

PAINTED SKY

LANGDON

Neighbourhood Plan (Conceptual Scheme)

NW ¼ & Portion of SW ¼ of Section 22-23-27-W4M

September 26, 2017 | Approved Version

November 14, 2023 | Amended Version

Qualico Communities
100, 5709 - 2nd Street SE
Calgary, AB | T2H 2W4

B&A Planning Group
600, 940 6 Ave SW
Calgary, AB | T2P 3T1

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OFFICE CONSOLIDATION

This document has been consolidated for convenience only. A copy of the original Bylaw and all amending Bylaws can be obtained from Rocky View County. This office consolidation comprises the following Bylaws:

Bylaw	Amendment Type	Date of Approval
C-7676-2017	Original Bylaw	September 26, 2017
C-8350-2022	Added new Policy 4.3.4 under Section 4.3	November 14, 2023

(copy and paste this after the title page and before the table of contents in any plan being amended. In the case of a DC Bylaw, this becomes the first page of the bylaw)

Project Team

Acknowledgements

Submitted by:

Qualico Communities

Prepared by:

B&A Planning Group Planning and Urban Design

In Association With:

BSEI Municipal Consulting Engineers Civil Engineering

Bunt & Associates Transportation Engineering Transportation Planning

LGN Consulting Engineering Stormwater Management

Aresco Ltd. Social and Earth Sciences Research Historical Resources Assessment

Ecotone Environmental Ltd. Wetlands and Biophysical Assessment

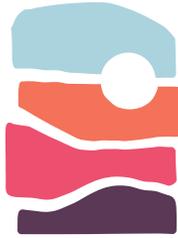
Base Property Consultants Ltd. Environmental Site Assessment

McIntosh Lalani Engineering Ltd. Geotechnical Assessment

LA West Landscape Architecture

Altus Group Economic Consulting Market Analysis

TBD Fiscal Impact Analysis



PAINTED SKY

L A N G D O N

Neighbourhood Plan

NW ¼ & Portion of SW ¼ of Section 22-23-27-W4M

Prepared for | **Rocky View County**
911 - 32 Ave NE
Calgary, Alberta, T2E 6X6

Submitted by | **Qualico Communities**
100, 5709 - 2nd Street SE
Calgary, AB | T2H 2W4

Prepared by | **B&A Planning Group**
600, 940 6 Ave SW
Calgary, AB | T2P 3T1

Date | **September 26, 2017**

Version | **APPROVED**
Amended November 14, 2023



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Introduction

1.1 Neighbourhood Plan Purpose

The Painted Sky Neighbourhood Plan (Conceptual Scheme) has been prepared for Rocky View County on behalf of Qualico Communities. The plan affects the NW 1/4 and a portion of SW 1/4 of Section 22-23-27-W4M comprising approximately ±107.91 HA (±266.65 acres) located on the west side of the Langdon.

This policy document is to be used to guide future land use, subdivision and development permits within the plan boundary. Rocky View Council will consider adoption of this Neighbourhood Plan by Bylaw forming a non-statutory policy document.

Conceptual Schemes are developed within the framework provided by an area structure plan. Based on this framework, the Neighbourhood Plan (Conceptual Scheme) must demonstrate how development in the local area will retain the integrity of the overall area structure plan planning concept and how development will be connected and integrated with adjacent areas. Policy sections in the ASP identify the unique requirements that must be addressed in the Neighbourhood Plan due to the location and specific development conditions of the area. The standard technical requirements of a conceptual scheme or master site development plan are identified in the Rocky View County Plan (Section 29 and Appendix C).

1.2 User Guide to this Plan

The Painted Sky Neighbourhood Plan is a companion document to the Langdon Area Structure Plan with its primary purpose to demonstrate consistency and determine suitability of the lands for the intended land uses. Supporting information is contained in the appendices of this document.

Appendix A: Site Evaluation

Painted Sky is described from a topographical perspective in this appendix. There are relatively minimal physical constraints to development on the subject land.

Appendix B: Development Rationale

Painted Sky is a logical extension of development in the community. The Development Rationale provides a series of sound planning reasons for why this development makes sense.

Appendix C: Open Space Landscape Concepts

A key characteristic of Painted Sky is the integration of open space features in strategic locations. Considerable attention has been given to landscaping for these areas, and these concepts are detailed in this appendix.

Policy Framework and Technical and Supporting Studies

To assist the reader with interpretation and reference, the relevant policy plans and technical supporting studies are listed in the second part of the Appendix of the document. It is recommended that the reader consult and have available the specific documents listed for further information and recommendations when reviewing this plan and its respective policy section.

Appendix D: Policy Framework

Relevant, provincial and local policy which has been used for guidance in the preparation of this document has been outlined in this appendix

Appendix E: Technical and Supporting Studies

In support of the preparation of this document and development concept a number of required technical and supporting studies have been prepared and submitted under separate cover as part of the review process by Rocky View County. These studies are listed in this appendix

Agreements

The ultimate success of a community plan can be credited to the foundation laid by direct consultation and agreements with a number of stakeholders reached throughout the planning process.



Policies referencing this icon indicate the direct commitments made to community members, stakeholders and/or the County and have been added to the CS to mitigate concerns.

Plan Interpretation

The following describes the meaning of some of the key words that are contained in a policy:

- Shall:** *a directive term that indicates the actions outlined are mandatory and therefore must be complied with, without discretion, by Administration, the developer, the Development Authority, and Subdivision Authority.*
- Should:** *a directive term that indicates a preferred course of action by Council, Administration, and / or the developer, but one that is not mandatory.*
- May:** *a discretionary term, meaning the policy in question can be enforced by the County if it chooses to do so, dependent on the particular circumstances of the site and / or application.*

1.3 The Future of Langdon

The neighbourhood of 'Painted Sky' is a highly sought after, family-oriented community, designed from strong planning principles and a commitment to serving the housing, lifestyle and amenity needs of its residents. Painted Sky is a distinct prairie neighbourhood with "small town" attributes characteristic of rural Alberta. It is ideally suited for raising a family – safe, contains an abundance of green space and natural areas, extensive pathways, walkable streets, environmental features, and a future school.

Painted Sky has small town charm created through the prairie heritage architectural style reminiscent of original farmhouses, central common gathering areas, and a potential gateway node with local shops and services, and seniors opportunities. This new neighbourhood is a haven for families looking for an alternative to city living, but who still want the convenience of nearby schools, recreation, fire, police and emergency services.



“By 2025, Langdon will be a charming Hamlet nestled in its surrounding wetlands and agricultural lands. The community’s character is rooted in its railway and early-settler heritage, while supporting modern lifestyles through a range of housing, employment, and amenity options. Centre Street provides a focus for meeting the daily needs of people in all stages of life. Residents and visitors travel a network of sidewalks and pathways throughout the community, and enjoy Langdon’s parks, recreation facilities, and outdoor gathering spaces.” (Langdon Area Structure Plan, p. 22)

1.4 EQWell 'A Qualico Communities Initiative'

We create communities we believe in. Which is why we have created EQWell, an initiative built on a commitment to reduce our impact on the environment, provide ample places for outdoor activity and social gathering spaces and create innovative and diverse communities that cater to all stages of life. Careful planning and consideration has gone into creating each of our communities including Painted Sky.

EQWell is comprised of three main pillars – each providing guidance and structure to how Qualico develops and cares for



A QUALICO COMMUNITIES INITIATIVE

their communities.



We create communities we believe in.

The logo for Qualico Communities features the word 'QUALICO' in a large, blue, sans-serif font with a registered trademark symbol, and the word 'communities' in a smaller, blue, sans-serif font below it. The logo is partially enclosed by a semi-circular arc with segments in green, grey, and blue.

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1.5 Neighbourhood Plan Goals

To align with the community vision, land use strategy and goals of the Langdon Area Structure Plan, six broad themed neighbourhood plan goals have been used for guidance and form foundational elements for the creation of the Painted Sky Development Concept. These goals ensure alignment with the Langdon Area Structure Plan.



1] *Create a Great Place to Live.*

Build an enduring community that includes walkable neighbourhoods, parks, pathways and community amenities with a strong sense of place for people, young and old, to enjoy;



2] *Sustainability.*

Commitment to achieve the best possible economic, social, and environmental outcomes for the neighbourhood and community of Langdon;



3] *Land Use and Neighbourhood Design.*

To determine the appropriate type and location of proposed land uses and their distribution in the proposed neighbourhood, including high level building, street and open space concepts along with the target density for the neighbourhood;



4] *Land Suitability and Policy Alignment.*

Demonstrate the suitability of the subject lands for development by providing a comprehensive development framework grounded in the vision and policies of the Langdon ASP;



5] *Infrastructure Improvements.*

Focus on connections to existing infrastructure to ensure private investment generates the maximum benefit for the community. Establish a strategy to implement appropriate transportation and utility infrastructure improvements and any required off-site improvements; and



6] *Meaningful Engagement and Consultation.*

To undertake community consultation and engagement in order to ensure land use policies and community design will respond appropriately to community concerns.

1.6 Public Engagement

Public consultation during preparation of the Painted Sky Neighbourhood Plan included a number of open house meetings and information sessions along with direct consultation with affected community members.



June 21, 2006

An open house was held at the Langdon School from 7:00 pm to 9:00 pm. This open house was advertised in the Rocky View Weekly for two consecutive issues prior to the scheduled open house. The purpose of this open house was to discuss the concept of a new community in the area with adjacent neighbours and to adapt the plan to accommodate the preferences of neighbours wherever possible. Approximately 30 people attended this open house, with four comment sheets completed. Respondents noted that they wanted to maintain the small-town feel to the community, with more single-family development, parks and open space, a local grocery store, a hockey rink and other small town amenities.



November 14, 2011

A meeting of the Bow North Recreation Board was held with B&A Planning Group presenting a concept that was developed over 2011. The Board expressed its desire for active play areas and pathways due to its currently active and family-oriented population.



January 16, 2017

A second public open house meeting was held in the Winter of 2017 to provide updates and changes following the recently adopted Langdon Area Structure Plan. The open house and engagement program is described in the following pages.

Given that many landowners and stakeholders have changed since 2006, Qualico undertook an extensive public engagement program in 2016-2017 to reach out to all new affected landowners and stakeholders for input on the revised plan. On January 16th, 2017 the Painted Sky team hosted a public open house at the Langdon Field House. During the two hour event, nearly 150 nearby residents came by to review the Neighbourhood Plan and to learn more about the proposed development. **The open house was a culmination of a two month long public engagement campaign that included an informational project flyer, mail drop postcard invitations, newspaper advertisements and a website launch with a dedicated stakeholder relations email domain to field general inquiries and respond to local concerns.**

The Painted Sky team followed up with open house participants and other stakeholders by administering an online survey. The objective of the survey was to further refine the Painted Sky concept plan and to ensure that Painted Sky becomes a well-integrated addition in the greater Langdon community. The survey received 20 unique participants who responded to a series of qualitative and quantitative questions with dedicated space to provide comments on design specifications including lot sizes, green space and transportation networks.

