & beverage development.

# 2.10 AVS Review (2018)

To ensure that the 2015 Aerotropolis Viability Study remains relevant, a review was carried out in 2018 which identified both the directions that were still applicable and those that required updating. Key current trends identified include the high office vacancy rate, a growing industrial market, and increased demand for flex industrial and flex commercial space. The four core clusters originally identified in the AVS remain viable, though ICT should be seen as a supporting cluster to other sectors since ICT continues to be primarily located in the City of Edmonton.

Crucial projects for the viability of economic growth in the 65<sup>th</sup> Avenue area include the 65<sup>th</sup> Avenue / QEII Interchange and planned transit-oriented development around a future public transportation line. Planned phasing was identified as an area needed further exploration, due to the availability of utilities, including sanitary servicing.

Case studies were provided of recent developments in airport connected contexts similar to the 65<sup>th</sup> Avenue ASP area. Examples of the types of development appropriate for a 10 to 15 minute drive time

from an international airport (which is the case for the ASP area) include a mixed-use centre, transit oriented development with Smart City technology, and an Amazon logistics hub.

Once the 65<sup>th</sup> Avenue interchange is constructed, connecting the ASP area with the Perimeter Road at EIA, some land within the ASP area will fall within the 5 to 10 minute drive time window. The AVS identifies additional sectors appropriate for airport connected development, such as ground logistics, bio-life sciences and diagnostics, and research and development.

# 2.11 Bridgeport ASP

Adopted in 2004, the Bridgeport ASP (Bylaw 585-2004) included portions of the 65<sup>th</sup> Avenue ASP plan area as well as two quarter sections to the south. While the two quarter sections were developed as the Bridgeport neighbourhood, the north portion of the Bridgeport ASP was not developed. Due to changes in the location of the NEF contours following the adoption of the Bridgeport ASP, the land uses proposed for this area are no longer viable, and the plan does not align with the MDP.

The 65<sup>th</sup> Avenue ASP replaces a portion of the Bridgeport ASP in order to provide an updated land use concept and policies that align with the current MDP, IDP, and EIAVPAR. The Bridgeport ASP will need to be amended or rescinded to facilitate the adoption of the 65<sup>th</sup> Avenue ASP.



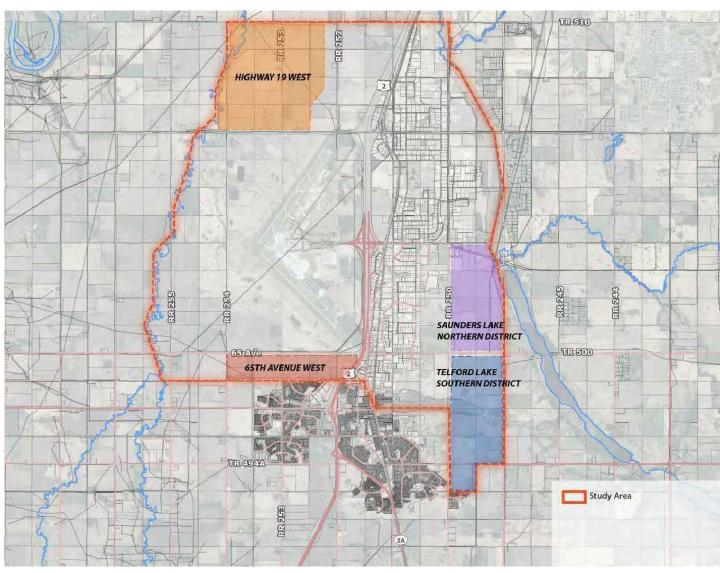


FIGURE 3

**AVS PRIORITY AREAS** 





#### City of Leduc 65th Avenue ASP





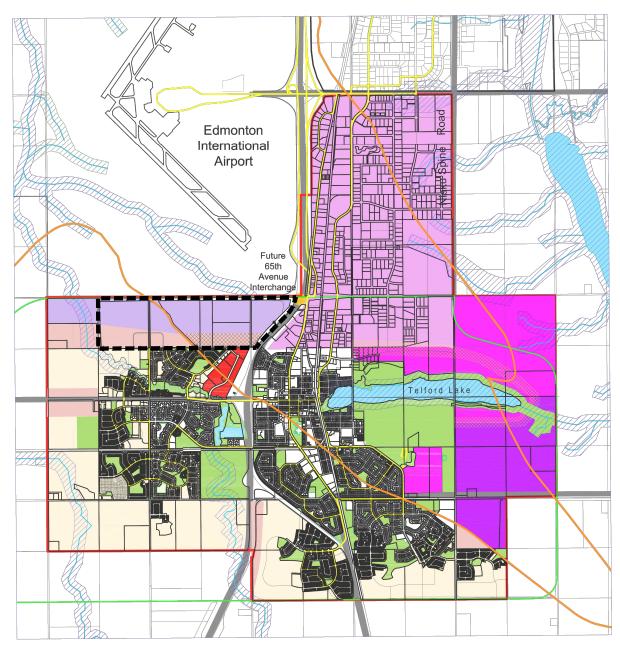


FIGURE 4

MDP CONTEXT





#### City of Leduc 65th Avenue ASP

## Legend IDP Area Boundary IDP Reserve and Referral Area → Railway City of Leduc Boundary Proposed Future Major Roadway Open Space and Greenways Primary Urban Residential Growth Business to Greenways Transition Runway Saunders / Telford Lake Business Future Runway & Clearance Zone LeducTransit Transitional Residential Mixed Use Approved Residential ASPs N.E.F. 30 Contour Town Centres Open Space Creeks & Rivers Temporary Industrial Use West Business Industrial Regional Landfill Site (to be reclaimed as open space in the future) 65th Avenue ASP Boundary West Business Industrial Reserve Regional Landfill Site (West Expansion Area) Nisku/Leduc Business Industrial Riparian Areas Southeast Business Industrial Leduc County Environmental Study Area Boundary QEII 814 Edmonton International Airport B В E1 D West Town Н H QEII 814

FIGURE 5

**IDP CONTEXT** 





## 3. EXISTING CONDITIONS

# 3.1 Existing Land Uses and Zoning

The ASP area is currently used for agricultural production. No structures are present, but a historical farmstead has been identified in air photos in the south part of the ASP.

As of 2019, the ASP area was designated as UR (Urban Reserve) in the Land Use Bylaw (Bylaw 809-2013). The UR zone provides for agricultural uses on land that is intended for future development. The Airport Vicinity Protection Overlay and Highway 2 Corridor Design Guidelines apply to portions of the plan area, further impacting the potential land uses.

# 3.2 Adjacent Land Uses and Zoning

South of the plan area, the Bridgeport neighbourhood consists primarily of residential land uses, with a mix of low density and medium density residential uses zoned Residential Standard District (RSD) and Residential Narrow Lot (RNL). There are also two areas of parkland zoned General Recreation (GR) that border the 65<sup>th</sup> Avenue ASP area. A commercial area is located along the east side of the Bridgeport neighbourhood adjacent to the QEII Highway, zoned Commercial Shopping Centre (CSC).

65<sup>th</sup> Avenue defines the north boundary of the ASP area, which is also the boundary of the City of Leduc. North of 65<sup>th</sup> Avenue is the Edmonton International Airport lands, with an open field and runways closest to the ASP area.

The QEII Highway runs along the east boundary of the plan area, with commercial, industrial, and residential uses along the other side zoned Commercial Shopping Centre (CSC), General Commercial (GC), and Residential Manufactured Home (RMH). West of the plan area are agricultural uses of the same nature of the existing uses within the plan area, zoned Urban Reserve (UR).

## 3.3 Biophysical Assessment

A desktop Biophysical Assessment was prepared to support the preparation of the 65<sup>th</sup> Avenue ASP (Stantec, 2018). The ASP area contains historically agricultural land with one wooded area, as well as a drainage feature and wetland in the northeast portion.

The following sections summarize major findings from the Biophysical Assessment as well as recommendations for retention and development considerations.

## 3.3.1 Topography and Soils

The ASP area slopes from the southeast to the northwest, though is overall relatively flat. Some lower lying wet areas exist.

Soil stratigraphy consists of fill or topsoil overlying clay till, underlain by clay shale or sandstone bedrock. A variety of soil types are identified within the ASP area.

On a scale from 1 (no significant limitations to agriculture) to 7 (no capacity for agriculture), soils within the ASP area are generally classified with a Suitability Class of 2. This indicates that there are slight limitations that may restrict the growth of some crops. A small portion of soils in the north central part of the ASP area is classified with a Suitability Class of 5, indicating severe limitations.

### 3.3.2 Hydrogeology and Hydrology

Regionally, the ASP area is located within the North Saskatchewan River drainage basin and the Whitemud Watershed. Groundwater flow is in a northerly and downward direction toward Whitemud Creek and the North Saskatchewan River. Groundwater levels range from 0.6 m to 5.7 m below ground surface.

Stormwater management discharge release rates are estimated at between 2 and 8 litres per second per hectare. With some ephemeral field drainage features and one main drainage feature in the northeast portion of the plan area, watercourses are unmapped and considered Class D waterbodies with no associated restricted activity period.

#### 3.3.3 Vegetation and Wetlands

Five Natural Areas (NAs) are identified in the ASP area. NA 73 is a wooded area classified as anthropogenic upland, associated with a former farmstead. NA 74 is a wetland with an apparent origin of a borrow pit approximately 50 years ago. NA 81 is a dugout formed within the last 10 years, with limited to no native vegetation. NA 83 is a wooded are classified as an aspen woodland alliance community type. NA 85 is a wetland area formed between 1976 and 1982 which functions as a stormwater management system.

Both wetlands within the ASP area are classified as category D, with the lowest wetland value.

The Biophysical Assessment recommends that NA 85 be retained for continued use as a stormwater management system. If, due to the proposed QEII Highway corridor realignment, this is not possible, future development will need to consider stormwater management and design a new system accordingly. Stormwater management facilities should be designed to deter waterfowl, due to the close proximity to the EIA. This wetland is located on lands owned by the Province of Alberta.

Ephemeral drainage features are also recommended for retention for hydrological functions where feasible. Wooded areas should be considered to provide habitat for wildlife and preserve existing forested areas.

The other NAs are not prioritized for retention.

NA 73, a 3.8 ha area with a mix of native and planted tree species, was subject to a health analysis which showed that it is dying and will be removed in 2020.

#### 3.3.4 Wildlife

Wildlife species in the ASP area are typical of the Central Parkland Natural Subregion and are likely exposed and habituated to existing human disturbances. A wide variety of wildlife may be found in this area. There are several Species of Management Concern which may be found within the ASP area, as well as the potential for protected features for the bald eagle and sharp-tailed grouse. Wildlife surveys should be completed prior to development to confirm the presence of habitat and/or protected features, and if they are identified, restricted activity periods and setback distances may apply.

#### 3.3.5 Environmentally Significant Areas

There are no Provincial or Local Environmentally Significant Areas within the ASP area.

#### 3.4 Environmental Site Assessment

A desktop Phase I Environmental Site Assessment was prepared for the ASP area (Stantec, 2018). The following are major considerations which must be incorporated into the ASP. Further assessment of the site, including a site visit, is recommended in order to investigate the concerns identified below and determine whether further assessment is required.

#### 3.4.1 Pipelines

One pipeline, an operational Natural Gas line, is located within the site. Three pipelines are located adjacent within 60 m of the north boundary of the Site, two of which are discontinued Crude Oil lines. The third is an operational pipeline that carries low vapour liquids. It turns off of the north boundary of the ASP area to run along the west boundary as well.

The ESA recommends that development protocol setbacks related to the pipelines be adhered to during development and construction according to Directive 79 of the Alberta Energy Regulator (AER).

#### 3.4.2 Well Sites

One historical oil well located in 10-34-049-25 W4M, designated 00/10-34-049-25 W4M, was drilled and abandoned in 1962. Reclamation certificate #3086 was obtained in 1966 as documented in the Alberta Environment Site Assessment Repository (ESAR) for this well, although environmental site assessment for subsurface impacts was reported. The well is considered a potential environmental concern to the Site based on potential subsurface impacts due to drilling activities and potential waste disposal activities.

The ESA recommends that the well be assessed for subsurface impacts at the outline plan stage. It further recommends that development protocol setbacks related to the well be adhered to during development and construction according to Directive 79 of the Alberta Energy Regulator (AER).

#### 3.4.3 Historical Farmstead

A farmstead located in the southeast area of the ASP area was identified in aerial photographs form at least 1950 to 2011. This is considered a potential environmental concern due to potential fuel storage and use, chemical storage and use, and waste generated that could result in subsurface impacts.

One water well is identified to be within the ASP area, possibly in relation to the former farmstead.

The ESA recommends that, at the outline plan stage, the farmstead be further investigated for potential environmental concerns, including fuel and chemical storage and use, the possible presence of a septic tank, and the possible presence of a water well. If present, the septic system and water well should be properly decommissioned as per applicable legislation.

# 3.5 Geotechnical Study

A desktop Geotechnical Study was prepared in support of the 65<sup>th</sup> Avenue ASP (Stantec, 2019). The following are key considerations included in the Geotechnical Study. A detailed geotechnical investigation will be required to confirm the subsurface conditions.

#### 3.5.1 Surficial Geology

Surficial deposits in this area are identified as glaciofluvial with a landform consisting of eroded lacustrine plain, associated with glaciolacustrine sediments. These are anticipated to have a thickness of 5 to 20 m and consists of fine to medium-grained sand overlaying silt and clay, overlaying till and a bedrock base. Local gravelly lenses may also be expected. Bedrock was found to be in the range of 3 to 5 m below ground surface.

