# Aspendale Area Structure Plan

**Bylaw 2025-12**
**DRAFT NOVEMBER 2025**

TOWN OF Westlock

Bearisto & Associates
ENGINEERING & SURVEY | 60 YEARS

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# 1.0 INTRODUCTION

## 1.1 Purpose

The Aspendale Area Structure Plan has been prepared to provide a comprehensive land use and servicing framework for the orderly and efficient development of the Aspendale neighbourhood within the Town of Westlock. It establishes a high-level vision and planning direction to facilitate growth and development in response to the Town's constrained supply of developable residential and commercial lands.

The Plan provides guidance for the phased subdivision and development of approximately 25.13 hectares (62.10 acres) of land, supporting the expansion of Westlock's urban footprint in a way that is logical, integrated, and aligned with municipal goals. It addresses land use, transportation, stormwater and utility servicing, open space, and community amenities while balancing environmental considerations.

By establishing clear policies and development expectations, this Area Structure Plan supports the Town, landowners, and developers in making informed decisions and ensures that new growth contributes positively to the character and functionality of the Aspendale neighbourhood.

## 1.2 Plan Area

As shown in **Map 1 - Location**, the Aspendale Area Structure Plan covers approximately 25.13 hectares (62.10 acres) of land within the Town of Westlock. **Map 2 - Existing Land Use Designations** illustrates the current land use designations within the plan area, which include:

- Approximately 7.46 hectares (18.41 acres) of undeveloped or recently developed Highway Commercial (C-H) land, including lands designated as Commercial Multi-Purpose (C-MP), located directly north of Highway 18; and
- The remainder of the lands, which are currently designated as Low-Density Residential (R1) and are largely undeveloped.

The Area Structure Plan area is situated on the western edge of the Town and is bounded by existing residential development to the west, Highway 18 to the south, and rural/agricultural lands to the east. The location and characteristics of the Plan Area offer a logical extension of the Town's existing residential neighbourhoods and commercial corridor.

## 1.3 Interpretation

This Area Structure Plan is a statutory document adopted by Bylaw in accordance with the Municipal Government Act. It is intended to provide high-level guidance for future subdivision and development but allows for flexibility in implementation.

All mapping, boundaries, land use classifications, and infrastructure alignments shown in this Area Structure Plan are conceptual in nature and may be refined at the subdivision or development permit stage, provided that the general intent and policy direction of the Plan are maintained. Interpretation of this Plan should be done in conjunction with the Town's Municipal Development Plan, Land Use Bylaw, and other applicable policies and regulations.

## 1.4 Community Consultation

Community and stakeholder consultation played a vital role in shaping the Aspendale Area Structure Plan. Engagement was designed to be collaborative, transparent, and inclusive, ensuring that input from administration, landowners, Council, and the public informed key decisions throughout the planning process.

### Initial Stakeholder Discussions

The project began with one-on-one discussions with Town staff and key stakeholders. These conversations were used to identify known opportunities and constraints in the plan area, gather background information, and introduce the purpose and scope of the Area Structure Plan.

### Administrative Workshop & Review Session

An internal workshop was held with Town Administration to review site-specific conditions, servicing limitations, and development considerations. Input from this session was used to inform the creation of two preliminary land use concept options for the Aspendale neighbourhood.

### Public Open Houses

Two public open houses were held to engage residents and landowners in the development of the Aspendale Area Structure Plan.

The first open house took place in March 2025 and was attended by approximately 40 people. It presented two concept layout options and invited participants to identify their preferred direction and provide feedback. An online survey was also conducted in conjunction with this event, running for one week in March 2025 and receiving 35 responses.

The second open house was held in June 2025 and was attended by approximately 22 people. This session presented the draft Area Structure Plan and allowed attendees to review and comment on the proposed land use layout, supporting policies, and servicing strategy.

### Council Review

Following the initial Public Open House, Town Council reviewed the feedback received from the community, landowners within the plan area, and Town Administration. Council selected the preferred development concept based on this input, guiding the refinement of the draft Area Structure Plan.

### Public Hearing

As required under the Municipal Government Act, a formal public hearing was held to provide a final opportunity for public input prior to Council's consideration of the bylaw adopting the Aspendale Area Structure Plan. The development concept was further altered by Council based on feedback heard during the Public Hearing on September 8, 2025.


**Map 1 - Location**

Plan Area Boundary

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## Map 2 - Existing Land Use Designations

- Plan Area Boundary
- Low Density Residential （R1） District
- Commercial Multi-Purpose （C-MP） District
- Highway Commercial （C-H） District
- Institutional （I） District
- Urban Reserve （UR） District
- Parks and Recreation （PR） District

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# 2.0 PLANNING & DEVELOPMENT FRAMEWORK

The Aspendale Area Structure Plan has been prepared in accordance with the relevant provincial legislation and municipal statutory documents that provide the policy direction and regulatory framework for land use planning and development within the Town of Westlock. This section outlines the primary statutory plans and regulations that inform and influence the Area Structure Plan.

## 2.1 Alberta Land-Use Framework

The Alberta Land-Use Framework, introduced in 2008, provides a strategic provincial policy direction for managing growth, balancing development with environmental stewardship, and supporting long-term economic, environmental, and social sustainability. The Alberta Land-Use Framework establishes seven regional planning areas across the province, with each region guided by a Regional Plan.

The Town of Westlock is located within the Upper Athabasca Region. As of the adoption of this Area Structure Plan, the Upper Athabasca Regional Plan has not yet been completed. In the interim, the Alberta Land-Use Framework encourages municipalities to make planning decisions that reflect provincial goals such as efficient use of land, conservation of resources, and the promotion of livable communities. The Aspendale Area Structure Plan supports these goals by encouraging compact, phased development that maximizes existing infrastructure and protects key environmental features.

## 2.2 Municipal Development Plan, Bylaw 2024-16

The Town of Westlock Municipal Development Plan, Bylaw 2024-16, provides overarching policy direction for land use, growth management, infrastructure, and community development within the municipality. The Municipal Development Plan identifies the Aspendale area as a key location for future residential growth and requires the creation of a statutory plan to guide its development.

The Aspendale Area Structure Plan aligns with the goals and policies of the Municipal Development Plan by:

a. Supporting a logical expansion of residential development in proximity to existing neighbourhoods;

b. Providing a mix of housing opportunities and access to parks and trails;

c. Ensuring the efficient extension of municipal services; and

d. Respecting the Town's environmental management and community design principles.

## 2.3 Land Use Bylaw 2022-12

The Town of Westlock Land Use Bylaw, Bylaw 2022-12, regulates the use and development of land and buildings within the Town. It establishes the land use districts (zones), development standards, and application processes for subdivision and development permits.