A number of strategies were used to create an effective engagement and communication approach with the surrounding community and other stakeholders. Objectives were outlined primarily to raise awareness with the community, provide opportunity for feedback, and allow the community to stay current with the project prior to consideration of the plan by Council. A What We Heard Report was prepared and made available to the public to report back to the community and that we have heard. These techniques included:

-  **Temporary Signage** on the 4-way main stop into town and at the Langdon Field House
-  **Open House Invitation** distributed to 1034 residents within expanded circulation area
-  **Ad in (print/online)** along with Langdon News' Community Event Listings
-  **Ad in (print/online)** Rocky View Weekly and Langdon News
-  **Media Interview** for Rocky View Weekly
-  **Personal Invitations** sent to 11 local organizations and key stakeholders



Open House At-a-Glance



138 ATTENDEES
ON JANUARY 16, 2017



161 SUBSCRIBERS
FOR NEWSLETTERS



19 FEEDBACK
FORMS FILLED OUT



04 PHONE INQUIRIES
RECEIVED ABOUT THE PROJECT

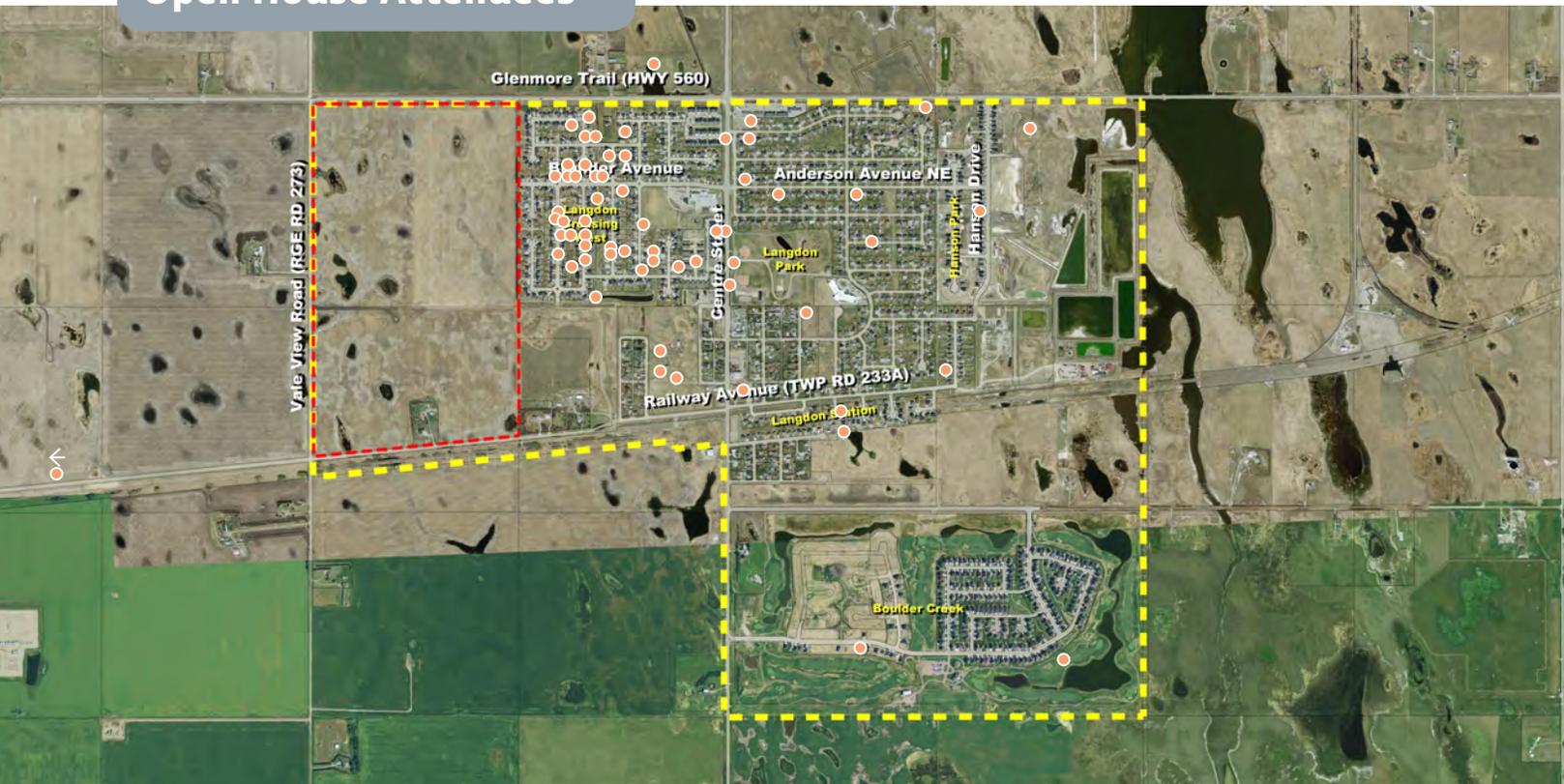


80 COMMENTS
ON THE FEEDBACK FORMS



18 EMAIL INQUIRIES
RECEIVED ABOUT THE PROJECT

Open House Attendees



Several themes emerged from the feedback:

Housing

A dominant theme of the feedback received was regarding the proposed lot sizes in Painted Sky. While many people expressed satisfaction with a diversity of lot sizes and housing types, some residents are concerned that lot sizes under 60 feet in width will hinder Painted Sky's integration into the hamlet. It was revealed in our face-to-face conversations and through the feedback forms that there was some confusion about lot sizes in the development.

Another theme was the public's response to the potential for seniors housing in Painted Sky. Residents spoke with members of the development team at the open house to articulate the need for improved options for seniors housing in the hamlet.

Infrastructure Upgrades & Servicing

A theme of concern among some of the open house attendees was the growing need for infrastructure upgrades including water, sewer, and stormwater management. Residents expressed concerns about the number of proposed new developments in the Langdon area that are slated for construction prior to the announcement of any infrastructure upgrades, Painted Sky being one of them.

Approximately 80% of the homes will be single family with an average 50 foot lot width. 10% of the product will accommodate smaller, single family homes on lots with an average width of 34 feet. The proposed plan also includes a 10% multi-family housing component that would be duplexes and townhomes. The ultimate mix and distribution of housing types will be determined by market demand and Council approvals

A typical new community in the City of Calgary averages 8-10 Units per acre in residential density. The planned density for Painted Sky is 4.56 unit per acre while still being able to provide a range of housing forms and meet the requirements of the Langdon ASP.



The county and Langdon Water works are responsible for future upgrades to servicing infrastructure in the Hamlet of Langdon. Developers pay servicing levies on a per acre basis that support future infrastructure upgrades

The storm pond designed to handle Painted Sky runoff will be a wet pond and sized to accommodate up to a 1:500 year storm event. The volume of the Painted sky Pond has allowed for contribution from off-site lands including portions of Vale View Road and the future development of the former railway lands lying to the south of the Painted Sky Planning area (south of Railway Avenue).

Water supply has been confirmed with Langdon Waterworks to service this development and provision of services will be verified with application for each phase of subdivision. Provision of water to each phase will be planned in association with Langdon Waterworks infrastructure projections and the staged upgrading of their water treatment plant and distribution system.

Wastewater generated by the Painted Sky development will be conveyed via gravity to a proposed new wastewater lift station located adjacent to the storm pond in the southeast portion of the plan area. The proposed lift station will convey the wastewater flow via force main to the 600 mm force main that connects Balzac to the Langdon Wastewater Treatment Facilities with ultimate discharge of treated effluent being released into the Weed Lake wetland. Upgrades to the wastewater treatment plant are planned to accommodate future growth.

Transportation & Site Access

Surrounding residents wanted to ensure that the development is accompanied by traffic solutions to address concerns regarding access points, movement within, to and from the site, and any additional road or infrastructure upgrades that may be required to accommodate new development and help to reduce impacts on the adjacent residents.

Green Space

Summary of feedback suggests that the vast majority of open house attendees and feedback form respondents are pleased with the amount of green space, open space, and park space within the development. The proposed plan has a total of eight parks and designated open spaces to support the community's need for recreation areas and for Langdon to maintain elements of country living while having the conveniences of a residential subdivision.

Brander Avenue will be extended through to Vale View Road and would be built to a core collector standard (10.6 m/21.0 m R/W). Vale View Road will have two accesses and Railway Avenue will have two accesses. No new access to Glenmore is currently proposed, however traffic calming will be provided to address concerns about speeding along Brander Ave.

In general, the most common sentiment echoed throughout the evening and through the feedback forms was support for growing the Langdon community and keen interest in the amenities of Painted Sky. Local resident feedback largely agreed that the proposed new neighbourhood would be a good fit in Langdon given that the lot sizes and offering of housing types are in alignment with the diverse needs of the greater community.

"This whole project will be a fantastic compliment to Langdon!"

"We own a small business here and have lost good employees due to unaffordable housing options here –the multi-family and townhome options are in huge demand here!"

"The neighbourhood would be more complete with a few business or retail options. We need more convenience stores and little coffee shops to serve our residents better, and to bring new jobs into the community too."

