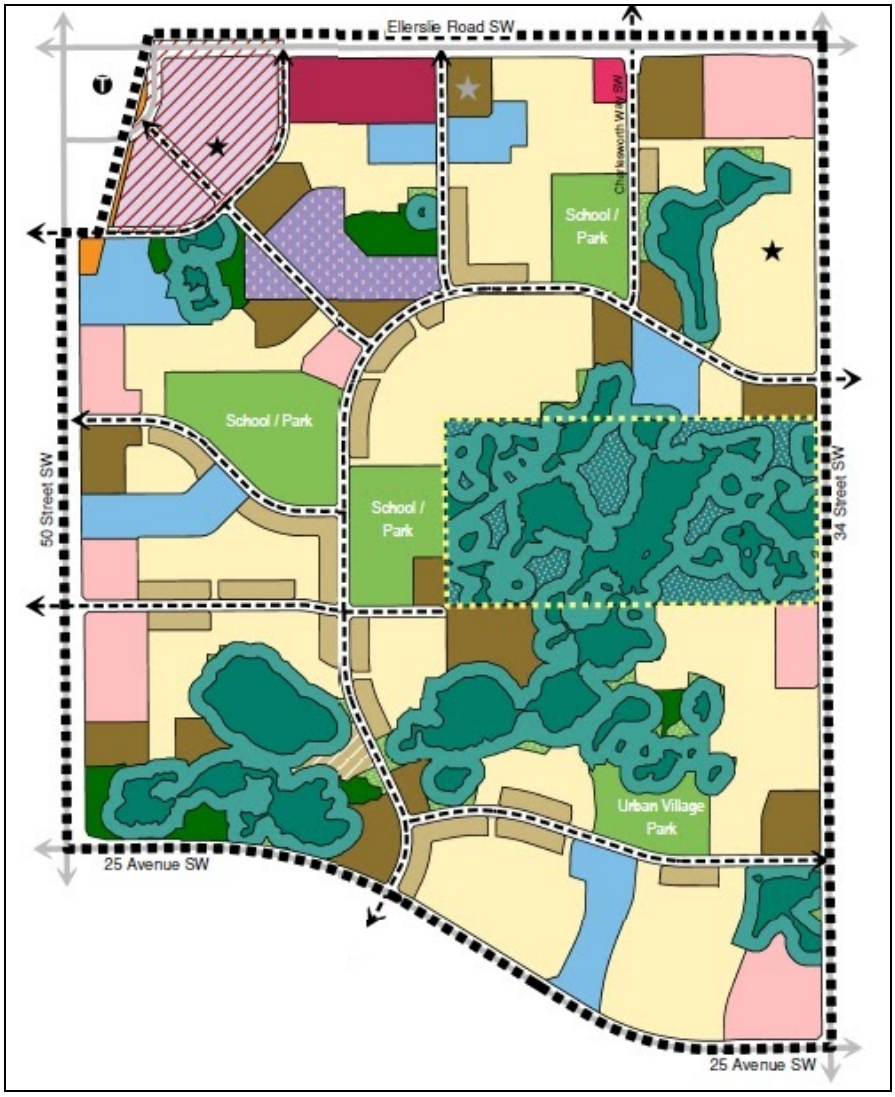
ADMINISTRATION REPORT
PLAN AMENDMENT AND ADOPTION OF THE MELTWATER NEIGHBOURHOOD PLAN
DECOTEAU

SOUTH OF ELLERSLIE ROAD SW AND WEST OF 34 STREET SW (SOUTHEAST EDMONTON)



Recommendation: That Bylaw 19537 to amend the Decoteau Area Structure Plan and Charter Bylaw 19538 to adopt the Meltwater Neighbourhood Structure Plan be **APPROVED**.

Administration is in **SUPPORT** of this application because it:

- will facilitate the development of a new neighbourhood, planned to accommodate over 11,000 future residents, in the southeast portion of the City;
- establishes a comprehensive framework for contiguous development and infrastructure servicing;
- preserves natural areas as community and ecological assets; and
- conforms with City of Edmonton plans, policies and guidelines.

Report Summary

This application was submitted by Invistec Consulting Ltd. on November 27, 2017 on behalf of the participating landowners, Hasco Development Corporation, Southview Hasco Estates General Partner Regards, Terranova Developments Ltd., 1645827 Alberta Ltd., and Lamba Financial Corporation. The application proposes to adopt a new neighbourhood structure plan in the Decoteau Area. The proposed Meltwater Neighbourhood Structure Plan (Charter Bylaw 19538) is the second neighbourhood to be planned under the Decoteau ASP and proposes to establish:

- a preserved ecological network within a connected open space system;
- the location of various land uses including residential, commercial, mixed uses, public utility and institutional uses;
- the location of future school and park sites;
- opportunity for a town centre around a future transit centre;
- a variety of residential densities and building types; and
- the pattern of required road, walkway and utility infrastructure that supports the planned phasing of development.

The application meets the target residential densities and guiding principles of the Edmonton Metropolitan Region Growth Plan and aligns with the applicable policies of City Plan by supporting growth within Edmonton's existing boundaries, concentrating development around key nodes and corridors, strengthening our natural systems, and providing a mix of uses that will allow residents to meet their daily needs within a 15 min walk, bike or transit ride from where they live.

The NSP proposes the logical extension of infrastructure including drainage, water, power and other utility services from planned neighbourhoods to the west. The development staging and extension of service will be contiguous, efficient, and economical, and designed to meet municipal standards.

An associated application to amend the Decoteau Area Structure Plan (Bylaw 19537) to reflect the proposed Meltwater NSP is advancing concurrently with this application.

The Application

1. **Bylaw 19537** proposes to amend the Decoteau Area Structure Plan (ASP) to update maps, text, and statistics to align with the more precise boundaries for land uses that were established during the Meltwater Neighbourhood Structure Planning process. Proposed revisions to the ASP include:

    - Articulation of more precise boundaries for wetlands and natural areas;
    - An increase in the amount of land designated as Environmental Reserve from 46.7 hectares (15% of Gross Area) to 72.0 hectares (23% of Gross Area);
    - Addition of a third (Francophone) school site and minor adjustments to the location and shape of the Public and Separate school sites;
    - Addition of commercial/residential and institutional/residential mixed use sites;
    - Reconfiguration of the mixed use town centre;
    - Addition of a potential civic use (fire station);
    - Relocation and reconfiguration of the commercial sites;
    - An increase to the proposed overall residential density of the ASP from 34.3 to 36.5 units per net residential hectare (upnrh); and
    - An update to the names of the neighbourhoods in the Decoteau Area that were approved by the Naming Committee on September 29, 2020.

2. **Charter Bylaw 19538** proposes the adoption of the Meltwater Neighbourhood Structure Plan (NSP). The Plan proposes to create a unique, sustainable, and complete residential neighbourhood, consisting of residential, commercial, open space and institutional uses integrated within a preserved ecological network. The major NSP land use components include:

    - A connected system of parks, stormwater management facilities, wetlands and natural areas;
    - A mixed-use town centre adjacent to a future transit centre and park and ride;
    - A mix of residential housing types to accommodate approximately 11,000 new residents over the next 20 to 25 years;
    - Neighbourhood and community commercial uses;
    - Three school sites for the Public, Catholic and Francophone School Boards;
    - An urban village park and pocket parks;
    - A transportation network that accommodates diverse modes;
    - Institutional uses including opportunity for a potential Fire Station;
    - Mixed use sites which will provide development flexibility as market demands change;
    - A road and infrastructure network that supports the planned phasing of development; and
    - A projected residential density of 44.9 units per net residential hectare (upnrh).

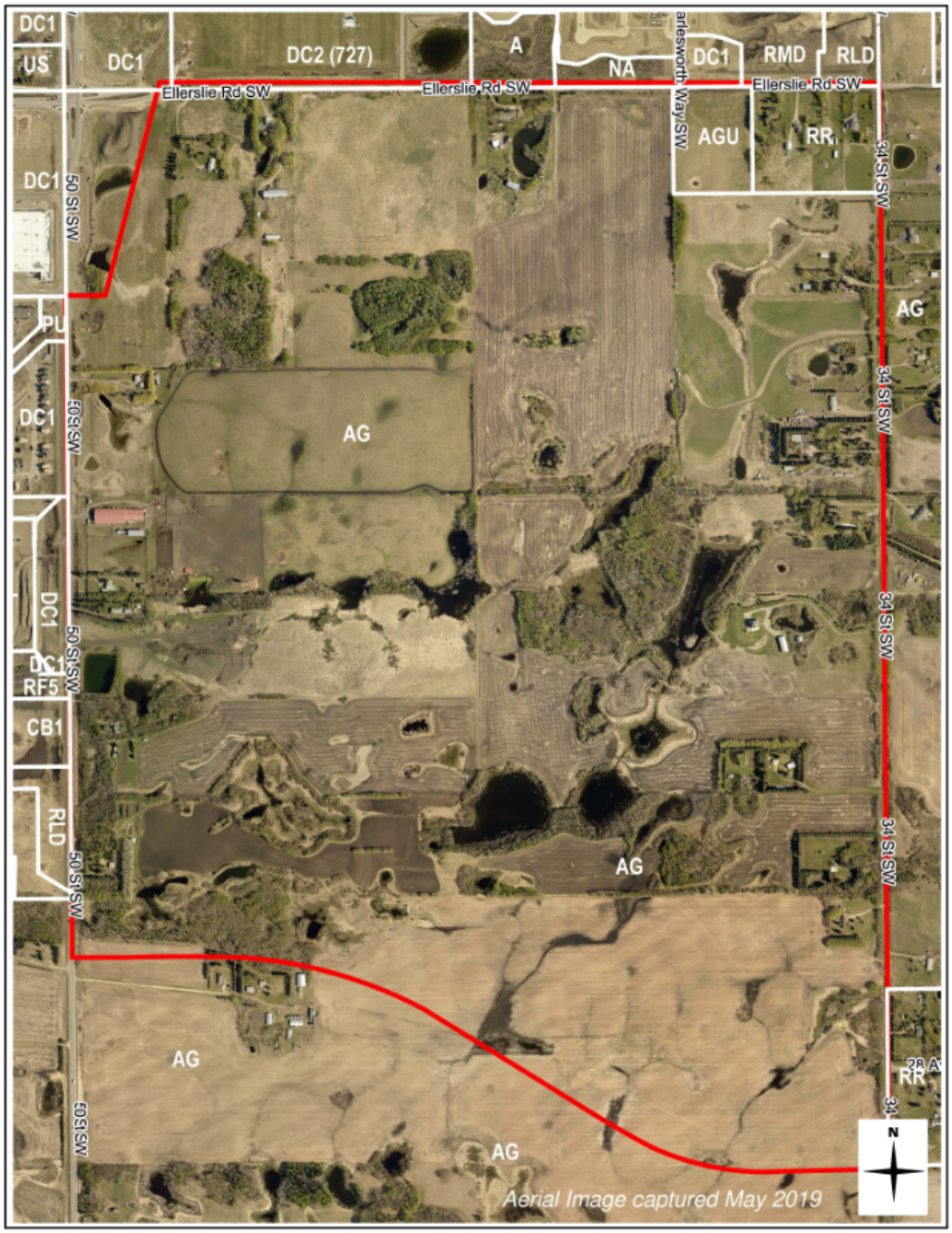
Authorization to prepare the Meltwater NSP (formerly Northwest Decoteau NSP) was granted by Council on June 28, 2016.

Site and Surrounding Area

The Meltwater NSP is the second of five neighbourhood plans proposed for the Decoteau Area. It contains approximately 311 hectares of undeveloped land consisting of unique topography, numerous natural areas and wetlands, agricultural lands, farmsteads, and rural residential uses. The NSP plan area is bounded on the north by Ellerslie Road SW, 34 Street SW to the east, 50 Street SW to the west and 25 Avenue SW to the south.

North of Ellerslie Road SW is the Charlesworth neighbourhood and west of 50 Street SW is the Walker neighbourhood. These neighbourhoods are in the beginning stages of development and will provide active transportation connections to Meltwater from the north and west. These connections include pedestrian linkages, cycling routes and shared use paths, and provide both active and ecological connections to the Natural Areas, school/park sites, and stormwater management facilities.

To the south and east, land is undeveloped and consists of agricultural uses, farmsteads and country residential, in addition to wetlands and natural features. These areas will ultimately also be developed as urban residential neighbourhoods.



AERIAL VIEW OF APPLICATION AREA

	EXISTING ZONING	CURRENT USE
SUBJECT SITE	(AG) Agricultural Zone (AGU) Urban Reserve Zone (RR) Rural Residential Zone	Undeveloped Land, Wetlands, Tree Stands, Farmland and some Rural Residential

CONTEXT		
North	(DC1) Direct Development Control Provision (DC2) Site Specific Development Control Provision (A) Metropolitan Recreation Zone (NA) Natural Areas Protection Zone (RMD) Residential Mixed Dwelling Zone (RLD) Residential Low Density Zone	Undeveloped Land, Neighbourhood Commercial, Ivor Dent Sports Park, Treed Area, and Low Density Residential Housing
East	(AG) Agricultural Zone	Undeveloped Land, Farmland and some Rural Residential
South	(AG) Agricultural Zone	Undeveloped Land, Farmland and some Rural Residential
West	(DC1) Direct Development Control Provision (CB1) Low Intensity Business Zone (RLD) Residential Low Density Zone (RSL) Residential Small Lot Zone (RF5) Row Housing Zone (PU) Public Utility	Community Commercial Site, Low Density Residential Housing, Neighbourhood Commercial, Pipeline Corridor, and Undeveloped Land

Planning Analysis

DECOTEAU AREA STRUCTURE PLAN AMENDMENT

The Decoteau ASP establishes the high-level land use planning framework that guides future development in the Decoteau Area. Bylaw 19537 proposes to amend the maps, text and statistics of the ASP to ensure alignment with the proposed Meltwater NSP.

The proposed ASP amendments centre on the more detailed information on wetlands and natural areas obtained through the NSP planning process. More precise boundaries for these ecological features have been established and are reflected in the amendments. The amendment reflects an increase in the proportion of Environmental Reserve to be taken from 10.1% to 11.4% of the ASP's Gross Area. The amendment will strengthen the ASP's commitment to preserving the Emerald Crescent - a 10 km network of wetlands, parks and wooded areas that span southeast Edmonton.

A third school site is proposed to meet the projected student population of the Conseil Scolaire Centre-Nord and is anticipated to accommodate a K-9 school. The site was included in the northern portion of the plan area (rather than on the southern urban village park site) to accommodate the school's land requirements and to align the Francophone School Board's development timelines with neighbourhood staging.

A potential civic use (fire station) is proposed in the northern portion of the plan area, south of Ellerslie Road. If the City determines that the fire station is not required in this neighbourhood, then the site may develop with residential uses.

The projected residential density for the ASP will increase from 34.3 to 36.5 units per net residential hectare (upnrh) and remains within the target density of 30-45+ upnrh under the

former Capital Region Growth Plan (grandfathered into the current Edmonton Metropolitan Region Growth Plan for plans adopted prior to the new growth plan).

