ATTACHMENT 1
Bylaw No. 1024-2019

AMENDMENT TO DEER VALLEY AREA STRUCTURE PLAN, BYLAW NO. 511-2002

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;

AND: Bylaw No. 511-2002 adopts the Deer Valley Area Structure Plan, passed by Council on May 13, 2002 and subsequently amended by Council on December 13, 2004; June 12, 2006; and July 15, 2008;

AND: Council has deemed it expedient and necessary to further amend Bylaw No. 511-2002;

AND: 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:

PART II: APPLICATION

1. THAT: That Bylaw 511-2002 be amended as follows:
   a. This Bylaw be cited as the Deer Valley/Creekside Area Structure Plan Bylaw;
   b. Schedule “A” of Bylaw No. 511-2002 be amended in accordance with the attached Schedule “A”.

PART III: ENACTMENT

2. This Bylaw shall come into force and effect when it receives Third Reading and is duly signed.

READ A FIRST TIME IN COUNCIL THIS _____ OF __________, AD 2019.

READ A SECOND TIME IN COUNCIL THIS _____ DAY OF __________, AD 2019.

READ A THIRD TIME IN COUNCIL AND FINALLY PASSED THIS _____ DAY OF __________, AD 2019.

_________________________
Robert Young
MAYOR

_________________________
Sandra Davis
CITY CLERK
Deer Valley | Creekside

AMENDMENT TO THE DEER VALLEY ASP
ASSESSMENT REPORT
S.E. ¼ Sec.33, Twp.49, Rge.25, W4M

26 April 2019

Submitted to: City of Leduc
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1.0. Introduction

1.1. PURPOSE AND PROJECT LOCATION

The purpose of this document is to describe the vision, development objectives, and proposed land uses for a portion of the S.E. ¼ Sec.33, Twp.49, Rge.25, W4M, which is part of the Deer Valley/Creekside Area Structure Plan (hereinafter referred to as “the Plan”) located in Leduc, AB. This document serves to support our client’s intention to amend the Deer Valley ASP by identifying how proposed changes to the plan align with the existing vision and policies as identified in the City’s existing planning documents and the Edmonton Metropolitan Region Growth Plan (EMRGP).

The reason for amending the Plan is attributed to a change in the land use plan, which originally designated a 2.85-hectare parcel in the north west corner as School Reserve. Through discussions with City administration and Black Gold Regional School Division, it was confirmed that there was no longer a desire or plausible need to locate a school at this location, and subsequently the future land use for this portion of the plan area is being reconsidered as medium-density residential. Since the Plan was originally completed in 2008, there have been many changes in Leduc. With the recent adoption of the EMRGP, along with updates to a number of the City’s planning documents (Municipal Development Plan in 2012, Strategic Plan in 2014, Intermunicipal Development Plan in 2017), the portion of lands currently undeveloped, known as Creekside, need to be consistent with these documents. In carrying out the amendment to the Plan for the Creekside area the City also requested that the Plan reflect the entire area to clean up the Plan based on changes that have occurred previously. Therefore, this amendment includes the entire Area Structure Plan, however, the main focus is on the changes arising that relate purely to the Creekside area.

The project location is shown on Figure 1 – Project location. This boundary encompasses the final phase of the Deer Valley/Creekside ASP, however, there is a portion of the Deer Valley ASP to the south of the creek along Deer Valley Drive that is yet to be developed.

![Figure 1. Creekside and Deer Valley ASP Boundary](image-url)
1.2. EXISTING CONDITIONS

The subject lands are predominately built out, with effectively the Creekside (Phase 4) area remaining undeveloped, resulting in the majority of the lands containing residential buildings of a variety of forms (ranging from single – multi units) (refer to Figure 2). On the corner of 50 Ave and Deer Valley Drive exists a small commercial site providing services to residents and beyond that is part of the original Plan. The development also includes the provision of an Environmental Reserve that protects an existing watercourse along with a naturalized stormwater pond. The land is relatively flat with the Creekside phase, containing some mild undulation and existing wetlands.

A developed neighbourhood Park exists on the corner of Ameena Drive and Deer Valley Drive and a multiway extends on the east side of Deer Valley Drive running in a north south direction. The Creekside portion of the Plan adjoins the Environmental Reserve and Community Park. Currently an existing natural gas line runs through the Creekside and Park lands and will require relocation.

1.3. OBJECTIVES

The Plan updates Creekside based on the changes to the land uses while also cleaning up historical changes to the original Plan. The key objectives of the Plan are:

- To provide diversity in the housing stock that provides affordable choices to residents.
- To provide a Sense of Place within the community through enhancement of natural areas, creation of parks and open space, combined with a connected trail system and local commercial site.
- To increase density in accordance with the recently adopted Edmonton Metropolitan Region Growth Plan.
- To create a transportation network that is consistent with the City’s Transportation Master Plan.
- To provide water, sanitary and stormwater services to support the development.
- To provide housing within close proximity to major nodes of employment.