"The plan looks great – you strike a good balance between residential and open spaces to make the neighbourhood feel like a real Langdon community"

Section N^o. 2

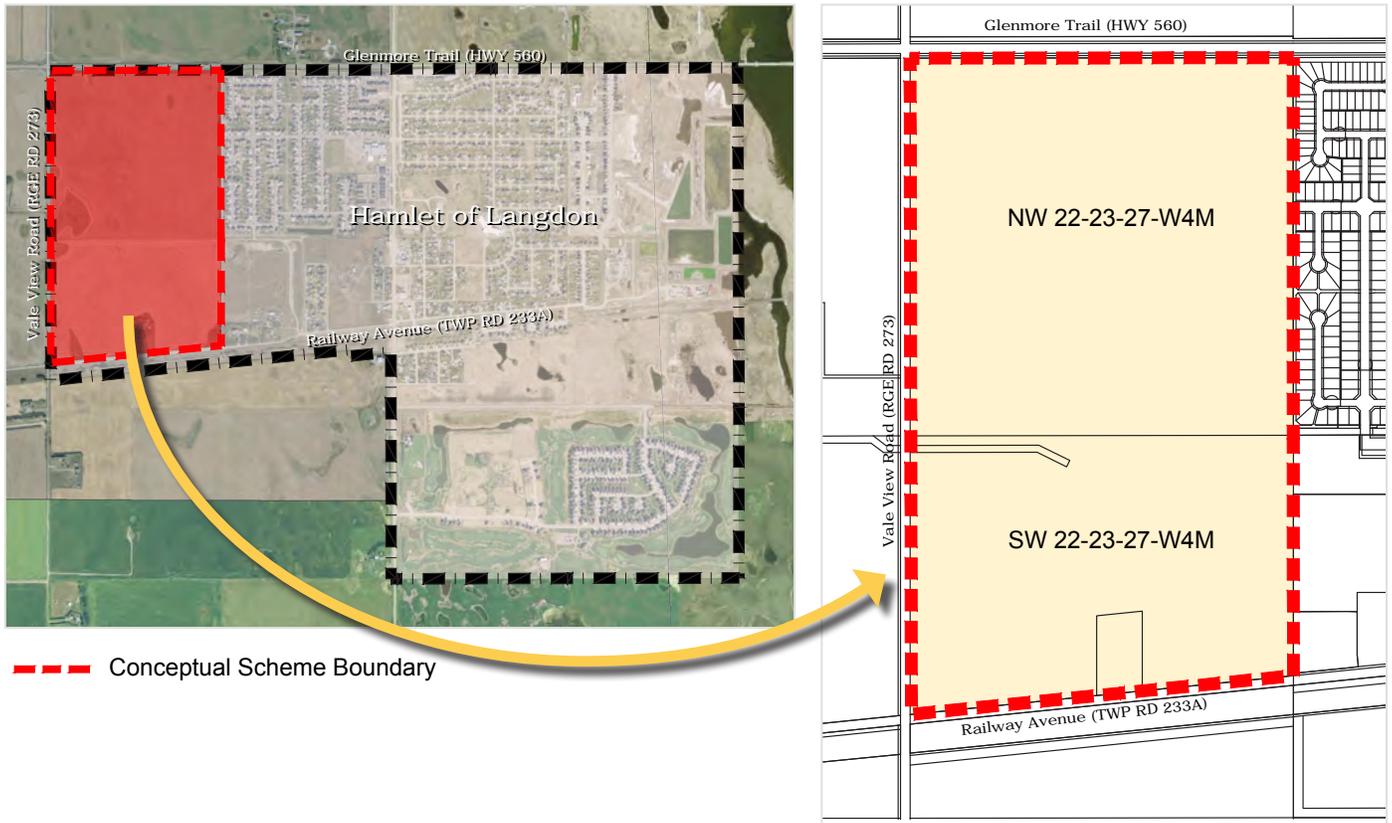
Plan Area Description

2.1 Location

The Painted Sky Neighbourhood Plan area is located in Langdon, Rocky View County, approximately 20 minutes east of the city of Calgary. The lands are located immediately south of Provincial Highway 560 (Glenmore Trail), east of Range Road 273 (Vale View Road) and north of Township Road 233 (Railway Avenue). The existing neighbourhood of Langdon Crossings West and the proposed neighbourhood of Mornington are located immediately to the east.

The plan area affects the NW 1/4 and a portion of the SW 1/4 of Section 22-23-27-W4M comprising approximately ±107.9 HA (± 266.65 acres) located on the west side of the Langdon. The area is currently comprised of three titles as described in Table 1. Qualico Communities has been engaged with the community and County respecting the planning of a new community for these lands since 2006. These efforts and recent participation in the preparation of the Langdon Area Structure Plan has set the foundation for this policy document. This section provides a brief description of the lands.

Figure 1 | Painted Sky Context



2.2 Land Use and Ownership

The planning area consists of approximately ±107.9 HA (±266.65 acres) of predominantly cultivated agricultural land, legally described as the NW 1/4 of Section 22-23-27-W4M and a portion of the SW 1/4 of Section 22-23-27-W4M. West Langdon Developments Ltd. is a joint venture with Qualico Communities as its managing partner. The Neighbourhood Plan also includes the existing ±1.62 (±4.0 Acre) acreage that had been previously subdivided by description.

Table 1 | Land Use and Ownership Location

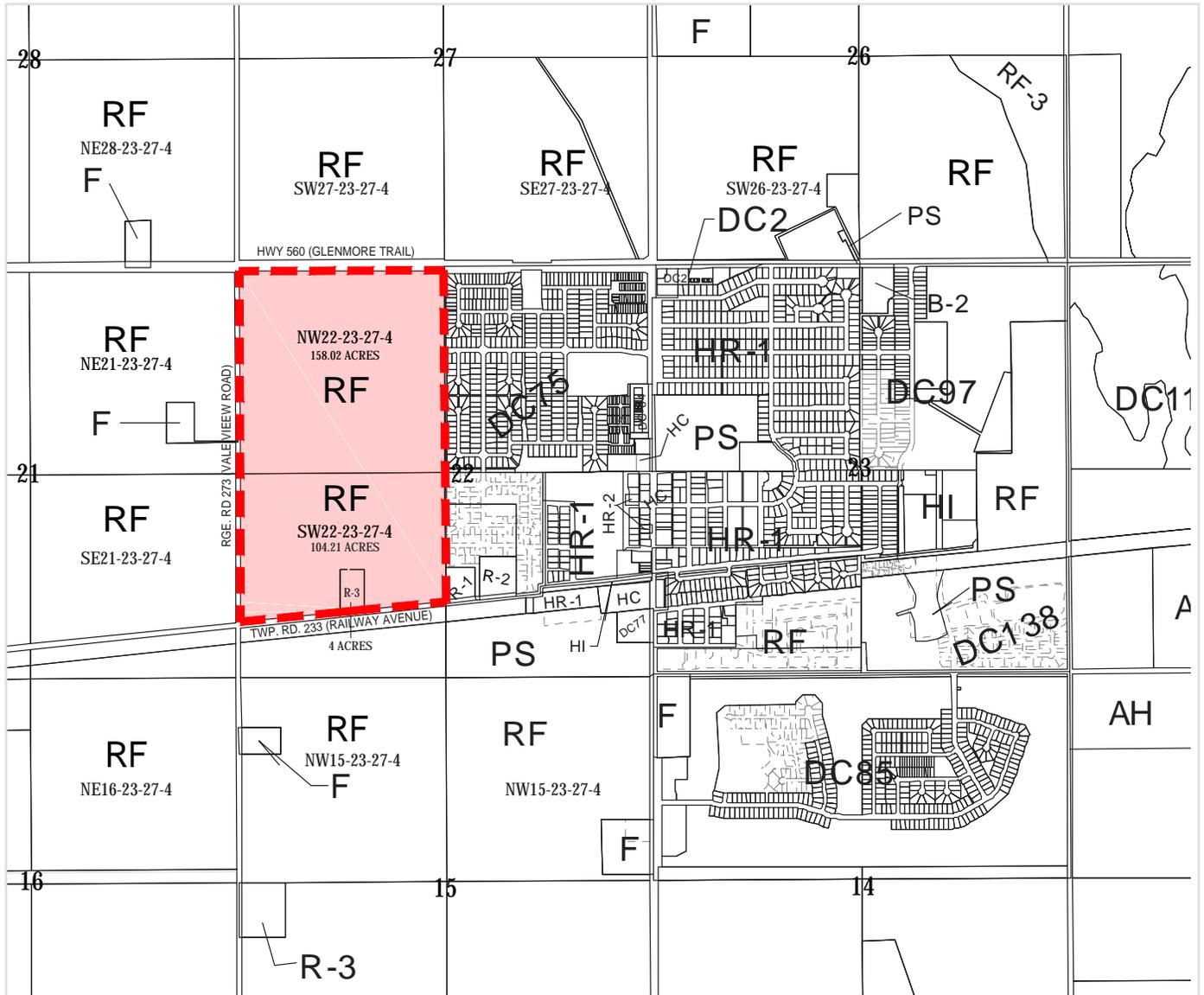
	Acres	Hectares	Owner	Land Use
1. NW 22-23-27-W4M	±158.02	±63.899	West Langdon Developments Ltd.	RF
2. Portion of SW 22-23-27-W4M	±104.21	±42.145	West Langdon Developments Ltd.	RF
3. Portion of SW 22-23-27-W4M	±4.0	±1.62	Mike Allan & Heather Allan	R-3
TOTAL AREA	±266.23	±107.664		

2.3 Land Use Context

The general vicinity in and around Langdon has experienced considerable development pressure and this is attributed to its close proximity to the City of Calgary and strong growth in the region. Robust growth combined with rising land prices continue to provide incentives for businesses and individuals to locate outside the city's boundaries. Rocky View County is expected to continue to experience strong growth rates as people seek alternatives to living in the city of Calgary.

Lands immediately north, west and south of the subject lands are agricultural containing farmsteads and some country residential development. The lands to the east of the subject lands, are anticipated for residential development and are guided by the Langdon Crossings West (2005) and Mornington (2011) Conceptual Schemes. Langdon Crossings West is predominately built-out as a residential single family community and Mornington has not yet proceeded to the development stage.

Figure 2 | Existing and Adjacent Land Uses



--- Neighbourhood Plan Boundary

- | | | | |
|-----|--------------------------|------|---|
| RF | Ranch and Farm District | R-2 | Residential Two District |
| DC | Direct Control | HR-1 | Hamlet Residential Single Family District |
| AH | Agricultural Holding | HR-2 | Hamlet Residential (2) District |
| R-1 | Residential One District | | |

Figure 3 | Site Context



-  Neighbourhood Plan Boundary
-  Hamlet of Langdon Boundary

Painted Sky Development Concept

Painted Sky Neighbourhood Design

A series of principles form the foundation of the Painted Sky development concept. These principles build upon the vision and goals of the Langdon Area Structure Plan as well as incorporate commitments to creating a sustainable community.

3.1 Guiding Principles

Painted Sky will be a distinct and attractive neighbourhood in Langdon that integrates and respects existing built form and the heritage of the community. Residents and visitors will have the opportunity to travel via a network of sidewalks and pathways throughout the neighbourhood, and enjoy Langdon's parks, recreation facilities, and outdoor gathering spaces. The majority of residents will live in single-family and multi-family (semi-detached and townhouse) dwellings and be in close proximity to neighbourhood and community destinations. There is a strong commitment to minimize impacts on the environment to provide ample places for outdoor activity, and to create diverse neighbourhoods that cater to all stages of life.