The land use designations proposed in the Aspendale Area Structure Plan are consistent with the Land Use Bylaw and will be supported by appropriate redistricting at the time of subdivision. Any future rezoning applications arising from the Area Structure Plan will be required to conform to the Land Use Bylaw's standards for residential, commercial, and public use areas.

## 2.4 Matters Related to Subdivision & Development Regulation

The Subdivision and Development Regulation (Alberta Regulation 43/2002, as amended) under the Municipal Government Act outlines the minimum standards and referral requirements for subdivision and development applications in Alberta. Key considerations include access to public roads, proximity to oil and gas infrastructure, environmental setbacks, and the availability of municipal services.

This Area Structure Plan has been prepared in accordance with the Regulation, ensuring that all proposed development areas are suitable for subdivision, have appropriate access and servicing options, and avoid conflict with regulated features. Any subdivision or development within the Area Structure Plan area will be subject to further review under the Regulation at the time of application.

# 3.0 DEVELOPMENT CONSIDERATIONS

A thorough understanding of the physical, environmental, and regulatory context of the plan area is essential to informing an achievable and resilient development strategy.

This section outlines the key development considerations within the Aspendale Area Structure Plan boundary based on geotechnical studies, environmental assessments, and existing land use patterns.

## 3.1 Physical Landscape & Constraints to Development

**Map 3 - Topography** illustrates that the plan area is characterized by relatively flat to gently undulating terrain with a slight southward slope, transitioning to hilly terrain in localized areas. Subsurface conditions are generally favourable for development, consisting of a surface layer of topsoil underlain by high plastic clays, bentonitic sands, and weathered bedrock.

However, the geotechnical investigation identified high plastic expansive soils, which can pose challenges for traditional shallow foundations due to their shrink-swell potential. Mitigation strategies include the use of deep foundations (e.g., cast-in-place piles), may include fill replacement, and enhanced drainage design. Foundations and utility installations should be designed to account for potential frost heave, and road structures must be appropriately engineered.

No groundwater was encountered in most boreholes, although seasonal fluctuations may occur. Overall, the site is suitable for development with proper geotechnical controls in place.

The Desktop Environmental Assessment and Field Investigation confirmed that the site is not located within a designated Environmentally Significant Area, and no wetlands were mapped within the Area Structure Plan boundary. However, a more detailed Wetland Assessment and Impact Report may be required prior to construction if any low wet areas or potential wetlands are encountered.


## Map 3 - Topography

Plan Area Boundary

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## 3.2 Plan Area Composition

A summary of the plan area is provided in **Table 1. Plan Area Composition**, which outlines the legal land descriptions and approximate parcel sizes based on the most recent land title search.

As illustrated in **Map 4 - Existing Land Ownership**, the majority of land within the plan area is currently municipally owned by the Town of Westlock, while the remainder is held by private landowners.

**Table 1. Plan Area Composition**

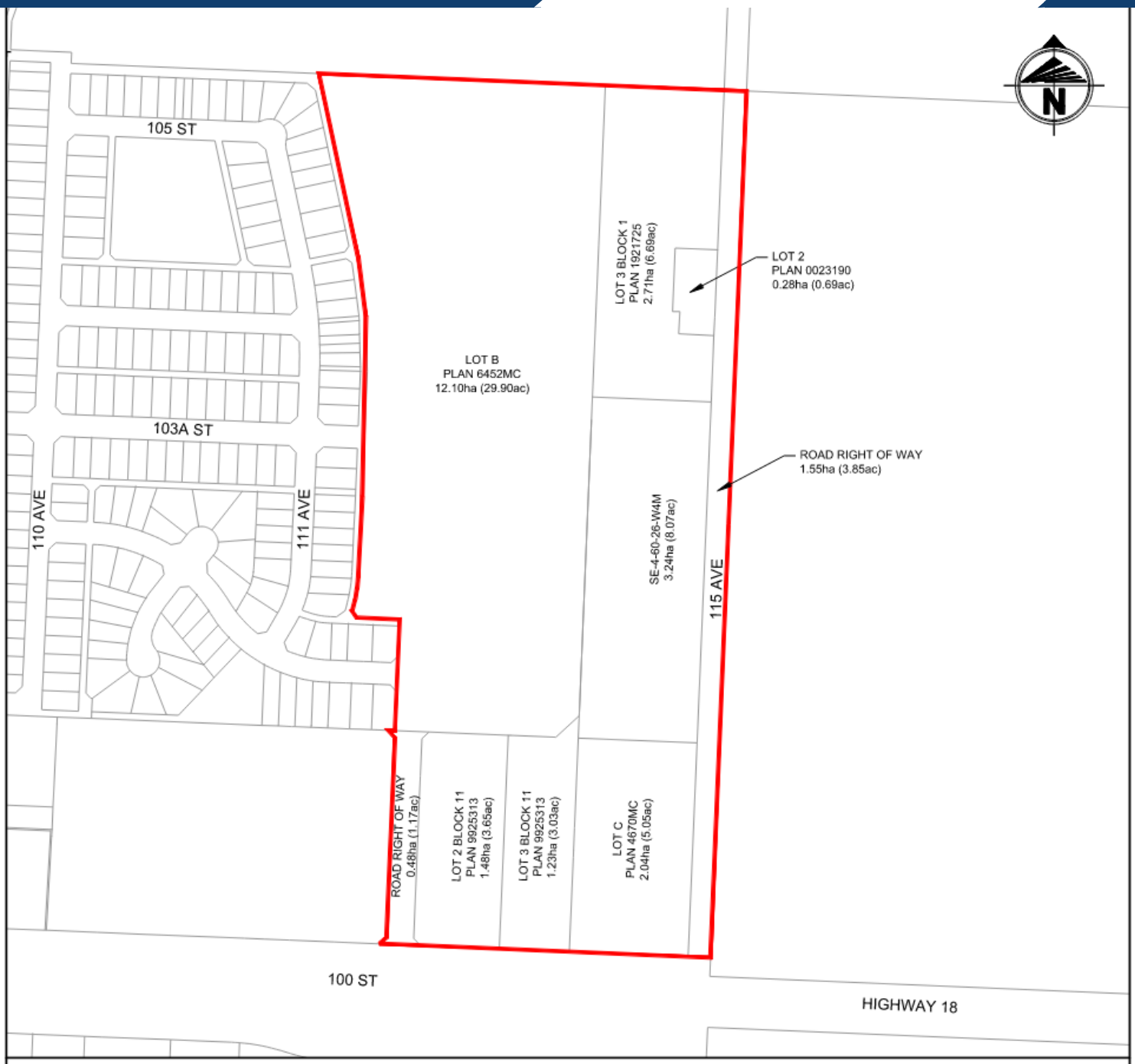
| Legal Land Description | Hectares (Acres) |
|---|---|
| Lot B;;Plan 6452MC | 12.10 Hectares (29.90 Acres) |
| SE-4-60-26-W4M | 3.26 Hectares (8.07 Acres) |
| Lot 3; Block 1; Plan 1921725 | 2.71 Hectares (6.69 Acres) |
| Lot C;;Plan 4670MC | 2.04 Hectares (5.05 Acres) |
| Lot 2; Block 11; Plan 9925313 | 1.48 Hectares (3.65 Acres) |
| Lot 3; Block 11; Plan 9925313 | 1.23 Hectares (3.03 Acres) |
| Road Right-Of-Way | 2.03 Hectares (5.02 Acres) |
| Lot 2;;Plan 0023190 | 0.28 Hectares (0.69 Acres) |
| Total Land Area | 25.16 Hectares (62.10Acres) |