A thorough review was conducted of all relevant planning documents, both statutory and non-statutory, for the purpose of demonstrating how this amendment will ultimately be in accordance with the City’s policies and aligned with the growth & development objectives of the wider region.

1.4. APPROVAL PROCESS

Approval of the Plan amendment will be undertaken as per the City of Leduc Area Structure Plan & Outline Plan Guidelines. For the purpose of providing greater clarity to The Plan, it is our understanding that it would be in the best interests of the City and the Developer to rescind the entire existing ASP and draft a new document which would include all of the approved and proposed amendments in one consistent document.

Following confirmation of compliance by the City of Leduc’s Planning & Development Department, the ASP amendment shall be referred to Council with a recommendation that Council approve the proposed rezoning and ASP amendment. Following Council’s first reading of the proposed bylaw, an
application under the Regional Evaluation Framework (REF) will be made to the Edmonton Metropolitan Region Board for review and subsequent approval.
2.0. Municipal & Regional Policy Context

The proposed amendment to the Plan is guided by a hierarchy of planning documents. These documents were reviewed and referenced to achieve consistency with the proposed land use and the plan amendment aligns with the larger planning framework.

2.1. STATUTORY & NON-STATUTORY PLANS

2.1.1. Edmonton Metropolitan Region Growth Plan (EMRGP)

The City of Leduc is a member of the Edmonton Metropolitan Region Board which is comprised of 13 municipalities in the Edmonton Metropolitan Region. The Edmonton Metropolitan Region Growth Plan (EMRGP) provides a 50-year vision for the region as well as principles and policies to guide growth over the next 30 years through integrated land use, infrastructure, and transportation, with an emphasis on sustainable communities. The EMRGP is applicable to the amending portion of the Area Structure Plan (ASP) known as Creekside, as the remaining lands have effectively been developed under the original ASP. Because of changes over time, the City has requested that this Plan reflect previous changes to create one ASP document.

2.1.1.1. Planning Elements

The Plan is located within the Metropolitan Area as indicated on Schedule 2 of the EMRGP.

2.1.1.2. Applicable Policies

The following are considered the key policies that are applicable to the Creekside undeveloped lands of the Plan.

<table>
<thead>
<tr>
<th>Edmonton Metropolitan Region Growth Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1.4:</strong> Promote the livability and prosperity of the Region and plan for the needs of a changing population and workforce</td>
</tr>
</tbody>
</table>

**Policies 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.

**OBJECTIVE 3.1** Plan and develop complete communities within each policy tier to accommodate people’s daily needs for living at all ages Policies

*3.1.1 Built-up urban areas and greenfield areas will be planned and developed as complete communities generally in accordance with Table 1A-C.*
3.1.4 In the metropolitan area, greenfield areas will be planned and developed as complete communities that:

- are compact, contiguous, and incorporate a mix of uses;
- are accessible and age-friendly;
- provide a diversity of housing options in terms of density and built form;
- achieve the minimum greenfield density, in accordance with Schedule 6;
- incorporate an interconnected street network and urban form to support active transportation;
- integrate local services, amenities, institutional and commercial uses with residential development, within buildings and/or within a five-minute walk (400 metres);
- incorporate higher density uses along existing and planned transit corridors and at major transit stations; and
- provide high quality parks, trails and open spaces.

OBJECTIVE 3.2 Plan for and promote a range of housing options

Policies

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.

Creekside will provide a diversity in housing choices within close proximity to major employment of the airport and City of Leduc. This phase includes housing options ranging from mid-rise, townhouses, a range of duplexes through to single residential dwellings. The phase is a contiguous urban development of the Plan and is within close proximity to a small commercial business hub, major shopping centre (Leduc Common) located along 50th Avenue and downtown City of Leduc.

The proposed development of Creekside continues with providing a comprehensive active transportation corridor through the incorporation of sidewalks throughout the neighbourhood, the creation of a trail system east to west that adjoins the Environmental Reserve and a continuation of a north south accessible 3.0 m wide multi-way.

In relation to densities outlined under Schedule 6 of the EMRGP, Creekside falls under the requirement of meeting the minimum greenfield Density of 35 (du/nrha). Section 3, Table 2 of this report illustrates that a minimum of 58 (du/nrha) will be achieved that will contribute to increasing the overall density of the Plan to 43 (du/nrha).