Great Place to Live

- 1 Built Form.** Maintain the rural character and small town feel of Langdon and respect the built form and character established in existing neighbourhoods within the community;
- 2 Active Living.** Promote active living and encourage physical activity;
- 3 Complete Community.** The addition of the Painted Sky Neighbourhood will strengthen the Langdon community as a whole and allow residents to live a full lifestyle;
- 4 Distinct Neighbourhood.** Create a neighbourhood that is unique and inviting (human scale, street layout, pedestrian trails, parks, gathering points, squares, architectural theme);
- 5 Prairie Town Design.** Promote a neighbourhood design that fully embraces all seasons, including winter, through a mix of land uses, design of the public realm and built form within the context of Langdon being a winter town and prairie town;
- 6 Housing Variety & Choice.** Sensitively incorporate a variety of housing forms that meet the needs of a wider range of residents, family composition and income levels including opportunities to age-in-place.;
- 7 Recreation.** Incorporate an effective and thoughtful parks and recreation system throughout the community that encourages exercise and socialization of people of all ages;
- 8 Connectivity & Mobility.** Provide a well-connected community that is easy to navigate by foot, bike or car allowing for alternative access options and routes through the extension of streets, sidewalks and pathways in a pedestrian friendly environment;
- 9 Gateway Node.** Provide opportunity and strategically locate local commercial, community services and housing opportunities at the Gateway location of Glenmore Trail and Vale View Road with accessibility in mind while promoting Centre Street as the primary commercial area for the community;

Painted Sky will be a distinct and attractive neighbourhood in Langdon that integrates and respects existing built form and the heritage of the community.

Sustainability

- 10 Manageable Growth.** Promote sensible growth that is in keeping with anticipated servicing and population projections for the community over the next 10 years;
- 11 Financial Sustainability.** Ensure that the design and maintenance of the neighbourhood is cost effective to build, service, and maintain while not compromising on liveability;
- 12 Water Conservation.** Promote high efficiency water consumption and ensure high standards of water management;
- 13 Recycling & Energy Efficiency.** Minimize impacts on the environment through recycling, education and use of energy efficient building materials; and
- 14 Environmental Stewardship.** Neighbourhoods conserve and enhance ecosystems and biodiversity through sustainable landscaping and design that beautify streetscapes and build on a prairie micro-climate, flora and fauna.



1 *Gateway to the community*

2 *Mix of grid and curvilinear road network*

3 *Housing variety and choice*

4 *Connectivity with adjacent areas*

5 *Mobility options*

6 *Combining water management and recreation opportunities*

7 *Prairie Town Design*

8 *Predominately larger-lot residential use*

9 *Potential school site*

10 *Wetland conservation*

11 *Potential mixed use opportunities*

12 *Potential fire hall*

Plan Policies

4.1 Land Use Strategy

Three principal land use policy areas have been identified within the Painted Sky Neighbourhood Plan. Requirements for land use redesignation and subdivision plans will vary according to the location, context, and policy goals of each land use policy area.

Residential Neighbourhood

Painted Sky is a distinct neighbourhood with a feature park as a focal point. In addition, there will be sub-neighbourhood parks and an interconnecting pathway system linking the school, the proposed gateway node and the existing community of Langdon. The intent is to create a neighbourhood which is identifiable, thereby providing a sense of belonging as well as clarity of orientation within the larger community. Architectural style, detailing of streetscapes, design of urban elements and landscaping are some of the elements which will be used to establish a unique identity for the neighbourhood.

Parks and Open Space

Painted Sky is designed to provide both active and passive recreation opportunities, to enhance pedestrian connectivity as well as to serve a visual and social function. A comprehensive system of neighbourhood, sub-neighbourhood and linear parks and pathways will provide connectivity within the community of Painted Sky and beyond. The open space system in Painted Sky will become a logical extension of the existing and developing open space network within Langdon. Neighbourhood and sub-neighbourhood parks are located in a manner that enhance social interaction as well as make a visual statement. The central neighbourhood park, the sub-neighbourhood parks and the interconnected linear park and pathway system all work together to achieve a balanced distribution of open space within the broader community. Two wetlands along Vale View Road are proposed to be retained with future adjacent development being designed to complement these natural features.

Gateway Node

The gateway entrance to Painted Sky from Glenmore Trail is envisioned as a neighbourhood scale commercial centre that provides opportunity for specific needs mixed-use housing, commercial services and other civic uses including emergency services that can both take advantage of the unique 'gateway'

location of the site and be integrated sensitively within the surrounding community. The gateway node will be linked with the surrounding residential neighbourhood, the proposed school site, wetland and parks, and the rest of Langdon through an interconnected pathway/sidewalk system.

Housing

Painted Sky will provide primarily single-family housing with the opportunity to accommodate a diversity of housing choices including small lot single-family housing, and alternate housing forms (i.e. townhouses, semi-detached as the market dictates). Lot sizes will vary and could include a variety of homes including townhouse, semi-detached or duplex products that face onto central common areas. Some larger outlying lots will be situated directly onto natural areas and water features. Market demand will dictate various forms of housing at the subdivision stage on a phased basis.

Storm Water Retention Facility and Natural Wetlands

A storm water retention facility and high valued wetlands will be integrated within the community which will also act as water features for the enjoyment of community residents. A stormpond has been strategically located in the southeast corner where it will provide the most efficient use of the stormwater infrastructure. Protection and preservation of existing wetlands along the western portion of the neighbourhood will be incorporated into the overall community design.

Road Network

The Painted Sky community design has been prepared to integrate with existing and future developments, including existing access conditions. The internal road network is typical of Langdon's existing grid pattern of roads, although lanes and some cul-de-sacs are proposed to address design constraints as well as to reduce the visual impact of smaller lot development. Connectivity with the existing Hamlet development to the east is addressed through a continuation of the grid pattern with controlled access. Pedestrian accessibility, however, is seamless and encouraged through the extensive use of sidewalks and connecting pathways.

Table 2 | Primary Land Use Policy Areas

Land Use	Development	Implementation Approach
Residential	<ul style="list-style-type: none"> • primarily single-detached housing • multitude of lot sizes • incorporation of multi-family medium density housing in the form of row housing (townhouse) • semi-detached housing • transition and buffering of land uses adjacent to other land use areas 	<ul style="list-style-type: none"> • municipal servicing for potable water and sewer • comprehensive land use redesignations and subdivision plans • linked park and pathway network providing connectivity between the gateway node, the school site, neighbourhoods, and the rest of Langdon • maximize direct access to the open space and pathway system from all types of residential development
Gateway Node	<ul style="list-style-type: none"> • pedestrian-oriented mixed-use development including residential and local commercial • emergency services • local neighbourhood-serving uses • specific needs housing opportunities (seniors) 	<ul style="list-style-type: none"> • local goods and services • linked park and pathway network providing connectivity between the mixed use area, the school site, neighbourhoods, and the rest of Langdon • appropriate range of medium density housing types • stores fronting on sidewalks • on-street angle and parallel parking • sidewalk amenities, including patios, street furniture, public art, planters, ornamental street lighting
Open Space, Park and School	<ul style="list-style-type: none"> • school site, playing fields, pathways, parks, community open space and natural areas • recreational opportunities - both passive and active use • walking, hiking, cycling, soccer, baseball, etc. 	<ul style="list-style-type: none"> • coordination of roadways and pathways • linked park and pathway network providing connectivity between the mixed use area, the school site, neighbourhoods, and the rest of the Langdon • dedication of municipal and school reserves through subdivision process • appropriate balance and integration of recreational uses • appropriate balance and integration of landscaped and natural areas

Each of these land use policy areas is subject to policies that will provide guidance in the preparation of land use redesignation and subdivision plans. The policies in this Neighbourhood Plan are intended to address an appropriate level of detail while also allowing for a reasonable degree of flexibility and innovation in design and development.

Land Use Concept and Statistics

The Painted Sky Neighbourhood Plan has been prepared to meet the Langdon ASP development criteria (Section 27). The Langdon ASP plans for an approximate population of 13,400. The anticipated number of dwellings and density are as shown below.

Table 3 | Land Use Statistics

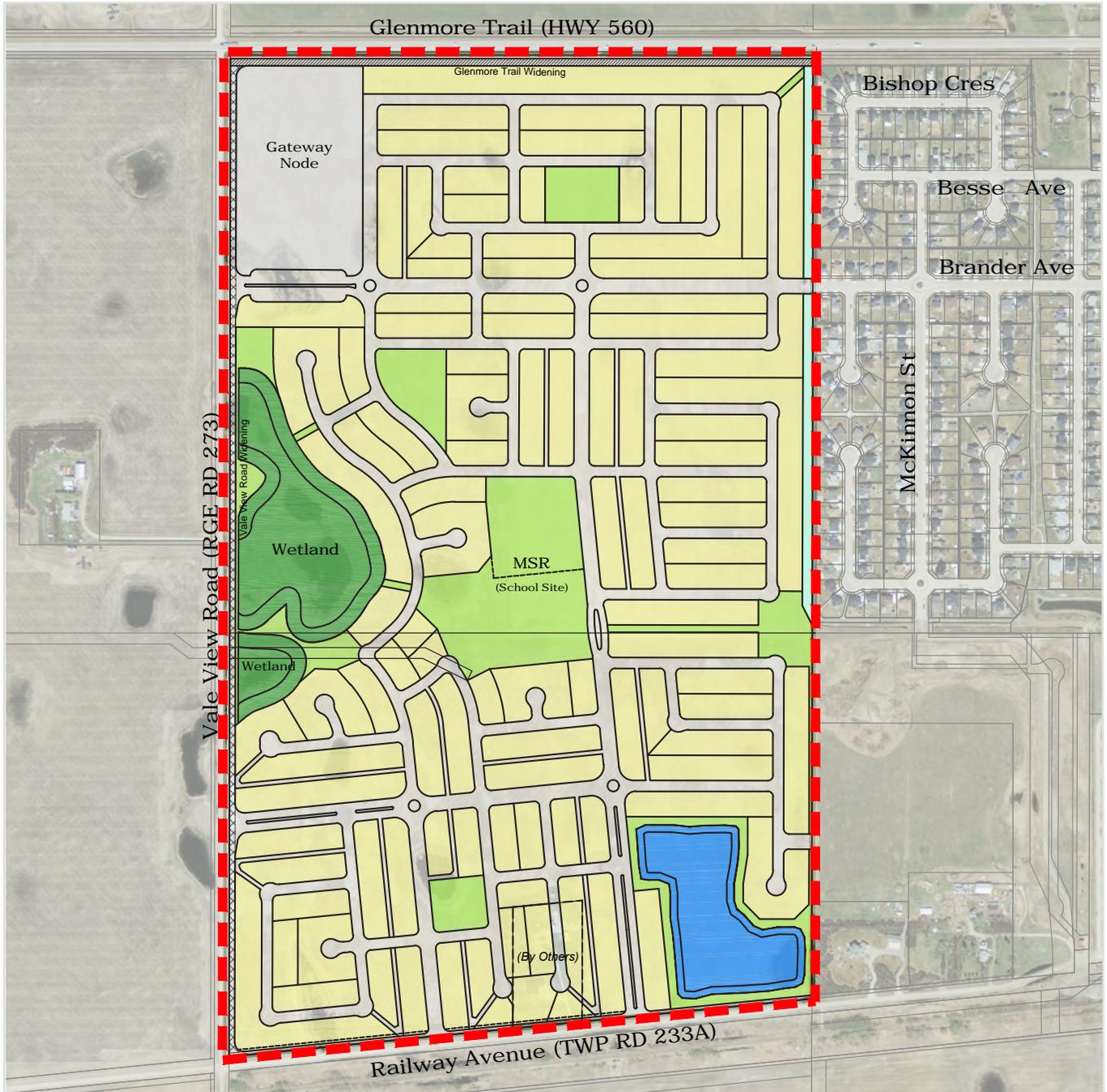
	Frontage	Areas		%
	Meters (m)	Hectares (ha)	Acres (ac)	
TOTAL AREA		107.91 ha	266.65 ac	
LESS				
Environmental Reserve		5.54 ha	13.69 ac	
Road Widening (Glenmore Trail)	10.00 m	0.81 ha	2.00 ac	
Road Widening (Vale View Road)	7.94 m	1.09 ha	2.69 ac	
Gross Development Area		100.47 ha	248.27 ac	100.0%
Gateway Node		4.96 ha	12.26 ac	4.9%
Municipal Reserve (Park)		5.70 ha	14.08 ac	5.7%
Municipal School Reserve (Park)		4.45 ha	11.00 ac	4.4%
Public Utility Lots (PUL)		4.23 ha	10.45 ac	4.2%
Residential				
Laned	4,285.59 m	15.11 ha	37.34 ac	15.0%
Laneless	11,167.85 m	42.55 ha	105.14 ac	42.4%
Total Frontage	15,453.44 m			
Local Roads				
Road Widening (Railway Avenue)	5.00 m	0.40 ha	0.99 ac	0.4%
Internal Roads/Lanes		23.07 ha	57.01 ac	23.0%