MELTWATER NEIGHBOURHOOD STRUCTURE PLAN

The proposed Meltwater NSP was prepared in accordance with the City's *Terms of Reference for the Preparation and Amendment of Neighbourhood Structure Plans in Edmonton's Urban Growth Areas*. The plan covers 311 hectares of land and contains 220 hectares of developable area (Gross Developable Area). The Plan proposes to create a unique, sustainable, and complete residential neighbourhood consisting of residential, commercial, open space and institutional uses within a preserved ecological network. The NSP recognizes the value of its unique landscape as a natural amenity that encourages recreation, provides ecological connectivity and establishes a sense of place. The following sections outline key elements within the proposed Meltwater NSP.

URBAN DESIGN AND PLACEMAKING

The Meltwater NSP includes policies which promote pedestrian-friendly streetscapes, visual and physical access to the natural areas, and all-season design. Streetscapes within 400 m of the transit centre will be developed in accordance with the Transit Oriented Development Guidelines. These streets will be designed with pedestrian comfort, safety and interest in mind by providing human-scaled massing, street-oriented uses at ground level, and placing parking in structures, underground parkades or at the side or rear of buildings.

View corridors and pedestrian access to the natural areas will be provided wherever feasible. Parks shall be designed to provide four-season use, minimize exposure to wind, maximize exposure to sunlight and incorporate plant species that provide shelter, solar penetration and year-round appeal.

NATURAL AREAS, OPEN SPACE, PARKS & SCHOOLS

The Meltwater NSP development concept identifies several types of open spaces including natural areas, school sites, parks and stormwater management facilities (see Figure 6: Green Network). The NSP objectives, policies and implementation strategies ensure that 100% of future residents will be within 500 m of parkland.

Natural Areas

The network of wetlands spread throughout the plan area forms the core of Meltwater's identity. The Meltwater NSP aims to dedicate 72.0 hectares of land for Environmental Reserve (ER) in the form of natural area (wetlands) and natural area buffers. This amounts to 23% of the Gross Area. An additional 4.5 hectares of Natural Area (tree stands) shall be dedicated as Municipal Reserve (MR) and there are approximately 5.1 hectares of protected non-ER land on City owned parcels. The proposed ecological network within the Meltwater NSP supports the vision of the Decoteau ASP to protect the Emerald Crescent - a network of wetlands, parks and wooded areas that span southeast Edmonton.

A Phase II Ecological Network Report, submitted for review with the application, identifies several wetlands and tree stands to be preserved within the plan area to maintain ecological

integrity. Conserving natural areas benefits residents by providing recreation opportunities, intercepting rainfall, filtering pollutants from water, removing carbon dioxide from the air, providing habitat for wildlife, and producing oxygen. The plan outlines the following measures to protect the natural areas and wildlife:

- Designation of approximately 80 hectares of natural areas to be retained as Environmental Reserve or Municipal Reserve in accordance with the Municipal Government Act or protected through other means;
- 30 m buffers have been established around the natural areas to support their continued viability and to ensure proper separation from surrounding development;
- A Natural Area Management Plan will be required for all rezoning applications within 200 m of each designated natural area;
- Parks and stormwater management facilities have been positioned around the natural areas to enhance connectivity, strengthen the buffers and maintain the pre-development intake of the wetlands;
- Naturalized landscaping and Low Impact Development features such as bioswales and constructed wetlands will be required;
- In Natural Areas, shared use paths will have low-impact granular surfaces to provide permeability and minimize runoff;
- Five wildlife mitigation passages are identified in the plan to support safe wildlife movement across roadways; and
- The City of Edmonton owns approximately 32.5 hectares of land within the plan area. These lands were purchased to preserve a large portion of the Koroluk-Kozub Natural Area - the largest continuous tract of native vegetation in south Edmonton and home to diverse and sensitive wildlife species. Future programming opportunities for these lands may be determined by the City at a later date.

Approximately 5% of natural features (4.3 hectares) are proposed to be lost to development.

Parks, Open Space & Schools

A Parkland Impact Assessment (PIA), submitted for review with this application, describes the parks and open space concept for the Meltwater NSP and is based on guidelines outlined in the Parkland Classification System, *Breathe: Edmonton's Green Network Strategy*, and the *Urban Parks Management Plan*. The Meltwater NSP aims to dedicate 26.7 hectares of land for Municipal Reserve (MR) in the form of natural areas, school sites, and parks. This amounts to 12% of the Gross Developable Area.

Parks

The Meltwater NSP provides future residents with convenient access to green space through the careful distribution of park space. The proposed parks encompass approximately 4.6 ha of land and include an Urban Village Park and two Pocket Parks.

An Urban Village Park encompassing approximately 3.6 ha is located in the southern portion of the neighbourhood, providing a space for passive and active recreation and acting as a potential staging area into the Natural Area and site for a community league building and amenities.

Two pocket parks are identified in the land use concept; one in the Town Center and one in the northeast portion of the Plan. Both Pocket Parks will be designed in accordance with the City's *Urban Parks Management Plan* and *Breathe* Strategy. It is envisioned that the pocket park in the town centre will combine elements of the nearby natural areas in its design.

There are also several Parkland (Non-MR) sites, encompassing approximately 2.2 ha, located around the Natural Area buffers to provide public access to the Natural Areas. In some places, the organic shape of Natural Areas require parkland extensions to connect them to roadways.

Schools

A Community Knowledge Campus Needs Assessment (CKCNA) was submitted for review with the proposed NSP to establish the need for future schools in the neighbourhood. Three School and Community Park sites, encompassing approximately 17.7 ha, are provided in the plan area. Their location along collector roads allows for school drop-off and pick-up zones. Front attached garages are not permitted across from a school site. The schools will draw students from both the future student population within the neighbourhood and surrounding area. The school sites will provide for playing fields, playgrounds and passive recreation uses. The three schools include:

- a Catholic Elementary / Junior High School;
- a Public Elementary / Junior High School; and
- a Francophone Elementary / Junior High School.

Positioning of the school sites near natural areas enhances access to ecological learning opportunities for students.

Urban Agricultural

Policies within the plan encourage parks, open spaces and utility rights-of-way to provide opportunities for urban agriculture, community garden plots, and edible landscaping (eg. fruit trees and bushes). The location of urban agriculture and community gardens may be explored by developers and the City at a later stage of development.

Stormwater Management Facilities

Six proposed constructed wetland stormwater management facilities contribute to the open space network by providing habitat and opportunities for passive recreation. The facilities have been strategically positioned to maintain the pre-development intake of the natural areas.

MIXED USE TOWN CENTRE

A Mixed Use Town Center and Special Study Area is proposed in the northwest portion of the plan area adjacent to a future transit centre and park and ride (see Figure 7: Town Centre Mixed Use). The Town Center is intended to create a street-oriented, pedestrian-friendly residential and employment node. It will feature transit oriented development (TOD) at higher densities and a mix of uses to support the future transit centre. Residential development is anticipated in the form of low to medium rise buildings with potential for ground floor retail.

Increased densities may be considered if the Transit Centre is serviced by LRT. A pocket park will be located in the Town Centre to serve future users and provide a focal point and public destination for the area.

Two high-pressure pipelines run adjacent to the Town Centre's western boundary and through the Orchards at Ellerslie, Walker, Meltwater, and Charlesworth neighbourhoods. A Risk Assessment was submitted for review with the plan, which identified appropriate setbacks from the pipeline right of way for different types of development. Setbacks ranging from 21 m for sensitive uses such as Child Care Services to 10 m for low-intensity commercial and low-density residential developments are required.

During the planning process, reviewers noted that there are several possible land uses that may be incorporated into the Town Centre site, which is mostly owned by the City of Edmonton. These land uses may include: a transit centre, a park and ride, an LRT station, a Light Rail Vehicle Storage facility and a jughandle (at the intersection of Ellerslie Road and 50th Street).

Due to the uncertainty of the future use of this land, the area has been identified as a Special Study Area. The Walker NSP provides policy direction for the future Transit Centre and Park and Ride facility located adjacent to the Town Centre. Planning and preliminary design for the new Transit Centre and Park and Ride is required to provide additional details related to the number of bays, parking stalls, site access, etc., and will help inform the Special Study Area. The timing of that design study is not determined and will be dependent on availability of funding. Once the City determines its needs, a Special Study will be conducted to establish the future development of the site.

RESIDENTIAL

The proposed residential development framework in the NSP, (see Figure 8: Residential Uses), provides the opportunity for a variety of residential land uses and densities:

- low density residential (25 units/ha);
- street oriented residential (35 units/ha);
- mixed use residential (45 units/ha);
- medium density residential (90 units/ha);
- potential development area (MDR) (90 units/ha); and
- Town Centre mixed use residential (90 units/ha).

The low density residential and street-oriented residential designations will be the predominant form of residential development in the neighbourhood encompassing 69 hectares or 64% of the Net Residential Area. The street-oriented residential designation projects a slightly higher residential density as it may include row housing and stacked row housing built forms in addition to other low density housing types. Street-oriented residential uses shall not have front attached garages and are located along collector roadways, adjacent to school sites, and in areas with high pedestrian mobility.

The medium density residential designation includes predominantly low-rise and medium-rise developments but could include row housing and stacked row housing. This designation encompasses approximately 23 hectares of land or 21% of the Net Residential Area. Medium

density developments are located near commercial sites, natural areas, parks and collector roads to promote walkability, public transit use, and access to open spaces. A 0.7 hectare site is designated as "potential medium density residential" as constraints from adjacent natural areas could reduce the amount of developable area of the site. If the site develops, it will strive to incorporate low-impact development techniques and innovative architecture.

The Town Centre mixed use residential designation projects a density of 90 units/ha. This is an average derived from the minimum residential densities projected for sites within 200 m and 400 m of a Transit Centre in the Transit Oriented Development Guidelines. Residential development under this designation will feature medium or high density residential development with potential for ground floor commercial and comprises 5.4 hectares or 5% of the Net Residential Area.

Policies in the plan ensure a mix of housing types, sensitive development around natural areas and compliance with the City's affordable housing policies. The plan's projected overall residential density of 44.9 upnrha meets both the density targets identified under the former Capital Region Growth Plan and the requirements for plan amendments under the current Edmonton Metropolitan Region Growth Plan .

MIXED USE

The Meltwater NSP proposes seven mixed use sites along arterial and collector roads to provide flexibility under changing market conditions and to improve walkability in the plan area (see Figure 9: Commercial Uses and Mixed Use). The mixed use sites help to ensure that 97% of future residents will be within 600 m of a commercial service.

Each mixed use site shall allow for a mix of commercial, institutional and residential uses either vertically integrated within a single building or horizontally integrated within multiple buildings. Each mixed use site is expected to have a minimum residential density of 35 du/ha and a minimum commercial floor area ratio of 0.25. Residential uses could include row housing, stacked row housing, low-rise apartments and medium-rise apartments. The assumed split between residential and non-residential components of the mixed use sites is 60:40. The residential portion comprises 10.4 hectares or 9.6% of the net residential area. The commercial portion comprises 6.9 hectares or 3% of the Gross Developable Area.

COMMERCIAL

The NSP identifies two commercial sites (excluding the Town Centre and Mixed Use sites); one community commercial site and one neighbourhood commercial site (see Figure 9: Commercial Uses and Mixed Use). The community commercial site is intended to be larger in scale, meeting the commercial retail needs of residents and surrounding areas. The neighbourhood commercial site is intended to be smaller in scale, meeting the daily commercial retail needs of residents in Meltwater. Policies in the Plan ensure the sites will be accessible by transit and active modes of transportation and encourage street-oriented building orientation with parking located behind the buildings to create a stronger public realm along roadways. Commercial uses comprise 5.1 hectares or 2.3% of the Gross Developable Area.

COMMUNITY SERVICES

The NSP features two institutional sites (see Figure 10: Community Services); a Civic Use and an Institutional/Residential Mixed Use designation. The institutional sites comprise 4.6 hectares or 2% of the Gross Developable Area. A potential Civic Use (Fire Station) site is located in the north of the plan adjacent to Ellerslie Road SW. The fire station is considered a high priority for the City of Edmonton and is required to meet the Fire Rescue needs of the residents and surrounding area. In the event that an alternate Fire Station location is found outside of the Meltwater neighbourhood, the landowner will be allowed to rezone the site for Medium Density Residential development without amending the plan.

The second institutional site will provide the opportunity for a religious and cultural facility mixed with potential residential development. The assumed split between residential and institutional uses on the site is 40:60.

INFRASTRUCTURE AND SERVICING

The NSP proposes the logical extension of infrastructure including drainage, water, power and other utility services from planned neighbourhoods to the west. The development staging and extension of service will be contiguous, efficient, and economical, and designed to meet municipal standards. Servicing requirements are re-examined in more detail at subsequent rezoning and subdivision stages of development.

Additional information on infrastructure management to service the new NSP is provided under the Technical Review section of this report.

PLANS IN EFFECT

Edmonton Metropolitan Region Growth Plan

The Decoteau ASP was approved in July 2015, prior to the adoption of the new *Edmonton Metropolitan Region Growth Plan: Re-imagine Plan Build* in 2017. In accordance with Section 5.1.1 of the new Growth Plan, the Decoteau ASP is grandfathered.

The proposed amendment to the Decoteau ASP will increase the projected residential density of the ASP area from 34.3 to 36.5 units per net residential hectare (upnrh) and of the Meltwater NSP area from 35.5 to 44.9 upnrh. The proposed change to the ASP and NSP remains within the target residential density of 30-45+ upnrh under the former Capital Region Growth Plan, and the projected density within the NSP also satisfies the EMRB expectation for amendments.

The application supports the following guiding principles of the Edmonton Metropolitan Region Growth Plan:

- Promote global economic competitiveness and regional prosperity;
- Protect natural living systems and environmental assets;
- Recognise and celebrate diversity of communities; and
- Achieve compact growth that optimizes infrastructure investment.

Referral of the application to the Edmonton Metropolitan Region Board is not required, as the proposed NSP is consistent with the original objectives of the ASP. The proposed amendments meet Section 4.1 (a) and (b) and 4.2 (a) and (e) of the Regional Evaluation Framework (Ministerial Order No. MSD:088/20) and are therefore not considered substantive.

CITYPlan Alignment

Under the City Plan, the Meltwater NSP is identified as a Developing Area located within the Ellerslie District. The neighbourhood is part of a District Node and is connected by transit and bike routes.

- **Map 1** - The City Plan Concept designates most of the Meltwater NSP area as "Residential". The proposed Meltwater NSP meets this designation as a residential neighbourhood.
- **Map 2** - District Network locates the Meltwater NSP within the eastern portion of the Ellerslie District.
- **Map 3** - Nodes and Corridors Network identifies a District Node in the northwest corner of the Meltwater plan area. District Nodes provide urban village centres with a variety of services and housing types. The City Plan targets a desired overall density of 150 people and/or jobs per hectare. The proposed Meltwater NSP reflects the district node through the mixed use town centre which provides opportunity for a mix of uses around the future transit centre. The Meltwater NSP projects 160 people per residential hectare in the mixed use town centre, as well as opportunity for employment activities (which would generate additional jobs towards the target). There is also the opportunity for greater density if LRT service is provided.
- **Map 7** - Mass Transit Network identifies a mobility hub in the adjacent Walker NSP where different modes of transportation come together and allow people to move from one travel option to another. This is supported in the Meltwater NSP by designating a mixed use town centre adjacent to the future transit centre and park and ride.
- **Map 9** - Development Pattern Areas designates the Meltwater NSP area as "Developing Area". The Meltwater NSP proposes contiguous development within the Developing Areas of the city extending services west from Walker and and south from Charlesworth.
- **Map 10A and 10B** - Anticipated Growth from 1-1.25 Million and 1.25-1.5 Million people shows the Decoteau Area as a priority growth area where medium to high population growth is expected as existing Area Structure Plans and Neighbourhood Structure Plans are built out.