#### 3.5.2 Groundwater

Groundwater was identified as shallow as 0.6 m below ground surface. Interviews with City engineering staff revealed that seepage was encountered within the top 3 m to 5 m during borrow pit excavations within the Bridgeport neighbourhood to the south of the ASP area.

The Geotechnical Report recommends that the high groundwater table be considered during development, and indicates that design features and permanent de-watering systems may be needed for control of seepage.

## 3.5.3 Stormwater Management Facilities

As a result of low permeability clay and clay till soils in the area, the Geotechnical Report recommends that native soils be altered or replaced with more suitable material for stormwater management facilities. Further, a clay liner should be constructed over the bedrock.

#### 3.5.4 Potential Presence of Fill

Aerial photograph reviews suggest that a borrow pit in NW 35-49-25-4 (Provincial lands) may have been excavated and backfilled, with the nature and composition of this fill unknown. The Geotechnical Report recommends that a future geotechnical investigation include investigation of the historical borrow area.

#### 3.5.5 Soil Considerations

Thickened layers of organic material may be present in previously forested areas located in NW 34-49-25-4, and borehole records showed topsoil thicknesses of 150 to 800 mm.

Medium to high plastic clays were found in borehole drilling, which are subject to swelling or shrinking when moisture is added or removed. Moisture conditioning of the clay may be required during construction sue to natural moisture content. The Geotechnical Report recommends that further investigation should be conducted to confirm the suitability of these clays for potential use as fill for future development.

Dewatering methods may also be required for challenges posed by interbedded sand pockets in the till layer. The Geotechnical Report recommends confirming the groundwater elevation and developing a detailed soil stratigraphy for the site as part of a detailed geotechnical investigation during the detailed design stages.

The Geotechnical Report includes many further recommendations for site preparation and temporary excavations as a result of variable soils and a high groundwater table.

Shallow and deep foundations for building construction are feasible.

# 3.6 Agricultural Impact Assessment

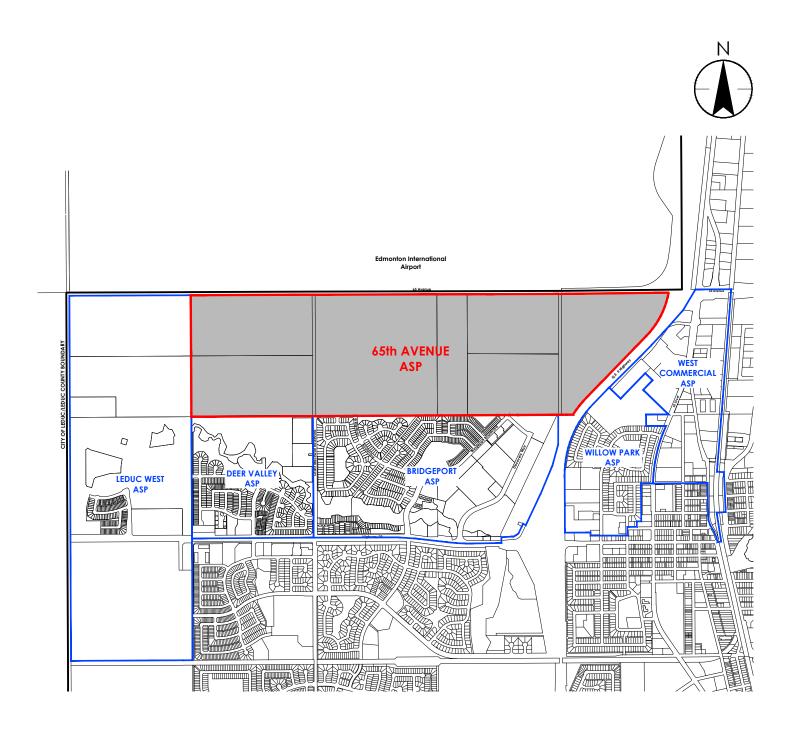
An Agricultural Impact Baseline Assessment was prepared for the ASP area and lands within 1 km around it (Stantec, 2020). The assessment identifies that both the Edmonton Metropolitan Region Growth Plan and the City of Leduc Municipal Development Plan direct that agricultural uses should be maintained for as long as possible until urban development occurs within the plan area. The MDP also prohibits agricultural uses considered incompatible with urban uses, such as intensive agriculture.

Based on historic air photos, the planning area has been predominantly used for cultivated annual agricultural cropping since the late 1940s. Soils in the area are predominantly moderate to fine textured loam and clay loam Eluviated Black Chernozems. There are also some areas of fine textured Gleyed Black Chernozems. Under the Land Suitability Rating System (LSRS), soils in the planning area are generally classified with a Suitability Class of 2H. This indicates a high productivity for a wide range of field crops and is one of the best Agro climate ratings in Alberta. However, wetlands and treed areas in the plan area pose some natural constraints to agricultural uses.

## 3.7 Historic Resources

A Statement of Justification (SoJ) for *Historic Resources Act* requirements was completed in June 2019 and submitted to Alberta Culture and Tourism in support of the ASP. The SoJ indicates that the ASP area has been cultivated extensively and contains minimal potential for heritage resources. However, there is a potential for deep archaeological deposits around former sloughs and a deep (backhoe) testing program is recommended. Further, one farmyard, located in LSD09-Section 34-TO49-R25 W4M,is evident in a 1950 historic air photo and has high potential for intact historic deposits and building/feature remains. Standing buildings and features in this yard should be recorded in detail, as per Alberta Heritage Survey guidelines.

Historical Resources Act approval was granted in September 2019, subject to Section 31, "a person who discovers an historic resource in the course of making an excavation for a purpose other than for the purpose of seeking historic resources shall forthwith notify the Minister of the discovery." The chance discovery of historical resources is to be reported to the contacts identified within Standard Requirements under the Historical Resources Act: Reporting the Discovery of Historic Resources.



# FIGURE 6

**ASP CONTEXT** 





## Legend

65th Avenue ASP Boundary

Watercourse

**Existing Pipelines** 

Existing Oil and Gas Wells

Hydrological Function Considered for Retention

EIA Airport Vicinity Protection Area (AVAP)

EIA Noise Exposure Foreceast (NEF)



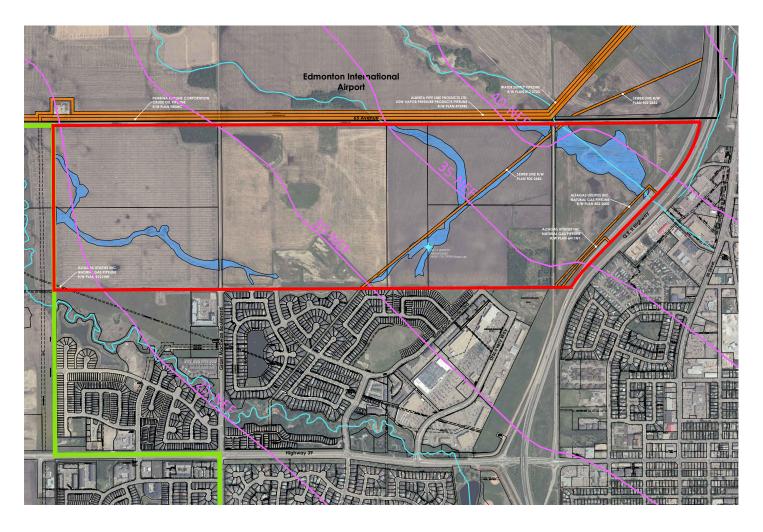


FIGURE 7

**EXISTING CONDITIONS** 





# 4. LAND USE CONCEPT

The 65<sup>th</sup> Avenue ASP area will accommodate the development of primarily employment and business uses, along with commercial areas and residential uses which transition into adjacent neighbourhoods. Figure 8: Land Use Concept shows the conceptual land use allocations, major roadway alignments, and other land use features such as stormwater management facilities and open space. The land use concept achieves the intent EMRGP, IDP, MDP, and AVS, and is in alignment with the land use restrictions imposed by the AVPA noise contours.

As per the net residential density requirements for the plan area that are outlined in the EMRB's Growth Plan, the net residential density for the 65<sup>th</sup> Avenue ASP is **35 dwelling units per net residential hectare**.

The approximate area of each land use is shown in the table below.

Table 1: 65th Avenue ASP Total Land Use & Population Statistics

Land Use	Area (ha)	% of GA	% of GDA
Gross Area (GA)	209.48	100.00%	
Arterial Roadway Dedication	7.27	3.47%	
Government of Alberta Land	23.08	11.02%	
Gross Developable Area (GDA)	179.13	85.51%	100.00%
Circulation	10.73		5.99%
Stormwater Facilities (PUL)	15.01		8.38%
Greenways & Open Space (MR)	7.02		3.92%
Pump Station (PUL)	1.01		0.56%
Commercial	15.94		8.90%
Flex Business	57.55		32.13%
Aero Employment	44.68		24.94%
Total Non-Residential Area	151.94		84.82%
Net Residential Area	27.19		15.18%

				% Total		
Residential Land Use Summary	Area (ha)	Units/ha	Units	Units	People/Unit	Population
Low Density Residential (LDR)	24.78	30	743	77%	2.8	2,082
Medium Density Residential (MDR)	2.41	90	217	23%	1.8	390
Total	27.19		960	100%		2,472

Net Population Density:91persons per net residential hectareNet Unit Density:35units per net residential hectare

Table 2: Melcor NE 33-49-25-4 Land Use & Population Statistics

Land Use	Area (ha)	% of GA	% of GDA
Gross Area (GA)	64.09	100.00%	
Arterial Roadway Dedication	4.84	7.55%	
Gross Developable Area (GDA)	59.25	92.45%	100.00%
Circulation	3.64		6.14%
Stormwater Facilities (PUL)	4.75		8.02%
Greenways & Open Space (MR)	2.76		4.66%
Commercial	0.00		0.00%
Flex Business	12.67		21.38%
Aero Employment	18.60		31.39%
<b>Total Non-Residential Area</b>	42.42		71.59%
Net Residential Area	16.83		28.41%

	% Total					
Residential Land Use Summary	Area (ha)	Units/ha	Units	Units	People/Unit	Population
Low Density Residential (LDR)	15.38	30	461	78%	2.8	1,292
Medium Density Residential (MDR)	1.45	90	131	22%	1.8	235
Total	16.83		592	100%		1,527

Net Population Density:91persons per net residential hectareNet Unit Density:35units per net residential hectare

Table 3: 1525758 Alberta Ltd. NW 34-49-25-4 Land Use & Population Statistics

Land Use	Area (ha)	% of GA	% of GDA
Gross Area (GA)	64.55	100.00%	
Arterial Roadway Dedication	4.87	7.54%	
Gross Developable Area (GDA)	59.68	92.46%	100.00%
Circulation	3.13		5.24%
Stormwater Facilities (PUL)	4.75		7.96%
Greenways & Open Space (MR)	3.16		5.29%
Commercial	0.00		0.00%
Flex Business	16.08		26.94%
Aero Employment	22.20		37.20%
<b>Total Non-Residential Area</b>	49.32		82.64%
Net Residential Area	10.36		17.36%

				% Total		
Residential Land Use Summary	Area (ha)	Units/ha	Units	Units	People/Unit	Population
Low Density Residential (LDR)	9.40	30	282	77%	2.8	790
Medium Density Residential (MDR)	0.96	90	86	23%	1.8	156
Total	10.36		368	100%		945

Net Population Density:91persons per net residential hectareNet Unit Density:36units per net residential hectare

Table 4: Remaining Parcels within NE 25-49-34-4 Land Use & Population Statistics

Land Use	Area (ha)	% of GA	% of GDA
Gross Area (GA)	64.22	100.00%	
Arterial Roadway Dedication	4.02	6.26%	
Gross Developable Area (GDA)	60.20	93.74%	100.00%
Circulation	3.96		6.58%
Pump Station (PUL)	1.01		1.68%
Stormwater Facilities (PUL)	5.51		9.15%
Greenways & Open Space (MR)	1.10		1.83%
Commercial	15.94		26.48%
Flex Business	28.80		47.84%
Aero Employment	3.88		6.45%
Total Non-Residential Area	60.20		100.00%
Net Residential Area	0.00		0.00%

#### City of Leduc 65th Avenue ASP

## Legend

65th Avenue ASP Boundary
City Boundary
Low Density Residential
Medium Density Residential
Flex Business
Aero Employment
Park/Greenway

Retail/Commercial
Province of Alberta Lands
Storm Water Management Facility (SWMF)
Public Utility Lot
Arterial Road
Collector Road



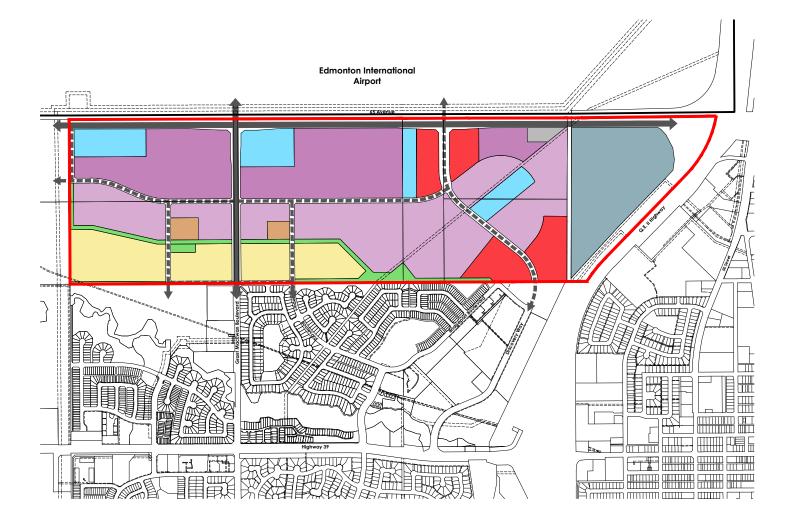


FIGURE 8

LAND USE CONCEPT





## 4.1 Overall Residential

#### 4.1.1 Overview

A mix of residential uses provide opportunities for different housing types and demographics to live in the ASP area. At the ASP level, the EMRB density targets are met, contributing to regional development goals for intensification.