## 3.3 Historic Resources

A review of the Alberta Listing of Historic Resources and the Heritage Resource Management Information System confirmed that the Area Structure Plan area is not identified as having known or high-potential historic or archaeological resources.

Should any historical resources be discovered during excavation or site disturbance, construction must cease and the Alberta Ministry of Arts, Culture, and Status of Women must be contacted in accordance with the Historical Resources Act

No Historical Resource Impact Assessment is currently required; however, standard development protocols apply to ensure compliance during construction activities.




## Map 4 - Existing Land Ownership

Plan Area Boundary

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# 4.0 DEVELOPMENT CONCEPT

**Map 5 - Development Concept** illustrates the planned layout for Aspendale, which provides a comprehensively planned framework for future urban growth within the Town of Westlock. It supports a balanced mix of residential, commercial, recreational, and open space land uses while ensuring logical phasing, efficient servicing, and strong community connectivity.

The neighbourhood is designed with walkability, green space access, and functional road and utility infrastructure in mind. The layout reflects current market demands and accommodates long-term growth objectives identified in the Town's Municipal Development Plan.

## 4.1 Residential Policies

Aspendale will offer a range of residential housing types to accommodate diverse household needs and support housing affordability. Policies include:

- Low-density residential areas will primarily consist of single detached dwellings on varied lot sizes, offering a mix of housing styles and options.
- Medium-density residential may be developed near collector roads or adjacent to open spaces to allow for duplexes, row housing, or future small-scale multi-unit dwellings, subject to detailed subdivision and rezoning.
- High-density residential may be considered in limited locations, such as near major intersections or adjacent to commercial areas, to support compact urban form and provide additional housing options such as apartments or stacked townhomes. High-density proposals must demonstrate compatibility with surrounding uses and meet the Town's design and servicing standards.

Residential areas must be designed with direct pedestrian access to parks, trail connections, and stormwater features. Where appropriate, rear lane access and innovative lot configurations may be supported to improve streetscape appeal and reduce driveway conflicts. Residential development will be phased to ensure logical extension of municipal infrastructure and efficient use of existing services.

## 4.2 Commercial Policies

The Development Concept includes two types of commercial areas to support a range of business and service needs: Highway Commercial (C-H), located along Highway 18, and Commercial Multi-Purpose (C-MP), intended to serve local residents with a variety of retail and service uses.

### 4.2.1 Highway Commercial

The Highway Commercial area aligns with the C-H Highway Commercial District and is intended to accommodate uses that require convenient vehicular access and benefit from highway connectivity.

a. Development may be required to utilize shared access and internal circulation to reduce direct highway access points and ensure traffic safety. All access and circulation design is subject to approval by Alberta Transportation, and may require the construction of a service road or accommodation for future highway upgrades as determined through the review process.

b. A range of highway-oriented commercial uses may be considered, as outlined in the Town's Land Use Bylaw.

c. Landscaping, signage, and building orientation should enhance the community's visual identity from Highway 18.

d. Commercial development must be compatible with adjacent residential uses and include appropriate buffering, such as landscaping and noise attenuation.

### 4.2.2 Commercial Multi-Purpose

The Commercial Multi-Purpose area reflects the C-MP Commercial Multi-Purpose District, intended to allow for a mix of commercial, office, institutional, and compatible residential uses within a pedestrian-oriented context.

a. A variety of commercial and service-oriented uses may be permitted, in accordance with the Town's Land Use Bylaw.

b. Development should promote accessibility and connectivity with the surrounding area.

c. Site planning should support a cohesive and functional layout that aligns with the overall character of the neighbourhood.

d. Design elements such as landscaping, signage, and building orientation should contribute to a visually appealing and context-sensitive environment.

e. Flexible building forms that support a mix of compatible uses over time are encouraged.

## 4.3 Estimated Land Use Areas

**Table 2. Estimated Land Use Areas** provides a summary of the proposed land use distribution within the Aspendale Area Structure Plan. It outlines the approximate area allocated to each land use category and its corresponding proportion of the total plan area. This breakdown reflects the Development Concept and supports a balanced mix of residential and commercial uses that contribute to a complete and connected neighbourhood. Notably, the ASP exceeds the minimum housing mix requirement (80% low-density to 20% medium/high-density), achieving a ratio of approximately 63% low-density to 37% medium/high-density residential.

**Table 2. Estimated Land Use Areas**

| Land Use Summary | Hectares (Ha) | Percentage |
|---|---|---|
| **Gross Area** | **25.13 Ha** | **-** |
| Less Existing Road Right-Of-Way | 2.03 ha | - |
| **Net Developable Area** | **23.10 Ha** | **100%** |
| **Residential** | **9.21 Ha** | **40%** |
| Low Density Residential | 5.78 Ha | 25% |
| Medium Density Residential | 2.25 Ha | 10% |
| High Density Residential | 1.19 Ha | 5% |
| **Commercial** | **5.85 Ha** | **25%** |
| Highway Commercial | 4.48 Ha | 19% |
| Commercial Multi-Purpose | 1.37 Ha | 6% |
| **Parks & Recreation** | **3.06 Ha** | **13%** |
| **Stormwater Management Facilities** | **1.15 Ha** | **5%** |
| **Road Right-of-Way** | **3.82 Ha** | **17%** |

## 4.4 Population Projections

Based on average residential densities consistent with the Town's development trends and the proposed lot configurations, the Aspendale Area Structure Plan area is projected to accommodate approximately 989 residents at full build-out. This estimate is based on the following land use breakdown and assumptions, as outlined in **Table 3. Population Projections**.