The proposed Meltwater NSP meets the directions of the City Plan by:

- Protecting and maintaining a system of conserved natural areas within a functioning and interconnected ecological network;
- Incorporating nature and natural systems into the built environment;
- Promoting compact, mixed use development that is integrated with accessible mass transit;
- Managing sources of risk;

- Managing stormwater runoff and improving water quality through the design and development of the built environment; and
- Enabling business and development to integrate with transit facilities.

The Meltwater NSP helps the city become "Greener as We Grow" by strengthening our natural systems, embracing development and sustainability and protecting our land, air, water and biodiversity. It establishes "A Community of Communities" by providing a mix of uses that will allow residents to meet their daily needs within a 15 min walk, bike or transit ride from where they live.

Breathe: Edmonton's Green Network Strategy

The Meltwater NSP meets the following policies of *Breathe - Edmonton's Green Network Strategy*:

- 100% of Meltwater residents are located within 500 m of Parkland (4.5 Distribution and Supply);
- Provision of a system of multi-use trails that connect to and through the various open spaces in the plan area (4.6 Public Access and Connectivity);
- Preservation of a system of natural areas that will be buffered from development and enhanced by surrounding open spaces (4.7 Ecological Integrity); and
- Provision of a range of multi-functional and adaptable open spaces that will support a variety of different users (4.8 Adaptive Management and Flexible Spaces).

Designing New Neighbourhoods: Guidelines for Edmonton's Future Residential Communities

The Designing New Neighbourhoods Guidelines apply to the preparation of new Neighbourhood Structure Plans in the city's Urban Growth Areas. The Meltwater NSP meets all 12 Outcomes and Principles of the Designing New Neighbourhoods Guidelines:

1. *Neighbourhoods are Connected* - Meltwater provides multi-modal transportation opportunities between residential development and neighbourhood destinations and ensures roads and paths are connected with adjacent neighbourhoods;
2. *Neighbourhoods are Unique and Inviting* - Meltwater creates a connection to place by respecting, preserving and embracing the natural context of the area;
3. *Neighbourhoods are Inclusive* - Meltwater provides a wide variety of housing types and open spaces. 97% of residents are located within 600 m of commercial service, and 100% of residents are located within 500 m of parkland;
4. *Neighbourhoods provide residents with convenient access to a full range of transportation options* - Meltwater features an extensive active modes network and ensures that 100% of residents are located within 400 m of transit service;
5. *Neighbourhoods support viable uses, services and facilities* - Commercial uses are concentrated along major roadways and the future transit centre and are supported by higher density residential uses. Schools are located along collector roads to facilitate access by multiple modes;

6. *Neighbourhoods are cost effective* - Meltwater supports a logical extension of services from contiguous neighbourhoods to the north and west. An integrated Infrastructure Management Plan (IIMP) was conducted for the Meltwater NSP to provide information about the infrastructure required for the development, how it relates to existing infrastructure, timing of development, implications for future Capital Budgets, and implications for the City's operations;
7. *Neighbourhoods conserve and enhance ecosystems and biodiversity* - Meltwater encourages urban biodiversity and ecological connectivity by conserving approximately 80 ha of natural area;
8. *Neighbourhood amenities and facilities support the social and recreational needs of residents* - Meltwater provides flexible, visible and accessible open spaces to residents at each stage of life;
9. *Neighbourhoods embrace all seasons* - Meltwater supports the development of open spaces that minimize exposure to wind and maximize exposure to sunlight in the winter months and that are landscaped with plants that provide year-round appeal;
10. *Neighbourhoods are safe and secure* - Development setbacks are required from the pipeline and a location for a potential fire station is provided;
11. *Neighbourhoods are flexible and adaptable* - Storm ponds, Low Impact Development (LID) design and natural area conservation will help Meltwater adapt to the changing climate. Mixed use sites provide opportunities to adapt to changing market conditions; and
12. *Resources are used efficiently and responsibly in neighbourhoods* - Meltwater incorporates LID features such as bioswales and constructed wetlands to support the retention of Natural Areas.

Transit Oriented Development (TOD) Guidelines

The TOD Guidelines designate the future Ellerslie Transit Centre as a "New Neighborhood" Station Area type. The Meltwater NSP meets the New Neighbourhood Land Use and Intensity Guidelines by providing a Mixed Use Town Centre adjacent to the Transit Centre with a projected residential density of 90 units/ha and an expected FAR of 2.0. The Town Centre supports a mix of street-oriented uses and features a pocket park.

Streetscapes within 400 m of the transit centre will be developed in accordance with the TOD Guidelines. These streets will be designed with pedestrian comfort, safety and interest in mind by providing human-scaled massing, street-oriented uses at ground level, and placing parking in structures, underground parkades or at the side or rear of buildings.

Park and Ride Guidelines

The Park and Ride Guidelines designate a permanent park and ride at Ellerslie and 50th Street. This park and ride will be located at the ultimate terminus of the presumed Southeast Valley Line LRT alignment within the City of Edmonton boundary and is considered regionally significant. The exact number of stalls requires further analysis and will inform the Meltwater NSP's Special Study Area.

Decoteau Area Structure Plan

Amendments proposed to the ASP are minor in nature and focus on incorporating refined information provided through analysis at the NSP preparation stage. The proposed Meltwater NSP meets the planning principles of the Decoteau ASP by:

- Providing a multi-modal transportation system;
- Creating a mixed use community with a diversity of housing types;
- Respecting the natural systems of the area by retaining natural landforms and incorporating them into the development;
- Creating local, integrated, and flexible employment zones within neighbourhoods;
- Creating complete streets and community civic spaces to promote active recreation;
- Endorsing urban agriculture; and
- Integrating parks and school sites with the ecological network.

Technical Review

In order to evaluate the feasibility of the proposed NSP land use framework, several technical reports were submitted for review with the application. The following reports were reviewed and approved by the responsible reviewing agencies:

- Neighbourhood Design Report (NDR);
- Transportation Impact Assessment Report (TIA);
- Parkland Impact Assessment Report;
- Environmental Overview;
- Phase II Ecological Network Report (ENR II);
- Geotechnical and Hydrogeological Site Investigation;
- Hydraulic Network Analysis (HNA);
- Campus Knowledge Community Needs Assessment (CKCNA); and
- Integrated Infrastructure Management Planning Strategy (IIMP).

Neighbourhood Design Report (NDR)

The Neighbourhood Design Report (Drainage Servicing Report) lays down the servicing concept, cost-sharing mechanism and staging information to facilitate orderly development.

Sanitary servicing is provided by connecting to three separate sanitary trunks located in 50 Street draining west, 50 Street draining north, and 34 Street draining south. The sanitary trunk has adequate capacity to accommodate future flows from this area.

Storm sewers have been designed to handle 5-year events as per prevalent standards. Low Impact Development will be incorporated at the time of detailed design. Stormwater will be directed at pre-development rates towards Natural areas and Wetlands within the development area to ensure their sustainability post-development.

Stormwater during major rainfall events is stored in six Stormwater Management Facilities (SWMF) that have been designed for a 100-year event.

Ecological Network Report (ENRII)

The supporting ENRII identifies and evaluates ecologically important areas and features while providing recommendations that inform the environmental planning and design of the Meltwater Neighbourhood. It is a detailed inventory of wetlands, natural areas, and wildlife that provides recommendations for the retention of important ecological features within the proposed development to maintain ecological network connectivity.

The proposed ecological network consists of semi-natural habitat (parks, greenways, stormwater management facilities), wetlands, and upland habitat that, when combined, will provide an ecological network representing approximately 36% of the total neighbourhood area.

The Meltwater Neighbourhood has been fundamentally informed by ecological design principles, and as a result, creates functional habitat for a variety of flora and fauna, while also providing a vibrant and liveable neighbourhood for future residents.

Transportation

Alternate Modes Assessment

A continuous network of sidewalks, shared use paths, and mid-block crossings are proposed throughout the neighbourhood to accommodate pedestrians and cyclists. The network provides strong connectivity to the Town Centre, parks, commercial and employment land uses, and three school sites within the neighbourhood while providing opportunities for the logical network extension to the adjacent neighbourhoods. The NSP promotes safe pedestrian routes within and outside the neighbourhood, and requires roadway designs to include various traffic-calming techniques to discourage shortcutting, speeding, while enhancing safety at key pedestrian crossings.

Transit delivery in the area will be influenced by the Transit Strategy. Although, initial implementation of bus service to Meltwater will be dependent on demand, neighbourhood buildout and available funding for transit, alternatives to traditional bus service will be explored to provide transit service at the early stages of the development

The Special Study Area that has been identified in the northwest corner of the plan adjacent to a future Transit Centre and Park and Ride facility, will provide connection to the Mill Woods Transit Centre and LRT Station, as well as to potential cross-town routes being developed in the Bus Network Redesign. The Valley Line LRT may also eventually extend to 50 Street and Ellerslie Road, subject to future study of the long-term LRT network plan.

Traffic Assessment

The Transportation Impact Assessment (TIA) submitted with the application supports the NSP roadway network hierarchy proposed and includes the identification of collector roadway arrangements, transit route opportunities, and active modes accommodation. 2050 was selected as the full build out analysis horizon for the TIA. The arterial road network

recommended by the TIA generally aligns with the requirements established at the ASP stage. Alberta Transportation has reviewed and accepted the findings of the TIA.

The 50 Street/Anthony Henday interchange is currently constructed to its ultimate stage with no future upgrades planned to be funded through the P3 contract. Upgrades to 50 Street/Anthony Henday interchange will be required to support the city-wide and regional growth. An update to the existing functional planning study may be required to determine the scope of longer term capacity improvements. Future upgrades to the 50 Street interchange will require collaboration with the Province, adjacent municipalities, and other interested parties such as the area developers.

Roadways in the Meltwater neighbourhood will be designed in accordance with Complete Street Guidelines and offer safe and convenient access throughout the neighbourhood. In addition to typical collector roadways, a modified cross-section will be used adjacent to wildlife/midblock pedestrian crossings with special attention to enhanced pedestrian safety and minimal impact to wildlife habitat. The collectors in the school zones will have enhanced features to provide safe routes to the schools from locations within and outside the NSP area.

EPCOR Water

A Hydraulic Network Analysis was submitted to EPCOR Water for review with this application. Water servicing has been designed to provide peak hour flows and fire flows for residential and commercial uses. Water service will be provided through the existing water main located along 50 Street and the existing quaternary system transmission main along Ellerslie Road.

Service pressures in the area will be low. Developers will be made aware of this service pressure situation to design servicing and buildings accordingly. The City of Edmonton Design and Construction Standards state that all residential lots with peak hour pressures below 350 kPa must be provided with a minimum of 25mm services. A booster station is proposed along 50 Street and Ellerslie Road.

Integrated Infrastructure Management Planning Strategy (IIMP)

Integrated Infrastructure Management Planning (IIMP) for the Meltwater Neighbourhood is a high-level analysis that provides Council with information about the infrastructure required for development of the neighbourhood. The broad-based analysis performed at this stage of the area development provides a general indication of future cost implications and revenue potential and can help inform high-level decision making.

The IIMP review was completed assuming a neighbourhood development build-out of 20 years, starting in 2021. Based on the information available at this time, the review generally shows that Meltwater will require a capital investment of approximately $67 million from the City. Capital and operating expenditures may be required as early as 2021 to support the anticipated development of the neighbourhood.

Community Engagement

PRE-APPLICATION NOTICE (APPLICANT) Date: March 2016 & April 2017	• Number of recipients (2016): 15 (all landowners in the plan area) • Number of recipients (2017): 10 (all non-participating landowners in the plan area) • Number of responses: 8 • Common comments included: o interest in developing commercial uses on their property; o interest in developing a future institutional facility of their property; o interest in maximizing the developability of land; o interest in allowing flexibility of development on their land due to the changing market; and o support for preserving natural areas and wetlands on their lands.
ADVANCE NOTICE Date: May 25, 2020	• Number of recipients: 43 • Number of responses with concerns: 1 • Common comments included: o Felt proportionately harmed by this plan and some of the burden on environmental or municipal reserves should rest with others
PUBLIC MEETING Remote Open House Date: August 11- 28, 2020	• Number of recipients: 1235 • Number of visits: 268 • Engaged Visitors: 9 • Informed Visitors: 85 • Aware Visitors: 195 • Number of feedback forms in support: 3 • Number of feedback forms with concerns: 6 • Common comments included: ○ ensure all development meets its sustainability goals; ○ limit parking in front of development; ○ Make the arterial road more comfortable for pedestrians and cyclists; ○ The Plan does not address compensation for landowners for such things has Environmental Reserves, Municipal Reserves and Non Environmental Reverse (only City owned property); ○ City should design a grid network for walkability;

	○ The City did not engage with the landowners, the online event does not fill the duty to consult with landowners; ○ The majority of the lands designated as ER are seasonal marshes that don't qualify as ER; ○ Trees stands do not qualify for ER land; ○ Not Planned according to the Municipal Government Act (MGA); ○ Town Center should be at the center of the neighbourhood; ○ Commercial and residential needs to be better connected and integrated; ○ Keep streets short and narrow to deter speeding and more wider sidewalks; ○ Cannot support any new greenfield development; ○ Please consider main road planning for 50th street, 34 street, and Ellerslie road; ○ Glad to see new schools and green areas in these plans; ○ Ellerslie road needs to be doubled and 34 street needs to be properly paved and doubled; and ○ Don't Agree with ASP for the District activity park (DP) location and the portions of the land used. I think it should be more central and not facing major road (Ellerslie Road). (*NOTE: the planned District Activity Park is not located within the Meltwater neighbourhood)*
WEBPAGE	• edmonton.ca/projects_plans/communities_neighbourhoods/northwest-decoteau-neighbourhood-structure-plan.aspx

In response to concerns, administration advises that the Municipal Government Act grants municipalities the authority to dedicate wetlands as Environmental Reserve (ER). This authority is not impacted by seasonality of the wetland. Tree stands in the plan area are proposed to be preserved through Municipal Reserve (MR). The designation and dedication of land regarding MR and ER is governed by the Municipal Government Act.

The town centre was placed adjacent to the future transit centre to encourage transit use and facilitate transfer from one mode of transportation to another. The town centre is connected to the rest of the neighbourhood with a spine road that is intended to be developed as a main street and extend the pedestrian-oriented development inwards towards the Natural Areas.

Currently, Ellerslie Road is a two-lane urban undivided arterial roadway and changes to a two-lane undivided rural roadway approximately 1.3 km east of 50 Street. Ellerslie Road is planned to be a four-lane divided roadway in the future as development occurs on both sides of the road. 34 Street is planned to be a four-lane divided roadway with urbanized cross-section as development occurs in that area. Some temporary improvements have been recently completed on 34 Street to facilitate better access to the Charlesworth neighbourhood.