#### 4.1.2 Objectives

- To provide diverse housing forms which meet the needs of a variety of demographics, income levels, and lifestyles.
- To meet regional density targets set out by the Edmonton Metropolitan Region Growth Plan.

#### 4.1.3 Policies

- A. A variety of housing types shall be provided, within both the Low Density Residential and Medium Density Residential policy areas.
- B. Overall residential density in the ASP area shall meet or exceed the minimum City of Leduc residential density target in accordance with the Edmonton Metropolitan Region Growth Plan.

## 4.2 Low Density Residential

#### 4.2.1 Overview

The intent of the Low Density Residential designation is to provide a transition between the Flex Business uses in the north part of the ASP area and the residential uses in the Bridgeport and Deer Valley neighbourhoods. Appropriate housing types include single detached homes, duplexes, and townhouses, with opportunities for garage suites, secondary suites, and garden suites. A greenway is provided between the residential area and non-residential designations, ensuring additional separation space.

## 4.2.2 Objectives

- To provide diverse low density housing forms which meet the needs of a variety of demographics, income levels, and lifestyles.
- To appropriately buffer residential uses from non-residential uses and transportation corridors.
- To locate residences with convenient access to amenities and services that meet daily needs.
- To achieve high quality landscape and urban design outcomes.

#### 4.2.3 Policies

- A. A variety of housing types shall be provided, which may include single detached, duplexes, and townhouses.
- B. Opportunities for garage suites, secondary suites, and garden suites shall be provided.
- C. Opportunities for the integration of appropriate home-based businesses and live-work uses shall be provided.
- D. Townhouses should be located adjacent to a collector road, or to act as a transitional land use between residential and non-residential land uses.
- E. Residential development adjacent to an arterial roadway may require a noise attenuation assessment to determine the appropriate level of noise attenuation measures prior to subdivision approval.
- F. Residential areas shall be developed in a manner compatible in scale and density to adjacent residential developments that existed prior to the approval of this ASP.
- G. Development shall achieve high quality design outcomes in alignment with the City of Leduc Neighbourhood Design Guidelines.
- H. Development should demonstrate high quality landscaping and incorporate elements of low impact development, such as bioswales and rain gardens.











### 4.3 Medium Density Residential

#### 4.3.1 Overview

The Medium Density Residential designation aims to provide greater housing diversity in the ASP area by accommodating residential uses from townhouses to four-storey apartments. These uses are located adjacent collector roadways in order to promote transit access and reduce traffic impacts on adjacent low density residential. As with the Low Density Residential designation, a greenway is provided between residential and non-residential areas, ensuring additional separation space.

### 4.3.2 Objectives

- To provide diverse medium density housing forms which meet the needs of a variety of demographics, income levels, and lifestyles.
- To include housing forms with greater densities than low density residential areas.
- To provide appropriate transition and complementarity between residential uses, non-residential uses, and transportation corridors.
- To locate residences with convenient access to amenities and services that meet daily needs.
- To achieve high quality landscape and urban design outcomes.

#### 4.3.3 Policies

- A. A variety of housing types shall be provided, which may include townhouses, stacked townhouses, and apartment housing up to four storeys.
- B. Single detached homes shall not be permitted.
- C. Opportunities for garage suites, secondary suites, and garden suites should be provided.
- D. Townhouses and apartment housing shall be located adjacent to an arterial or collector road, or to act as a transitional land use between higher density and lower density land uses.
- E. Residential development adjacent to an arterial roadway may require a noise attenuation assessment to determine the appropriate level of noise attenuation measures prior to subdivision approval.
- F. Residential areas shall be developed in a manner compatible in scale and density to adjacent residential developments that existed prior to the approval of this ASP.
- G. Development shall achieve high quality design outcomes in alignment with the City of Leduc Neighbourhood Design Guidelines.

H. Development should demonstrate high quality landscaping and incorporate elements of low impact development, such as bioswales and rain gardens.







### 4.4 Commercial

#### 4.4.1 Overview

The Commercial designation aims to meet the daily needs of people living and working within and surrounding the ASP area. General Commercial uses such as retail stores, health services, entertainment, accommodation and eating and drinking establishments are accommodated in this designation.

### 4.4.2 Objectives

- To provide commercial, retail, and service uses that meet the daily needs of residents and employees within and surrounding the ASP area.
- To achieve high quality landscape and urban design outcomes and integrate development with the surrounding uses in a pedestrian-oriented manner.

### 4.4.3 Policies

- A. Commercial sites shall be located along an arterial or collector road to ensure visibility and access.
- B. Commercial uses shall be accessible by multiple modes of transportation, including car, transit, bike, and walking.
- C. Pedestrian and cyclist access shall be designed to prioritize safety.
- D. Development shall achieve high quality design outcomes in alignment with the City of Leduc Neighbourhood Design Guidelines.
- E. Landscaping and screening shall be used to limit the visibility of garbage and loading areas to adjacent development.
- F. There shall be no outdoor storage permitted in the commercial area.









### 4.5 Flex Business

#### 4.5.1 Overview

Flex Business will provide for a range of office, commercial, and employment uses. These developments will border new residential areas built in the southwest area of the plan, and current residential in the Bridgeport neighbourhood.

### 4.5.2 Objectives

- To develop flexible business uses that are compatible with and complement the neighbouring residential areas.
- To provide development that is lighter and smaller in scale than that of development in the Aero Employment area.
- To achieve high quality landscape and urban design outcomes.
- To establish a buffer between residential to the south and Aero Employment to the north.
- To leverage adjacency to the southern edges of Edmonton International Airport by incorporating principles of "Airport Connected Development". This includes economic synergies with Edmonton International Airport.
- To focus on providing development typologies that assist in economic diversification and support the economic development principles of the City.
- To locate commercial uses within the area to provide amenities for nearby employees, residents, and transient people.
- To allow for flexibility to respond to market conditions in the City of Leduc and the Edmonton Metropolitan Region.

### 4.5.3 Policies

- A. Any use that creates a nuisance factor outside an enclosed building shall not be permitted within the Flex Business area, aside from the movement of goods in and out of enclosed buildings. Any manufacturing, fabrication, assembly, testing of goods, and similar activities are required to be completed in an enclosed building.
- B. Business Light Industrial land uses shall be permitted.
- C. Commercial uses intended to serve employees, residents and transient people within in the ASP area shall be permitted, such as personal services, retail wholesale, and food and beverage.
- D. Single-use, large-scale warehouses/logistics buildings shall not be permitted.

- E. Developments should be constructed in a manner that enables the building(s) to house a wide range of uses. Single purpose buildings shall be designed to have the ability to be altered to allow for multiple uses based on the needs of the end user tenant(s).
- F. Developments that include multiple uses within a singular building or multiple connected buildings shall be allowed, as permitted under the Land Use Bylaw. Uses may include, but are not limited to, office, general commercial, laboratories, product testing, light assembly, storage, warehousing, and distribution.
- G. Long term outdoor storage shall be not be permitted.
- H. Office and commercial uses shall be located in the front of buildings that face a public roadway, while other employment uses may operate on the side or back of lots.
- I. Office and commercial uses should be accessible by multiple modes of transportation, including car, transit, bike, and walking.
- J. Setbacks from the lot line to the building along the primary roadway and primary entrance to the building shall be attractively landscaped to create a pleasing visual environment.
- K. Where a proposed business or commercial use is located adjacent to a stormwater management facility or greenway, the City of Leduc may require:
  - a. Measures such as noise attenuation, setbacks, buffers, and particular site design which mitigate potential development impacts on adjacent lands; and
  - b. Enhanced architecture, urban design, and landscaping to ensure an attractive interface with adjacent lands.
- L. Appropriate landscaping and screening shall be used to enhance important locations such as at roadway entrances to the plan area, and corner lots within the development. Additional landscaping to that normally required in business and industrial areas by the City of Leduc Land Use Bylaw shall be provided on corner sites, with additional requirements identified in zoning, to be defined at the Outline Plan stage.
- M. Development should incorporate elements of environmental design, green building techniques, recycled construction materials, and Low Impact Development to reduce ecological impact.







### 4.6 Aero Employment

#### 4.6.1 Overview

Aero Employment will provide for a range of warehouse, logistics, and manufacturing facilities. These development uses will be in the north area of the plan and will front the future 65<sup>th</sup> Avenue roadway. These development uses will also be located directly across from the southern boundary of Edmonton International Airport.

### 4.6.2 Objectives

- To provide development typologies larger in scale than those within the Flex Business area.
- To achieve high quality landscape and urban design outcomes.
- To ensure a visually appealing interface near the future 65<sup>th</sup> Avenue interchange, the gateway to the west side of Leduc.
- To provide for a transition from the Edmonton International Airport to the Flex Business and residential uses located within the ASP area.
- To leverage direct connectivity to 65<sup>th</sup> Avenue by focusing on warehousing and logistics that support the efficient movement of goods to Edmonton International Airport for air cargo and to the QEII Highway for transport across the province.
- To leverage adjacency to the southern edges of Edmonton International Airport by incorporating principles of "Airport Connected Development". This includes economic synergies with Edmonton International Airport.
- To focus on providing development typologies that assist in economic diversification and support the economic development principles of the City.
- To allow for flexibility to respond to market conditions in the City of Leduc and the Edmonton Metropolitan Region.

#### 4.6.3 Policies

- A. Light Industrial land uses shall be permitted.
- B. Medium Industrial may be permitted subject to the following conditions:
  - i. No nuisance factors are created outside an enclosed building, aside from the movement of goods in and out of enclosed buildings;
  - ii. Medium industrial land use will be based on the preparation of an Outline Plan; and

- iii. The Outline Plan will make provisions for the mitigation of any adverse effects on adjacent Light Industrial development.
- C. Commercial uses intended to serve employees within the ASP area may be permitted at the discretion of the City of Leduc.
- D. Land uses that facilitate the implementation of an agribusiness hub within the Aero Employment area shall be permitted.
- E. Land uses that contribute to the Aerotropolis concept, such as airport-connected logistics, warehousing, and distribution, should be encouraged.
- F. Eco-industrial development, such as value-added food chain, renewable energy, resource recovery, bio-technology, environmental technology, and green building industries should be encouraged.
- G. Uses that provide added value to the agricultural crops that are grown locally, regionally, and nationally shall be permitted. Value added agriculture is recognized as enhancing the potential of a raw product through a particular production process.
- H. Development should incorporate elements of environmental design, green building techniques, recycled construction materials, and Low Impact Development to reduce ecological impact.













### 4.7 Open Space

#### 4.7.1 Overview

Open space, dedicated as Municipal Reserve (MR), in the 65<sup>th</sup> Avenue ASP is allocated as a linear greenway dividing the Residential areas from the Flex Business. The greenway aims to provide separation space between the uses, amenity space for residents and employees, and a corridor for wildlife movement. The greenway is designed to connect to park spaces and natural areas in the adjacent Bridgeport and Deer Valley neighbourhoods.

### 4.7.2 Objectives

- To establish separation space between residential and non-residential designations with a greenway.
- To provide connections for pedestrians and other active modes along multiway trails.
- To achieve high quality, attractive, and functionable landscaping.
- To identify additional park space at that Outline Plan stage.

#### 4.7.3 Policies

- A. Dedication of an approximately 30 m wide Municipal Reserve greenway shall occur at the time of subdivision, or prior, subject to separate agreements between the City of Leduc and landowners.
- B. The City of Leduc will require the full 10% MR dedication, whether that is provided as land, cash-in-lieu of land, or a combination thereof, as deemed appropriate by the City of Leduc and in accordance with the MGA. The specific strategy for dedication of MR shall be determined at the Outline Plan stage.
- C. A multiway trail shall be provided along the length of the greenway, with frequent connections to the pedestrian network in adjacent land uses.
- D. The greenway shall employ screening, including, but not limited to, a berm and planting, to visually obscure employment uses from residential developments.
- E. Opportunities for additional parks, open spaces and a greenway along the sanitary line in the eastern portion of the plan area, while ensuring unobstructed access to the line, may be identified at the Outline Plan stage. Examples could include amenity areas to serve neighbourhood residents, employees, customers and visitors.

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### 4.8 Stormwater Management Facilities (SWMF)

#### 4.8.1 Overview

Four Stormwater Management Facilities (SWMFs) are located within the ASP concept area. The easternmost area (Provincial Lands) takes advantage of the previously existing wetland and drainage area.

### 4.8.2 Objectives

- To minimize impacts to wetland features and provide natural ecosystem features.
- To provide amenity and recreation space.
- To achieve high quality, attractive, and functionable landscaping.

### 4.8.3 Policies

- A. Wherever possible, development impacts to wetland features not taken as ER should be minimized. Where impacts cannot be avoided, compensation will be provided for damage or loss pursuant to the provisions of the Alberta *Water Act* and Wetland Policy.
- B. SWMFs shall be landscaped and designed as open space amenities through the utilization of non-bird attracting landscaping materials and treatments.
- C. SWMFs that are adjacent to employment uses should provide multiway connections to ensure that they are accessible to employees.
- D. The minimum amount of multiways around the perimeter of SWMFs within the plan area shall be provided in accordance with the City of Leduc's Parks, Open Space, and Trails Master Plan.
- E. All storm management servicing within the 65<sup>th</sup> Avenue Right of Way will be piped via gravity.