2.1.2. City of Leduc / Leduc County Intermunicipal Development Plan

The County and City of Leduc adopted an Intermunicipal Development Plan (IDP) in 2011 with the purpose of creating a joint plan to address a range of issues and interests of common concern.

2.1.2.1. Planning Elements

The Plan is contained within the IDP Area as indicated in Figure 2 of the IDP document.
2.1.2.2. Applicable Policies

!), 022) 05-02622 022) RESIDENTIAL POLICIES

/0010 Area Structure Plans Required

4.2.2.2 No new multi-lot subdivision (three lots or more) will be allowed without an adopted area structure plan pursuant to Section 632 of the MGA.

\%0010 Residential Density

4.2.2.3 All Residential Area Structure Plans shall achieve an overall density of 25-30 dwelling units per net residential hectare, as prescribed by the Capital Region Growth Plan (CRGP) for Priority growth Area “E”.

4.2.2.5 The minimum residential densities required in this IDP should be achieved through a variety of housing types including single-detached, semi-detached, townhouse, and apartment dwellings.

\%0010 Residential Community/Neighborhood Design

4.2.2.6 New residential communities/neighbourhoods within the IDP area should incorporate design that:

• reduces vehicle dependency
• includes a variety of housing choices
• exceeds minimum residential densities
• comprises mixed uses and activities in neighborhood nodes
• supports pedestrian and public transit connections and
• provides access to open space and recreational areas and facilities.

Through the ASP and subdivision processes, both municipalities will ensure residential neighbourhoods and communities are designed and developed in a manner to make them safe, attractive and well serviced through the following design principles:

• The design of the neighbourhood or community wherever possible should maintain and protect stands of trees, watercourses, wetlands, ravines and other natural features. In the more rural areas, a conservation (cluster) subdivision design form should be encouraged.
• Provide a wide range of housing forms and tenure.
• Try to exceed minimum residential densities specified in the IDP.
• The design of the neighbourhoods and communities should avoid dwellings fronting onto highways or arterial roadways.
• The design needs to provide for adequate parks and open space to serve the neighbourhood and community, preferably in the form of a large centralized or linear park area which is more usable and easier to maintain.
• Wherever possible, provisions need to be made in the design of the neighbourhood and community to encourage alternative sustainable transportation such as walking, cycling and public transit to reduce vehicle dependence.
The proposed development comprises a wide range of residential dwellings from mid rise apartments, townhouses, varying duplexes through to single family residential dwellings. A small commercial hub is also located within the southern boundaries of the Plan. This provides local services to residents.

Identified watercourses have been protected through the creation of an Environmental Reserve and, where possible, the creation of a trail system has been incorporated into the design to capitalize on the natural features of the site. These trails connect into a wider trail system within the overall development, comprised of sidewalks through to multiway trails located on the eastern side of Deer Valley Drive. Figure 5 Section 3.0 illustrates the overall trail system accessible to the community.

This amendment enables the densities to be increased within the Creekside portion of the Plan to be more consistent with the Edmonton Metropolitan Region Growth Plan, and will increase the overall density of the Plan (refer to tables 1 & 2 Section 3). The increase in density could also create the opportunity to justify transit along key collector roads in the future.

### Intermunicipal Development Plan

#### Environmental Review

4.6.2.10 At the Area Structure Plan, land use redesignation, or subdivision stage, Environmental Impact Assessments addressing natural areas on site or Environmental Site Assessments addressing contamination on site, shall be prepared by qualified environmental consultants, to the satisfaction of the relevant municipal approving authority.

4.6.2.11 Lands identified as sensitive natural areas may be designated as Environmental Reserve at the subdivision stage in accordance with the Municipal Government Act. Such areas may also be identified at the Area Structure Plan stage. In the case of identification at the Area Structure Plan stage, sensitive natural areas would require the appropriate land use designation before subdivision could proceed. If at the subdivision stage private ownership of environmentally sensitive lands is deemed more appropriate by the relevant municipal approving authority, then environmental reserve easements may be registered to protect the sensitive lands.

An Environmental Phase 1 has been completed for Creekside and is contained in the Phase 1 Environmental Site Assessment report (November 30, 2017) by Trace Associates. The conclusions of the investigations did not identify any potential contaminated lands. A desktop Biophysical Impact Assessment (BIA) was also carried out for Creekside, which identified five wetlands that included two seasonal freshwater graminoid marshes and three temporary freshwater marshes that will be disturbed by the development. Approval will be required prior to development in accordance with the Alberta Wetland Policy and Water Act.