Detailed planning of the district activity park will be accomplished under the Decoteau Neighbourhood Structure Plan process.

For a detailed summary of comments collected from through the advance notice and the Engaged Edmonton platform, refer to the attached *What We Heard Report.*

Conclusion

Administration recommends that City Council **APPROVE** this application.

Appendices

1. What We Heard Report
2. Approved ASP Context Map - Bylaw 18539
3. Proposed ASP Context Map - Bylaw 19537
4. Proposed NSP Concept Map - Bylaw 19538
5. Approved ASP Land Use and Population Statistics - Bylaw 18539
6. Proposed ASP Land Use and Population Statistics - Bylaw 19537
7. Integrated Infrastructure Management Planning Report
8. Application Summary

Planning Coordination
CITY PLANNING
October 29, 2020

WHAT WE HEARD REPORT

New NSP in Decoteau Northwest (Meltwater)

LDA17-0668

PROJECT ADDRESS: The Decoteau Northwest neighbourhood (Meltwater) is located south of Ellerslie Road SW, west of 34 Street SW, east of 50 Street SW and north of 25 Avenue SW in Southeast Edmonton.

PROJECT DESCRIPTION: A proposal for a new Neighbourhood Structure Plan (NSP) for the northwest neighbourhood under the Decoteau Area Structure Plan (ASP). The NSP will provide a framework for development for 311 hectares of land.

EVENT TYPE: Virtual Open House, hosted on Engaged Edmonton website

MEETING DATE: August 11 - 28, 2020

NUMBER OF VISITS: 268

NUMBER OF RESPONSES: 9

ABOUT THIS REPORT

The information in this report includes feedback gathered during the virtual open house. This report was shared on the Remote Open House Webpage. This summary was also shared with the applicant and the Ward Councillor. If/when the proposed NSP advances to Public Hearing, comments will be summarized in the Report to Council and this report will be attached.

MEETING FORMAT:

Because of public health issues, the City did not host an in-person Public Engagement Event to share information and collect feedback. Instead, a meeting was held using remote technology on the Engaged Edmonton web page. Information about the new neighbourhood plan was presented on the website through a series of videos and links to relevant resources and materials. Interested citizens could watch the videos, review the information, and post comments or ask questions. The website was open for nearly three weeks (from August 11 - 28, 2020).

THE APPLICATION

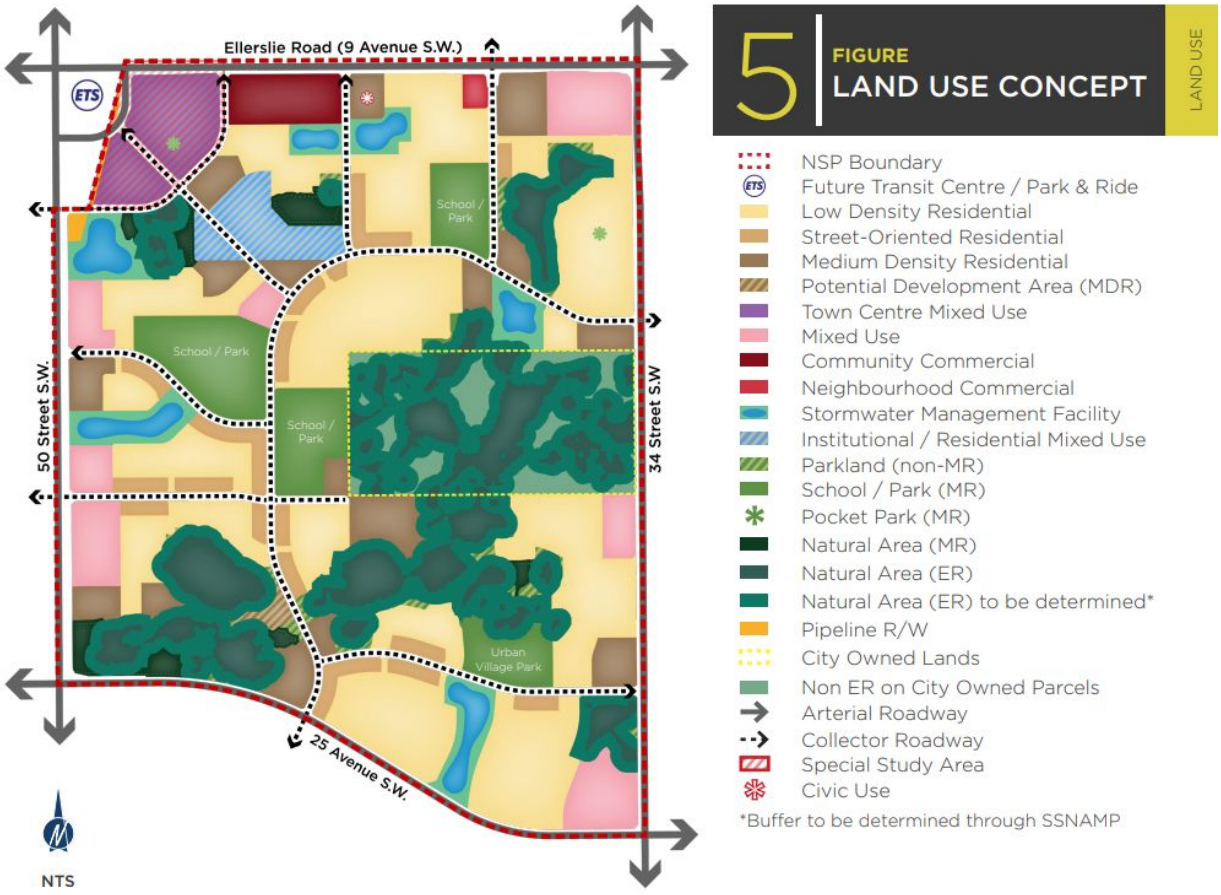
An application to amend the Decoteau Area Structure Plan and adopt a new Neighbourhood Structure Plan (NSP) was received by the City of Edmonton on January 3, 2018. Neighbourhood Structure Plans provide the official framework for the development of a new residential neighbourhood.

The policies of the NSP guide the next stages of development, including zoning, subdivision, and infrastructure design. The proposed Northwest Decoteau NSP outlines:

- Type and location of residential, commercial, and other land uses;
- Projected population densities;
- The location of major roads and utilities (water, storm and sanitary sewers);
- Future park space and school sites;
- Preservation of natural areas; and
- General staging pattern for development.

Key Features of the Plan

- Preservation of approximately 70 hectares of wetland and tree stands;
- A Town Centre with a mix of commercial and residential development, adjacent to a future transit centre and park and ride facility;
- Three future school sites and an urban village park;
- A future population of approximately 10,900 people;
- A mix of low and medium density housing types; and
- Opportunities for commercial development along major roadways.



OPEN HOUSE FEEDBACK SUMMARY

The following were questions that were posted and answered during the event:

Q. How has the public been informed of this project?

- The applicant sent letters to property owners in the Northwest Decoteau neighbourhood on May 27, 2020;
- Northwest Decoteau NSP webpage was set up the week of May 19, 2019;
- City Administration (Planning Dept) sent out advance notification letter to all property owners in the Northwest Decoteau NSP area;
- A Website was established and updated throughout the review; and
- The File planner has monitored and responded to inquiries from the public.

Q. What technical Reports have been submitted for this application?

- Transportation Impact Analysis
- Phase II Ecological Network Report
- Hydraulic Network analysis
- Neighbourhood Design Report
- Geotechnical/Hydro-geotechnical Report
- Community Knowledge Campus Needs Assessment
- Parkland Impact Assessment
- Environmental Overview

Q. What is the timing of full build out of the Northwest neighbourhood?

- it is estimated that the first new housing would be constructed a year or two after the NSP is approved.
- Full build out of the neighbourhood may take many years depending on housing demand, economic factors and servicing constraints. It can commonly take a decade or two for a new neighbourhood to completely build out.

Q. When will the area be serviced?

- Once the NSP is approved, the City will accept rezoning and subdivision applications within the area.
- The construction of roads, water and sewer pipes, electrical and other utilities to service the new development will be required as part of the subdivision approvals.
- Once the civic infrastructure is in place, the City will accept applications for Development Permits and construction.
- This process will happen in stages as described in the NSP, and as per the logical extension of services.
- The speed at which the area will be serviced depends on market demand and the pace of development.

Q. When will other plans in the Decoteau ASP area be completed?

- There are a total of five neighbourhoods planned within the Decoteau ASP. So far the city has only approved one NSP within the ASP area; the Decoteau North Neighbourhood was approved on September 17, 2018.
- NSPs are initiated and submitted by landowners within a given plan area, and therefore the City does not control when plans are done.
- It can typically take the City up to a year to review an application for a new NSP, from the time that the application is submitted; and it can often take longer. This is due to the complexity of the process; there are many technical and planning considerations to

consider and multiple objectives to balance, such as achieving residential density targets and protecting natural areas.

Q. Why is there a road, wetland or stormwater management facility on my property?

- A Neighbourhood Plan must provide all the amenities and services for a complete community, this includes access into neighbourhoods, storm ponds to manage drainage and protecting existing wetlands and natural areas.
- The location of various land uses, roads and natural features are dependent on what is existing on the land, what makes sense from a practical and technical perspective to service the area, and trying to balance landowner interests.

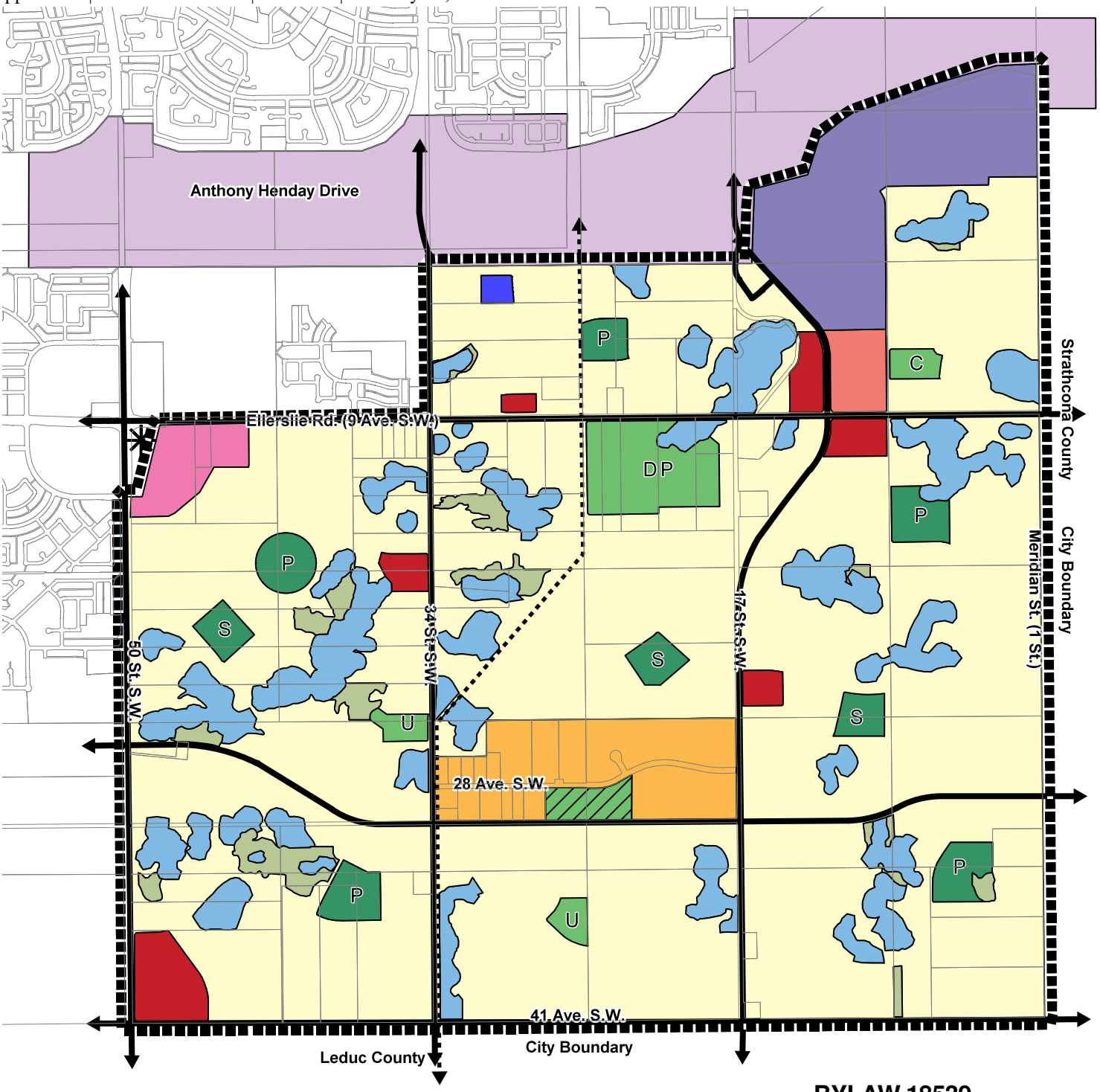
Q. How was the virtual public engagement publicized?

- Advanced notice of the application was sent by direct mail to property owners within the plan area, in the form of a letter on May 27, 2020 (42 recipients).
- A postcard to notify the public of the Virtual Public Engagement Opportunity was sent on the week of August 4, 2020.
- It was posted on the City's Public Engagement Calendar.
- It was also posted on the Northwest Decoteau webpage.

There were no questions left on the Public Engagement webpage, and nine written comments received. The comments are summarized as follows:

- Agree with the new NSP (3 responses).
- Consider design guidelines, to ensure all development meets its sustainability goals.
- Limit parking in front of development, making sure development is transitional and can support people right at the onset of development.
- Make the arterial road more comfortable for pedestrians and cyclists.
- Felt proportionately harmed by this plan and some of the burden on environmental or municipal reserves should rest with others.
- The Plan does not address compensation for landowner for such things has Environmental Reserves, Municipal Reserves and Non Environmental Reverse (only City owned property).
- Did not agree with the winding road layout, the City should design a grid network for walkability.
- The City did not engage with the landowners, the online event does not fill the duty to consult with landowners.
- The majority of the lands designated as ER are seasonal marshes that don't qualify as ER. Trees stands do not qualify for ER land.