Interpretation:

The above table has been included for convenience and purposes of determining expected density, population and housing type range. Final lot widths, housing type distribution, and lot counts will be determined at the subdivision stage in accordance with the residential policies of this local plan.

Figure 5 | Concept Plan



- Neighbourhood Plan Boundary
- Residential
- Parks and School (MR / MSR)
- Environmental Reserve (ER)
- Storm Water Pond (PUL)
- Regional Drainage Ditch (PUL)

4.2 Residential Policy

Painted Sky will have a distinct character and sense of place through its community design and built form. The purpose of the Residential Policy Area is to comprehensively plan for a new neighbourhood with rural character, an efficient development pattern, and provision of appropriate land use transitions to lands outside the plan area. The residential component of the Painted Sky Land Use Concept has been prepared to align with Map 5 and the policies contained within Section 8 of the Langdon ASP. The predominant housing anticipated within the residential area will be single detached residences. However semi-detached residences, and townhouses have been incorporated into the overall design to provide housing choice and additional variety.

Residential Trends

A market demand study was prepared by Altus Group Economic Consulting in the spring of 2016 in support of this land use concept. It is expected that Langdon will continue to represent a significant proportion of overall residential growth in the County and in particular the local trade area. Growth expectations for the life of this Neighbourhood Plan and the Langdon Area Structure Plan (10–20 Years) should see trends in growth occurring among young families with children and among older segments, both with preferences for single family housing and communities.

Trends in population and demographics in the Calgary Region indicate that policies should be aimed at adding new housing supply providing for segments of the population in the ‘move-up’ age range of (35-50) as well as the ‘move-down’ range of 65+).

Trends in Population and Demographics in the Calgary Region

Market	Age Range	Growth Potential
Value Focused ‘first step’ housing	20-35	↓
‘Boomer-Echo’ / Early Millennial	35-50	↑
Boomer Generation	55-70	↑

Population of the Langdon Trade Area - Expected Growth Rates

Langdon Trade Area	
4%	Next 5 Years (2016-2021)
3.3%	Following 10 Years (2021-2031)
2.4%	Following 15 Years (2031-2046)

Langdon Residential and Commercial Demand Projection (Altus Group, Q2 2016)

Expected housing demand in both the Langdon trade area well as the Hamlet could be met by Painted Sky.

Residential Density and Population Estimates

The Painted Sky development concept anticipates a maximum overall residential density of approximately 4.56 units per gross acre. Twenty percent (20%) of the housing product has been targeted at alternate housing options which will facilitate a variety of housing choice for new residents, and increase the affordability and diversity to the neighbourhood. This is in keeping with the policies of the current Langdon Area Structure Plan and the historical anticipated density expectations which had guided neighbouring development seen in Langdon Crossings West.

Housing Type	% of Units	Anticipated Lot Width	Width Range	Area Range (ft ²)	# of Units
Dwelling, Single-detached (Single Family)	80%	15.25m (50ft)	11.58 m (38ft) to 18.29m (60ft)	4,370 to 6,900	913
Dwelling, Single-Detached 'Pioneer Single Family'	10%	10.52m (34.5 ft)	9.14m (30ft) to 11.58m (38ft)	3,450 to 4,370	108
Dwelling, Semi-detached	5%	8.4m (27.56 ft)	7.62m (25ft) to 8.84m (29ft)	2,875 to 3,335	56
Dwelling, Row Housing (Townhouse)	5%	6.86m (22.50 ft)	6.10m (20 ft) to 7.32m (24ft)	2,300 to 2,760	56
TOTAL	100%				1,133

DENSITY (UPA)

4.56 Units Per Acre

Anticipated Population

Housing Units	Persons / Dwelling	Anticipated Population
1133	3.1 (Langdon Area Structure Plan)	3512



Interpretation:

The above table has been included for convenience and purposes of determining expected density, population and housing type range. Final lot widths, housing type distribution, and lot counts will be determined at the subdivision stage in accordance with the residential policies of this local plan.

Residential Housing Type

The purpose of the Residential Policy is to plan comprehensively for a community with rural character, an efficient development pattern, and to provide for appropriate land use transitions to lands outside the Neighbourhood Plan Area. The creation of a sense of identity is to be achieved through the proposed housing product and streetscapes anticipated for the neighbourhood. Painted Sky is envisioned to be a low-density, single-family community with limited medium density and alternate housing form that is sensitively integrated into the neighbourhood. Focus has been placed on street-oriented design that accommodates a variety of lot widths and home sizes. Painted Sky is designed to be compatible and integrated with the adjacent community development pattern through the use of controlled road access, pedestrian linkages (sidewalks and pathways), and a transition of lot sizes. The Concept Plan contemplates a larger lot interface with existing development to the east.

Rendering of a potential streetscape in Painted Sky - Single Family



FOR CONCEPTUAL PURPOSES ONLY

SINGLE-FAMILY HOMES

Residential development will be mainly single family homes provided on a range of lot sizes to accommodate a variety of housing product.

- Single-detached Dwelling (Large Lot).** A variety of housing product and lot type is proposed throughout the neighbourhood, with a predominate focus on providing for the single-detached market which is expected to dominate in the Langdon area over the course of the current growth plan. Approximately 80% of the planned residential housing (\pm 913 homes) is anticipated to be in the form of large lot single family housing constructed on a variety of lot widths and sizes, with both laned and laneless lots options. Lot widths are anticipated to accommodate a greater selection of housing choice with 11.58m (38ft) to 18.29m (60ft) wide lots available. This range of lot size and dominance of single family housing will ensure consistency with the established housing pattern seen in the community today.

Rendering of proposed single family housing typologies



Boulevards along streetscapes to create an open feel



Rendering of proposed single family residential



Renderings of a potential single family residential streetscape in Painted Sky

FOR CONCEPTUAL PURPOSES ONLY



ALTERNATE HOUSING TYPES

An important part of the vision for Langdon in the next decade is to develop new neighbourhoods as predominately single detached homes while allowing opportunity for other housing types and density to be incorporated into a community design while respecting the existing built form of the community. Housing diversity to support a widening range of household type, income, and preference has been included into the neighbourhood vision for Painted Sky and includes a mixture of semi-detached dwellings (2 attached units), row housing or townhouses (3 or more attached units) and a value-focused housing product called 'Pioneer Single Family'. These alternative housing styles will comprise approximately 20% of the overall housing product for Painted Sky.

- **Single-Detached Dwelling (Pioneer).** A portion of the anticipated single-family housing product will be devoted to the entry level market and 10% of the total housing product (\pm 108 homes) anticipated for Painted Sky will be of this type of housing. These smaller houses and lots will be directed towards laned lots which will accommodate rear detached garages and be planned in the same fashion as the required medium density guidelines for the community.
- **Semi-Detached Dwellings.** A limited amount of semi-detached houses are anticipated to be located within the neighbourhood. It is anticipated that approximately 5% of the housing product (\pm 56) will be aimed at this market. Semi-detached dwellings may be located along main traffic corridors to promote an alternative streetscape.
- **Row Housing (Townhouse).** Rounding out the housing product for Painted Sky will be devoting a portion of the planned laned lots for the development of row housing. Row housing or townhouse homes will be oriented to the street in a similar fashion as the 'pioneer single-family' product and aimed at a similar market. Approximately 5% (\pm 56 homes) are anticipated. Specifically this townhouse product will be oriented towards the street with parking in the rear and located in proximity to planned community amenities such as parks, school and neighbourhood commercial areas.

Policies

General

- 4.2.1 The predominant land use shall be low density residential in the form of single-detached dwellings located on a wide range of lot widths;
- 4.2.2 Lot and block layouts shown on the Concept Plan are conceptual only and may not reflect the final design, number or size of lots that may be proposed in future tentative plans of subdivision. The final size, configuration and design of individual parcels proposed through subdivision shall be determined at the tentative subdivision plan approval stage and to the satisfaction of Rocky View County;
- 4.2.3 At the time of subdivision, density for each phase will be calculated and monitored in comparison to the anticipated density and proportion of housing product indicated in this plan;
- 4.2.4 The development concept should incorporate multi-family dwellings, neighbourhood parks, and a system of sidewalks, pathways, and roadways that provide connectivity with Langdon;
- 4.2.5 A suitable range of housing types shall be allowed, provided such housing types are compatible with their surroundings and integrated in an efficient and logical manner. The type of housing product should be comprised of:
- a. single-detached dwelling (single family);
 - b. single-detached dwelling (pioneer);
 - c. semi-detached dwelling;
 - d. row housing (townhouse);
 - e. seniors housing;
- 4.2.6 Where new residential areas are developed in proximity to developed residential areas, there shall be an acceptable transition between the two areas through appropriate building form similar in height, massing and architectural design;
- 4.2.7 The development concept shall include locally appropriate prairie building styles and aesthetics;

Rendering of a entranceway & open space in Painted Sky

FOR CONCEPTUAL PURPOSES ONLY



East entrance - faux-bridge rendering

FOR CONCEPTUAL PURPOSES ONLY



Rendering of pathway integration into Painted Sky

FOR CONCEPTUAL PURPOSES ONLY



SENIORS HOUSING

As the senior population in Langdon and the County increases in the coming years, opportunities for housing options with the Painted Sky neighbourhood could be realized. It is important that the future residents of Langdon and Painted Sky have the opportunity to remain within the community as they age and have a variety of housing options suited to their income level and required level of support and independence.