**Table 3. Population Projections**

| Land Use District | Area (Ha) | Maximum Development Density (D.U./Ha) | Person Density (ppl/D.U.) | Maximum Total Population Estimate |
|---|---|---|---|---|
| Low Density Residential (R1 & R1-B) District | 5.78 Ha | 30 Units/Ha | 2.2 | ~381 residents |
| Medium Density Residential (R2 & RMM) District | 2.25 Ha | 70 Units/Ha | 2.2 | ~346 residents |
| High Density Residential (R3) District | 1.19 Ha | 100 Units/Ha | 2.2 | ~261 residents |

This results in an estimated 449 dwelling units and a projected total population of approximately 989 residents. These projections reflect a compact and efficient neighbourhood design that supports a variety of housing options and population needs, based on the average household size identified in the 2021 Census.

The anticipated growth will help address the Town's current shortage of serviced lots and contribute to the development of a complete, walkable, and inclusive community.


## Map 5 - Development Concept

- Plan Area Boundary
- Low Density Residential (R1 and/or R1-B) Districts
- Medium Density Residential (R2 and/or RMM) Districts
- High Density Residential (R3) District
- Commercial Multi-Purpose (C-MP) District
- Highway Commercial (C-H) District
- Parks and Recreation (PR) District
- Stormwater Facility

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# 5.0 PARKS & RECREATION


The Aspendale neighbourhood is planned to provide residents with accessible, connected, and high-quality outdoor spaces that support recreation, wellness, and community gathering.

The Development Concept integrates a variety of park spaces and trail connections to meet the recreational needs of all age groups and abilities.

Parks and open spaces are centrally located and connected via a multi-modal trail system, with consideration for linkages to the broader Town of Westlock trail network, including the future expansion of the Rotary Trail system. The open space strategy is guided by the policies of the Town's Municipal Development Plan and Parks and Recreation Master Plan, and aligns with the Town's park and reserve dedication standards under the Municipal Government Act.

## 5.1 Neighbourhood Parks

Neighbourhood parks will be strategically located within residential areas to ensure that all homes are within a short walking distance to green space. These parks are intended to serve as focal points for neighbourhood activity.

Park sites will be designed with flexibility to accommodate future community programming or changes in recreational preferences as the neighbourhood matures.

## 5.2 Trails

A continuous internal trail system is planned to connect neighbourhood parks, stormwater ponds, and key destinations throughout Aspendale. As illustrated in **Map 6 - Parks & Recreation Concept**, the trail network is integrated into the Municipal Reserve system and will provide direct pedestrian and cycling access across the community, including a safe crossing opportunity near the central roundabout.

Where feasible, connections to the broader Town trail system will be incorporated to support town-wide mobility.

Trail design will consider all-season use and accessibility standards, and may include:

a. Asphalt or gravel multi-use paths.

b. Benches and rest areas.

c. Wayfinding signage and lighting, when applicable.

This system supports active transportation, encourages healthy lifestyles, and provides safe routes for children walking to parks or school bus stops.

## 5.3 Municipal Reserve

Municipal Reserve dedication will be provided in accordance with the Municipal Government Act and the Town's subdivision and development policies. The reserve lands will be used to:

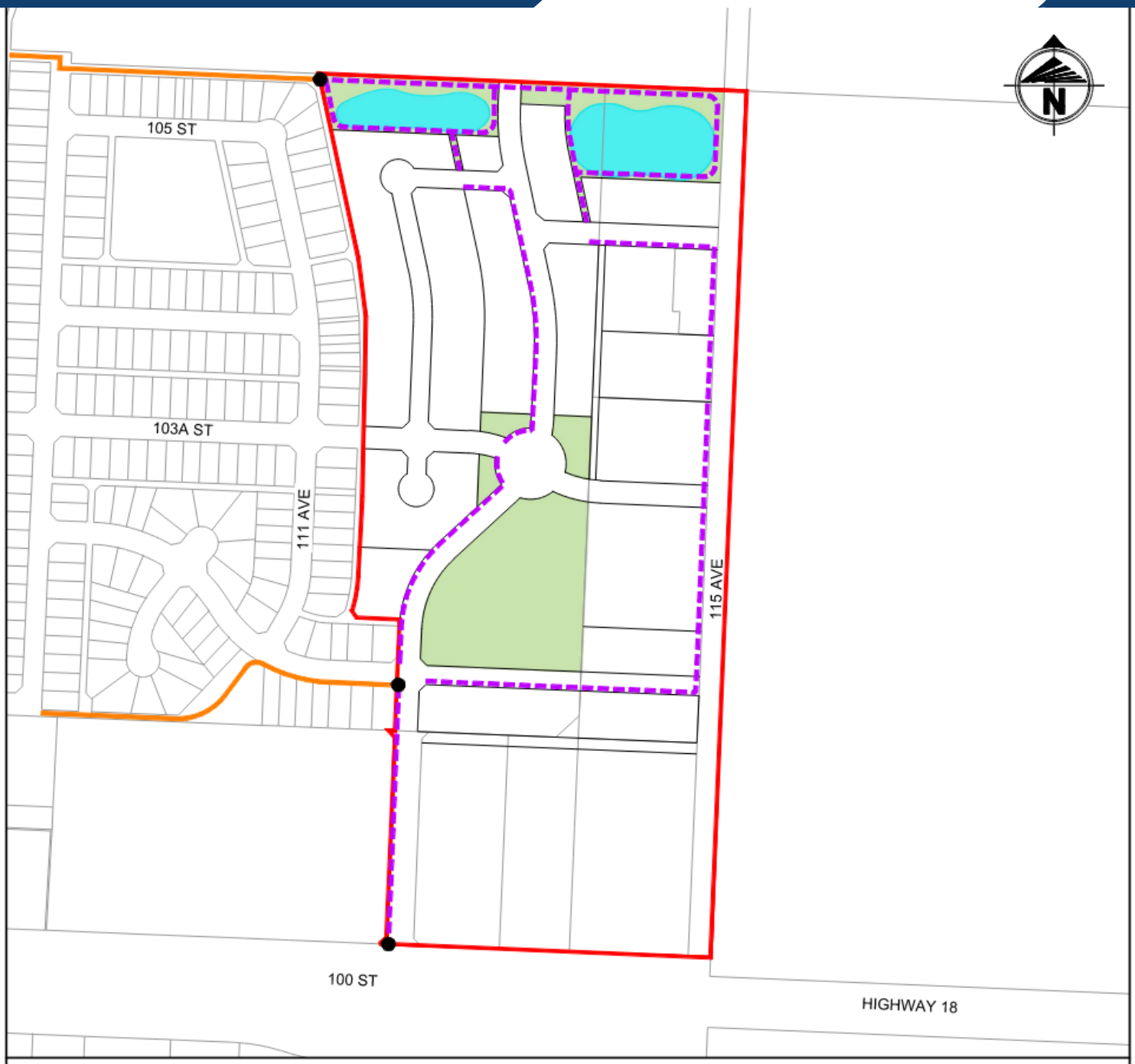
a. Accommodate neighbourhood parks and trail corridors.

b. Provide visual and physical buffers from adjacent land uses (e.g., storm ponds, collector roads).

c. Integrate stormwater management areas into the open space network.

d. Where applicable, reserve dedication may include a combination of land, cash-in-lieu, or deferred dedication if supported by the Town.

e. All reserve parcels will be reviewed and approved by the Town to ensure they are functional, appropriately located, and support the overall goals of the Development Concept.