There were no rare vegetation species, however, the desktop assessment did identify the eastern kingbird and sora bird species within the area. Overall, the assessment concluded that the development will have a minimal impact on local habitat loss for some wildlife species, and a small loss of native vegetation and wetlands. The predicted effects will be mitigated through the implementation of the mitigation measures contained with the BIA desktop report. Further details on the findings of the BIA can be found in the Desktop biophysical Impact Assessment (May 2, 2018) by Trace Associates.
As referred to earlier the trail system is indicated on Figure 5 Section 4.

2.1.3. City of Leduc: Municipal Development Plan

The City of Leduc’s Municipal Development Plan (MDP) was amended in August 21, 2017 and directs the future growth and land use development of the area.

2.1.3.1. Planning Elements

The MDP provides policy direction for the future growth within the boundaries of the City and the Plan has to be consistent with the relevant policy contained within the document.

2.1.3.2. Applicable Policies

<table>
<thead>
<tr>
<th>City of Leduc Municipal Development Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4E NEW RESIDENTIAL DEVELOPMENT</strong></td>
</tr>
<tr>
<td>The City shall provide for new residential neighbourhoods by:</td>
</tr>
<tr>
<td>1. requiring Area Structure Plans for all new residential development;</td>
</tr>
<tr>
<td>2. requiring that all new residential Area Structure Plans achieve the target densities mandated by the Capital Region Board;</td>
</tr>
<tr>
<td>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;</td>
</tr>
<tr>
<td>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;</td>
</tr>
<tr>
<td>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;</td>
</tr>
<tr>
<td>7. supporting the provision of affordable market and financially supported housing in all new neighbourhoods;</td>
</tr>
<tr>
<td>8. balancing higher residential densities with the provision of open space; ensuring that all new residential neighbourhoods have full access to a complete range of municipal infrastructure</td>
</tr>
</tbody>
</table>
City of Leduc Municipal Development Plan

(sewer, water, and roads), community services, retail establishments, commercial developments, open space, recreational facilities, and educational institutions;

9. ensuring that all new residential neighbourhoods have full access to a complete range of municipal infrastructure (sewer, water, and roads), community services, retail establishments, commercial developments, open space, recreational facilities, and educational institutions;

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;

11. protecting and creating access to adjacent neighbourhoods, natural amenities, open space, and the Multiway system;

12. protecting and creating views to natural amenities;

13. incorporating public transit into new neighbourhoods;

14. protecting rights-of-way for future public transit service;

18. requiring that all new residential Area Structure Plans are supported by comprehensive engineering, servicing, environmental, geotechnical, and transportation studies approved by the City;

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,

25. requiring that all new residential subdivision and site plans include landscaping and open space plans that take into account, integrate, and where appropriate, protect existing natural vegetation, topography, wildlife, soils, water bodies, drainage courses, and climatic conditions;

In relation to the above policies, they are considered generally consistent with those contained within the EMRGP and the Intermunicipal Plan and therefore the comments made in relation to these documents are applicable to this policy content.

2.1.4. Edmonton International Airport Vicinity Protection Area Regulation
The Edmonton International Airport is a significant piece of infrastructure to the wider region and protecting the airport’s effective operation plays a significant role in the economic development of the region and Province. Protecting the airport’s corridors are critical elements when developing within proximity to such infrastructure, to avoid any potential negative impacts.

2.1.4.1. Planning Elements

The Plan area is partially located within the Protection Area: NEF 25.

2.1.4.2. Applicable Policies

Edmonton International Airport Vicinity Protection Area Regulation

_**Duty of Municipality**_

9(1) A municipality must notify the Airport Operator where a subdivision of land has been approved or a development permit has been issued relating to land in the Protection Area in a NEF Area of 30 or more and the use of the land will change as a result.

(2) Before adopting a statutory plan or land use bylaw, or an amendment of either, that relates to land in the Protection Area, a municipality must refer the statutory plan or land use bylaw, or the amendment, to the Airport Operator.

The Plan area is located in the Protection Area and is identified under the NEF 25 contour; therefore, it does not meet the criteria described for requiring a referral of the subdivision to the Airport Operator under 9(1). However, under 9(2), because this is a statutory document with lands located within the Protection Area it will be required to be referred to the Airport Operator.

2.1.5. City of Leduc: Transportation Master Plan

The City of Leduc’s Transportation Master Plan was amended in October 2018 and sets out a long-term framework for the interconnection of future roads, public transit and pedestrians that correlates with projected growth. Any future development needs to align with the direction of the plan.

2.1.5.1. Planning Elements

The Plan needs to align with the proposed future transportation connections within and beyond the site.