### 4.9 Agriculture

#### 4.9.1 Overview

While no long-term agricultural uses are planned for the 65<sup>th</sup> Avenue ASP area, existing agricultural uses are expected to continue until required for planned development. Ranching or livestock raising is prohibited due to incompatibility with adjacent land uses. Interim agricultural uses producing specialty crops that can be processed in nearby facilities should be encouraged.

### 4.9.2 Objectives

- To permit low impact agricultural uses in the interim until urban development occurs.
- To promote value added food chain and agricultural uses.

### 4.9.3 Policies

- A. Existing agricultural activity shall be permitted to continue as an interim use as set out by the regulations in the Land Use Bylaw (Urban Reserve district).
- B. Ranching and livestock raising should be discouraged where adjacent to lands that do not permit agriculture as a use.
- C. Value-added agricultural and food chain uses that contribute to aerotropolis development should be encouraged in the Flex Business and Aero Employment designations.

### 4.10 Province of Alberta Lands

The Province of Alberta owns 22.91 ha of land in the eastern portion of the ASP area. The land is being held for future use and is not directed by policy in this ASP. Once the Government of Alberta has made a decision about the future use of their land holdings, the City of Leduc will collaborate to update and/or amend the ASP as necessary.

### 5. TRANSPORTATION

The overall transportation network as shown in *Figure 9: Transportation Plan* will accommodate the proposed land uses in this ASP. The Transportation Plan establishes approximate alignments for arterial and collector roadways, while local roadways will be identified by Outline Plans.

A Transportation Impact Assessment was prepared in support of the ASP, submitted under separate cover (Stantec, 2020). The TIA indicates background traffic conditions in the vicinity of the proposed ASP, estimates the magnitude and characteristics of traffic generated from full build out of the ASP, evaluates the impacts of vehicular traffic generated by the proposed development on the adjacent roadway network, and provides recommendations for appropriate roadway improvements.

### 5.1 Roadway Network

#### 5.1.1 Overview

The 65<sup>th</sup> Avenue ASP identifies a series of internal collector roadways intended to accommodate vehicular traffic generated by the proposed land uses and allow for the future provision of public transit.

### 5.1.2 Objectives

- To ensure that sufficient circulation to and through the plan area.
- To support alternative modes of transportation such as public transit and active modes.
- To ensure that the roadway network can evolve over time to meet the demands of the residents and visitors within the plan area.

#### 5.1.3 Policies

- A. Arterial and collector roadways within the 65<sup>th</sup> Avenue ASP shall be developed in general accordance with Figure 9: Transportation Plan
- B. Arterial and collector roadways within the 65<sup>th</sup> Avenue ASP shall be designed to an urban standard.
- C. As development occurs, the City of Leduc will review opportunities and requirements for higher order public transit. Arterial and collector roadways may, at discretion of the City, be designed to accommodate potential higher order transit routes and stops. Locations of potential higher order transit stops and routes will be determined at the Outline Plan stage.
- D. Requirements for local roadways will be determined at the Outline Plan stage.
- E. Local roadway alignments will be identified at the Outline Plan stage and will be designed and developed to an urban standard, in accordance with the City of Leduc Minimum Engineering and Design Standards

### 5.2 65th Avenue Interchange

#### 5.2.1 Overview

A functional planning study has been completed for the proposed 65<sup>th</sup> Avenue interchange spanning over the Queen Elizabeth II (QEII) Highway. While detailed design has not been completed on this project, it must be considered as a driving factor in the transportation network and land use concept presented in the 65<sup>th</sup> Avenue ASP.

### 5.2.2 Objectives

 To ensure that the design and eventual construction of the 65<sup>th</sup> Avenue interchange is accounted for an incorporated into the land use concept and transportation network of the 65<sup>th</sup> Avenue ASP

#### 5.2.3 Policies

A. The 65<sup>th</sup> Avenue interchange and its related transportation infrastructure (abutments, on and off ramps, and connector roadway linkages) shall be considered and incorporated into the transportation network and land use concept for the 65<sup>th</sup> Avenue ASP.

### 5.3 Active Transportation

#### 5.3.1 Overview

The active transportation network will also serve to connect the various open spaces, neighbourhood focal points, and employment opportunities. Active transportation will be provided throughout the plan area to enable multi-modal access to and through the plan area and will be implemented through the arterial and collector road networks.

### 5.3.2 Objectives

- Provide multi-modal transportation options to and through the plan area
- Create a pedestrian and cyclist friendly environment that is accessible to all users all seasons
- Connect major destinations such as commercial centres and the open space network through active modes of transportation

#### 5.3.3 Policies

A. Transportation concepts shall include a system of greenways/shared-use paths and walkways to facilitate pedestrian movement across the neighbourhoods to parks and open spaces and commercial / neighbourhood amenities.

B. Multi-modal transportation facilities should be designed to ensure access for all ages and abilities through all seasons.

### 5.4 Transit

### 5.4.1 Overview

The transit network throughout the 65<sup>th</sup> Avenue ASP will serve to provide convenient and effective mobility opportunities to connect residents, employees and visitors to the various neighbourhood focal points, employment opportunities, and to the broader community.

### 5.4.2 Objectives

- To encourage residents, employees, and visitors of the 65<sup>th</sup> Avenue plan area to make use of transit on a regular basis.
- To encourage transit ridership through the provision of multi-modal transportation networks.
- To effectively connect residents to employment opportunities through the provision of transit.
- To connect residents, employees, and visitors to the broader regional transit network and the EIA's protected transit corridor.

### 5.4.3 Policies

A. As development occurs, the City of Leduc will review opportunities and requirements for a West Transit Corridor as outlined in the City of Leduc's Transportation Master Plan.

### Legend

65th Avenue ASP Boundary

City Boundary

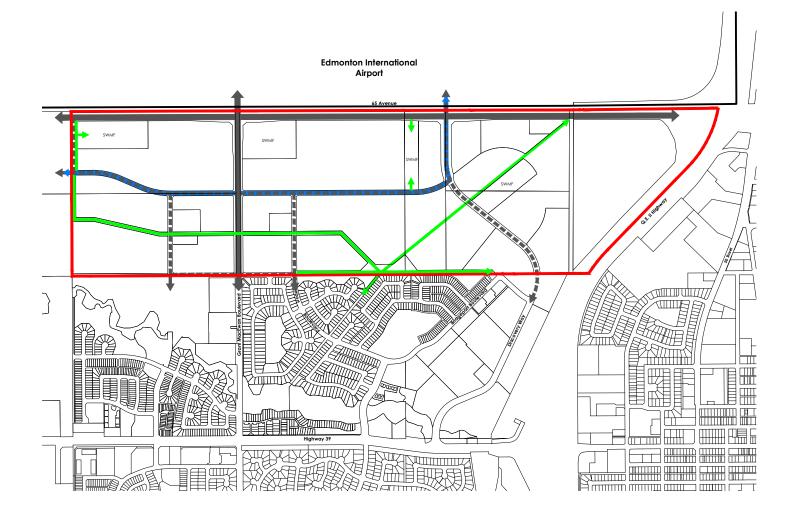
Arterial Road With Multiway

Collector Road With Multiway

Potential Higher Order Transit

Open Space Multiway





### FIGURE 9

TRANSPORTATION PLAN





### 6. SERVICING

A Servicing Study outlining the stormwater, sanitary, and water systems for the ASP area, was prepared and submitted under separate cover (Stantec, 2020). This section provides a description of the conceptual servicing schemes, and provides policy direction. All water, sanitary and storm servicing plans will need to be confirmed at subsequent design stages.

### **6.1 Stormwater Management**

#### 6.1.1 Overview

Figure 10: Stormwater Servicing shows the proposed stormwater servicing plan. Several stormwater management facilities (SWMFs) are identified based on the existing topography and drainage patterns and the land use and transportation designs. The location and configuration of the proposed stormwater management facilities will be further refined based on the detailed drainage area grading and internal roadway network requirements.

#### 6.1.2 Policies

- A. Prior to any development and in conjunction with the development of Outline Plans for any portion of the plan area, detailed engineering reports must be prepared by the proponent and accepted by the City of Leduc.
- B. Stormwater management facilities shall be in general accordance with the servicing scheme shown in Figure 10: Stormwater Servicing.
- C. Low Impact Development stormwater management techniques are encouraged to be incorporated into roadway and site design.
- D. The City may consider innovative servicing and utility technologies if they are proven to be equally or more efficient, cost-effective, aesthetically acceptable, and environmentally beneficial than existing technologies, and if they will result in long-term economic, social, and environmental benefits to the community. Innovative servicing must be sustainable in the long term and cannot increase liability or maintenance for the City of Leduc, on an objective quantitative basis, to be considered

### Legend

65th Avenue ASP Boundary

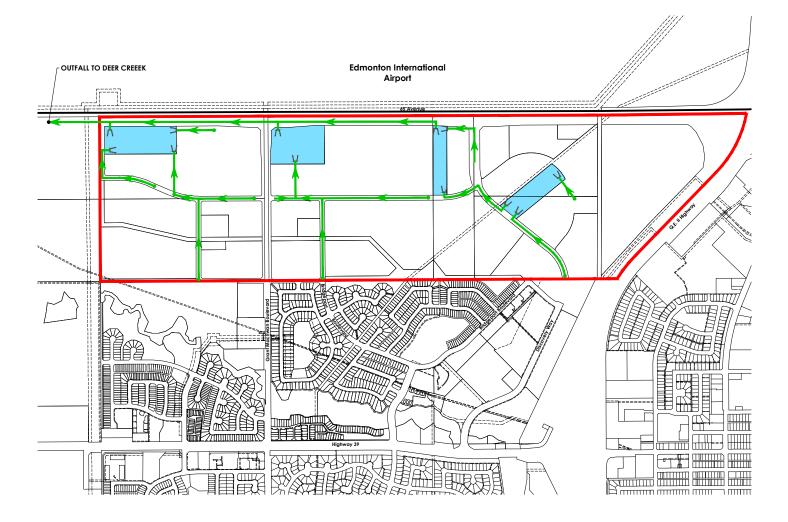
- City Boundary

Storm Water Management Facility (SWMF)

Proposed Storm Main

Direction of Flow





### FIGURE 10

STORM WATER MANAGEMENT





### 6.2 Sanitary Sewer

### 6.2.1 Overview

Figure 11: Sanitary Servicing shows the proposed sanitary servicing plan. The location and configuration of the proposed sanitary servicing facilities will be further refined based on the detailed drainage area grading and internal roadway network requirements.

### 6.2.2 Policies

- A. Prior to any development and in conjunction with the development of Outline Plans for any portion of the plan area, detailed engineering reports must be prepared by the proponent and accepted by the City of Leduc.
- B. The City may consider innovative servicing and utility technologies if they are proven to be equally or more efficient, cost-effective, aesthetically acceptable, and environmentally beneficial than existing technologies, and if they will result in long-term economic, social, and environmental benefits to the community. Innovative servicing must be sustainable in the long term and cannot increase liability or maintenance for the City of Leduc, on an objective quantitative basis, to be considered.
- C. Sanitary servicing facilities shall be in general accordance with the servicing scheme shown in Figure 11: Sanitary Servicing.
- D. The status of the sanitary trunk ROW shall be determined at the Outline Plan stage in order to ensure sufficient access can be maintained.
- E. Only localized sanitary mains will be permitted to connect to the existing sanitary trunk within the plan area.
- F. Sanitary mains will be required to be oversized for adjacent development when required.

### City of Leduc 65th Avenue ASP

### Legend

65th Avenue ASP Boundary

— City Boundary

Existing Sanitary Main (900mm)

**--** Existing Sanitary Forcemain

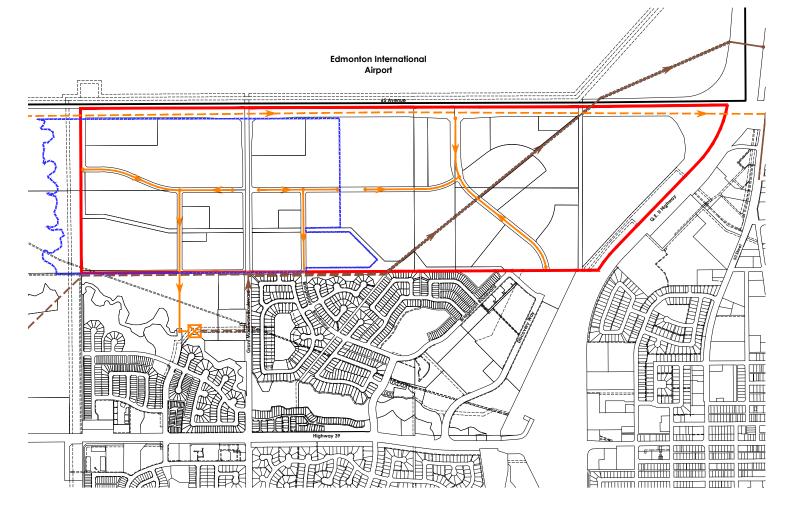
Proposed Sanitary Main

**---** Proposed Sanitary Forcemain

Existing Lift Station

Deer Valley Lift Station Contributing Area Boundary





### FIGURE 11

SANITARY SERVICING





### 6.3 Water Network

#### 6.3.1 Overview

Figure 12: Water Servicing shows the proposed water servicing plan. The location and configuration of the proposed water servicing facilities will be further refined based on the detailed drainage area grading and internal roadway network requirements.