The inclusion of the proposed alternate housing product will compliment the single detached dwellings and help facilitate a wider range of housing types that can promote aging at home, affordability and more supportive living options.

ARCHITECTURAL GUIDELINES

The architectural guidelines for Painted Sky are intended to reflect the prairie context and historical significance of Langdon. These guidelines will provide for a compatible variety of massing, colours and housing styles that will assist in achieving the overall vision for Painted Sky, that of a community that expresses and relates to the surrounding regional prairie context. Elements of prairie building styles and aesthetics that will serve as visual organizing principles are intended to be expressed through the use of rural based building form and massing, traditional building colors and materials. These guidelines may be revised from time to time to reflect market changes.

Qualico is sensitive to its agricultural neighbours. As such, for lots adjacent to an agricultural operation, additional edge treatment should be considered and implemented through the architectural guidelines with guidance from the County's Agricultural Boundary Design Guidelines.

- 4.2.8 Architectural controls will be formulated and implemented by the developer in order to ensure aesthetically coordinated development in keeping with the prairie heritage architectural style and theme. Prairie heritage architectural design elements reflecting Langdon's history should be incorporated into building design;
- 4.2.9 Lighting should conform to Dark Sky Principles and be designed in a manner sensitive to a rural country setting and may include different types of lighting (i.e. fixtures that direct light downward only) as well as reduced levels of lighting;
- 4.2.10 The integration of meaningful neighbourhood gathering places for resident interaction shall include local parks, the natural environment, the potential future school site and a future mixed use area;
- 4.2.11 Seniors housing, public, recreational, and institutional uses such as child care facilities are encouraged and have been included in the land use concept where appropriate;
- 4.2.12 Lots adjacent to an agricultural operation should consider edge treatment such as incorporation of appropriate landscaping and fencing with guidance from the County's Agricultural Boundary Design Guidelines.

Alternative Housing

- 4.2.13 The development concept shall include lanes to accommodate the anticipated diversity of housing product, variety and interest to the street and facilitate street oriented design;
- 4.2.14 The following proposed housing types shall be oriented to the street with parking located off a lane:
 - a. Dwellings, Row Housing (Townhouse);
 - b. Dwelling, Single Detached (Pioneer Single Family);
- 4.2.15 Row Housing (Townhouses) should be located in proximity to community amenity areas such as local parks, the future school site, open space, institutional and local commercial uses; and
- 4.2.16 The incorporation of single-detached housing (Pioneer Single Family) should be built on a minimum 9.14m (30ft) lot width.

4.3 Gateway Node

Painted Sky has the opportunity to take advantage of a primary gateway into the community of Langdon. The location of the planning area at the intersection of Glenmore Trail (HWY 566) and Vale View Road intersection will act as the primary entrance and arrival point for the community of Langdon. It is important that this gateway is visually attractive, well-maintained and provides for an inviting destination. The Painted Sky development concept hopes to take advantage of this unique location and has been designed in accordance with the ASP policies and the Rocky View County Commercial, Office and

Industrial Design Guidelines. Alberta Transportation has also been involved in the creation of this attractive gateway along its highway (Glenmore Trail).

The purpose of the proposed Gateway Node is to provide a focal point for the Painted Sky neighbourhood and at the same time provide benefit to the overall community without detracting from the opportunities presented along Centre Street. This area is anticipated to be developed near the build-out of the Painted Sky as the last phase.

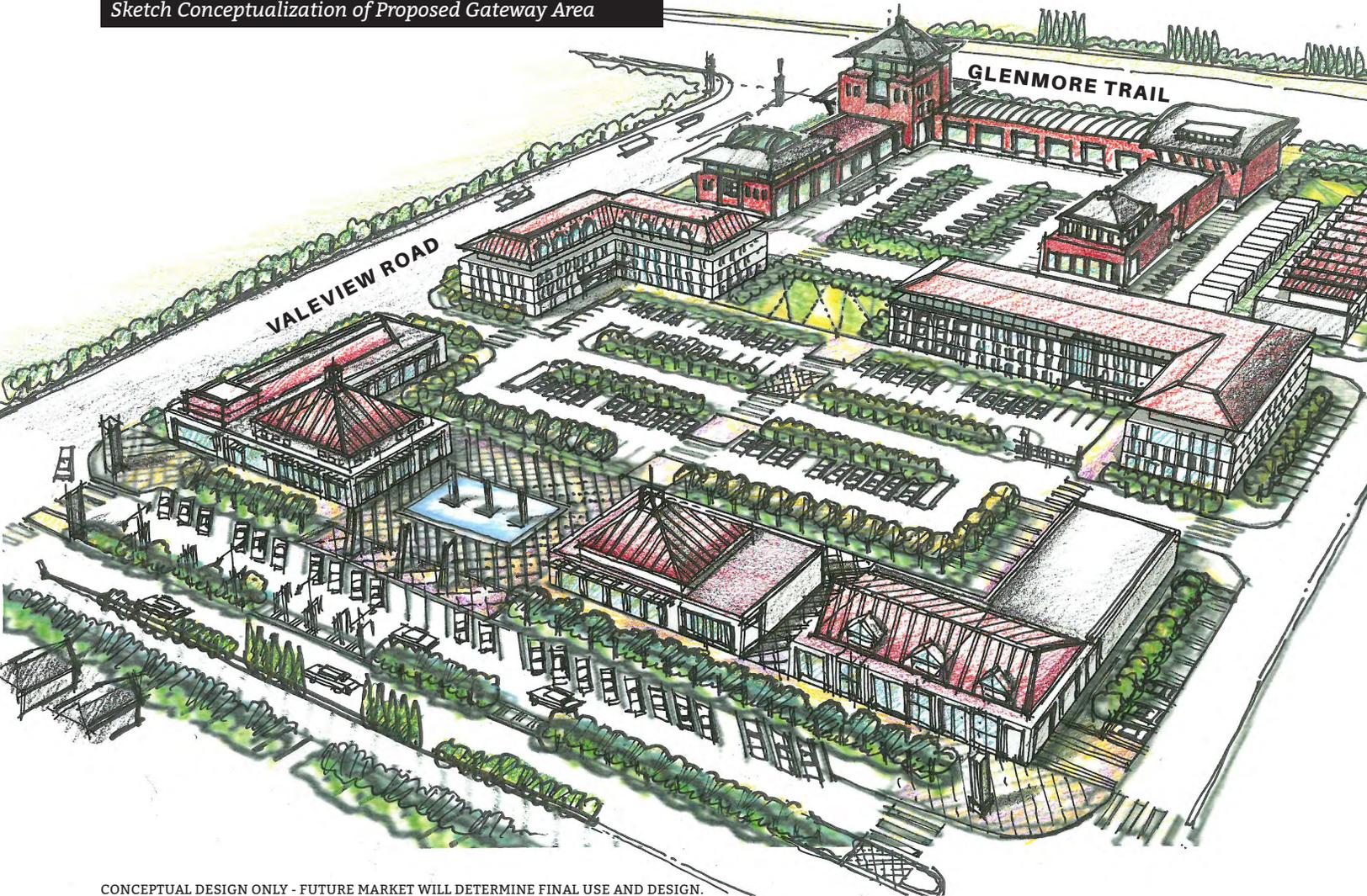
Rendering of proposed fire hall at Gateway



Rendering of proposed fire hall at Gateway



Sketch Conceptualization of Proposed Gateway Area



CONCEPTUAL DESIGN ONLY - FUTURE MARKET WILL DETERMINE FINAL USE AND DESIGN.

The proposed Gateway Node aspires to create a centre focused on the neighbourhood. Primary design principles for the gateway has consideration for sight lines, noise attenuation, setbacks, natural land features, innovative building design, and high quality landscaping, signage and parking. **Some primary design strategies that are envisioned are:**

Gateway Development. The future land use concept presented in the Langdon Area Structure Plan recognizes the strategic nature of this gateway and its role as an important entrance into the community which represents a ‘community’s welcome’ and stresses the importance that it becomes a visually attractive and well maintained development.

Neighbourhood Commercial. The north-west portion of the planning area presents an ideal location to develop a neighbourhood focused destination that can support a well-integrated, neighbourhood oriented commercial node located on the periphery of the neighbourhood along arterial and major collector roads.

Civic Uses. The incorporation of civic mixed uses into the design concept for the gateway node that can complement surrounding residential, special needs housing (seniors, live/work), and neighbourhood commercial. The opportunity for small-scale cultural facilities, religious assembly, community meeting space, civic offices or facilities that can foster a lively, walkable neighbourhood with a meaningful gathering place.

Specific Needs Housing. To incorporate residential housing aimed at specific needs housing to address an aging population by integrating housing at walkable locations. Housing aimed at seniors is encouraged to be located within easy walking distance to neighbourhood commercial, services, and amenities. The opportunity for a flexible mix of land uses which include residential, neighbourhood commercial, institutional and civic focus.

Emergency Services. As Langdon grows beyond the current population, increased demand on the provision of local emergency services will increase (police, fire, and ambulance). To ensure that these services have the opportunity to expand, the proposed gateway node and its strategic location along the Provincial and Local transportation network, can accommodate opportunity for the location of an emergency services facility at the corner of Glenmore Trail and Vale View Road.

Policies

General

- 4.3.1 Small-scale neighbourhood commercial that serves the convenience needs of local residents should be encouraged and be well-integrated into the overall design;
- 4.3.2 Specific Needs Housing that addresses needs of an aging population should be encouraged and located within easy walking distance to retail, services and amenities;
- 4.3.3 Other related uses should be encouraged within the gateway node including medium density housing, live/work spaces, cultural facilities, community meeting space, places of worship, civic uses and facilities and other related uses;
- 4.3.4 Development of the gateway node is anticipated to be predominantly neighbourhood commercial. The mix of uses within this node will be determined by market demand and subject to comprehensive review at the Development Permit Stage.