2.1.5.2. Applicable Policies
4.0 TRANSIT

4.2 FUTURE SERVICE

As the City grows there will be opportunities to expand the transit service. Each expansion should meet the following guiding principles:

- Provide quality service selectively – … A better strategy is to concentrate service in areas most friendly to transit, then build on this success by increasing service to this area or by servicing a different area of the City with a route that ties into existing service. For example, adopt a walking distance criteria that recognize some areas will be distant from transit such as at 40% of households are within 499m walking distance and at least 80% of households are within 800m walking distance.

6.0 INTEGRATED PEDESTRIAN AND BICYCLE TRANSPORTATION NETWORK

6.2 FUTURE SYSTEM

- Recognize the important contribution active transportation makes to the health and sustainability by adopting policy that encourages active transportation and by creating a funded budget program to implement facilities for active transportation users. New multiways, bike lanes and missing sidewalk links, particularly those connecting to bus stops, mixed land uses and in industrial areas, should be the primary target of this program.

Based on the review of the Transportation Master Plan the majority of the policies are reference to those in the Cities Municipal Development Plan. In context to the points identified above from the Transportation Master Plan it should be recognized that opportunity exists in the longer term for expanding the bus transit system through Deer Valley Road based on the increased density and walkability to this major collector. The Plan also refers to Active Transportation which outlined in Figure 5 Section 4.0 demonstrates the interconnectivity between sidewalks and the trail system presenting attractive and stress-free active transportation options.

2.1.6. City of Leduc: Environmental Plan

This document seeks to raise environmental awareness amongst the community and a more effective steward of its environmental resources.

2.1.6.1. Planning Elements

The Environmental Plan provides information and guidance on the development of the Plan.
2.1.6.2. Applicable Policies

Environmental Plan

- The City of Leduc will promote development density to use land more efficiently.
  
  The proposed amendment will increase the residential density from what was originally proposed for this phase of the development.

- The City of Leduc will continue to provide and expand community gardens.
  
  The overall amount of park space will be greater than what was originally proposed for this phase of the development. Portions of the park will be dedicated to community gardens and made available to local residents.

- The City of Leduc will protect natural areas and work on habitat restoration.
  
  Requirements for protection of wetlands and areas of biological significance are described in the Biophysical Site Assessment contained in the Desktop Biophysical Impact Assessment (May 2, 2018) by Trace Associates, along with recommendations on mitigation methods during construction.

- The City of Leduc will continue to enhance the multiway system and provide educational opportunities on the natural environment.
  
  The Plan will incorporate an extension of the multiway system through the neighbourhood, and link to the existing system by aligning with the existing multiway network opposite Grant MacEwan Boulevard (as shown in Figure 4 Section 4.0).

2.1.7. City of Leduc: Parks, Open Space and Trails Master Plan

Complete inventory and assessment of all parks and open space resources in Leduc is contained within the Plan. As the document states, properly planned multiway and trail systems in communities can enable and promote active transportation, reducing carbon footprint and increasing physical activity.

In staying in concert with the objectives of the POST Master Plan, the Plan will contribute to this by providing new linkages to the trail network and introducing a new section of trail that borders along the creek bed.

2.1.7.1. Planning Elements

The Parks, Open Space and Trails Master Plan provides direction on what lands are expected to be provided for different types of parks and trail systems in relation to the Plan.
2.1.7.2. Applicable Policies

<table>
<thead>
<tr>
<th>Parks, Open Space and Trails Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.6 WEST LEDUC (Area A)</td>
</tr>
</tbody>
</table>

*West Leduc is an area of significant current and future growth for the City (Figure 4.2). As development has occurred, POST development on the west side of the QEII has been primarily focused on community and neighbourhood park development....*

The Parks, Open Space and Trails Master Plan Figure 4.2 outlines the future direction for the establishment of Parks, Open Space and Trails. In relationship to the Plan, Figure 3 Section 3.0 and Figure 5 Section 4.0 indicates the proposed location of Parks, Open Spaces and Trails which are consistent with this plan. It includes a multiway heading north-south on the western side of Deer Valley Road and multiway that follows the creek in a west-east direction and accommodates for a neighbourhood mini park and regional park. The overall Municipal Reserve Lands being dedicated to the City are 10%, indicated in Table 1 Section 3.0 of this report.
3.0. Land Use Concept

3.1 Proposed Land Use Plan

Figure 2: Land Use Plan
### 3.2 Density Calculation

Table 1: Overall Area Structure Plan Density Calculations

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Area*</td>
<td>63.1</td>
<td>100.00%</td>
</tr>
<tr>
<td>Environmental Reserve**</td>
<td>4.1</td>
<td>6.50%</td>
</tr>
<tr>
<td>Roadways</td>
<td>11.93</td>
<td>18.90%</td>
</tr>
<tr>
<td>Plan 3879 NY**</td>
<td>0.48</td>
<td>0.76%</td>
</tr>
<tr>
<td><strong>Gross Developable Area (GDA)</strong>***</td>
<td>58.52</td>
<td>100.00%</td>
</tr>
<tr>
<td>MR Requirement</td>
<td>5.85</td>
<td>10.00%</td>
</tr>
</tbody>
</table>