### 6.3.2 Policies

- A. Prior to any development and in conjunction with the development of Outline Plans for any portion of the plan area, detailed engineering reports must be prepared by the proponent and accepted by the City of Leduc.
- B. Services shall be constructed with appropriate oversizing to accommodate future development within the plan area, as identified in detailed engineering reports, as well as future offsite development, if feasible and as required by the City of Leduc.
- C. Water servicing facilities shall be in general accordance with the servicing scheme shown in Figure 10: Water Servicing.
- D. The specific location of a water reservoir located within north eastern portion of the plan area shall be determined at the Outline Plan stage.
- E. Water main sizing shall be provided in accordance with the City of Leduc's Water Master Plan.

### **6.4 Emergency Response Services**

Local emergency services will be available to all future developments located in the ASP area. Ambulance services are supplied by the City of Leduc and contracted out to Alberta Health Services. The closest hospital is located in the City of Leduc. Police Services in the City of Leduc are provided by the Royal Canadian Mounted Policy (RCMP), with a detachment located in the City of Leduc. Fire Protective Services are provided from two fire halls with permanent staffing, the closest being along 50<sup>th</sup> Avenue southwest of the ASP area, within the Crystal Creek Outline Plan.

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### City of Leduc 65th Avenue ASP

### Legend

65th Avenue ASP Boundary

City Boundary

Proposed Water Main

Proposed West Reservoir and Pumphouse



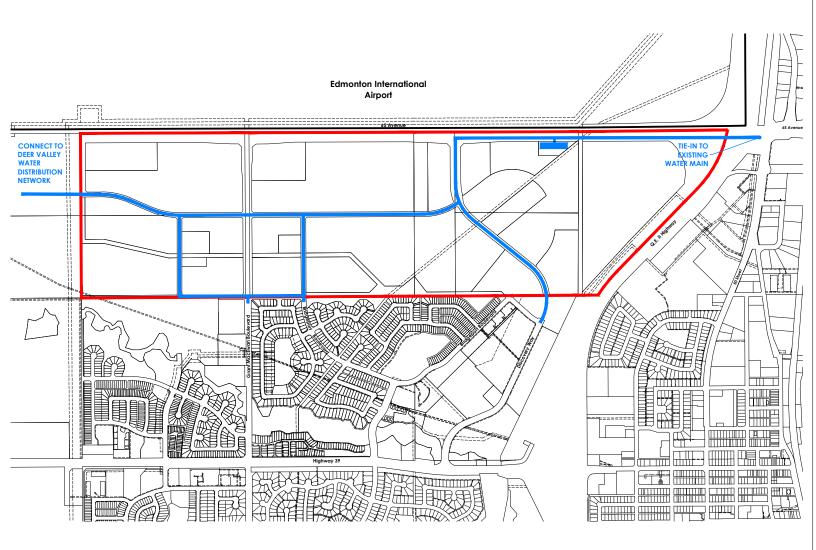


FIGURE 12

WATER SERVICING





### 7. IMPLEMENTATION

Outline Plans will be required prior to any redistricting or subdivision to ensure that sub-areas within the ASP are planned to an appropriate level of detail.

Amendments to the Land Use Bylaw may be required during the implementation of this plan in order to create or modify districts or overlays in support of the policy direction in this plan.

Within the ASP area, the City of Leduc will require development proponents to assume financial responsibility for the extension of all required municipal utility services, including initial capital costs. In accordance with the provisions of the *MGA*, the City will ensure that development proponents receive appropriate compensation from future benefiting developments as they occur, through the establishment of a levy, cost sharing arrangements, or some combination thereof.

### 7.1 Outline Plans

### 7.1.1 Policies

- A. Prior to the approval of redistricting or subdivision that would allow development to proceed, detailed Outline Plans shall be prepared by the applicant and accepted by the City of Leduc.
- B. Outline Plans shall be consistent with the 65<sup>th</sup> Avenue ASP, and with all adjacent Outline Plans.
- C. At the Outline Plan stage, further assessment of the site, including a site visit, will be required in order to investigate concerns identified in the Environmental Site Assessment report.
- D. Further studies identified in the Biophysical Assessment report will be required to be conducted at the Outline Plan stage.

### 7.2 Land Use Bylaw

### 7.2.1 Policies

A. Amendments to the Land Use Bylaw may be required to ensure that development occurs as envisioned in the 65<sup>th</sup> Avenue ASP. The City of Leduc and/or landowners shall be responsible for initiating the Land Use Bylaw amendment process.

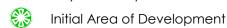
### 7.3 Staging

Development is anticipated to begin in the east portion of the ASP area and proceed toward the west as services are extended as indicated in *Figure 13: Staging Plan*. Development will generally proceed in a manner that is contiguous, logical, and economical with respect to municipal servicing. Development of individual phases may vary from Outline Plans and redistricting and subdivision applications, depending on market demand and the aspirations of respective landowners. Should sufficient demand warrant, or engineering design be made more efficient, portions of separate phases may be developed concurrently.

### City of Leduc 65th Avenue ASP

### Legend

65th Avenue ASP Boundary
City Boundary



Indicates General Direction of Development



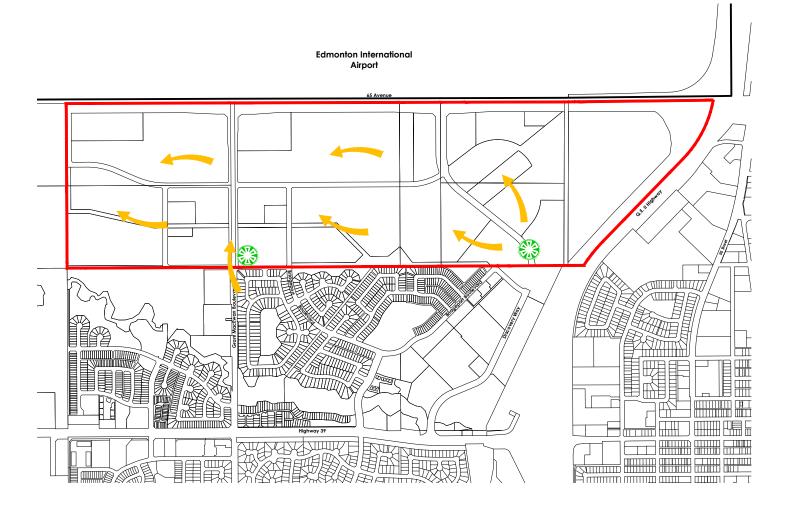


FIGURE 13

STAGING PLAN





### 8. REFERENCES

MXD Development Strategists, Stantec. 2015. Aerotropolis Viability Study – Final Report. Prepared for the Leduc Partnership comprised of the City of Leduc and Leduc County.

Stantec. 2018. 65<sup>th</sup> Avenue ASP – Desktop Phase I Environmental Site Assessment – Leduc, AB. Prepared for the City of Leduc.

Stantec. 2018. Agricultural Impact Baseline Assessment. Prepared for the City of Leduc.

Stantec. 2018. City of Leduc Area Structure Plan Desktop Biophysical Assessment 33, 34 and 35-49-25 W4M. Prepared for the City of Leduc.

Stantec. 2018. Economic Sector Diversification Analysis. Prepared for the City of Leduc.

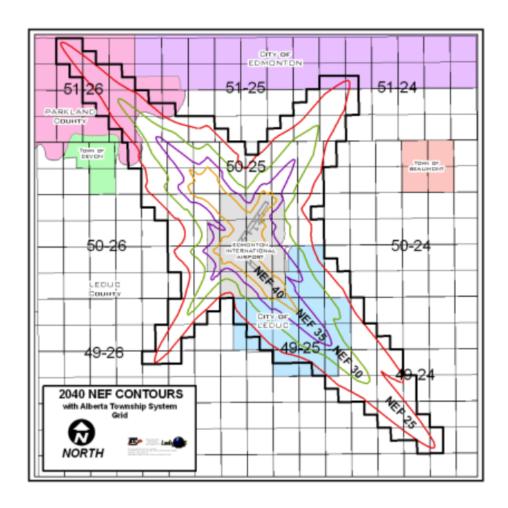
Stantec. 2018. Real Estate Market Review Summary. Prepared for the City of Leduc.

Stantec. 2019. 65 Avenue Area Structure Plan Geotechnical Desktop Study. Prepared for the City of Leduc.

# Appendix A PROHIBITED USES ACCORDING TO NEF AREA (EIAVPAR; AR 55/2006)

The figure below shows the noise exposure forecast contour lines. In the table,

- a. "NEF 40+ Area" means an area of land located between noise exposure forecast contour line 40 and the runway;
- b. "NEF 35-40 Area" means an area of land located between noise exposure forecast contour lines 35 and 40;
- c. "NEF 30-35 Area" means an area of land located between noise exposure forecast contour lines 30 and 35;
- d. "NEF 25-30 Area" means an area of land located between noise exposure forecast contour lines 25 and 30



A land use shown in Column 1 of the following table is prohibited on land that is located in a NEF Area shown in Column 2, 3, 4 or 5 of the table if the expression "PR" appears in that column opposite that land use.

**Table 5: Prohibited Uses by NEF Contours** 

Column 1	Column 2	Column 3	Column 4	Column 5
Land Uses	NEF 40+	NEF 35-40	NEF 30-35	NEF 25-30
	Area	Area	Area	Area
Commercial Uses				
Billiards, Bowling and Arcades	PR	-	-	-
Cinemas	PR	-	-	-
Eating and Drinking Establishments	PR	-	-	-
Funeral Homes	PR	-	-	-
Gambling Facilities	PR	-	-	-
Hotels/Motels	PR	-	-	-
Office and Retail Facilities	PR	-	-	-
Private Clubs and Lodges	PR	-	-	-
-	1			•
Public and Semi-public Uses				
Places of Worship	PR	PR	-	-
Day Care	PR	PR	-	-
Emergency Response Services	PR	-	-	-
Exhibition and Fairgrounds	PR	PR	-	-
Halls/Auditoriums	PR	PR	-	-
Hospitals	PR	PR	PR	-
Clinics	PR	-	-	-
Libraries	PR	PR	-	-
Nursing Homes	PR	PR	PR	-
Outdoor Recreation Facilities	PR	-	-	-
Schools	PR	PR	PR	-
Spectator Entertainment Facilities				
Outdoor	PR	PR	PR	-
Indoor	PR	PR	-	-
Spectator Sports Facilities				
Outdoor	PR	PR	PR	-
Indoor	PR	PR	-	-
Residential Uses				
Campgrounds	PR	PR	PR	PR
Residences	PR PR	PR PR	PR PR	PK
residences	71	_ rn	""	_

### 9. APPENDIX A – POLICY COMPLIANCE

# 9.1 Edmonton Metropolitan Region Board Growth Plan. Reimagine. Plan. Build.

#### **EMRB Growth Plan**

65th Avenue ASP

# A.1 Policy Area 1: Economic Competitiveness and Employment

## A.1.1 1.1 Promote global economic competitiveness and diversification of the regional economy.

- 1.1.1 Global economic competitiveness and diversification in the Region will be promoted by:
  - d. supporting the growth of sectors related to and not limited to finance, health, the knowledge-based economy, manufacturing and logistics;
  - f. supporting efforts to improve information and communications technology across the Region;
  - g. defining and protecting major employment areas to provide for employment growth;
  - j. promoting the growth and diversification of the agricultural sector related to food production, value-added activities, processing and distribution.

The 65<sup>th</sup> Avenue ASP is identified as a major employment area. Flex Business and Aero Employment designations offer substantial opportunities for growth of diverse economic sectors that benefit regional competitiveness.

## A.1.2 1.2 Promote job growth and the competitiveness of the Region's employment base.

1.2.3 Within major employment areas, growth will be accommodated by:

The 65<sup>th</sup> Avenue ASP is identified as a major employment area. A range of employment uses are included within the Flex Business and Aero

EMRB Growth Plan	65 <sup>th</sup> Avenue ASP
a. supporting employment intensive land uses with a range of employment types including commercial, industrial and institutional uses;	Employment designations. Planned higher order transit supports future intensification and increasing employee density.
b. planning for and promoting intensification and increasing employee density in areas with multimodal transportation access in the metropolitan core and metropolitan area;	
c. planning and coordinating infrastructure to support current and future employment and diversification opportunities;	

## A.1.3 1.3 Enhance competitiveness through the efficient movement of people, goods and ser vices to, from and within the Region.

1.3.3 The Edmonton International Airport (EIA) is recognized as a regionally significant economic engine and transportation asset that will enhance the Region's connectivity to global markets and as a key enabler of the Region's global economic competitiveness.

The 65<sup>th</sup> Avenue ASP emphasizes the role of Aerotropolis development which leverages adjacency to the EIA, supporting its role as a regionally significant economic engine.

## A.1.4 Promote the livability and prosperity of the Region and plan for the needs of a changing population and workforce

1.4.1 To improve housing diversity in the Region, market affordable and non-market housing will be planned and developed within close commuting distance to major employment areas and within centres, appropriate to the level of service and amenities identified in Table 1A-C.

The ASP supports and promotes sustainable, alternative, and compact residential development by providing diverse low and medium density housing forms in close proximity to the significant employment areas.

1.4.3 To attract and retain a diverse range of workers, complete communities will be planned and developed appropriate to the scale and level of service identified in Table 1A-C and in accordance

The 65th Avenue ASP lands will be designed to be a part of a broader complete community for various household types. A mix of residential uses, employment uses, Multiways, parks, and

EMRB Growth Plan	65 <sup>th</sup> Avenue ASP
with the policies in the Communities and Housing policy area.	retail/commercial uses will be available within the neighbourhood. Connections to the greater community ensures access to City-based amenities.