Built Form Policy

- 4.3.5 Locate buildings or civic uses at the corner of main intersections to help facilitate a sense of place and presence;
- 4.3.6 Integrate a unique civic plaza or green space within the gateway node to promote community interaction;
- 4.3.7 Buildings should be oriented in such a way that the rear of the building does not face an adjacent property.;
- 4.3.8 Parking and loading areas should be appropriately screened, or located so as not to be visible from adjacent areas;
- 4.3.9 Consideration of highly articulated facades and landscaping should be incorporated into the overall design; and
- 4.3.10 Roads and pathways should be coordinated with adjacent areas.

A market demand study has been prepared by Altus Group Economic Consulting in the spring of 2016 in support of this land use concept and viability of commercial opportunity within the neighbourhood activity centre. Some of the key opportunities are discussed below:

Commercial Opportunity. A neighbourhood shopping centre of approximately 40,000 ft² could be developed as part of the later stages of the Painted Sky neighbourhood build out.

Commercial Timing and Sensitivity to Centre Street Opportunities. The timing of such development would ensure no competition with the Centre Street area for at least the next ten years and would entail the capture of only a portion of the growth in retail demand from the trade area.

Unique Commercial Opportunity. Development would differ from the Centre Street area in that vehicle accessibility and convenience will form a key part of shopping centre design – as opposed to the Centre Street area that places priority on pedestrian movement and small-scale local commercial development.

Gateway Commercial Opportunity. Targeted uses for commercial adjacent to Highway 560 would be directed towards transient traffic as well as serving the daily needs of Painted Sky neighbourhood. It would also become an attractive service node and gateway into the larger Langdon community.

Destination Uses. Commercial uses will be primarily driven by market demand and may include a convenience store, pharmacy, personal service businesses (daycare or fitness facilities) restaurants and a gas station. Drive-through restaurants could specifically be targeted since no such facilities will be permitted on Centre Street.

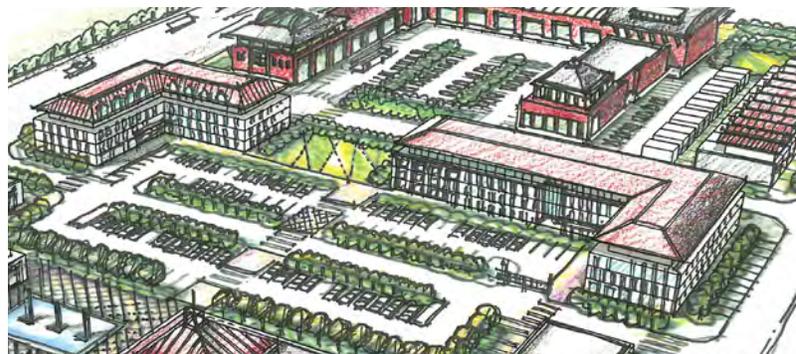
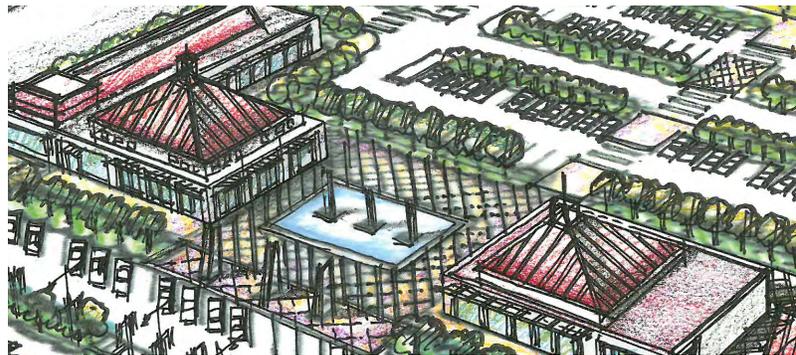
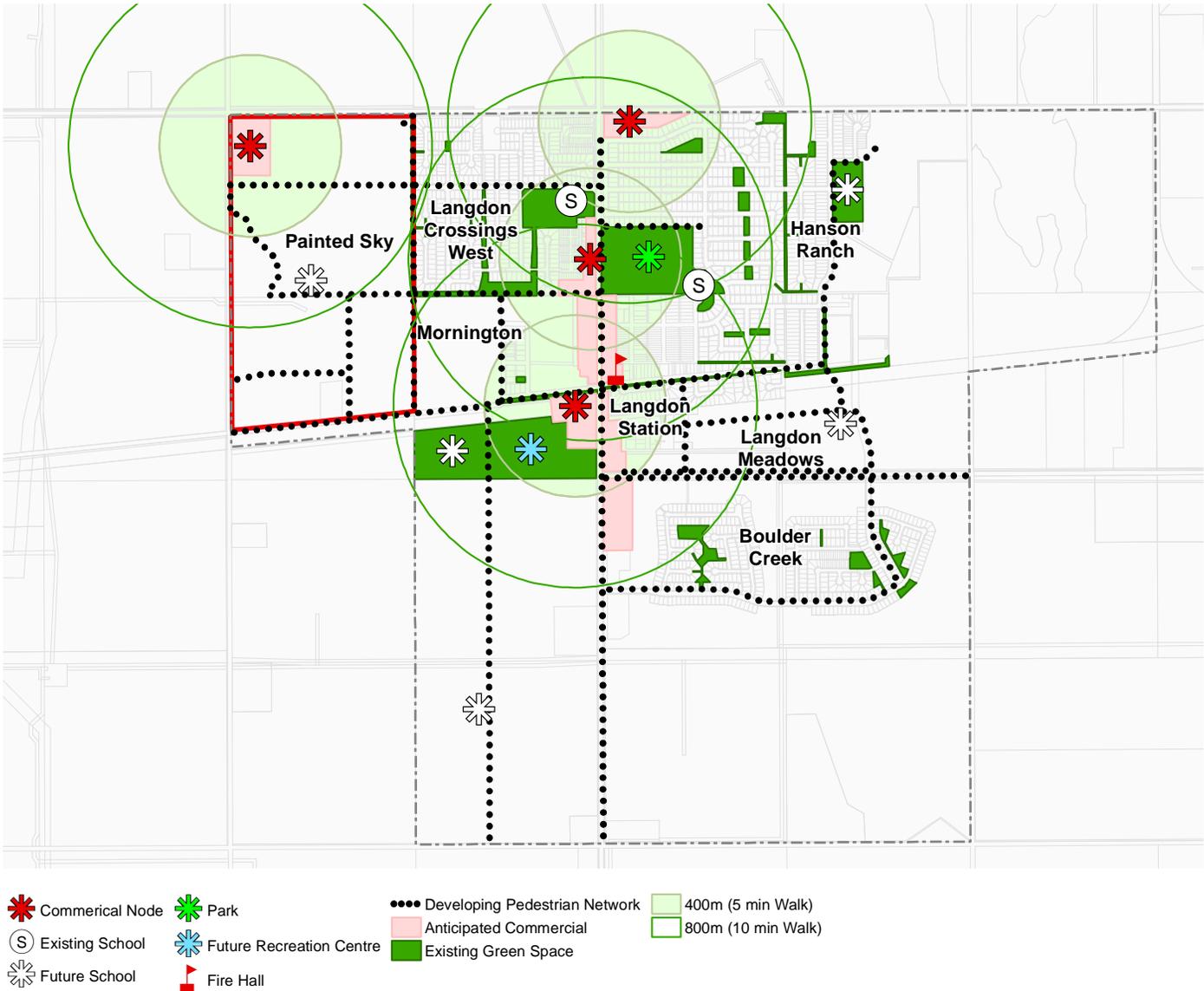


Figure 6 | Commercial Nodes and Pedestrian Connections



4.4 Schools Assessment

Painted Sky has been designed to accommodate a future joint municipal and school reserve site (MSR) that is centrally located within the neighbourhood. The Langdon School Analysis & Pedestrian Connections figure shows the coverage of area within a 5 minute walking distance from the future school site. It also shows that virtually the entire Painted Sky neighbourhood is within a 10 minute walking distance. Langdon is very well served by schools and open spaces. Painted Sky will continue this coverage through provision of the MSR site and well connected pedestrian trails, pathways and/or sidewalks.



Policies

- 4.4.1 The Developer and the County shall collaborate with school authorities on school development;
- 4.4.2 The location of the new school site is an important design element for the proposed neighbourhood. The amount of land dedicated for a future school site should be consistent with the size requirements delineated in the Reserves Agreement between Rocky View County and the School Authorities;
- 4.4.3 The system of linked open spaces (joint use areas and pathways/trails/sidewalks) provided an important design element for the neighbourhood. This system of open space (open space / joint use) areas shall be maintained in subsequent applications for subdivision approval to the County;
- 4.4.4 The school site should be designed and located on reserve land that is optimized for facilities and play areas;
- 4.4.5 The school site and facilities should be configured in a manner satisfactory to the School Authorities and the County;
- 4.4.6 The school site should be located on collector roads with appropriate consideration to parent drop off and school bus related traffic movements;
- 4.4.7 The school site shall be situated to minimize hazards associated with student crossings of roads and mitigated through use of innovative design approaches to road design; and
- 4.4.8 The school site shall be sensitively integrated into the proposed opens space and park network and shall ensure pedestrian movement is accommodated.