- Not Planned according to the Municipal Government Act (MGA), will be asking for a review by the MGA.
- Town Center should be at the center of the neighbourhood.
- Commercial and residential needs to be better connected and integrated. Keep streets short and narrow to deter speeding.
- Add more wider sidewalks.
- Cannot support any new greenfield development.
- Please consider main road planning for 50th street, 34 street, and Ellerslie road.
- Glad to see new schools and green areas in these plans.
- Ellerslie road needs to be doubled and 34 street needs to be properly paved and doubled.
- Don't Agree with ASP for the District activity park (DP) location and the portions of the land used. I think it should be more central and not facing major road (Ellerslie Road). (Editor’s note: the District Park is not located within the proposed Meltwater neighbourhood)

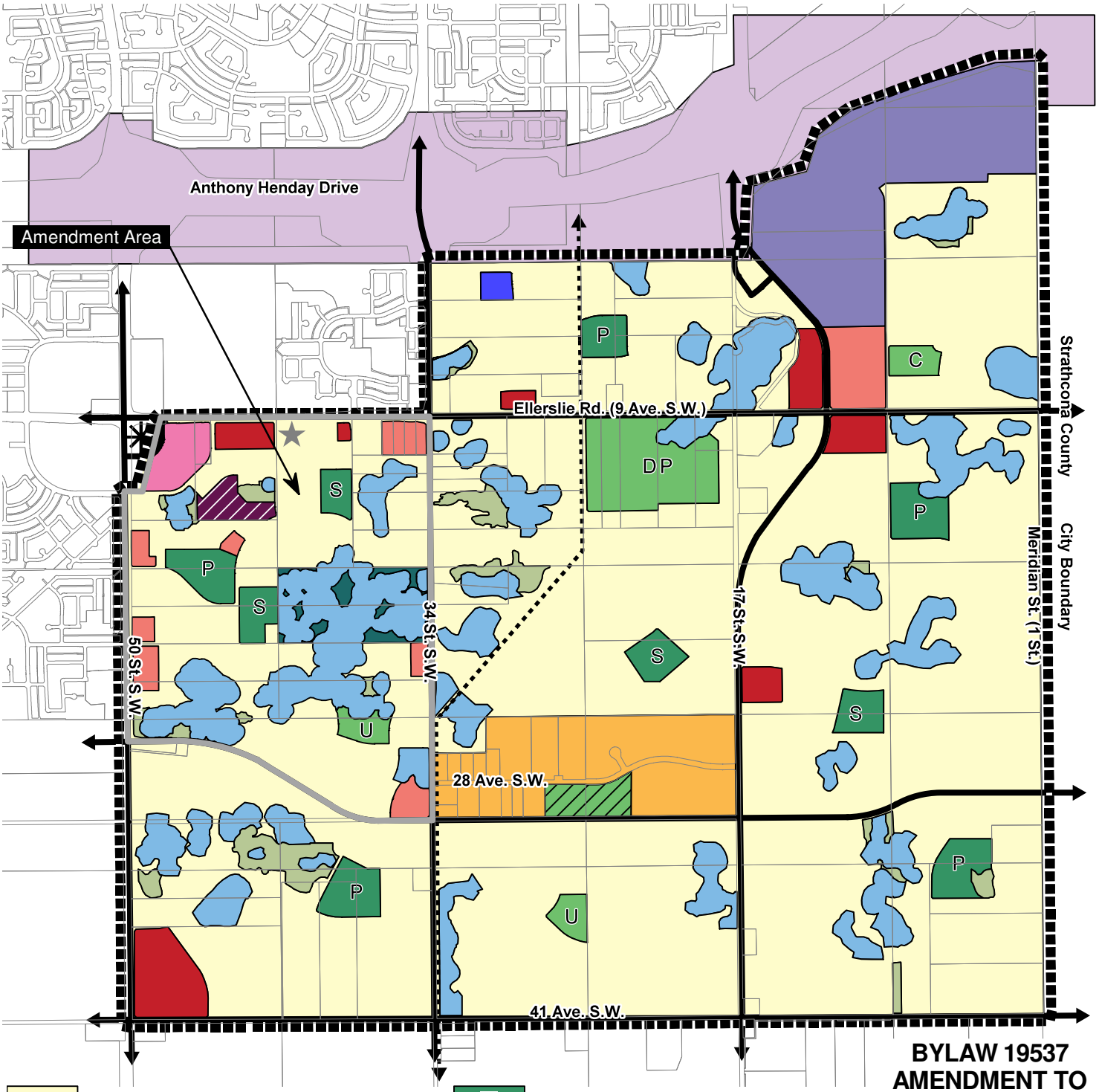


BYLAW 18539
APPROVED DECOTEAU
Area Structure Plan

N

- Residential
- Existing Country Residential
- Commercial / Office
- Commercial / Office /Residential Mixed Use
- Town Centre Mixed Use
- Business Employment
- Institutional
- P — Public School/Park
- S — Separate School/Park
- DP — District Activity Park
- C — Community Park
- U — Urban Village Park
- Existing Park (MR)
- Natural Area (MR)
- Wetland (ER)
- Anthony Henday Drive (TUC)
- Utility ROW
- Transit Centre/Park & Ride/Potential Future LRT Station
- Arterial Roadway
- Area Structure Plan Boundary

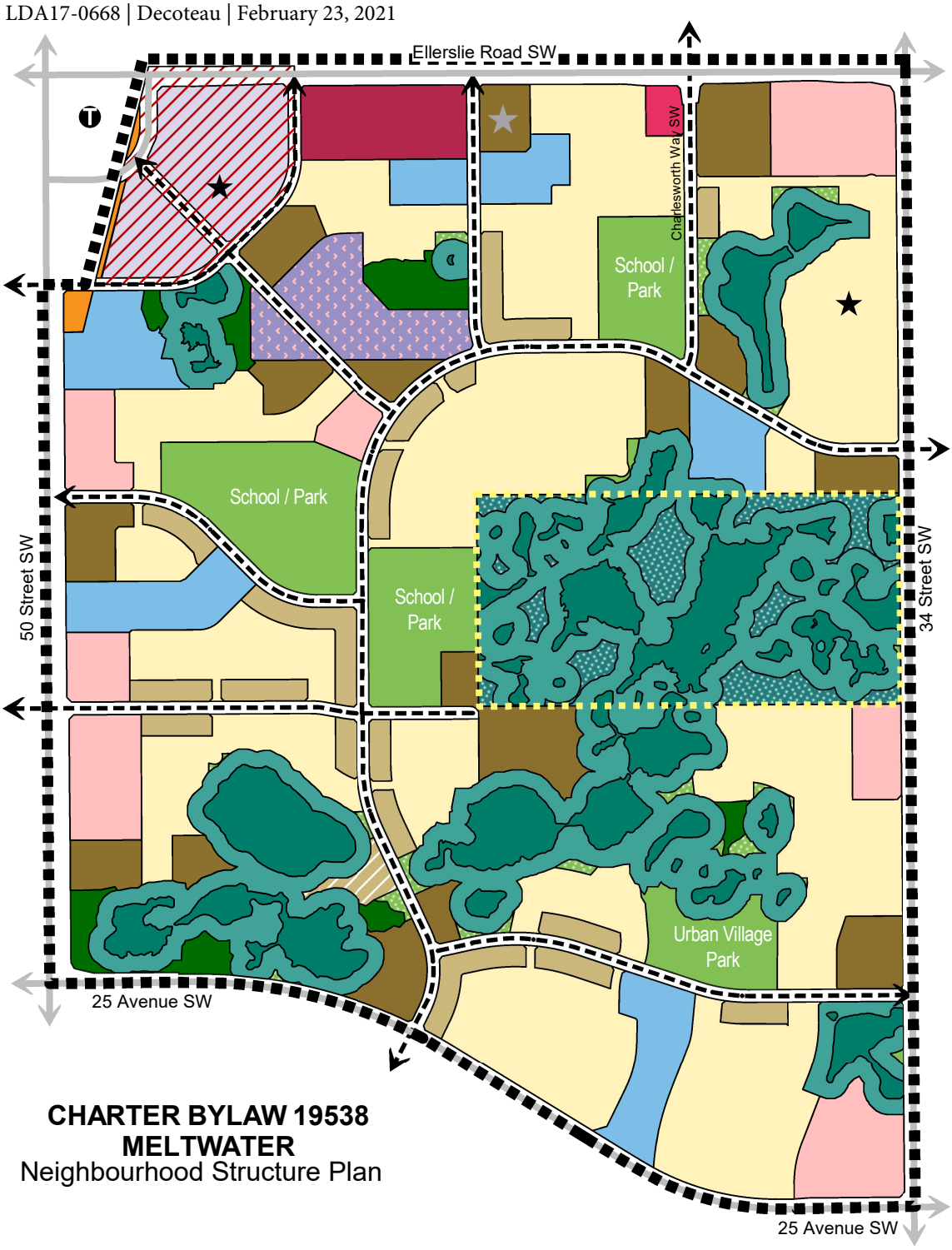
Note: Location of collector roads and configuration of stormwater management facilities are subject to minor revisions during subdivision and rezoning of the neighbourhood and may not be developed exactly as illustrated.



BYLAW 19537
AMENDMENT TO
DECOTEAU
Area Structure Plan
(as amended)

- Residential
- Existing Country Residential
- Commercial / Office
- Commercial / Office / Residential Mixed Use
- Town Centre Mixed Use
- Business Employment
- Institutional
- Institutional / Residential Mixed Use
- Public School/Park
- Separate School/Park
- District Activity Park
- Community Park
- Urban Village Park
- Existing Park (MR)
- Natural Area (MR)
- Wetland (ER)
- Non ER on City Owned Parcels
- Anthony Henday Drive (TUC)
- Utility ROW
- Transit Centre/Park & Ride/Potential Future LRT Station
- Civic Use
- Arterial Roadway
- ASP Boundary
- Amendment Area

Note: Location of collector roads and configuration of stormwater management facilities are subject to minor revisions during subdivision and rezoning of the neighbourhood and may not be developed exactly as illustrated.



CHARTER BYLAW 19538
MELTWATER
Neighbourhood Structure Plan

- Low Density Residential
- Street-Oriented Residential
- Medium Density Residential
- Potential Development Area (MDR)
- Town Centre Mixed Use
- Mixed Use
- Community Commercial
- Neighbourhood Commercial
- Institutional / Residential Mixed Use
- Stormwater Management Facility
- Parkland (non-MR)
- School / Park (MR)
- Pocket Park (MR)
- Natural Area (MR)
- Natural Area (ER)
- Natural Area (ER) to be determined*
- Pipeline R/W
- City Owned Lands
- Non ER on City Owned Parcels
- Arterial Roadway
- Collector Roadway
- Future Transit Centre/Park & Ride
- Special Study Area
- Civic Use
- NSP Boundary

Note: Location of collector roads and configuration of stormwater management facilities are subject to minor revisions during subdivision and rezoning of the neighbourhood and may not be developed exactly as illustrated.
*Buffer to be determined through SSNAMP

APPROVED DECOTEAU AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 18539

3.2 Land Use and Population Statistics

Bylaw 18539, September 17, 2018

	Area (ha)	% GA	North	Northwest	Central	Southeast	Southwest
GROSS AREA	1,957.1	100%	386.0	310.8	378.1	497.7	384.5
Wetland (Environmental Reserve)	198.3	10.1%	34.0	46.7	26.2	39.3	52.1
Public Utility ROW	9.9	0.5%	4.8	0.0	3.6	0.0	1.5
Arterial Roadway	86.9	4.4%	12.8	19.4	15.1	17.6	22.0
Existing Country Residential	72.1	3.7%	0.0	0.0	72.1	0.0	0.0
Existing Park (Municipal Reserve)	8.3	0.4%	0.0	0.0	8.3	0.0	0.0
GROSS DEVELOPABLE AREA	1,581.6	80.8%	334.4	244.7	252.8	440.8	308.9
		%GDA					
Town Centre Mixed Use[1]	7.0	0.4%	0.0	7.0	0.0	0.0	0.0
Commercial/Residential Mixed Use[2]	8.3	0.5%	8.3	0.0	0.0	0.0	0.0
Commercial	38.5	2.4%	8.0	4.6	0.0	10.2	15.7
Business Employment	94.7	6.0%	94.7	0.0	0.0	0.0	0.0
Institutional	2.5	0.2%	2.5	0.0	0.0	0.0	0.0
Parkland, Recreation, School (Municipal Reserve)	157.5	10.0%	20.0	29.5	45.6	34.1	28.3
District Activity Park	*30.1*	*1.9%*	*0.0*	*0.0*	*30.1*	*0.0*	*0.0*
School/Park	*53.8*	*3.4%*	*5.3*	*13.5*	*5.5*	*21.5*	*8.0*
Urban Village Park	*12.2*	*0.8%*	*4.2*	*4.0*	*0.0*	*0.0*	*4.0*
Pocket Park & Linear Park	*31.2*	*2.0%*	*9.2*	*2.0*	*2.0*	*12.0*	*6.0*
Natural Area (MR)	*30.2*	*1.9%*	*1.3*	*10.0*	*8.0*	*0.6*	*10.3*
Transportation - circulation	316.3	20.0%	66.9	48.9	50.6	88.2	61.8
Stormwater Management Facility	96.5	6.1%	21.4	19.3	16.0	18.2	21.6
Total Non-Residential Area	721.4	45.6%	221.8	109.4	112.2	150.7	127.4
Net Residential Area	860.2	54.4%	112.6	135.3	140.6	290.1	181.5

RESIDENTIAL LAND USE AREA, DWELLING UNIT & POPULATION COUNT

Land Use		ASP	North	Northwest	Central	Southeast	Southwest
Single/Semi-detached	Area (ha)	675.1	87.2	108.4	110.4	228.2	140.8
25 du/nrha	Units	16,876	2,180	2,709	2,761	5,706	3,521
2.8 p/du	Population	47,253	6,103	7,585	7,731	15,977	9,857
Row Housing	Area (ha)	115.7	12.7	15.0	20.0	41.0	27.0
45 du/nrha	Units	5,206	571	675	900	1,845	1,215
2.8 p/du	Population	14,577	1,599	1,890	2,520	5,166	3,402
Low-rise/Medium Density Housing	Area (ha)	60.8	11.3	9.5	9.0	18.5	12.5
90 du/nrha	Units	5,465	1,013	851	810	1,665	1,125
1.8 p/du	Population	9,837	1,824	1,533	1,458	2,997	2,025
Medium to High Rise Housing	Area (ha)	8.8	1.5	2.5	1.2	2.4	1.2
225 du/nrha	Units	1,971	329	563	270	540	270
1.5 p/du	Population	2,943	479	844	405	810	405
Total Residential	Area (ha)	860.2	112.6	135.3	140.6	290.1	181.5
	Units	29,518	4,093	4,798	4,741	9,756	6,131
	Population	74,609	10,005	11,851	12,114	24,950	15,689

SUSTAINABILITY MEASURES

Population Per Net Hectare (p/nha)	86.7	88.9	87.6	86.1	86.0	86.4
Dwelling Units Per Net Residential Hectare (du/nrha)	**34.3**	**36.3**	**35.5**	**33.7**	**33.6**	**33.8**
Population (%) within 500m of Parkland[3]	76%					
Population (%) within 400m of Transit Service	100%					
Population (%) within 600m of Commercial Service[4]	43%					
Presence/Loss of Natural Areas						
Protected as Environmental Reserve	198.3					
Conserved as Naturalized Municipal Reserve (ha)	30.2					
Protected though other means (ha)[5]	7.4					
Lost to Development (ha)[6]	36.9					

STUDENT GENERATION COUNT

Public School Board						
Elementary School	3,163	668.8	489.4	505.6	881.6	617.8
Junior High	1,582	334.4	244.7	252.8	440.8	308.9
Senior High	1,582	334.4	244.7	252.8	440.8	308.9
Separate School Board						
Elementary School	1,582	334.4	244.7	252.8	440.8	308.9
Junior High	791	167.2	122.4	126.4	220.4	154.5
Senior High	791	167.2	122.4	126.4	220.4	154.5
Total Student Population	9,490	2,006.4	1,468.2	1,516.8	2,644.8	1,853.4

[1] The total area of this designation is 17.6 ha. The assumed split between residential and non-residential (retail and office) land uses is assumed as 60:40 respectively. The residential portion of this designation is accounted for in Low-rise/Medium Density Housing and Medium to High Rise Housing.