### A.2 Policy Area 2: Natural Living Systems

### A.2.1 2.2 Protect regional watershed health, water quality and quantity

2.2.1 The provincial Water for Life and Alberta's Strategy for Sustainability will guide statutory plans, regional plans and regional infrastructure projects to protect, enhance, and restore the water quality in the Region. Statutory plans, regional plans and regional infrastructure projects will include policies and initiatives to:

A Biophysical Report has been completed and did not identify any significant wetlands or other upland natural features for conservation.

- a. conserve natural areas along waterways;
- b. improve water quality and quantity;
- c. incorporate best practices to minimize soil erosion, protect and enhance riparian zones, and conserve and enhance areas that contain habitat for significant, rare or endangered plant species; and
- d. conserve wetlands with sufficient buffers to maintain their water quality and hydraulic function, as well as upland habitat necessary to support the life cycle needs of the wetland ecosystem.

## A.2.2 **2.3.** Plan development to promote clean air, land and water and address climate change impacts

2.3.1 The planning, design and construction of new development and infrastructure in greenfield areas and built-up urban areas will incorporate low-impact development and green building practices.

The ASP promotes low impact development practices and green design principles. LID principles and best practices will be used where practical in the landscaping of parks, Multiways, stormwater management facilities, roadways, and site design.

### 65th Avenue ASP **EMRB Growth Plan** Policy Area 3: Communities and Housing **A.3** A.3.1 Plan and develop complete communities within each policy tier to accommodate people's daily needs for living at all ages The ASP provides a compact and contiguous mix 3.1.1 Built-up urban areas and greenfield areas will be planned and developed as complete of residential and residential-related land uses, in communities generally in accordance with Table 1Asupport of developing a complete community within C. the Metropolitan Area (Table 1B). 3.1.4 In the metropolitan area, greenfield areas will The 65th Avenue ASP plans for a variety of low be planned and developed as complete and medium density household types, providing communities that: compact residential development provided with urban services, and an interconnected network of a. are compact, contiguous, and incorporate a mix Multiway paths and streets. The minimum of uses: greenfield densities are met. b. are accessible and age-friendly; c. provide a diversity of housing options in terms of density and built form; d. achieve the minimum greenfield density, in accordance with Schedule 6; e. incorporate an interconnected street network and urban form to support active transportation; f. integrate local services, amenities, institutional and commercial uses with residential development, within buildings and/or within a five-minute walk (400 metres); g. incorporate higher density uses along existing and planned transit corridors and at major

### A.3.2 **3.2** Plan for and promote a range of housing options

3.2.1 Housing will be planned and developed to address the changing demographics in the Region by including housing that offers a diversity of types, forms and levels of affordability to support a variety of lifestyle options, income levels and to meet the needs of all residents.

h. provide high quality parks, trails and open

transit stations; and

spaces.

The ASP supports the development of new and alternative residential forms and offers housing for a diversity of lifestyles and income levels.

EMRB Growth Plan	65 <sup>th</sup> Avenue ASP
3.2.3 The greatest density and diversity of housing in terms of type, form and affordability, including row housing and low, mid and high-rise buildings, will be directed to centres and areas with existing or planned regional infrastructure, transit and amenities, at a scale appropriate to the community.	This ASP plans for a variety of low and medium density housing options. Medium density housing is located in close proximity to planned higher order transit.

# A.4 Policy Area 4: Integration of Land use and Infrastructure

## A.4.1 4.1 Establish a compact and contiguous development pattern to accommodate employment and population growth

4.1.2 Employment and population growth will be accommodated in a compact form and a contiguous pattern within existing urban communities.	This ASP is contiguous to existing residential development and the existing EIA lands.
4.1.3 Major employment areas will be planned to accommodate current and future employment in accordance with the policies in the Economic Competitiveness and Employment policy area.	The 65 <sup>th</sup> Avenue ASP Area is identified as a major employment area and provides the Flex Business and Aero Employment designations. These include a wide variety of employment options in accordance with other policies of the Growth Plan. Current low impact agricultural employment uses are protected under the Agriculture designation.
4.1.4 Non-residential uses including commercial, retail, and institutional uses in built-up urban areas and greenfield areas will be planned and developed in a compact form to reduce auto dependency, enhance connectivity and create vibrant mixed use areas with on-site or adjacent residential uses to meet the needs of the local community.	The Commercial designation within the ASP directs commercial sites to be designed in a pedestrian-oriented manner, safely accessible by multiple modes of transportation, including car, transit, bike, and walking.

## A.4.2 4.3 Plan and develop greenfield areas in an orderly and phased manner to contribute to complete communities

- 4.3.1 Greenfield areas shall be part of a new statutory plan and planned, developed and phased in a contiguous pattern to:
- a. achieve the minimum greenfield density as identified in Schedule 6;

The ASP proposes a residential density that meets the minimum growth target mandated by Schedule 6 of the EMRB Growth Plan and provides the basis

### **EMRB Growth Plan**

### 65th Avenue ASP

- provide a mix of land uses in a compact form, including a mix of residential and employment uses to support the creation of complete communities;
- incorporate innovative and sustainable development standards to achieve compact development;
- d. incorporate an interconnected street network and open space network to support active transportation and transit viability, where applicable; and
- e. provide for a mix of housing forms and housing options that are attainable in areas close to existing and planned major and local employment areas and multi-modal transportation access.

of a complete and compact residential/employment neighbourhood.

The ASP plans for a variety of residential and complimentary uses (commercial, employment, and pocket parks) that are within a short walking distance and connected by a hierarchical network of streets, walkways, and Multiways.

- 4.3.2 Greenfield areas will only be considered for development in locations that meet all of the following criteria:
- a. are part of an existing urban community;
- are contiguous to planned areas approved through a statutory plan or are adjacent to existing or planned infrastructure or support the logical and orderly extension of infrastructure;
- have long term municipal storm, water and wastewater servicing capacity to accommodate the planned development;
- d. an agricultural impact assessment has been completed to identify the potential adverse impacts of the proposed development on prime agricultural lands and existing agricultural operations, in accordance with the policies in the Agriculture policy area; and
- e. if the lands are part of a new area structure plan including or adjacent to prime agricultural lands as identified on Schedule 11, an agricultural impact assessment shall be completed by a qualified professional in accordance with Policy 6.2.5.

The 65th Avenue ASP is the next logical and orderly extension of infrastructure from the adjacent Bridgeport and Deer Valley neighbourhoods. A review of Leduc's master servicing plans for water and sanitary servicing has been done to ensure there is capacity within the City's system. Ongoing review and detailed design will ensure that development is accommodate in a logical manner.

An Agricultural Impact Assessment has been submitted under separate cover, which evaluates the land use change and impacts to existing agriculture lands adjacent to the proposed ASP.

4.7.2 A transition of land uses will be required within the regional buffer areas to prevent or mitigate the adverse effects from odour, noise and other contaminants and minimize risk to public health and To transition residential uses from the EIA, the 65<sup>th</sup> Avenue ASP includes a buffer area of light and medium industrial uses, stormwater management facilities, and Multiways. The land use concept was

#### **EMRB Growth Plan**

safety as identified on Schedule 9. This includes but is not limited to: the Edmonton International Airport and other regional airports; CFB Edmonton; the Transportation Utility Corridor (TUC); resource extraction areas; Alberta's Industrial Heartland; coal power generation plants; and any future multi-use corridors. Transitional land uses may include passive open space, berms, light and medium industrial land uses, business and commercial land uses, and agricultural uses.

### 65th Avenue ASP

created in compliance with the EIA Vicinity
Protection Area Regulation, and recognizes the
necessity of sensitive land use restrictions to
protect the continued successful operation of the
EIA. The Plan carefully considers the NEF contour
lines in the land use concept, and conforms with
the EIAVPA.

### A.5 Policy Area 5: Transportation Systems

## A.5.1 **5.1 Develop a regional transportation system to support and enhance growth and regional and global connectivity**

5.1.1 The regional transportation system shown conceptually on Schedules 10A-10C will be planned and developed to:

- a. deliver viable multi-modal transportation choices that provide urban and rural residents and businesses with convenient access to the Region's economic, educational, recreational and cultural opportunities;
- ensure that regional transportation corridors provide connections to major employment areas and link the Region with local and extraregional markets in Canada and abroad;
- c. provide an efficient system of regional truck routes and over dimensional corridors to ensure the effective and efficient movement of goods into and out of significant industrial, commercial and agricultural areas; and
- d. ensure that access, intersection and interchange practices recognize and support the economic activities and provide a reasonable balance between access, efficiency and safety.

The 65th Avenue ASP plans for arterial roadways of 65th Avenue (regional arterial) and Grant MacEwan Boulevard, as well as the QE II Highway (regional freeway) at the east boundary.

The ASP plans for a hierarchical network of major and minor collectors and local roadways to provide safe and efficient movement through the residential neighbourhood. In addition, a network of Multiways will be connected within the neighbourhood as well as to the surrounding communities.

Planned higher order transit will connect with the major employment area in this ASP.

#### **EMRB Growth Plan**

#### 65th Avenue ASP

# A.5.2 5.2 Encourage a mode shift to transit, high occupancy vehicles and active transportation modes as viable and attractive alternatives to private automobile travel, appropriate to the scale of the community

5.2.3 Active transportation networks and facilities will be integrated into transportation and land use planning to provide safe, comfortable and reliable travel for pedestrians and cyclists within greenfield areas and built-up urban areas, and provide nonmotorized linkages to transit services, adjacent neighbourhoods and employment and recreational destinations, where applicable.

The ASP encourages multiple modes of transportation. The Multiway network provides connectivity between open spaces, employment uses, and residential uses, as well as into adjacent communities. The neighbourhood will be equipped to accommodate the integration of higher order transit when available.

# A.5.3 Coordinate and integrate land use and transportation facilities and services to support the efficient and safe movement of people, goods and services in both urban and rural areas

- 5.3.1 The locations, types, scale and built form of residential, commercial, institutional and industrial uses will be planned and developed to optimize the use of transportation infrastructure to ensure efficient, convenient and safe movement of people and goods.
- 5.3.2 The locations, types, scale and built form of development, including related parking regulations, will be actively managed with transit service, routing and alignment planning to foster a modal shift towards transit and active transportation modes.
- 5.3.3 The provision of transportation infrastructure and services will be consistent with and supportive of the guiding principles, objectives and policies of this Plan.

The ASP provides a mix of residential, commercial, and employment land uses and encourages multiple modes of transportation.

The neighbourhood is equipped to accommodate the integration of higher order transit when available.

The network of arterials, collectors, and local roadways is designed for the efficient movement of different modes of transportation.

#### **EMRB Growth Plan**

#### 65th Avenue ASP

### A.6 Policy Area 6: Agriculture

# A.6.1 6.1 Identify and conserve an adequate supply of prime agricultural lands to provide a secure local food source for future generations

6.1.3 In the metropolitan area, prime agricultural lands identified through the land evaluation and site assessment tool shall be conserved for agricultural purposes for as long as possible, recognizing that these lands will urbanize over time to accommodate growth.

An Agriculture Impact Assessment has been provided under separate cover. The ASP area is contiguous to existing residential development and the EIA lands, and presents a logical location for urban development over time. The staging of this land and timing of development will promote the continued agriculture use, until development occurs.

# A.6.2 6.2 Minimize the fragmentation and conversion of prime agricultural lands for non-agricultural uses

6.2.4 In the metropolitan area, the fragmentation and conversion of prime agricultural lands for nonagricultural uses will only be considered when the proposed development meets all of the following criteria:

- a. the lands are contiguous with built-up urban areas and/or planned areas;
- the lands are required to accommodate municipal employment and population projections in accordance with Schedule 1;
- c. if residential uses are proposed, the lands are within a proposed statutory plan in conformance with the applicable minimum greenfield density identified in Schedule 6;
- d. an agricultural impact assessment has been completed to identify the potential adverse impacts of the proposed development on agricultural lands and existing agricultural operations on-site and offsite in the surrounding area; and
- e. mitigation measures recommended through an agricultural impact assessment are incorporated in the planning and design of the

The ASP is planned for non-agricultural uses that are contiguous with existing urban development to the north and east, and with the EIA lands to the north. The logical and economical extension of services to this area will deter the fragmentation of existing agricultural uses.

The ASP is planned to meet the density target in accordance with Schedule 1 of the Growth Plan.

An Agricultural Impact Assessment has been submitted under separate cover, that reviews the impacts of the planned development and recommends mitigation measures, if necessary.

EMRB Growth Plan	65 <sup>th</sup> Avenue ASP
proposed development to minimize potential adverse impacts on agricultural lands and active agricultural operations on-site and offsite in the surrounding area from near neighbour impacts of urban growth.	
6.2.5 An agricultural impact assessment prepared by a qualified professional shall be required when a new area structure plan proposes development in a greenfield area that contains prime agricultural land as identified on Schedule 11. The application and contents of an assessment may be subject to review following completion of the Regional Agriculture Master Plan. The assessment shall:	An Agricultural Impact Assessment has been submitted under separate cover, that reviews the impacts of the planned development and recommends mitigation measures, if necessary.
<ul> <li>a. describe the proposed development and contextual factors;</li> <li>b. determine potential adverse impacts on agricultural lands and active agricultural operations on-site and off-site in the surrounding area; and</li> <li>c. recommend measures to buffer, mitigate and minimize potential land use conflicts.</li> </ul>	

## 9.2 City of Leduc Municipal Development Plan

City of Leduc Municipal Development Plan

65th Avenue ASP

### A.7 2B Clean Air and Greenhouse Gas Emissions

- 2. Encouraging the use of alternatives to motorized transport in collaboration with the school boards and other community partners, including active modes of travel such as walking and cycling, through integrated planning and the promotion of compact urban form and mixed land use.
- **3.** Providing realistic alternatives to single occupant automobile use.