**Land Areas Based on GDA:**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
<th>%</th>
<th>Dwelling Units</th>
<th>Projected Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadways</td>
<td>11.93</td>
<td>20.39%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road Widening Land Area</td>
<td>0.88</td>
<td>1.50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Utility Lot (PUL) Total Area</td>
<td>5.17</td>
<td>8.83%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stormwater Management Facility</td>
<td>4.66</td>
<td>7.96%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitary Lift Station</td>
<td>0.10</td>
<td>0.17%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Pipeline Right of Way</td>
<td>0.38</td>
<td>0.65%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Meter Station Site (PLAN 0621142)</em></td>
<td>0.03</td>
<td>0.051%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Reserve</td>
<td>5.85</td>
<td>10.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Land Uses</strong></td>
<td>34.73</td>
<td>59.35%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed-Use Neighbourhood</td>
<td>2.15</td>
<td>3.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood Commercial</td>
<td>1.8</td>
<td>3.07%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Residential (Medium Density &amp; Low Density)</strong></td>
<td>29.78</td>
<td>50.90%</td>
<td>1500</td>
<td>3900</td>
</tr>
<tr>
<td>Urban Reserve</td>
<td>1.0</td>
<td>1.71%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>63.1</td>
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*Gross Area is Deer Valley ASP Boundary Area

**not counted in GDA

***Gross Developable Area is defined as the total area of a parcel of land, less the land required as environmental reserve and the land made subject to Plan 3879 NY (Potential Future Environmental Reserve). Plan 3849 NY would likely to be re-designated as Environmental Reserve should it be resurveyed.

† Average household size of 2.6 from Statistics Canada, 2016 Federal Census for the City of Leduc was used to calculate the projected population.
While the above table provides the overall density calculations it should be noted that the
development has been constructed with the exception of Creekside Phase 4, and therefore the focus
on the change in density reflects this phase and not the overall site. It is this portion of the lands
where the amendment to the original Plan is being made and is subject to the Edmonton Capital
Region Growth Plan and the new minimum densities provided within this document. In context to the
remaining lands known as Creekside (Phase 4) the following density calculations apply:

Table 2: Creekside Phase 4 Density Calculations

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Area*</td>
<td>14.24</td>
<td>100.0%</td>
</tr>
<tr>
<td>Environmental Reserve</td>
<td>0.05</td>
<td>0.35%</td>
</tr>
<tr>
<td>Roadways</td>
<td>2.95</td>
<td>20.72%</td>
</tr>
<tr>
<td><strong>Gross Developable Area (GDA)</strong></td>
<td>14.19</td>
<td></td>
</tr>
</tbody>
</table>

Land Areas Based on GDA:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
<th>%</th>
<th>Dwelling Units</th>
<th>Projected Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadways</td>
<td>2.95</td>
<td>20.79%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Utility Lot (PUL) Total Area</td>
<td>1.44</td>
<td>10.15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stormwater Management Facility</td>
<td>0.86</td>
<td>6.06%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitary Lift Station</td>
<td>0.10</td>
<td>0.70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Pipeline Right of Way</td>
<td>0.38</td>
<td>2.68%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Reserve</td>
<td>3.39</td>
<td>23.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>0.00</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential (net res.ha)***</td>
<td>6.63</td>
<td>46.72%</td>
<td>391</td>
<td>905</td>
</tr>
<tr>
<td>Single/Semi Detached</td>
<td>5.59</td>
<td>39.39%</td>
<td>183</td>
<td>531</td>
</tr>
<tr>
<td>Multi-Unit</td>
<td>1.04</td>
<td>7.33%</td>
<td>208****</td>
<td>374****</td>
</tr>
<tr>
<td><strong>RESIDENTIAL TOTAL</strong></td>
<td>13.16</td>
<td>7.33%</td>
<td>208****</td>
<td>374****</td>
</tr>
</tbody>
</table>

*Dwelling Units per net residential ha* 59

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*Gross Area is a total Creekside Boundary Area
** Gross Developable Area means total Creekside Boundary Area less the land required as environmental reserve.
*** Net Residential Hectare is defined as number of dwellings per hectare on land devoted solely to residential development.
****based on maximum parcel density (Table 22 of LUB) of 200 units/ha.
1 Average household size of single detached dwellings (2.9) from Statistics Canada, 2016 Federal Census for the City of Leduc was used to calculate the projected population
2 Average household size of apartments less than 5 storeys (1.8) from Statistics Canada, 2016 Federal Census for the City of Leduc was used to calculate the projected population.
3.3 Residential

The majority of the development relates to creating a residential community comprised of a wide variety in mix of units ranging from mid rise apartments through to townhouses, duplex, triplex and singles. This mix provides choice in housing form but also a range of costs that enable affordability within the housing market.