## Map 6 - Parks & Recreation Concept

- Plan Area Boundary
- Rotary Trail System
- Trail System
- Connection to Rotary Trail System
- Parks and Recreation (PR)
- Stormwater Facility

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# 6.0 TRANSPORTATION

The transportation framework for the Aspendale neighbourhood is designed to support a safe, efficient, and functional roadway network that accommodates projected residential and commercial growth. As shown in **Map 7 – Transportation Concept**, the network aligns with the Town of Westlock's Transportation Master Plan, Municipal Development Plan, and applicable design standards, including roadway classifications, multimodal connections, and access management to Highway 18.

The Development Concept integrates a modified grid pattern with a central collector road, a traffic calming roundabout, and a hierarchical road system to provide appropriate vehicular, pedestrian, and cyclist access throughout the neighbourhood.

## 6.1 Road Construction Standards

All roadways within the Area Structure Plan area will be designed and constructed to meet or exceed the Town's Procedures and Design Standards for Development. Local roads will include asphalt surfacing and concrete sidewalks. Collector roads—particularly the north-south road—will provide wider rights-of-way to accommodate on-street parking and enhanced pedestrian and cyclist facilities, consistent with the cross-sections recommended in the Transportation Master Plan.

## 6.2 Highway 18

The lands fronting Highway 18 are designated for Highway Commercial (C-H) uses. As per the Transportation Master Plan and Alberta Transportation requirements, direct access to Highway 18 will be limited. Access management strategies will prioritize shared access points and the potential use of a service road, subject to approval by Alberta Transportation. A Transportation Impact Assessment will confirm the capacity and safety of any proposed access points, ensuring they comply with provincial and municipal standards. The Development Concept maintains appropriate separation distances and avoids introducing additional conflict points on Highway 18.

## 6.3 Minor Residential Collector Roads

The Development Concept includes a primary north-south collector road running centrally through the plan area. This road links local streets to the existing road network west of the Area Structure Plan boundary and ultimately facilitates access to Highway 18. The collector will incorporate a landscaped roundabout to enhance safety and traffic flow and will serve residential, institutional, and commercial nodes. This corridor is designed to support emergency access and efficient traffic movement within the neighbourhood, and must be designed as a complete street to enable safe and convenient multi-modal transportation, including walking, cycling, and transit.

## 6.4 Local Roads

Local roads follow a modified loop and cul-de-sac pattern to discourage cut-through traffic, reduce speeds, and foster a quieter residential environment. These streets are designed for pedestrian safety and comfort, with sidewalks on at least one side and strategic pedestrian linkages to parks, stormwater ponds, and community amenities. The layout supports phased development and redundancy in access points for efficient municipal servicing and emergency response. Traffic calming elements such as curb extensions, raised crosswalks, or signage are encouraged to further enhance safety and reduce vehicle speeds on local roads.

## 6.5 Roundabout Feature

A key component of the transportation concept is the central roundabout, which provides a focal point for the neighbourhood's internal circulation system. Strategically located at the intersection of the collector and local roads, the roundabout improves traffic flow, reduces the likelihood of collisions, and serves as a gateway feature for the neighbourhood. Its landscaped design not only offers traffic calming benefits but also contributes to the community's visual identity and streetscape character.

## 6.6 Rear Lanes / Alleys

Rear lanes also known as "Alleys" are incorporated into select residential areas to provide access to garages and off-street parking from the rear of lots. This approach supports a more attractive and pedestrian-friendly streetscape by reducing the number of front driveways and minimizing vehicle crossings over sidewalks. Rear Lanes also help facilitate waste collection and utility servicing while contributing to a more traditional neighbourhood character. All rear lanes will be constructed to municipal standards and aligned with best practices for low-volume access routes.


## Map 7 - Transportation Map

- Plan Area Boundary
- Minor Residential Collector Road
- Local Road
- Lane / Alley