The 65th Avenue ASP includes compact residential forms connected by a network of Multiways across the plan area and with neighbouring communities. Planned higher order transit will provide a realistic alternative for residents elsewhere in the City of Leduc and the Region to access the major employment area.

City of L	_educ Municipal Development Plan	65th Avenue ASP
<b>A.8</b>	2D Water Resources	
A.8.1	The City shall protect water resupplies by:	sources and manage municipal water
impleme environm	olling water pollution through the ntation of dependable, cost-effective, and nentally responsible best practices such as ct development.	The ASP encourages low impact development within residential area landscaping, employment area landscaping, and roadway and site design throughout the ASP area.
A.9	2F Natural Areas and Ur	ban Forests
A.9.1	-	rotect natural areas for the purposes of l corridors, supporting natural systems, portunities by:
environm	oping public open spaces with nentally sensitive best practices such as es, which will enhance and integrate systems.	Low impact development will be incorporated where practical in the landscaping of residential and employment areas, roadways, and site design.
A.10	2G City Beautification	
A.10.1	The City shall enhance the be	autification of Leduc by:
and open	nining minimum design standards for parks a spaces that reflect the community's landscaping on public lands.	Parks and Multiways will be designed according the City of Leduc standards.
<b>5.</b> Supporting enhanced way finding and community identity through the development of attractive entrance features and public signs at the		Signage and entrance features will be outlined at the time of detailed design.

entrances to Leduc and throughout the community.

### A.11 3B Local Economic Development

# A.11.1 The City of Leduc shall actively support and promote local economic development and increase Leduc's competitiveness in global markets by:

- **1.** Attracting businesses and industries related to logistics, manufacturing, information technology, value-added agricultural processing, green development and building, eco-industrial development, and energy efficiency.
- The ASP emphasizes opportunities for these businesses and industries within the Flex Business and Aero Employment designations, which encompass the majority of land within the ASP area.
- **2.** Ensuring that policy plans, land use redesignations, and municipal services are in place to provide for a readily available supply of serviced industrial and commercial land in a variety of parcel sizes and locations within Leduc.
- A broad variety of industrial and commercial land uses are supported within the ASP area, with the potential to be subdivided into a variety of parcel sizes within the collector and local roadway network.
- **4.** Providing the economic climate and infrastructure required to attract and retain successful businesses in well-designed industrial and business parks.

Policies of the Flex Business and Aero Employment designations in the ASP ensure well-designed business and industrial areas that will attract a wide variety of businesses.

## A.12 4A Growth Management

### A.12.1 The City shall manage growth by:

1. Promoting compact urban form through sensitive redevelopment of existing developed areas and efficient development of undeveloped areas.

The 65th Avenue ASP proposes densities that meet the requirements mandated by the Edmonton Metropolitan Region Board, which will result in a more efficient, compact urban form.

**7.** Ensuring that new development will be approved adjacent to existing developed areas, so that public services and infrastructure will be extended

The 65th Avenue ASP capitalizes on the logical extension of municipal infrastructure. The sanitary and water services for the plan area will be

City of Leduc Municipal Development Plan	65th Avenue ASP
logically and efficiently to create contiguous development.	provided through the extension of the water mains and trunks from adjacent communities.
<b>8.</b> Meeting transportation demand through provision of choice among mobility options including non-vehicular travel, the private automobile, and public transit.	The 65th Avenue ASP provides options for alternative modes of travel: the Multiway system provides connectivity throughout the ASP and to the greater community.
<b>9.</b> Achieving residential densities in conformance with the density targets of the Capital Region Board.	The 65th Avenue ASP proposes densities that meet the requirements mandated by the Edmonton Metropolitan Region Board.
<b>10.</b> Approving new subdivisions only where a full range of municipal infrastructure (sewer, water, and roads) can be provided in an environmentally sound, economical, and timely manner.	The 65th Avenue ASP lands will be serviced to full urban standards. Extending sewer, water, and roads in this area is a logical extension of infrastructure.

## A.13 4B General Land Use Planning

# A.13.1 The City shall achieve the orderly, economical and beneficial development and use of land by:

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1. Preserving agricultural land and protecting agricultural operations that are compatible with urban uses until such agricultural land is required for urban development.	Current low impact agricultural operations are protected under the Agriculture designation of the ASP until required for urban development.
<b>4.</b> Prohibiting the premature subdivision and development of land prior to the availability of municipal infrastructure (sewer, water, and roads).	The 65th Avenue ASP lands will be serviced to a full urban standard. Extending sewer, water, and roads in this area in a logical extension of infrastructure for the area.
<b>6.</b> Planning for land uses at safe distances from development constraints such as landfills, major rail and road rights-of-way, oil and gas facilities, and noise sources.	To transition residential uses from the EIA, the 65 <sup>th</sup> Avenue ASP includes a buffer area of light and medium industrial uses, stormwater management facilities, and Multiways. The land use concept was created in compliance with the EIA Vicinity

City of Leduc Municipal Development Plan	65th Avenue ASP
<b>7.</b> Prohibiting land uses and developments that may create negative impacts on safe airport operations.	Protection Area Regulation, and recognizes the necessity of sensitive land use restrictions to protect the continued successful operation of the EIA. The Plan carefully considers the NEF contour lines in the land use concept, and conforms with the EIAVPA.
<b>13.</b> Facilitating the development and redevelopment of local and regional commercial and retail areas that will serve all of the consumer needs of the region.	Commercial areas within the ASP are located within easy access to the QE II Highway, 65 <sup>th</sup> Avenue regional arterial, collector roadways, and Multiways, providing for commercial and retail uses that serve both local and regional needs.
14. Promoting industrial and business park development in strategically located areas that will take advantage of proximity to the QE II Highway, Edmonton International Airport, and major municipal and regional infrastructure.	The 65th Avenue ASP provides industrial and business park development that leverages it proximity to QE II Highway and EIA, and promotes uses that contribute to the Aerotropolis concept.
17. Promoting innovative planning and development concepts and methods such as low impact development, environmental design, green building techniques, innovative servicing technologies, and recycled construction materials.	LID features will be utilized in the design of landscaping and stormwater management facilities, where feasible. These features will be detailed at time of subdivision and engineering design.
20. Requiring that all Area Structure Plan, Area Redevelopment Plan, land use re-designation, subdivision, and development approvals generally conform to the land uses designated in Figure 4 — Municipal Development Plan Policy Areas, while allowing for minor adjustments to the boundaries of those Policy Areas without an MDP amendment if such adjustments are supported by detailed planning studies.	The 65th Avenue ASP conforms to the requirements of the Municipal Development Plan, as the land uses proposed support the Transitional Residential Mixed Use, Transitional Business Mixed Use, and Aerotropolis Business Industrial typologies.

City of Le	educ Munic	ipal Develo	pment Plan
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### A.14 4E New Residential Development

#### A.14.1 The City shall provide for new residential neighbourhoods by:

**2.** Requiring that all new residential Area Structure Plans achieve the target densities mandated by the Capital Region Board.

The 65th Avenue ASP achieves the desired density target mandated by the Edmonton Metropolitan Region Board.

- **3.** Measuring net residential density in new residential Area Structure Plans in order to maintain consistency with the density measures used by the Capital Region Board.
- **4.** Acknowledging new trends in household formation (e.g., smaller households) in the design of new residential neighbourhoods and the provision of a variety of housing types.

The 65th Avenue ASP provides a variety of low and medium density housing sizes and types, supporting a range of family types, sizes, and income groups throughout their life stages.

- **5.** Requiring that all new residential Area Structure Plans provide a variety of housing types including, where appropriate, types such as single-detached, semi-detached, duplex, triplex, fourplex, townhouse, or apartment dwellings, with no more than 50% of the total number of dwelling units in any residential Area Structure Plan to be designated within the same residential land use district of the Land Use Bylaw.
- **7.** Supporting the provision of affordable market and financially supported housing in all new neighbourhoods
- **9.** Ensuring that all new residential neighbourhoods have full access to a complete range of municipal

The 65th Avenue ASP contains primarily industrial and commercial development, providing

City of Leduc Municipal Development Plan	65th Avenue ASP
infrastructure (sewer, water, and roads), community services, retail establishments, commercial developments, open space, recreational facilities, and educational institutions.	employment opportunities to residential areas within the ASP and adjacent neighbourhoods. Multiways provide active connections to retail within the ASP area and to community services and educational institutions in adjacent built up areas.
10. Providing for neighbourhood commercial (office, personal service business, and retail) development at key locations within new residential Area Structure Plans, which will complement and integrate with the surrounding residential neighbourhoods through mitigation of traffic and parking impacts, appropriate site planning and architecture, landscaping, and pedestrian connections.	Commercial and retail areas are located along collector roadways and are found in the east portion of the ASP area, providing easy access to the QE II Highway and downtown Leduc.  Policies within the Commercial designation emphasize high quality design outcomes multimodal access. Multiways connect directly to the south commercial sites.
<b>11.</b> Protecting and creating access to adjacent neighbourhoods, natural amenities, open space, and the Multiway system.	The ASP supports the development of a network of Multiways that connect with adjacent neighbourhoods.
<b>13.</b> Incorporating public transit into new neighbourhoods.	The ASP policies support the future provisions of higher order transit service.
<b>14.</b> Protecting rights-of-way for future public transit service.	
17. Requiring that all residential developers be responsible for on-site and appropriate off-site costs of municipal infrastructure (sewer, water, and roads) and community services, through mechanisms such as off-site levies, bylaws, and development agreements.	A servicing agreement will be finalized prior to development.

City of Leduc Municipal Development Plan	65th Avenue ASP
<b>18.</b> Requiring that all new residential Area Structure Plans are supported by comprehensive engineering, servicing, environmental, geotechnical, and transportation studies approved by the City.	At the time of subdivision, detailed engineering design will be provided.
19. Prohibiting new residential development on undeveloped lands where the noise contours established by the Airport Vicinity Protection Area (AVPA) Regulation exceed NEF 30, except where special area exemption designations have been granted under the AVPA Regulation.	Residential development is not permitted in the ASP area where the noise contours established by the EIAVPA exceed NEF 30. Industrial and commercial uses are designated in this area.
<b>20.</b> Directing new residential development away from significant noise generators such as Edmonton International Airport, the Canadian Pacific Railway, and the QE II Highway.	The lands within The 65th Avenue ASP are in proximity to both the EIA and QE II Highway. Residential development is designated in the southwest portion of the plan area to provide distance from both of these noise generators. Light industrial and business uses, as well as a multiway network, provide a buffer between residential development and the EIA and QE II Highway.
21. Promoting innovative site planning, construction techniques, and building standards that will mitigate impacts from significant noise generators such as Edmonton International Airport, the Canadian Pacific Railway, and the QE II Highway, with reference to industry recommendations such as rail proximity guidelines.	In addition to setbacks requirements and proximity guidelines, innovative site planning, construction techniques, and building standards for noise mitigation will be explored at detailed design stages with further market research.
<b>22.</b> Allowing for commercial, light industrial, and business park development in the Transitional Residential Mixed Use policy areas shown in Figure 4, which would serve to buffer residential neighbourhoods from significant sources of highway and airport noise, and which would incorporate land use and design transitions to	A portion of the area designation Transitional Residential Mixed Use within the MDP is designated as Flex Business in the ASP, providing for low impact business and commercial uses that help buffer residential uses from medium industrial development and the EIA.

City of Leduc Municipal Development Plan	65th Avenue ASP
create compatible and sensitive development within the residential context.	
23. Allowing for a full range of housing types within the Transitional Residential Mixed Use policy areas shown in Figure 4, provided that:  • gradual land use transitions will be developed within the Transitional Residential Mixed Use areas, with  - lower density residential development closest to the adjacent residential policy areas,  - higher density residential development further away from the residential policy areas,  - compatible commercial, office, retail, public facilities, open space, or recreational development between the higher density residential development and other non-residential uses, and  - light industrial or business park development closest to the adjacent non-residential policy areas,  • impacts on residential development from non-residential uses within the Transitional	Low density and Medium Density designations within the 65 <sup>th</sup> Avenue ASP provide for an appropriate transition:  • Lower density uses are located adjacent to existing residential development  • Medium density uses such as townhouses and apartments up to four storeys are provided between lower density residential and non-residential uses  The Flex Business designation provides for light industrial, office, and commercial uses between residential and medium industrial areas, while the Aero Employment designation contains medium industrial uses located closest to the EIA.  The Multiway open space between residential and non-residential uses provides a buffer space, and the ASP includes consideration of noise attenuation and site planning design to mitigate the effects of non-residential uses.
Residential Mixed Use policy areas will be mitigated by elements and measures such as open spaces, natural areas, constructed or natural water bodies, recreational areas, berms, sound attenuation walls,	
landscaping, innovative site planning, building orientation, advanced construction	

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techniques, or more rigourous building standards.	
<b>24.</b> Requiring that any new residential development that may be affected by significant noise generators incorporate noise mitigation measures such as berms, sound attenuation walls, site planning, building orientation, landscaping, or building construction techniques.	Policies within the ASP provide for noise attenuation in the design of residential areas and sites. Residential development adjacent to an arterial roadway may require a noise attenuation assessment to determine the appropriate level of noise attenuation measures prior to subdivision approval.
<b>26.</b> Ensuring that all new residential subdivision and site plans conform to the City of Leduc Neighbourhood Design Guidelines.	Development within the 65th Avenue ASP area will conform to the City of Leduc's Neighbourhood Design Guidelines.
<b>27.</b> Encouraging city beautification, public art, and high quality urban design in new residential neighbourhoods that will exceed the minimum requirements of the Neighbourhood Design Guidelines.	Appropriate roadway widths, Multiway locations, low impact development, and mix of housing products have been considered for site design within the 65th Avenue ASP area. Details will be provided at the engineering design stage, at time of subdivision.