Objective

3.3.1 To increase the density that provides a wide range of housing choice that includes affordable housing.

Policies

3.3.2 Residential density for Creekside (Phase 4) shall be in accordance with the Edmonton Metropolitan Region Growth Plan.

3.3.3 A variety of housing types shall be provided that could include townhouses, duplexes, mid rise apartments, triplexes and four-plexes.

3.4 Commercial

Providing services within close proximity to residential dwelling enables easy access to services that may also not require the use of motor vehicles. The Plan incorporates the ability to develop a mixed use small commercial hub that can service the Plan area, located at the intersection of 50 Avenue and Deer Valley Drive.

Objective

3.4.1 To create a local commercial hub that is accessible to residents of the community.

Policies

3.4.2 Development will include the provision for the creation of a commercial/mixed use site as indicated on Figure 2.

3.5 Parks and Open Spaces

A complete residential community requires parks and open space that contributes to the wellness of the community and the ability to interact with other residents. There is typically a criteria on the type of parks and open spaces that are developed within a community, from a neighbourhood level through to a regional level, with each serving a different function and purpose.

Objective

3.5.1 To provide parks and open spaces that contributes to enhancement of the community and access to recreational spaces.
Policies

3.5.2 Development will include the provision of a neighbourhood park to be located in general accordance with Figure 3.

3.5.3 A community passive park will be established and located in general accordance with Figure 3.

3.5.4 Open space municipal reserve lands will adjoin the Environmental Reserve to enable the development of a trail system in general accordance with Figure 3.
Figure 3: Parks and Open Spaces
4.0. Transportation

4.1 Circulation

The road network plays an important function in how vehicles move within, through and beyond the site. The road network is developed based on the road classification system that determines the right of way width. Local roads feed into collector roads that feed into arterial road networks and is based on their carrying capacity from forecast traffic volumes.

Objective

4.1.1 To develop a road network that supports the traffic capacity arising from the development and connects with the regional road network.

Policies

4.1.2 The north-south collector road running through the Plan, known as Deer Valley Drive, that connects with 50 Avenue, and the portion of roadway located along the north boundary that connects through to Grant MacEwan Boulevard, will be classified as Major Collectors, as illustrated on Figure 4. Construction shall be in accordance with City of Leduc’s Engineering Design Standards.

4.1.3 The east-west collector road running through the Plan, known as Ameena Drive, that connects with Grant MacEwan Boulevard to the east and future development lands to the west, along with a portion feeding off Deer Valley Avenue to the west, known as Aventia Drive, will be classified as Minor Collector Roadways, as indicated on Figure 4. Construction shall be in accordance with City of Leduc’s Engineering Design Standards.

4.1.4 All other roads within the Plan will be classified as local roads as indicated in Figure 4 and shall be constructed in accordance with the City of Leduc's Engineering Design Standards.

4.1.5 The installation of the traffic lights, as shown on Figure 4, shall be based on the anticipated need within the ten (10) year horizon. The proposed traffic lights shall be cost shared by all developers benefiting from its installation.

4.1.6 Any activity that alters, impacts, occupies, or crosses the natural watercourse will require permission under the Public Lands Act.
Figure 4: Road Classification Plan
4.2  Active Transportation

Providing choice in people’s modes of transportation is important, including the provision of active transportation corridors that promote a healthy community.

Objective

4.2.1 To provide safe, functional and accessible multiway and sidewalks throughout the Plan, that connects with networks beyond the site.

Policies

4.2.2 Develop a multiway along the full length of Deer Valley Drive that intersects with 50 Avenue to the south and extends beyond the Plan area to the north, as shown in Figure 5. The multiway shall be constructed in general accordance with the City of Leduc’s Engineering Design Standards.

4.2.3 Develop a multiway system along the Deer Valley Creek as shown in Figure 5. The multiway shall be constructed in general accordance with the City of Leduc’s Engineering Design Standards.

4.2.4 Based on the outcome of the detailed design stage, the multi-way may proceed either as option A or as option B as shown in Figure 5. The multiway shall be constructed in general accordance with the City of Leduc’s Engineering Design Standards. Under option B, the City of Leduc road standard shall need to be modified to enable a multi-purpose trail along this section of the road.