[2] The total area of this designation is 12 ha. The assumed split between residential and non-residential (retail and office) land uses is assumed as 40:60 respectively. The residential portion of this designation is accounted for in the Low-rise/Medium Density Housing.

[3] does not include population within 500m of Pocket parks, which will be identified in future Neighbourhood Structure Plans.

[4] does not include population within 600m of convenience commercial sites, which will be identified in future Neighbourhood Structure Plans.

[5] Additional natural areas may be retained through ER dedication, compensation, land exchange, etc. These natural areas will be identified in future Neighbourhood Structure

[6] Includes areas recommended for retention as per the ENR II.

PROPOSED DECOTEAU AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 19537

	Area (ha)	%GA	Alces	Meltwater	Decoteau	Kettle Lakes	Snowberry
GROSS AREA	1,957.7	100.0%	386.0	311.4	378.1	497.7	384.5
Wetland (Environmental Reserve)	223.6	11.4%	34.0	72.0	26.2	39.3	52.1
Public Utility ROW	10.5	0.5%	4.8	0.6	3.6	-	1.5
Arterial Roadway	86.0	4.4%	12.8	18.5	15.1	17.6	22.0
Existing Country Residential	72.1	3.7%	-	-	72.1	-	-
Existing Park (Municipal Reserve)	8.3	0.4%	-	-	8.3	-	-
GROSS DEVELOPABLE AREA	1,557.2	100.0%	334.4	220.3	252.8	440.8	308.9
		%GDA					
Town Centre Mixed Use[1]	2.6	0.2%	-	2.6	-	-	-
Commercial/Residential Mixed Use[2]	15.2	1.0%	8.3	6.9	-	-	-
Commercial	39.0	2.5%	8.0	5.1	-	10.2	15.7
Business Employment	94.7	6.1%	94.7	-	-	-	-
Institutional[3]	3.7	0.2%	2.5	1.2	-	-	-
Institutional/Residential Mixed Use[4]	3.4	0.2%	-	3.4	-	-	-
Parkland, Recreation, School	154.7	9.9%	20.0	26.7	45.6	34.1	28.3
District Activity Park (MR)	*30.1*	1.9%	-	-	*30.1*	-	-
School/Park (MR)	*58.0*	3.7%	*5.3*	*17.7*	*5.5*	*21.5*	*8.0*
Urban Village Park (MR)	*11.8*	0.8%	*4.2*	*3.6*	-	-	*4.0*
Pocket Park & Linear Park (MR)	*30.2*	1.9%	*9.2*	*1.0*	*2.0*	*12.0*	*6.0*
Natural Area (MR)	*24.7*	1.6%	*1.3*	*4.5*	*8.0*	*0.6*	*10.3*
Parkland (Non-MR)	2.2	0.1%	-	2.2	-	-	-
Non ER on City Owned Parcels	5.1	0.3%	-	5.1	-	-	-
Transportation - circulation	311.4	20.0%	66.9	44.1	50.6	88.2	61.8
Stormwater Management Facility	92.4	5.9%	21.4	15.2	16.0	18.2	21.6
Total Non-Residential Area	724.5	46.5%	221.8	112.6	112.2	150.7	127.4
Net Residential Area	832.7	53.5%	112.6	107.8	140.6	290.1	181.5

RESIDENTIAL LAND USE AREA, DWELLING UNIT & POPULATION COUNT

Land Use		ASP	Alces	Meltwater	Decoteau	Kettle Lakes	Snowberry
Single/Semi-Detached	Area (ha)	624.6	87.2	57.8	110.4	228.2	140.8
25 du/nrha	Units	15,614	2,181	1,446	2,761	5,706	3,521
2.8 p/du	Population	43,720	6,105	4,049	7,731	15,977	9,857
Street-Oriented Residential	Area (ha)	11.6	-	11.6	-	-	-
35 du/nrha	Units	405	-	405	-	-	-
2.8 p/du	Population	1,134	-	1,134	-	-	-
Row Housing	Area (ha)	111.1	12.7	10.4	20.0	41.0	27.0
45 du/nrha	Units	4,998	571	467	900	1,845	1,215
2.8 p/du	Population	13,995	1,599	1,308	2,520	5,166	3,402
Low-rise/Medium Density Housing	Area (ha)	79.2	11.3	28.0	9.0	18.5	12.5
90 du/nrha	Units	7,131	1,013	2,518	810	1,665	1,125
1.8 p/du	Population	12,835	1,823	4,532	1,458	2,997	2,025
Medium to High Rise Housing	Area (ha)	6.3	1.5	-	1.2	2.4	1.2
225 du/nrha	Units	1,409	329	-	270	540	270
1.5 p/du	Population	2,113	493	-	405	810	405
Total Residential	Area (ha)	832.7	112.6	107.8	140.6	290.1	181.5
	Units	29,556	4,093	4,836	4,741	9,756	6,131
	Population	73,796	10,020	11,023	12,114	24,950	15,689

SUSTAINABILITY MEASURES

Population Per Net Hectare (p/nha)	90.0	89.0	102.3	86.1	86.0	86.4
Dwelling Units Per Net Residential Hectare (du/nrha)	**36.5**	**36.3**	**44.9**	**33.7**	**33.6**	**33.8**
Population (%) within 500m of Parkland[5]	86%					
Population (%) within 400m of Transit	100%					
Population (%) within 600m of Commercial[6]	35%					
Presence/Loss of Natural Area						
Protected as ER	198.3					
Conserved as NMR	30.2					
Protected through other means (ha)[7]	7.4					
Lost to Development (ha)[8]	36.9					

STUDENT GENERATION COUNT						
Public School Board						
Elementary School	3,129	668.8	455.0	505.6	881.6	617.8
Junior High	1,565	334.4	228.0	252.8	440.8	308.9
Senior High	1,565	334.4	228.0	252.8	440.8	308.9
Separate School Board[9]						
Elementary School	1,815	334.4	478.0	252.8	440.8	308.9
Junior High	908	167.2	239.0	126.4	220.4	154.5
Senior High	908	167.2	239.0	126.4	220.4	154.5
Total Student Population	9,889	2,006.4	1,867.0	1,516.8	2,644.8	1,853.5

[1] The total area of this designation is 8.56 ha with 0.5 ha intended for a future Pocket Park (Municipal Reserve). The assumed split between residential and non-residential (retail and office) land uses is assumed as 67:33 respectively. The residential portion of this designation is accounted for in Low-rise/Medium Density Housing.
[2] The total area of this designation is 29.30 ha. The assumed split between residential and non-residential (retail and office) land uses is assumed as 40:60 respectively in Alces, and 60:40 respectively in Meltwater.
[3] Includes the 1.22 ha potential Institutional Use (Fire Station) in Meltwater that is identified as residential with an asterisk in the land use concept.
[4] The total area of this designation is 5.63 ha. The assumed split between residential and institutional land uses is assumed as 40:60 respectively.
[5] Does not include population within 500m of Pocket Parks, which will be identified in future Neighbourhood Structure Plans.
[6] Does not include population within 600m of convenience commercial sites, which will be identified in future Neighbourhood Structure Plans.
[7] Additional natural areas may be retained through ER dedication, compensation, land exchange, etc. These natural areas will be identified in future Neighbourhood Structure Plans.
[8] Includes areas recommended for retention as per the ENR II.
[9] Includes Catholic and Francophone student generation in Meltwater.

Integrated Infrastructure Management Planning
Meltwater NSP

1.1 Executive Summary

Integrated Infrastructure Management Planning (IIMP) for the Meltwater Neighbourhood is a high-level analysis that provides Council with information about the infrastructure required for development of the neighbourhood. The broad-based analysis performed at this stage of the area development provides a general indication of future cost implications and revenue potential and can help inform high-level decision making.

The IIMP review was completed for a neighbourhood development build-out of 20 years, starting in 2021. Based on the information available at this time, the review generally shows that Meltwater will require a capital investment by the City of approximately $67 million. Capital and operating expenditures may be required as early as 2021 to support the anticipated development of the neighbourhood.

1.2 Purpose

Integrated Infrastructure Management Planning (IIMP) is a process for the gathering, synthesis, presentation and use of data related to the provision of infrastructure to the three remaining Urban Growth Areas, of which the Meltwater Neighbourhood Structure Plan (NSP) is a part. This document is based on information provided by the applicant in October 2020. The actual Plan before Council may have slightly different population statistics, but the differences are immaterial. This report will provide Council with information about the infrastructure required for the development, how it relates to existing infrastructure, timing, implications on the 2019-2022 as well as future Capital Budgets, and implications to the city's operations.

1.3 IIMP Background

The tax revenue generated by new residential neighbourhoods is not meant to pay for the municipal programs and services associated with those neighbourhoods. Property taxation is a tax on wealth as represented by the assessment of residential and non-residential properties under regulations set by the Province.

Residential neighbourhoods exist to provide for housing and community amenities. Other areas of the city, such as industrial areas and commercial nodes, exist to provide employment and wealth generation. The amount of revenue the City needs from property taxation is determined for the City as a whole and takes into consideration the balance between residential and non-residential assessment. A residential neighbourhood is not a

microcosm of the entire City and property taxes are not calculated on a neighbourhood basis.

It is difficult to capture all of the indirect costs and benefits that are attributable in whole or in part to new residential neighbourhoods. For example, the City collects dividends from EPCOR, earnings from its investments, and a substantial amount of non-residential tax revenue from dense commercial nodes including West Edmonton Mall, the Downtown core, and South Edmonton Common. These sources all help fund services provided to all neighbourhoods, but are difficult to include in a neighbourhood or area specific analysis. Additionally, secondary benefits accrue from the expenditures of those individuals deriving income directly or indirectly from the development industry. Economic impacts can be estimated by calculating expenditure multipliers. An expenditure multiplier estimates the final value of an incremental dollar spent once the direct and follow-on effects are included. By way of illustration, Alberta's economic multiplier for construction is 1.5. This means that a dollar of construction activity generates a gross gain of $1.50 of economic activity for Alberta once direct and follow-on impacts are included. For the Meltwater Neighbourhood, this equates to approximately $ 161 million over the construction time of the development, based on the City's $ 67 million investment in public infrastructure (See Table 3). Construction costs paid for by the developer and private investment in housing and commercial areas is over and above this.

The challenges facing the City are to balance development costs with the strategic benefits of sustainable growth, to achieve an appropriate balance of residential and commercial/industrial development. Although the City of Edmonton has achieved some success in diversifying its revenue base, property tax remains the largest component of City revenue. The long term sustainability of cities in Canada will depend on a combination of smart, resource efficient growth mixed with a progressive form of revenue generation that provides for the services being enjoyed by citizens in the long term, without providing undue burden to any particular stakeholder.

1.4 NSP Background

Meltwater is one of five neighbourhoods described in the Decoteau ASP. The neighbourhood is defined by the following general boundaries:

- North – Ellerslie Road (9 Avenue SW)
- East – 34 Street SW
- South – 25 Avenue SW
- West – 50 Street SW

An IIMP for the Decoteau ASP was completed in 2015. At the time, it was identified that a developer investment in infrastructure of approximately $803 million as well as an additional investment of approximately $369 million by the City was required to support full development of the ASP.

With a gross developable area of 221 ha and a population of 10,931 people, Meltwater makes up approximately 14% of the ASP's gross developable area and 15% of the ASP's population. Table 1 includes general Decoteau and Meltwater NSP area and population statistics.

Table 1 – Decoteau ASP and Meltwater NSP Statistics

	ASP	Decoteau Northwest
Population	**74609**	**10931**
% of ASP Population	100%	15%
Cross Area (ha)	**1957.1**	**311.4**
% of ASP Gross Area	100%	16%
Gross Developable Area (ha)	**1581.6**	**220.87**
% of Gross Developable Area	100%	14%
Commercial Land Allocation (ha)	**148.5**	**14.6**
% of Commercial Land Allocation	100%	10%
Proposed Residential Units	**29518**	**5062**
% of Residential Units	100%	17%

The proposed Meltwater Neighbourhood NSP includes planned single and multi-family residential development, commercial development, as well as many park uses.

Funding Assumptions

Additional assumptions are listed following Tables 3 as well as at the end of the report.

1.5 Methodology

Integrated Infrastructure Management Planning is conducted by working closely with city departments, utilities, and development proponents. Development projections were determined utilizing demographic data from the development proponent as well as the City of Edmonton's Financial Services Department. In this case, both the proponent and the City project a very similar timeline for development. Infrastructure requirements are analyzed with the City's Development Infrastructure Impact Model (DIIM) using data supplied by proponents and information from city departments and utilities to provide a financial

forecast based on the demographic projection. Work and analysis performed to date is designed to promote both the effective use of infrastructure and alignment with existing and master plans.

1.6 Scenario Analysis

The following provides infrastructure information related to the Meltwater Neighbourhood NSP. This section provides data resulting from the analysis of the development build-out scenario. The next section, Building Perspective, provides context to the data.

The IIMP analysis models a 20 year neighbourhood build-out horizon. Construction of the neighbourhood is anticipated to begin in 2021 and be completed by 2040. This build-out timeline was provided by the proponent and is in alignment with the City's build-out forecasts for the neighbourhood.

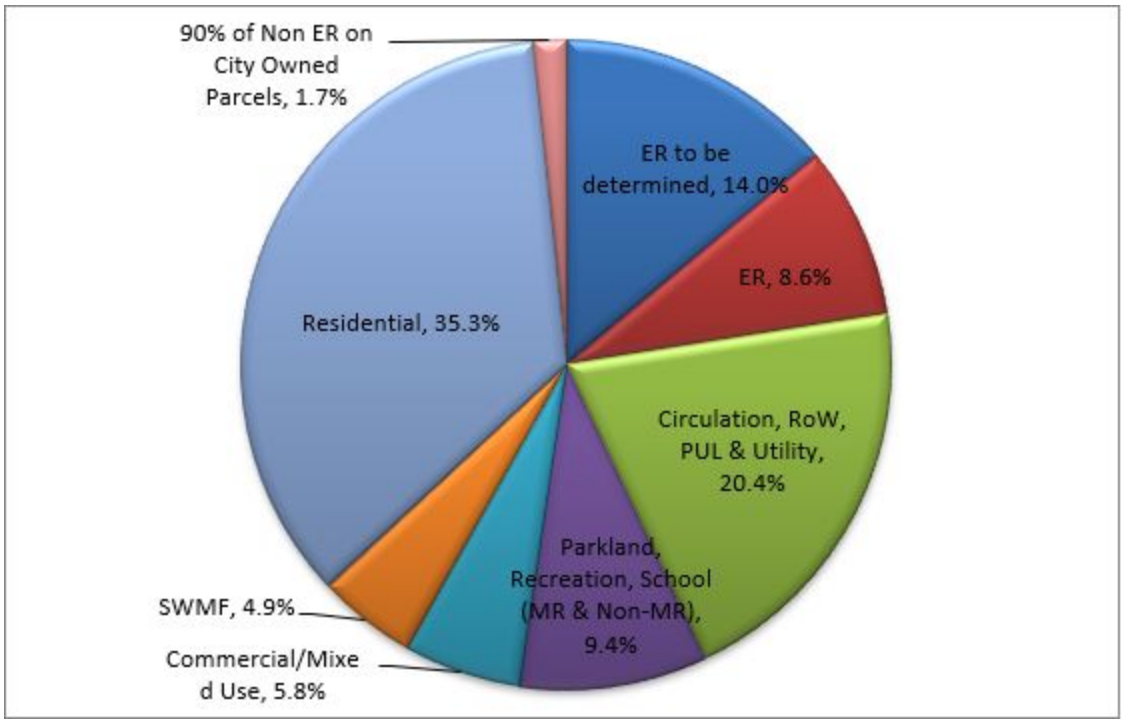
1.6.1 General Area Information

The proponent supplies information with the NSP that is used for Integrated Infrastructure Management Planning. This includes information on land use, population projections and residential units. This information forms the basis for the calculations and justifications for required infrastructure in the proposed communities. Complementing this base data, current service standards in combination with long term planning and consideration for the capacity of existing facilities nearby contribute to the infrastructure projections.