## A.15 4F Commercial Development

# A.15.1 The City shall promote local and regional commercial and retail areas that will serve all of the consumer needs of the entire community by:

2. Providing for new commercial development in clearly established corridors adjacent to Edmonton International Airport, the QE II Highway, and other primary highways such as Highway 39, where it would serve to buffer residential neighbourhoods from significant sources of highway and airport noise.

The Commercial designation within the ASP directs commercial sites to be designed in a pedestrian-oriented manner, safely accessible by multiple modes of transportation, including car, transit, bike, and walking.

Commercial areas within the ASP are located within easy access to the QE II Highway, 65<sup>th</sup> Avenue regional arterial, collector roadways, and

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City of Leduc Municipal Development Plan	65th Avenue ASP	
	Multiways, providing for commercial and retail uses that serve both local and regional needs.	
<b>7.</b> Providing for commercial and retail areas that support and have access to nearby residential neighbourhoods.	The south commercial areas are located with direct access from the Bridgeport neighbourhood, while the north commercial areas will be easily accessible from neighbourhoods east of the QE II Highway with the completion of the 65 <sup>th</sup> Avenue Interchange.	
8. Requiring that commercial and retail development and redevelopment that is visible from the QE II Highway, public open spaces, and residential neighbourhoods shall meet the highest design standards.	Commercial areas within the 65 <sup>th</sup> Avenue ASP area are visible from the QE II Highway and will be developed to have high quality landscape and urban design outcomes in alignment with the City of Leduc Neighbourhood Design Guidelines.	
<b>10.</b> Requiring that all commercial and retail development and redevelopment provide adequate pedestrian connections on site and to the City's trail, pathway, and Multiway systems.	The south commercial areas are directly connected to the Multiway network within the ASP area, while the north commercial areas are in close proximity to the pipeline corridor Multiway and will be connected through sidewalks along the collector roadways, which will be designed to an urban standard.	
<b>11.</b> Requiring that commercial development incorporate pedestrian-oriented frontages.	Commercial development will be integrated with surrounding uses in a pedestrian-oriented manner.  High quality urban design outcomes will be	
<b>12.</b> Requiring that parking areas for commercial development provide for pedestrian circulation, landscaping, and architectural elements to enhance the safety and comfort of pedestrians.	provided in alignment with the City of Leduc Neighbourhood Design Guidelines.	
<b>13.</b> Requiring that commercial and retail development and redevelopment provide adequate access for persons of all ages and abilities in accordance with the principles of universal access.		

City of Leduc Municipal Development Plan	65th Avenue ASP
<b>14.</b> Integrating public transit with commercial development.	Higher order public transit is planned through the ASP area and is directly adjacent to the north commercial areas.
<b>15.</b> Protecting rights-of-way for future public transit service.	commercial areas.

### A.16 4G Industrial and Business Park Development

# A.16.1 The City shall promote industrial and business park development in strategically located areas by:

- **2.** Actively promoting aerotropolis development adjacent to Edmonton International Airport in accordance with the City of Leduc Aerotropolis Integrated Land Use Compatibility Plan, which will:
  - take advantage of the economic development synergies and opportunities created by proximity to development at Port Alberta and Edmonton International Airport,
  - include logistics, warehouse, distribution, business park, and high-quality office park uses,
  - incorporate a transportation network that is linked and oriented to development at Port Alberta and Edmonton International Airport, so that transportation impacts on residential neighbourhoods to the south will be mitigated, and
  - provide for a land use and development buffer to separate the residential neighbourhoods to the south from noise sources at Port Alberta and Edmonton International Airport.

The 65<sup>th</sup> Avenue ASP emphasizes aerotropolis development and economic synergies with EIA. The Aero Employment designation promotes the development of diverse uses, including airport-connected logistics, warehousing, and distribution. Related uses in the Flex Business designation include office, general commercial, laboratories, product testing, light assembly, and storage.

The 65<sup>th</sup> Avenue arterial roadway and 65<sup>th</sup> Avenue Interchange will provide a transportation network oriented toward connecting Airport-connected

Transitional land uses including Flex Business, Multiways, and medium density residential provide a buffer to adjacent low density residential areas.

#### **City of Leduc Municipal Development Plan**

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**3.** Allowing for commercial, light industrial, and business park development as well as open spaces and recreational areas in the Transitional Business Mixed Use policy areas shown in Figure 4, which would serve to buffer the adjacent residential neighbourhoods from significant sources of highway and airport noise, and which would incorporate land use and design transitions to create compatible and sensitive development next to the adjacent residential neighbourhoods.

The area identified as Transitional Business Mixed Use in the MDP is designated as Commercial and Flex Business areas in the ASP. These offer opportunities for commercial, light industrial, and business park development, along with Multiways, providing a buffer for the adjacent residential neighbourhood.

**4.** Promoting eco-industrial development such as value-added food chain, renewable energy, resource recovery, bio-technology, environmental technology, and green building industries, which will:

The Aero Employment designation encourages eco-industrial development, such as value-added food chain, renewable energy, resource recovery, bio-technology, environmental technology, and green building industries.

- achieve improvements in the productivity of human and natural resources,
- conserve and use energy that is generated locally,
- introduce fewer non-biodegradable wastes into the environment,
- connect with the community,
- be compatible with other non-residential land uses,
- have links with inter-company networks that bring about new efficiencies and new market opportunities,
- incorporate sustainable land use and sustainable design of facilities, and
- adopt new technologies rapidly.

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<b>5.</b> Promoting the development of industries related to food production and the processing of agricultural products, particularly in relation to local agricultural operations and food that is produced within the region.	The Aero Employment designation encourages value added agriculture uses.	
<b>13.</b> Providing public transit service to industrial and high employment areas including, where feasible, access to C-Line transit service.	Higher order public transit is planned through the ASP area and is directly adjacent to high employment areas, including the Aero Employment and Flex Business areas.	
<b>14.</b> Protecting rights-of-way for future public transit service.		
<b>15.</b> Encouraging the use of low impact development, environmental design, green building techniques, and recycled construction materials in industrial development.	The Aero Employment and Flex Business designations encourage development to incorporate elements of environmental design, green building techniques, recycled construction materials, and Low Impact Development to reduce ecological impact.	
<b>17.</b> Requiring that all new industrial and business park Area Structure Plans are supported by comprehensive engineering, servicing, environmental, geotechnical, and transportation studies approved by the City.	At the time of subdivision, detailed engineering design will be provided.	
<b>18.</b> Approving new industrial and business park subdivisions only where a full range of municipal infrastructure or appropriate innovative servicing solutions can be provided in an environmentally sound, economical, and timely manner.	The ASP area presents a logical continuation of servicing and development contiguous to existing built-up areas. The sanitary and water services for the plan area will be provided through the extension of the water mains and trunks from adjacent communities.	
<b>19.</b> Requiring that all industrial and business park developers be responsible for on-site and appropriate off-site costs of municipal infrastructure and community services.	A servicing agreement will be finalized prior to development.	

City of Leduc Municipal Development Plan	65th Avenue ASP		
<b>20.</b> Ensuring that industrial and business park areas are developed with high quality buildings, appropriate landscaping, mitigation of impacts on adjacent land uses and the environment, pedestrian connections, and amenities for employees.	The Flex Business and Aero Employment designations require high quality landscaping, appropriate screening and setbacks, and a mix of retail and service uses that provide amenities for employees. Measures such as noise attenuation, setbacks, buffers, and site design will be used to mitigate potential development impacts on adjacent lands.		
A.17 4H Transportation and Utility Servicing Infrastructure  A.17.1 The City shall integrate land use planning and development with infrastructure investments based upon regional, city-wide, and sectoral priorities by:			
8. Providing a balanced transportation system that offers choice among mobility options including			
non-vehicular travel, the private automobile, and public transit.	Connectivity to the greater community will be provided through Multiways and the collector roadway network.		
•	provided through Multiways and the collector		

**15.** Integrating pedestrian infrastructure such as sidewalks, trails, pathways, and the Multiway system into the overall transportation network.

**14.** Directing investment into major roadway

most effective mode of travel and where the

to the community.

systems where the automobile is deemed to be the

improvement of traffic capacity will result in long

term economic, social, and environmental benefits

Multiway connections are proposed through the area and connecting with adjacent communities.

The ASP plans for a new interchange at 65<sup>th</sup>

development and the EIA.

Avenue and the QE II Highway, to improve traffic

capacity and easy access between Aerotropolis

#### City of Leduc Municipal Development Plan

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#### **17.** Requiring developers:

- to conduct engineering, servicing, environmental, geotechnical, and transportation studies for approval by the City,
- to identify significant development constraints and mitigate any impacts that such constraints may have on proposed development,
- c. to pay for the costs of providing adequate water and sewage services, stormwater management facilities, roadways, curbs and sidewalks, and franchise utilities (e.g. gas, power, cable, telephone) to new developments,
- d. to pay for appropriate off-site costs of municipal infrastructure (sewer, water, and roads) and community services, through mechanisms such as off-site levies, bylaws, and development agreements, and
- e. To provide irrevocable security to ensure that road and infrastructure construction meets City standards.

Preliminary geotechnical, biophysical, and environmental reports were conducted for the 65th Avenue ASP area. Further work is required prior to subdivision, detailing site specific conditions for development.

A servicing agreement will be finalized prior to development.

City of Leduc	: Municipal	<b>Development</b>	Plan
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### A.18 5C Healthy, Inclusive, and Safe Communities

# A.18.1 The City shall promote social well-being and will help individuals, couples, and families to develop and maintain healthy lifestyles by:

**15.** Ensuring that growth and development support the positive social atmosphere of Leduc and its reputation as a community that provides a safe and pleasant environment for raising families.

The placement of residential areas within the ASP has carefully considered nuisance factors from the EIA and industrial development, with buffering provided through land use placement and attenuation mechanisms, to provide a safe and pleasant living environment.

**16.** Adhering to urban design principles that address universal access, lighting, clear sightlines, building security, site planning, landscaping, and parking facilities in order to enhance safety, crime prevention, walkability, diversity, and sense of place.

Universal access design, site planning, lighting, building security, landscaping, and parking design will utilize CPTED principles, which will be outlined at time of detailed design.

Development within the ASP area will align with the City of Leduc Neighbourhood Design Guidelines.

**19.** Placing a high priority on noise mitigation as a human health issue and ensuring that compatible non-residential uses are developed around major noise sources.

The land use concept was created in compliance with the EIA Vicinity Protection Area Regulation, and recognizes the necessity of sensitive land use restrictions to protect the continued successful operation of the EIA and protect human health for resident and employees in the ASP area. Compatible non-residential uses are located within the Aero Employment designation, which is located closest to the EIA.

## A.19 6A Active and Healthy Communities

# A.19.1 The City shall promote the creation of an active and healthy community that reflects the needs of residents by:

1. Creating a range of park spaces with a variety of site amenities to meet the diverse needs of City residents.	The Multiway system within the ASP area provide recreation opportunities, and a planned pocket park has the potential to include an off-leash area. Multiways connect residential areas with larger park spaces in adjacent residential neighbourhoods.
<b>2.</b> Developing outdoor public spaces for year round use, with appropriate plantings and park design.	Design of outdoor spaces will be finalized at time of subdivision and detailed engineering design stages.
<b>3.</b> Developing the Multiway system as a complete network that promotes walkability and links residential subdivisions, recreation and cultural destinations, hubs of commerce, and high activity areas.	The proposed Multiway system is a complete network and will be integrated within the larger extent of the community.
<b>5.</b> Working with developers to have parks and the Multiway established in the early stages of development to ensure residents in new areas have access to outdoor recreational spaces.	The Multiway path system has been integrated at the preliminary design stages of the 65th Avenue ASP.

City of Leduc Municipal Development Plan	65th Avenue ASP
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# A.20 6C High Quality, Safe, and Accessible Public Open Spaces

# A.20.1 The City shall create high quality public open spaces that are accessible, safe, and responsive to the needs of residents by:

<b>1.</b> Developing efficient and sustainable public open spaces that incorporate natural systems where appropriate.	Public open spaces may incorporate naturalized landscaping, where appropriate. The easternmost stormwater management facility takes advantage of the previously existing wetland and drainage area, becoming a naturalized SWMF.
2. Locating parks, playgrounds, public open space, and Multiway trail heads so they are highly visible as well as easily and safely accessible for pedestrians and cyclists.	Proposed Multiway trail heads are sited in accordance to CPTED principles. They will be located along collectors and local road systems.
<b>3.</b> Promoting safety in parks and the Multiway system with accessible design, snow clearing and ice control, street lighting, and pedestrian-oriented design.	Orientation and layout of Multiways will be finalized at time of subdivision and detailed engineering design of the lands within the 65th Avenue ASP.
<b>10.</b> Developing stormwater management facilities, where appropriate, as attractive and usable park areas with public access.	Where possible, the proposed stormwater management facilities will be landscaped and integrated into the overall Multiway network.
<b>11.</b> Locating residential dwellings within walking distance of open space.	All residential units within The 65th Avenue ASP lands are within 400 m walking distance of open space and Multiways.