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# 7.0 MUNICIPAL SERVICES

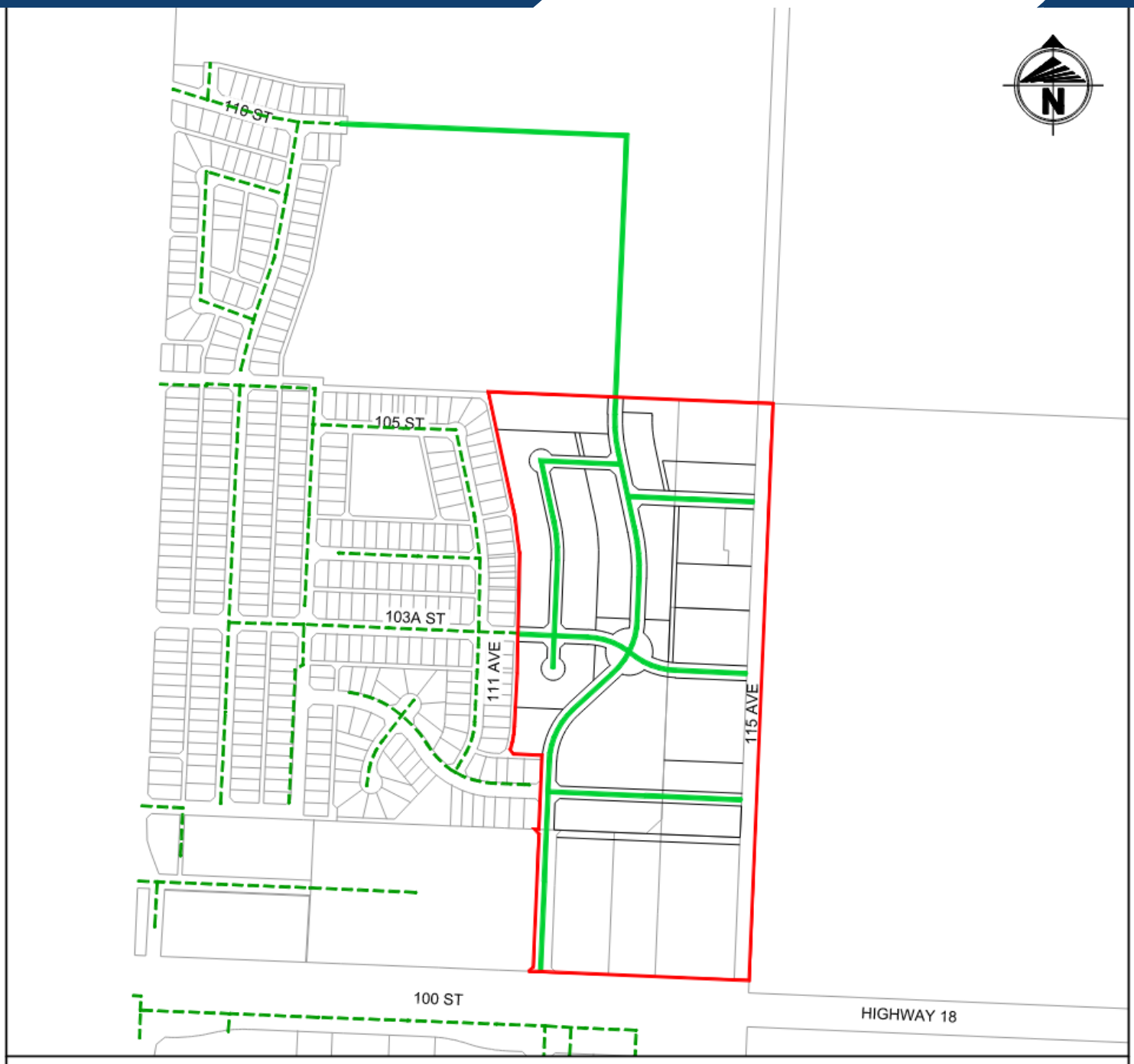

The provision of municipal services within the Aspendale Area Structure Plan (ASP) area will be guided by the Town of Westlock's Infrastructure Master Plans, applicable design standards, and recognized engineering best practices. The servicing strategy will ensure the efficient and phased delivery of infrastructure that supports long-term community growth while maintaining public health, safety, and environmental protection. Preliminary servicing concepts are summarized below, with final design details to be confirmed through subdivision and development-stage engineering.

## 7.1 Sanitary Services

The proposed sanitary servicing concept for the Aspendale neighbourhood integrates with the Town of Westlock's existing gravity sanitary network, which conveys flows to the municipal Wastewater Treatment Plant located approximately 2 km northwest of the Plan Area. The neighbourhood will be serviced by new sanitary mains installed within the internal road network, discharging northward to an existing 300 mm main at 110 Street.

The internal system will follow the natural drainage slope of the land, allowing for gravity-based collection. As development extends southward, the mains will increase in size—from 200 mm within local residential streets to 300 mm along primary routes—to accommodate cumulative flows. The 300 mm main will connect to an oversized 450 mm trunk identified in the Town's Sanitary Master Plan, which provides additional downstream capacity for future development in adjacent areas.

Wastewater generation rates were calculated using the Town's standard design criteria, incorporating peaking factors consistent with the Westlock Design Standards. The resulting Average Wet Weather Flow (AWWF) for the Plan Area is approximately 28.0 L/s. Hydraulic modelling confirms that the proposed sanitary network operates well within acceptable limits, utilizing roughly 60 % of the 300 mm pipe capacity under peak flow conditions and only about 40 % of the available capacity within the 450 mm trunk line.




## Map 8 - Sanitary Sewer Concept

Plan Area Boundary

Existing Sanitary Sewer

Proposed Sanitary Sewer

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As illustrated on **Map 8 – Sanitary Sewer Concept**, the proposed system provides adequate slope and capacity to accommodate full build-out and potential external tie-ins. Phasing of development is expected to proceed from north to south, consistent with gravity flow direction and proximity to existing infrastructure, thereby minimizing interim servicing requirements. The final design of pipe sizing, slopes, and manhole spacing will be refined during detailed engineering to ensure full compliance with the Town of Westlock Design Standards and Alberta Environment and Protected Areas (AEP) requirements.

## 7.2 Water Distribution

The proposed water servicing concept for the Aspendale neighbourhood builds upon Westlock's existing municipal infrastructure, which is supplied through the Westlock Regional Water Services Commission. The development will connect to existing 200 mm distribution mains at 103 Street and 103A Street, as well as the 250 mm main along Highway 18. New distribution mains ranging from 200 mm to 300 mm will follow the proposed road network, looping throughout the neighbourhood to maintain adequate pressure, redundancy, and fire-flow capacity. The network is designed to service low-, medium-, and high-density residential areas together with commercial lands, with fire hydrants spaced in accordance with municipal and Fire Underwriters Survey (FUS) standards.

Updated design modelling indicates an Average Day Demand (ADD) of approximately 286 L/min, a Maximum Day Demand (MDD) of 515 L/min, and a Peak Hour Demand (PHD) of 572 L/min. Under MDD + Fire Flow conditions, residual pressures remain above 229 kPa, while PHD conditions maintain pressures above 359 kPa, satisfying the Town's design criteria and AEP guidelines. These results confirm that the proposed network provides sufficient capacity for both current and future demand scenarios.

A 350 mm backbone main north of Highway 18 is included to reinforce supply and support long-term commercial expansion within the Plan Area. The water system modelling was completed using WaterCAD, applying boundary conditions provided by the Town to confirm flow, pressure, and hydraulic grade line performance across the network.

As illustrated on **Map 9 – Water Concept**, the distribution system is designed to accommodate phased development, allow for future looping, and provide operational flexibility for maintenance and fire protection. Further verification of pressures and flow will be completed during the detailed design and subdivision stages to ensure compliance with Town of Westlock design standards.

## 7.3 Stormwater Management

A comprehensive Stormwater Management Strategy has been developed for the Aspendale neighbourhood to ensure safe, effective drainage in accordance with the Town of Westlock's Design Standards and Alberta Environment and Parks (AEP) Guidelines. As illustrated on **Map 10 – Stormwater Management Concept**, the system includes both major and minor storm infrastructure designed to service residential and commercial areas within the Plan area.