4.2.5 Sidewalks shall be constructed throughout the development as general shown in Figure 5 and be carried out in general accordance with the City of Leduc’s Engineering Design Standards.
Figure 5: Active Transportation Plan
5.0. Utilities & Servicing

5.1 Water Distribution

The attached Figure 6 provides a conceptual layout and sizing for the proposed extension of the water distribution system to service the proposed Creekside development phase, as well as identifying the existing water main network within previous phases within the Plan area.

The Figure also provides the layout and sizing for the existing water distribution mains in previous phases of the Deer Valley subdivision. Connections will be provided from the existing main in Deer Valley Drive and a future connection on 65 Avenue.

Objective

5.1.1 To provide a public water distribution system that services the Plan area, and provides adequate capacity for domestic use and fire protection.

Policies

5.1.2 The water system will be designed and constructed in compliance with the City of Leduc’s Engineering Design Standards.

5.1.3 During the detailed design of the proposed subdivision, the City of Leduc’s Hydraulic Network Analysis model will be utilized to confirm the pipe sizing.

5.1.4 Any activity that alters, impacts, occupies, or crosses the natural watercourse will require permission under the Public Lands Act.
Figure 6: Water Distribution Plan
5.2 Sanitary Collection

Figure 7 provides the conceptual routing and sizing of the sanitary sewer collection system in Creekside, as well as the existing system in previous phases. The system connects to the main discharging to the existing lift station located north of Deer Creek. During the detailed design of the subdivision, the lift station capacity will be confirmed and pumping modifications undertaken if required.

Objective

5.2.1 To provide sanitary sewer infrastructure that connects into the City of Leduc’s public system, and provides service to the proposed development.

Policies

5.2.2 The sanitary collection system will be designed in accordance with the City of Leduc’s Engineering Design Standards.

5.2.3 Any activity that alters, impacts, occupies, or crosses the natural watercourse will require permission under the Public Lands Act.
Figure 7: Sanitary Distribution System
5.3 **Stormwater Management System**

The proposed stormwater collection system will collect the minor storm flow in a piped system and deliver the storm water to the proposed stormwater management pond located as shown in Figure 8. The major overland storm system, for runoff in excess of the anticipated 1 in 5 year storm, will be conveyed overland to the storm pond. Water will ultimately be released to Deer Creek at the pre-development outflow rate, to mitigate the potential downstream impact of increased runoff from the developed area.

Conceptual sizing of the storm mains has been included on the attached Figure, and will be confirmed by computer modeling during the detailed design phase.

**Objective**

5.3.1 To manage stormwater that mitigates the potential for flooding or direct run off into receiving natural watercourses.

**Policies**

5.3.2 The development of a stormwater pond that meet the City of Leduc’s and Alberta Environment regulations.

5.3.3 The stormwater ponds shall be designed to become an integrated amenity feature for the community.

5.3.4 The stormwater ponds shall be designed to incorporate native and naturalized plant species that contribute to the health of the ponds and local wildlife.

5.3.5 Any activity that alters, impacts, occupies, or crosses the natural watercourse will require permission under the Public Lands Act.
Figure 8: Stormwater Management System
5.4 Shallow Utilities

Shallow utilities will be provided to the proposed development from the providers currently servicing the City of Leduc. Details of the servicing will be determined during the detail design of the subdivision phases.

Objective

5.4.1 To provide underground distribution for telecommunications, power and natural gas utilities within the public right of way, to service residential and commercial premises.

Policies

5.4.2 The location of shallow utilities shall be in accordance with the City of Leduc and utility operator’s requirements and shall be located as required by the current street cross-sections for the various roadways.

5.4.3 Any activity that alters, impacts, occupies, or crosses the natural watercourse will require permission under the Public Lands Act.
Figure 9: Relocation of Gas Line
6.0 Implementation

The Plan has been prepared on the basis of a contiguous phasing of development over time that is reflected in Figure 10. As alluded to, the majority of the development has been built out resulting in Creekside (Phase 4) being the remaining lands to be developed.

Objective

6.1 To enable the development to move forward in accordance with the phasing while providing flexibility to enable the development to respond to market conditions.

Policies

6.2 Development will unfold in general accordance with the phasing plan indicated in Figure 10.

6.3 Development will be carried out in accordance with meeting the City’s, Provincial or Federal regulations that are applicable to the development.

6.4 Development shall be in general accordance with the land use concept plan Figure 2 Section 3.0.

6.5 Rezoning of lands shall be consistent with the land use concept plan (Figure 2 Section 3.0) and will be required prior to obtaining development approvals.
Figure 10: Phasing Plan
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