1.6.2 Gross Area Breakdown

The basic breakdown of the proposed Meltwater Neighbourhood NSP is shown in Figure 1. Out of a total area of 311.4 ha, 35.3% (109 ha) is allocated for the development of residential units, 20.4% (63 ha) is allocated to existing and future roads, pipeline and utility rights-of-way, 8.6% (26 ha) is allocated for Environmental Reserve, 14% (43 ha) is allocated for Environmental Reserve to be determined, 4.9% (15 ha) is allocated for Stormwater Management, 8.9% (29 ha) is allocated for Municipal Reserve and Non-MR parkland, 6% (18 ha) is allocated for Commercial and mixed use.

Figure 1 - Land Use Breakdown



There are four different residential land use types planned for this neighbourhood, including: single and semi-detached housing (53%), row housing (11%), low-rise to medium density apartments (31%), and town centre mixed-use residential (5%).

Table 2 includes the area, density, number of units and population for the different types of residential uses.

Table 2 – Residential Land Uses

	Area (ha)	Units per hectare	Numbe of units	% of Net Residential Area	People per Unit	Population
Single/Semi-detached	58	25	1447	53%	2.80	4,052
Row Housing	12	45	521	11%	2.80	1,459
Low-rise/Medium Density Housing	34	90	2605	31%	1.80	4,689
Town Centre Mixed Use	5	90	489	5%	1.50	734
Total	109		5,062	100%		10,933

1.6.3 General Infrastructure Breakdown

The amount of infrastructure required to be built by both the developer and the City of Edmonton is a function of many things, including the design of the community, the service standards provided, the amount and density of population served, and the presence of existing infrastructure. Table 3 details the City's expected cost of infrastructure for the proposed community in 2020 dollars. Developers would be responsible for various capital costs such as drainage infrastructure, local and collector roads, shared use paths etc (These costs are not included in Table 3, Table 3 is City costs only). It should further be noted that developers may choose to pay additional development costs beyond what is typically required.

Table 3 – City Funded Meltwater Neighbourhood Infrastructure

Infrastructure Type	Quantity	Cost (2020 Dollars)
Transit Facilities (#)	1	$1,245,000
Recreation Facility (#)	1	$18,314,000
Parks (ha)	99	$9,412,000
Fire Stations (#)	1	$1,905,000
Arterial Road Widening (Lane km)	6	$14,515,000
Wild Crossing (#)	5	$500,000
Police Vehicles	7	$525,000
Buses (#)	12	$16,909,000
Waste Collection	N/A	$3,990,000
Total		**$67,315,000**

Note: The following costs refer to the proportional costs attributed to Meltwater (City costs only):

Table 3: Transit Facility, Recreation Facility, Fire Station and Arterial Road Lane KM

Qualifications for Table 3

The information in Tables 3 is derived from consultations with the proponent's consultants and the areas responsible for the asset's provision and maintenance within the City. The following additional information is provided to help qualify the quantities and costs (in 2020$) in the tables:

Infrastructure with Area-Wide Benefit

For infrastructure that will serve the entire Decoteau ASP area, only the proportional share of the cost attributable to Meltwater is included in Table 3. The costs of the

infrastructure with area-wide benefit were apportioned using Gross Developable Area for linear infrastructure and population for all other categories (fire stations, transit centre, recreation centre, library, and river valley access).

Transportation (Transit)

A transit centre is planned to be located outside of the Decoteau ASP on the southeast corner of 50th street and the Ellerslie Road intersection. It will require future funding (total capital cost $8.5 million). The proposed transit centre will service the Decoteau ASP area and Table 3 shows the proportional share of the cost attributable to Meltwater.

Edmonton Police Service (EPS)

The Decoteau area does not require a new police division station. Police planning for facilities considers the City as a whole. Divisional stations are typically required to serve area populations of 150,000 to 160,000 people. EPS anticipates that development on the south side of the city will result in the need for an additional divisional station to complement the existing stations. The station is anticipated to be located in the south central area and not within Decoteau, accordingly, no proportional share is shown in Table 3.

Waste Management

The cost of additional infrastructure for Waste Management Collection Services, including the purchase of vehicles and the expansion of processing facilities, is included in Table 3. Waste Services has identified that an Eco-Station is not needed in Decoteau as the existing Ambleside Eco-Station is anticipated to accommodate Decoteau ASP's population.

Community Facilities

It is anticipated that a Recreation Centre will be constructed in the Decoteau ASP area (conceptual estimated capital cost of $125 million). The centre is anticipated to be constructed when the ASP population reaches approximately 50%. The actual timing of the construction of the facility is expected to be around 2041-2043. Table 3 shows the proportional share of the cost attributable to Meltwater.

Parks

The NSP identifies 95 ha of park in the Meltwater neighbourhood. Parks capital costs include the grade, level, and seeding of parkland, the provision of trees per park design standards, as well as the preservation of natural areas. Table 3 assumes that all park-related costs will be borne by the City. It should be noted that in the past, some developers have contributed to park development costs in some neighbourhoods.

Fire Services

Based upon the proposed Area Structure Plan, Fire Rescue Services will require one fire station in the Decoteau area (capital cost $13 million). This is based on projections of population density as well as response times to the area. Table 3 shows the proportional share of the cost attributable to Meltwater.

Transportation (Roadways)

Costs for local roads, collector roads, arterial roads, and shared use paths were supplied by the proponent.

For the analysis, it is assumed that the construction cost of the initial 4-lanes of an arterial is the responsibility of the neighbourhood it falls within or that the cost is split between adjacent neighbourhoods if the arterial is located along a neighbourhood boundary. It is further assumed that the cost of an arterial 6-lane widening benefits the area as a whole and the widening cost is therefore apportioned to all the neighbourhoods in the ASP based on the gross developable area.

Edmonton Public Library (EPL)

Edmonton Public Library has indicated that a library will not be located in the Decoteau area. The area residents will be served by the Meadows Library as well as a future library that will be developed west of the Decoteau area in the longer term.

Drainage Services

The costs for storm and sanitary pipes, stormwater management facilities, service connections, and other storm and sanitary related costs were not provided by the proponent and therefore have not been included. It is assumed that these costs will be paid for by the developer.

1.6.4 Demographic Based Cost and Revenue Projections

Forecasting financial impacts into the future is a speculative exercise. The following analysis projects costs and revenues for the proposed development out for 50 years. These projections are based on assumptions, which in a large part consist of what is known of the development at the present time, the current costs for the provision of service and infrastructure, and the length of time required to build both the overall development, as well as the individual components (commercial centres, high density residential projects, etc.) that make it up. The use of the results of this analysis should take this, and the context of the City as a whole, into consideration. The major assumptions used in the analysis are detailed at the end of this report.

The analysis completed considers one build-out development scenario. Both the proponent provided population build-out scenario and the City forecasted population scenario were similar and included a build-out of the neighbourhood in an approximate 20 year time-frame.

As any projection is just that, a projection based on defendable assumptions, it is important to consider that the eventual build-out of the neighbourhood may well be different than that shown in this analysis.

The scenario solely examines one potential neighbourhood build-out according to the proposed Neighbourhood Structure Plan and does not consider alternative land use concepts, different development guidelines or patterns, or different densities.

1.6.4.1 Scenario Demographics

Under the proposed development scenario, the total population of the proposed development of 10,931 people would be achieved in approximately 20 years as shown in Figure 2. It is anticipated to also take 20 years for the commercial area to be completed.

Figure 2 –Population Build-Out

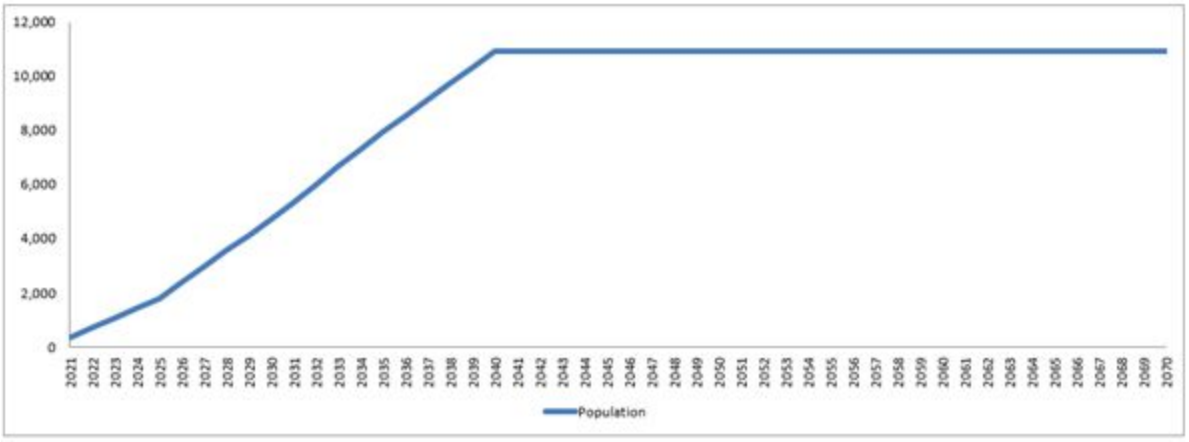
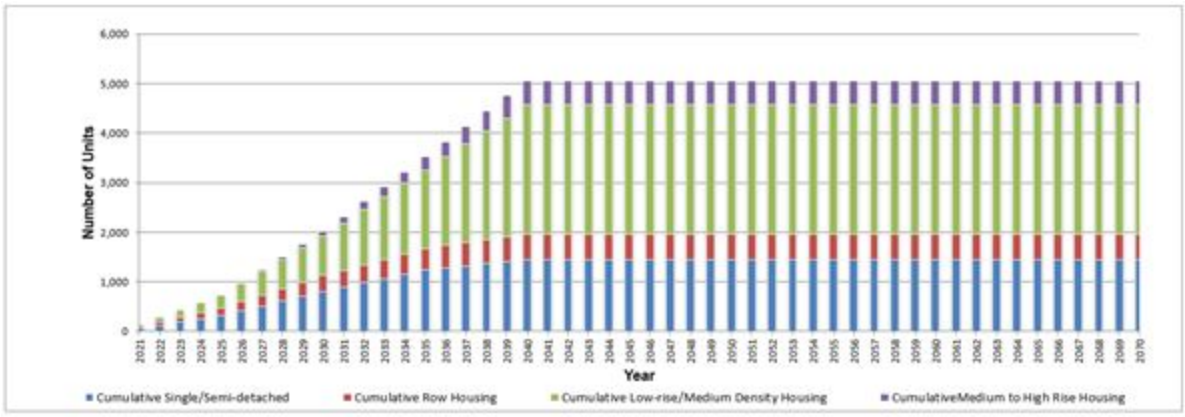


Figure 3 below depicts how the projected population growth in Figure 2 is translated into housing units of different types. It is cumulative and shows the relative distribution over time.

Figure 3– Residential Unit Build-Out

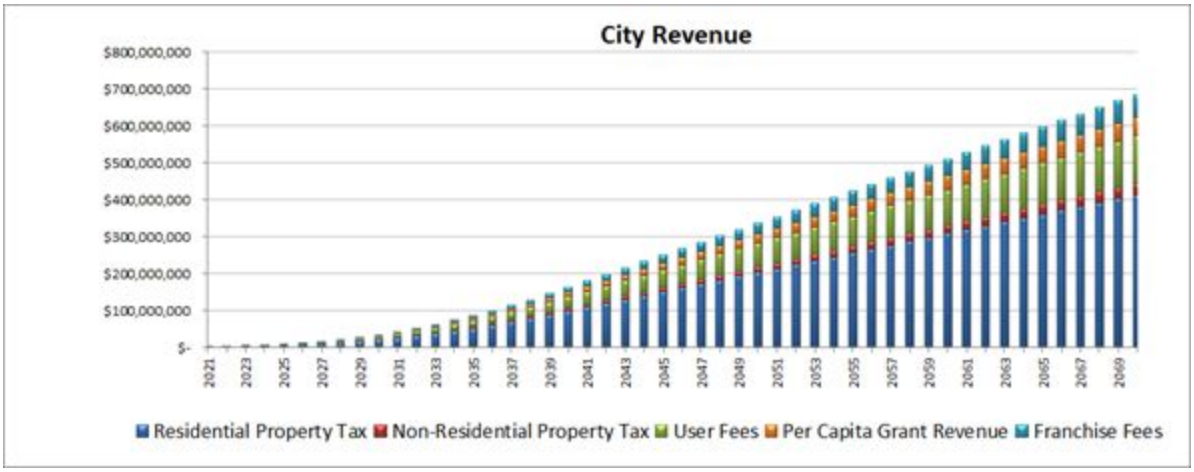


1.6.4.2 Revenue Expectations

City revenues come from a variety of sources. In this analysis, those revenues resulting directly from the proposed community were considered. Indirect revenues, such as EPCOR dividends, are not included in this analysis. Figure 4 depicts the expected revenues over 50 years and identifies revenues as one of five sources:

1. Franchise Fees: The City receives revenue from Atco Gas, EPCOR Electricity, EPCOR water, and EPCOR drainage and wastewater customers for the use of public road allowances for their distribution networks.
2. Per Capita Grant Revenue: The City of Edmonton relies on provincial and federal grants for a portion of its capital program. Without them, the City is not sustainable given its limited revenue generation options and increasing obligations and service expectations. Although it is difficult to model Grant funding as it varies by program, a general observation is that it increases proportionately with population. A per capita revenue allocation was developed based on existing grants and applied to the model.
3. User Fees: Individual City Departments and business units may charge fees for the service they provide. Examples include transit fees, recreation centre fees, and parking meters.
4. Non-Residential Property Tax: Commercially and Industrial zoned areas like office buildings, strip malls, convenience stores, and grocery stores help form complete communities and provide employment and critical services. They also contribute to the City's tax base, and therefore projected revenues from these areas are included.
5. Residential Property Tax: All residential units pay municipal tax based on the current year's mill rate and the assessed value of the property. As residential units are created in the model based on population growth, the taxes paid by these units are accounted for.