The minor system consists of a piped network that conveys runoff to a series of dry and wet ponds located in the northern portion of the Plan Area. These facilities are designed to manage a 1:100-year, 24-hour Huff rainfall event, ensuring post-development peak discharge rates are equal to or lower than pre-development conditions. Runoff from the eastern lots will be directed toward the west-side ditch along 115 Avenue, which will be upgraded to accommodate increased flows through ditch regrading and new culvert crossings. The twin culverts installed at Highway 18 and 115 Avenue will have a minimum diameter of 600 mm, improving conveyance capacity and reducing blockage risk. During detailed design, the drainage path along 115 Avenue will be reviewed to confirm that adjacent lands are not negatively impacted once development occurs.

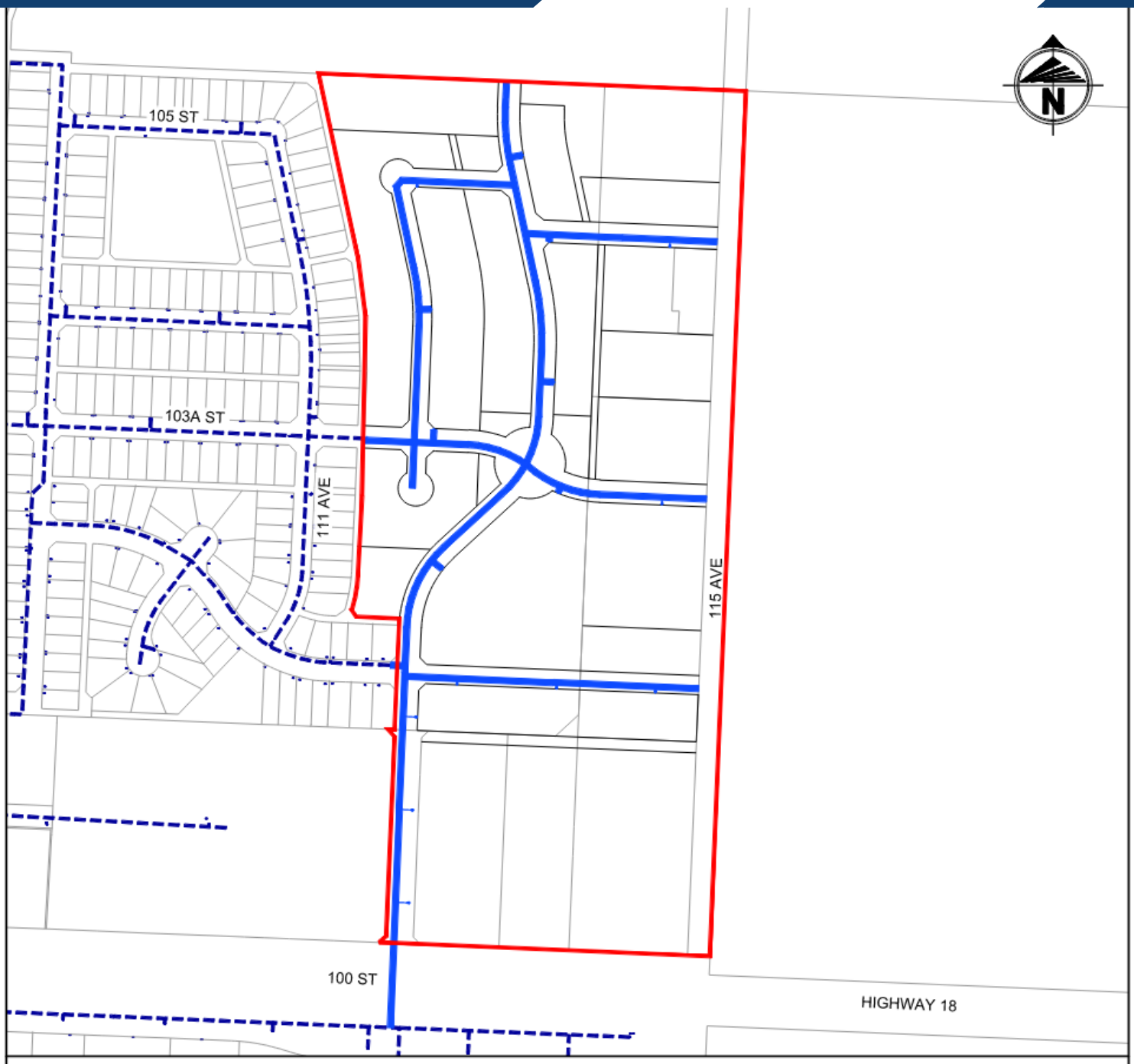
The stormwater system integrates Best Management Practices (BMPs)—including grassed swales, wet ponds, and potential lot-level oil-grit separators—to improve water quality and reduce downstream erosion. The wet pond provides extended pollutant settling and biological filtration while regulating discharge through an outlet pipe set at the Normal Water Level (649.250 m). The maximum release rate from the pond system is 60.50 L/s, with a High Water Level (651.169 m) observed under the 100-year, 24-hour Huff event. This approach maintains the pre-development peak discharge rate while optimizing retention time for enhanced water quality.

The stormwater model was prepared using XP-SWMM software, incorporating the Town's 2022 Design Standards and AEP criteria. Hydrologic modelling reflects a gross plan area of 23.35 ha and a contributing basin area of approximately 15.39 ha, consistent with the engineering design basis. These values differ slightly from the gross/net planning areas presented in Section 3.3 due to modelling requirements, which is standard practice for stormwater design reports.

Future phases of development may construct stormwater facilities in stages corresponding to build-out timelines. At the development permit and subdivision stages, developers will be required to undertake detailed engineering design to confirm final pond volumes, outlet structures, and water quality enhancements in accordance with AEP and municipal standards.

## 7.4 Shallow Utilities

Shallow utilities, including electricity, natural gas, telecommunications, and cable services, will be provided by the respective franchise utility providers. Coordination with utility companies will occur during the detailed design and subdivision stages to ensure timely and cost-effective installation. All shallow utilities are expected to be located within designated utility rights-of-way or municipal road corridors, with a preference for shared utility rights-of-way to minimize land impacts and promote coordinated servicing.




## Map 9 - Water Concept

Plan Area Boundary

Existing Watermain

Proposed Watermain

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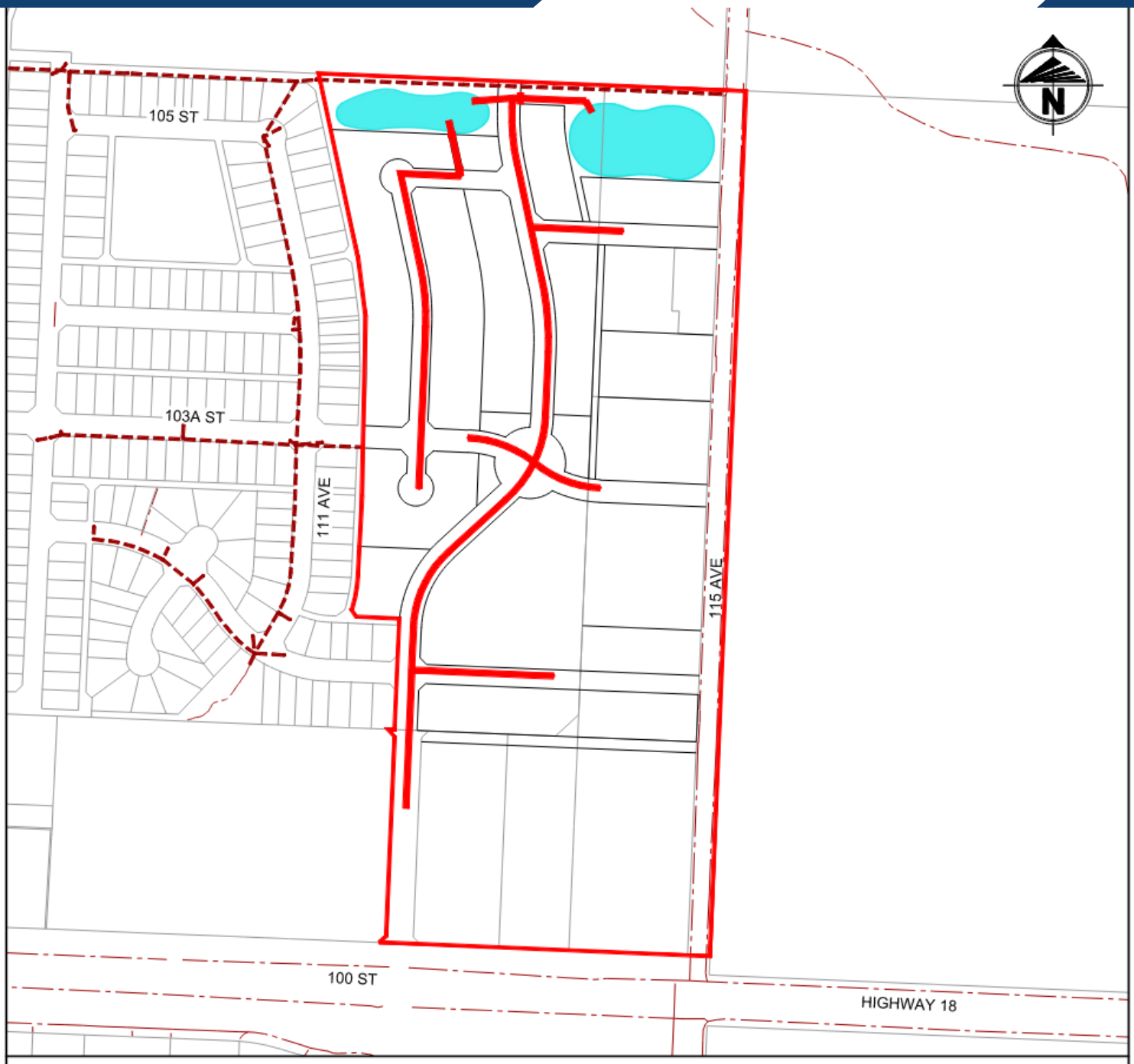
ENGINEERING & SURVEY




## Map 10 - Stormwater Management Concept

Plan Area Boundary

Existing Storm Sewer

Proposed Storm Sewer

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# 8.0 IMPLEMENTATION


The Aspendale Area Structure Plan provides a clear framework to guide Town Council, Administration, landowners, developers, and community members in planning for the future growth of the Aspendale area. This Area Structure Plan supports decision-making related to land use, infrastructure, and community development, and will be implemented through both statutory and non-statutory planning tools in accordance with the Municipal Government Act.

The policies and direction outlined in this Area Structure Plan are intended to align with the Town's long-term vision and will inform planning approvals, rezoning, subdivision, and infrastructure development.

## 8.1 Development Phasing

The timing of development within the plan area will depend on market demand, the extension of municipal services, and landowner interest in pursuing development. The western edge of the plan area, adjacent to existing development, presents the most logical starting point for extending municipal services and road networks. However, the pace and sequence of development will ultimately be guided by landowner intentions.

## 8.2 Land Use Bylaw Amendments

Developers shall be responsible for applications to amend the Land Use Bylaw within the boundaries of the Area Structure Plan to rezone land to the appropriate land use district prior or concurrently with the subdivision.

## 8.3 Subdivision & Development

Before subdividing land, developers must submit a Tentative Plan of Subdivision for approval in line with the Municipal Government Act, Matters Related to Subdivision and Development Regulation, and the Town's policies and procedures. All subdivision applications are subject to review and approval by Town Administration and the Municipal Planning Commission.

a. Developers must enter into a development agreement with the Town as a condition of subdivision approval. This agreement will cover items such as road construction, municipal services, stormwater management, landscaping, and the payment of off-site levies.

b. Detailed engineering drawings for roads, water, sanitary sewer, and stormwater systems must be prepared by the developer and approved by the Town. These should be submitted with the subdivision application.

c. If new municipal infrastructure benefits lands outside the Area Structure Plan area, the Town may help recover a share of those costs when the benefiting lands are developed or subdivided.

d. All levies identified in the Area Structure Plan will be collected at the time of subdivision or as agreed upon in respective Development Agreement.

e. Once the subdivision is approved and registered and properly redesignated, development permit applications can proceed for the approved land uses.

f. As part of the subdivision and development process, detailed design reports and drawings must be submitted for review and approval.

g. All subdivisions and developments must meet the Town of Westlock's Design Standards, the Land Use Bylaw, and other relevant municipal bylaws and policies.

## 8.4 Development Agreements

A development agreement will be required between the Town and the developer as a condition of subdivision approval, in accordance with Section 655 of the Municipal Government Act. Detailed engineering design drawings must be submitted and adhere to the Town's Procedures and Design Standards for Development. All on-site and off-site costs related to new roads and infrastructure will be the responsibility of the developer, and may include through applicable development charges and levies as outlined in the development agreement.

## 8.5 Amending the Plan

An amendment to the Area Structure Plan is required if the Development Approving Authority determines a proposed Land Use Bylaw change or Subdivision causes any of the following:

a. A change to the overall land use layout;

b. A change in the size or location of a school or major park;

c. The removal, major change, or relocation of key roads or intersections; or

d. Major changes to the location of utilities or stormwater systems.