Figure 4 –Cumulative Revenues

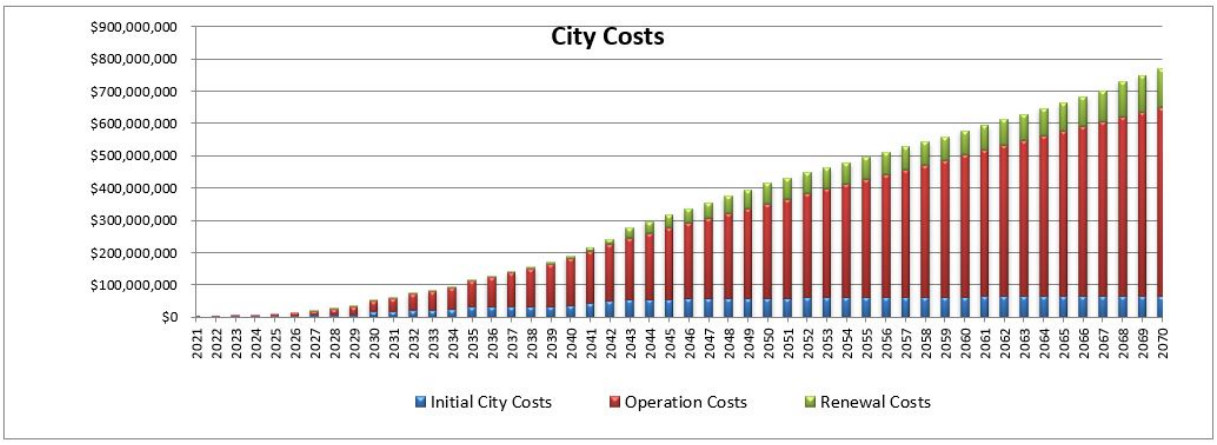


1.6.4.3 City Expenditure Expectations

City expenditures are attributable to the provision of a mix of services in the community, building new infrastructure required to provide that service, and maintaining and renewing infrastructure in the community that provides the service the community needs, and enjoys. Figure 5 depicts city costs over a 50 year time span. The expenditure is attributed to three categories:

1. Initial City Costs: This represents infrastructure built and funded by the City, and includes police and fire stations, libraries, community facilities, parks, and major transportation facilities. Initial City Costs are funded via the City's capital budget.
2. Renewal Costs: Renewal costs represent the reinvestment required to keep the community's infrastructure to an accepted physical standard. These costs are derived from the infrastructure built by both the developer and the City, and include rehabilitative actions throughout the life of the assets, as well as replacement costs at the end of the expected life of the asset. The costs shown calculate the renewal costs at the expected time of expenditure (i.e. not amortized throughout the life of the asset), and therefore some replacement costs for long lived infrastructure such as sewers are not represented in the scope of the analysis. Renewal Costs are funded via the City's capital budget.
3. Operating Costs: Operating costs represent the set of on-going activities and expenses that allow the use of an asset for its intended function. These costs include those required for the use of the asset (e.g. electricity, fuel) and those costs required for the provision of the service provided (e.g. labour). Operating Costs are funded via the City's operating budget.

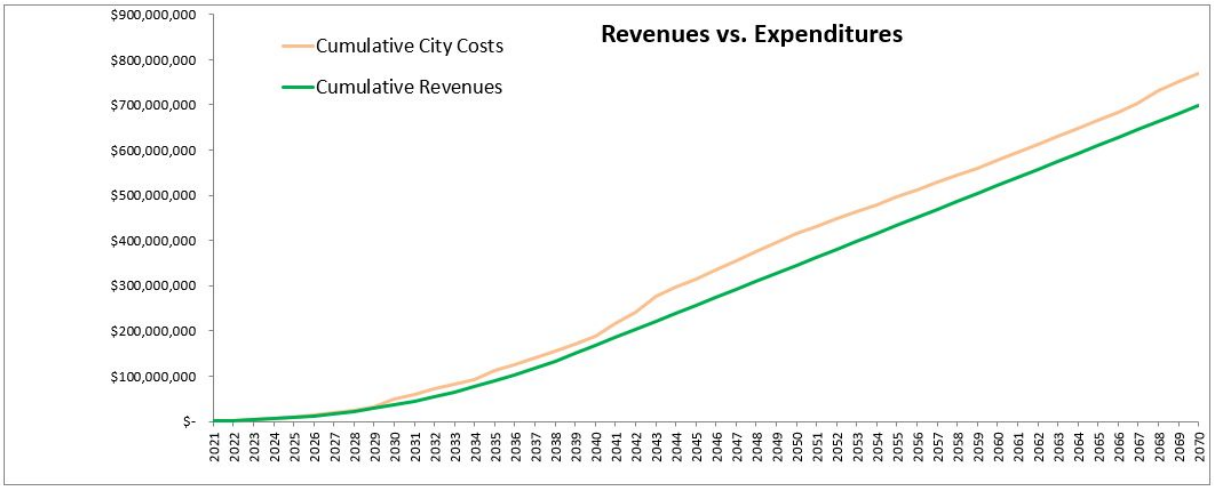
Figure 5 – Cumulative City Costs



1.6.4.4 Summary of Revenues and Expenditures

Figure 6 shows the difference in direct expenditures and revenues to the city for the proposed Meltwater Neighbourhood over a 50 year period, highlighting the total net fiscal costs and revenues expected from the proposed community.

Figure 6 –Revenues and Expenditures



1.7 Building Perspective

1.7.1 Infrastructure Planning

Meltwater Neighbourhood will require approximately $67 million in capital investment by the City. Major infrastructure like arterial road widening needs to be carefully planned and timed to meet the needs of the development.

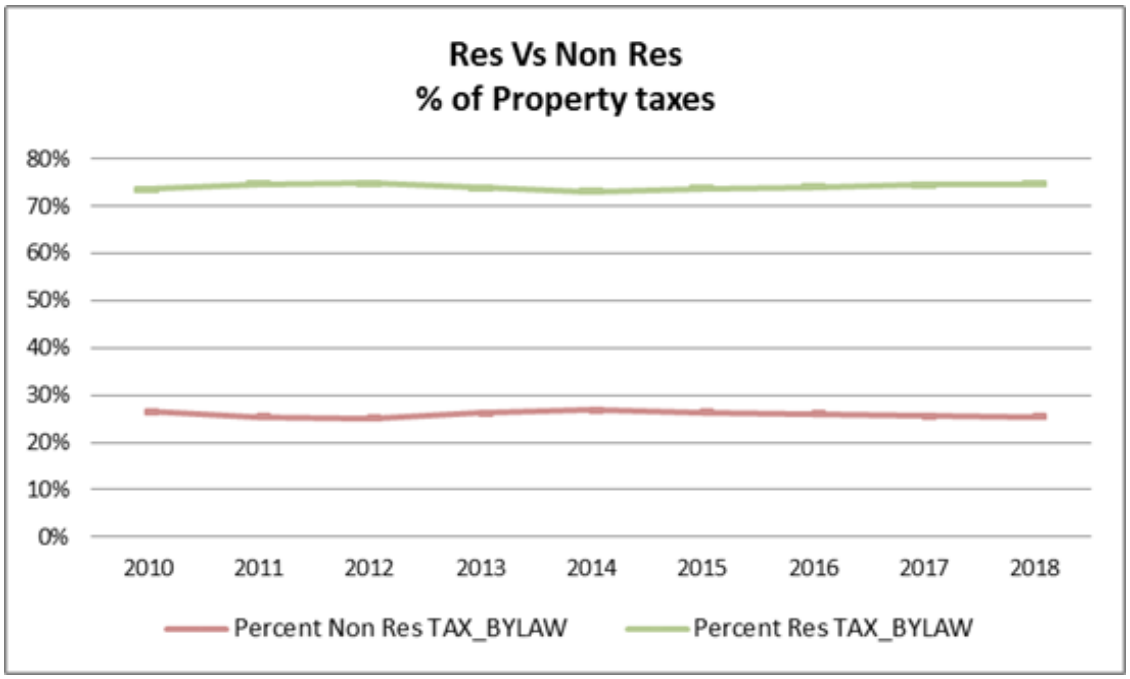
It is anticipated that the information presented in this report will change as planning and development in the neighbourhood progresses and more details are known.

1.7.2 Sustainability through Balanced Growth

The overall balance of residential and non-residential land in the City of Edmonton is important in a number of ways. Residential areas provide places for people to live and build community. Non-residential areas provide employment, services, and amenities among other things. Both contribute to and are an essential part of the fabric of the City. Maintaining a healthy balance between them is important.

It is therefore important to consider how proposed development, in any form, contributes to the overall balanced growth of the City of Edmonton. Figure 7 indicates the percentage of non-residential assessment out of the total assessment value of all property in the City since 2010. It shows that non-residential assessment makes up approximately 25% of the total assessment base of the City.

Figure 7 – Non-Residential Assessment



Generally speaking, residential property drives City costs because residential properties typically utilize more City services and require more linear infrastructure. When residential grows as a proportional amount of the total tax base, greater pressure is put on the City's budget. To this end, it is generally considered important to maintain a healthy balance between residential and non-residential assessment bases.

If the City maintains its current balance of approximately 25% non-residential assessment, by developing commercial and industrial areas throughout the City, this additional revenue helps to offset the fiscal imbalance in certain neighbourhoods.

1.7.3 Committed Infrastructure

With both an aging and growing city, balancing investment choices between renewal and growth is a significant challenge. As infrastructure ages, more maintenance and rehabilitation is required to ensure that infrastructure is performing well and continuing to meet the needs of citizens. At the same time, demands arise for new infrastructure to support growth.

In some cases, the neighbourhoods may take between 20 and 30 years to complete. This should be considered when putting these costs into context. Long term planning for the infrastructure requirements in new growth areas involves understanding how the area will build out and how quickly it will build out, giving planners an idea of what is required now versus what will be required in the future.

During the capital budgeting process, City departments evaluate infrastructure needs in new areas and make recommendations for funding to Council.

1.8 Impacts of the Meltwater Neighbourhood NSP on Future Budgets

As the Meltwater Neighbourhood develops, a number of infrastructure projects will require City and other funding to be constructed as well as city funding to operate and maintain the infrastructure.

1.8.1 Capital Budget Requirements

If development occurs as currently anticipated, the development of the neighbourhood may require capital dollars within the 2019-22 budget cycle.

With development of the Meltwater Neighbourhood as well as other neighbourhoods in the ASP area as currently anticipated, funding for capital projects is anticipated to be required as follows for the next three budget cycles:

Potential 2019-2022 Capital Budget Funding Requirements:

- Buses
- Police vehicles

With development of the neighbourhood, additional buses will be required to provide transit service and additional police vehicles will be required to provide

service for the residents of the neighbourhood. Funding will be required to develop park spaces and rehabilitate a natural area in the neighbourhood.

Potential 2023 – 2026 Capital Budget Requirements:

- Buses
- Police vehicles
- Park development
- Transit Center

On-going capital expenditures are required in this period for new buses, police vehicles and park spaces and river valley access development. Add transit center construction.

Potential 2027-2030 Capital Budget Requirements:

- Buses
- Police
- Parks development

Along with the purchase of additional buses and the funding of more park development, funds will start to be required for arterial road widening and interchanges, and bus refurbishment in this period.

Budgets beyond 2030

Future budgets beyond 2030 will require funding for capital improvements to benefit Meltwater Neighbourhood as well as the other neighbourhoods in the ASP including arterial roadway widening, and the recreation centre. Funding will also be required beyond 2030 for life cycle investment in Meltwater Neighbourhood including bus and police vehicle replacement as well as roadway resurfacing and reconstruction.

1.8.2 Operating Budgets

In addition to the requirements of Capital Budget funding, there will also be operating impacts on capital. These include:

- Roadway and traffic operations and maintenance, as well as snow clearing (as early as 2021)
- Transit bus operations and maintenance (as early as 2021)
- Police operations (as early as 2021)
- Parks maintenance and operations (as early as 2025)
- Transit center operations (as early as 2026)
- Fire operations (as early as 2043)
- Recreational service operations (as early as 2044 for new area recreation centre, existing surrounding rec centres will experience area users as development occurs)

1.9 Assumptions

The analysis presented in this report involves the combination of modelling using the Development Infrastructure Impact Model, coupled with area and sector specific analysis performed by the business units responsible for both the infrastructure and the provision of service. The gathering and analysis was performed by the Lifecycle Management Section of Infrastructure Planning & Design with assistance from the applicant and the following City Departments:

- Urban Form and Corporate Strategic Development Department
- Integrated Infrastructure Services
- City Operations
- Financial and Corporate Services
- Edmonton Public Library
- Edmonton Police Services

1.9.1 Area Specific Assumptions

With respect to the area being analyzed, the following was assumed:

1. Average market values for Ward 12 were used to determine the residential assessment values for the Meltwater Neighbourhood.
2. For the commercial and business employment areas, assessment averages were calculated using 2020 city wide commercial and industrial data.
3. Other assumptions are identified in the qualifications following Tables 3 in the report.

1.9.2 Assumptions for the Development Infrastructure Impact Model

As with any analytical procedure, the results of a model are dependent on the accuracy of the input data, and the strength of its underlying assumptions. In order to achieve a consistent corporate approach, certain assumptions were made to ensure that all neighbourhood development-related infrastructures are compared on the same basis. The following describes some of the assumptions used in the Development Infrastructure Impact Model:

- The Consultant supplied the timing for the neighbourhood's residential, commercial and business employment development.
- An assumption was made with respect to when all of the required infrastructure within a neighbourhood would be completed and in service. For modelling purposes, it was assumed that when the Decoteau ASP reaches 100% of its ultimate population, all City and developer built infrastructure would be in place.
- Operation and Maintenance as well as Service Delivery Costs were provided by City Departments or were calculated based on the City of Edmonton 2020 (pre-CoVID) Operating Budget. Major rehabilitation and renewal costs are asset specific and are based on typical lifecycle costs and timetables.
- Tax rates and average assessments for both residential and commercial uses are based on the 2020 tax year.

Prepared by: Lifecycle Management
December 2020

APPLICATION SUMMARY

INFORMATION

Application Type:	Plan Amendment and Plan Adoption
Bylaw: Charter Bylaw:	19537 19538
Location of New NSP:	South of Ellerslie Road SW, west of 34 Street SW, north of 25 Avenue SW and east of 50 Street SW
Address:	N/A
Legal Description:	N/A
Site Area:	311 hectares
Neighbourhood:	Meltwater (NW Decoteau)
Notified Community Organization (Advance Notice): Date: May 25, 2020 Notified Community Organization (Remote Public Engagement Event): Date: August 11-18, 2020	Summerside Community League of Edmonton The Meadows Community League Association Summerside Community League of Edmonton The Meadows Community League Association Ellerslie Community League Association Edmonton Southwood Community League
Applicant:	Stephen Yu, Invistec Consulting Ltd.

PLANNING FRAMEWORK

Current Zones and Overlays:	N/A
Proposed Zones and Overlays:	N/A
Plan in Effect:	Decoteau Area Structure Plan
Historic Status:	None

Written By:	Vivian Gamache and Michelle Neilson
Approved By:	Tim Ford
Branch:	Development Services
Section:	Planning Coordination