Figure 7 | Langdon School Analysis & Pedestrian Connections

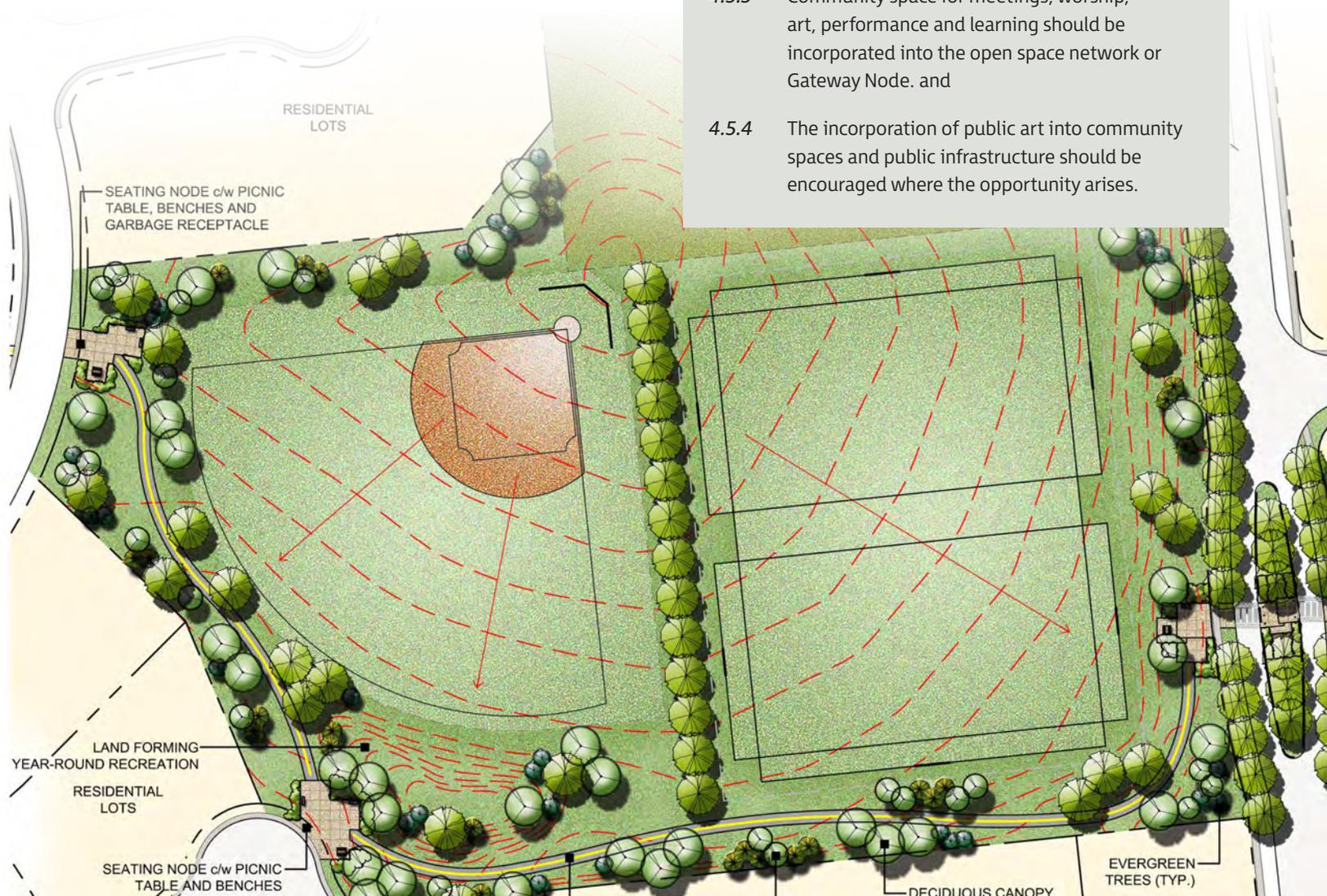


4.5 Recreation, Cultural, and Community Uses

Painted Sky includes a range of opportunities for culture, recreation and community uses including a future school and neighbourhood activity centre. The opportunity for live-work units and artist studios has been incorporated in order to foster a creative and entrepreneurial culture and sense of well-being. The gateway node is intended to facilitate a range of institutional and cultural facilities such as religious, educational, cultural and community organizations.

Policies

- 4.5.1 Connections to facilitate access for all modes of travel to the proposed Gateway Node, school site, environmental areas and park system shall be encouraged;
- 4.5.2 Recreation, culture, institutional, and community uses shall be encouraged and integrated into the neighbourhood fabric in accordance with the recommendations of the Langdon ASP and County Plan;
- 4.5.3 Community space for meetings, worship, art, performance and learning should be incorporated into the open space network or Gateway Node. and
- 4.5.4 The incorporation of public art into community spaces and public infrastructure should be encouraged where the opportunity arises.



4.6 Open Space, Parks, Pathways and Trails

Painted Sky will consist of a comprehensive system of neighbourhood, sub-neighbourhood, and interconnected linear parks and pathways that will provide connectivity within the community, and will become a logical extension of the existing open space within Langdon. High quality landscaping that reflects the prairie landscape and historical significance of the area will be evident throughout the community, incorporating elements of prairie building styles and aesthetics.

Appropriate considerations during subdivision design can assist in maintaining a safe environment. Examples include: where visual surveillance is fundamental, avoidance of linear spaces without public surveillance/access; proper placement of landscaping (shrub plantings, berming) in order to minimize potentially unsafe conditions; and the design of appropriate street lighting to create a sense of security during non-daylight hours.



The Painted Sky Neighbourhood Plan provides for a series of parks and an interconnected pathway system that provides strong linkages to the gateway node, proposed school site and existing community.

The open space, parks, pathway, trail, and sidewalk network in this Conceptual Scheme is consistent with the network shown on Map 7 of the Langdon ASP. The purpose of the policies in this section is to provide for a comprehensive system of interconnected parks, pathways and open spaces.

The Municipal Government Act allows a municipality to require that a landowner/ developer allocate and dedicate up to 10% of land at the time of subdivision for the purposes of providing public parks. Parks, open space and a school site will be provided as illustrated in the Open Space Plan. The plan accommodates over 10% of the plan area in parks, a school site, wetlands and storm water retention facility. In addition to storm water management, the associated areas will serve aesthetic, ecological and recreational functions within the community. The school site is located in a location that is central to the community, and therefore easily accessible by residents.

East entrance - faux-bridge rendering



Figure 8 | Open Space Plan



- - - - - Neighbourhood Plan Boundary
- Road Widening
- Separate Sidewalk
- Monowalk Connection
- - - - - Regional Pathway on South Side of Railway Avenue
- - - - - Local Pathway

Open Space Features (see Appendix C for detail)

1] **Painted Sky / Langdon Crossing West Gateway.**

The community gateway integrates the existing community of Langdon with the neighbourhood of Painted Sky. The proposed “gateway,” as a means of crossing the existing drainage corridor, allows the opportunity for a unique transition. The proposed concept illustrates a “faux bridge” crossing and integrates the regional pathway and sidewalk with new sidewalks and viewing opportunities while showcasing the naturalized drainage corridor. The enhanced crossing concept addresses the mid-block pathway crossing through a narrowed carriageway making pedestrian crossing safer.

2] **North Neighbourhood Park.** This park will provide passive and active recreation for the north part of the Painted Sky. The programming of the site allows for various recreational opportunities through a diversity of spaces. An enhanced plaza space with an overhead pergola and gateway will promote neighbourhood gatherings and celebrations, and is supported by an adjacent playground area, seating plaza with picnic and games tables and associated site furnishings. The requirements for bollards and site furnishing will be determined at the detailed design stage. The central green and orchard will contribute to its uniqueness and sense of place. A bridging component provides connectivity in the far northeast corner of the plan to the existing pathway on the east side of the ‘west ditch.’

3] **East Neighbourhood Park and Linear Connection.** To take advantage of the existing pathway juncture, this proposed neighbourhood park will provide the pedestrian user not only with a contiguous access to the proposed future school site from existing Langdon, but a destination park for relaxation and play. A new regional pathway connection will occur across the drainage corridor allowing for pedestrian movement through the neighbourhoods. A naturalized interface with the drainage corridor including shrubs, trees and seating rocks will allow for a quiet place to sit. Picnic areas, a playground and informal open play spaces make this east neighbourhood park a hub for activity.

The linear MR connection takes the regional pathway west to the future Municipal School Reserve site and its associated play fields. The mid-block crossing with a pedestrian “safe-zone” is designed in such a way to emphasize pedestrian movement and to ensure a safe crossing environment. Low growing grasses and public street art enhance the space providing a decorative element and bringing awareness to the site.

- 4] **School Site.** This central open space area at +/- 4.47 Ha (10.99 ac) in size will contain a school site and playfields (ball diamond and soccer pitch). With access to the site from four different streets, the site is easily accessible and is a functional amenity to the immediate community as well as to the adjacent Langdon neighbourhoods. Land forming on the site provides visual relief and potential winter (year-round) recreation. Park entry seating nodes are provided at access points as gathering spaces and as entrance transitions. The parcel configuration, street frontages and site grades are optimal for school and playfield development.
- 5] **Central Park.** At +/- 0.92 Ha (2.27 ac) this neighbourhood park is the largest and most conducive for a diverse range of recreation opportunities throughout the year. Surrounded by residential development and in close proximity to the Gateway Node, the functional programming offers users many passive and active recreation opportunities. A playground facility, picnic areas, and a hard court for basketball and other court sports makes this park a destination year round. Land-forming is incorporated for visual relief and year round use. A large public plaza among a grove of trees offers passive recreation such as seating, games tables and an opportunity for public gatherings. This park will contribute to the vibrancy of the Painted Sky community.
- 6] **South Neighbourhood Park.** This south neighbourhood park will meet the needs of the southern area of Painted Sky. A central informal open space for active play is supported by a play-ground and associated picnic and seating areas. The 'Bosque' on the west side of the park will provide a buffer and aid in wind protection and shade for park users through the summer season. Gentle land forming in the park provides visual relief and the trellis component provides architectural interest and a space for picnic and games tables. Lounge chairs and other park amenities such as bike racks and trash receptacles will be chosen to support the Painted Sky character and the enhanced public realm. Fencing along the common boundary with the laneway on the northern edge of the park will be required.

Policies

- 4.6.1 Parks and open space shall be addressed during all stages of development and ensure alignment with the County's Parks and Pathways: Planning, Development and Operational Guidelines as development references;
- 4.6.2 That proposed pedestrian and open space network shall provide connections within, and external to, the Neighbourhood Plan area;
- 4.6.3 The proposed open space and trails system shall be coordinated with the wetland and stormwater conveyance system;
- 4.6.4 Incorporate principles of Crime Prevention Through Environmental Design (CPTED) features into the open space plan;
- 4.6.5 Parks shall be designed so as not to create potential entrapment areas. This includes but is not limited to appropriate placement of landscaping materials (shrubs, trees, earth berms), minimizing long, narrow linear parks, and assuring proper lighting of all park spaces;
- 4.6.6 The predominant land uses in the Open Space area shall be, outdoor passive and active recreational uses, wetlands, storm water retention, and school and educational programming;
- 4.6.7 The parks, pathways, sidewalks and public open spaces shall provide recreational and travel opportunities and connections that will accommodate a variety of users and full accessibility (e.g., pedestrians, strollers, wheelchairs, bicycles) as determined appropriate by the developer and the Municipality; and
- 4.6.8 Parks, pathways, sidewalks and public open space shall be designed, constructed, and well-marked with signs to provide full accessibility and the safe and enjoyable use of those for whom they are intended (e.g., pedestrians, strollers, wheelchairs, bicycles, or the appropriate combination of such users).



Natural Park at the Western Wetland



East Neighbourhood Park



Existing Local Pathway

Possible Future Regional Pathway



School Site and Adjacent Open Space



Please refer to Appendix C on page 85 for fully detailed versions of all Open Space concepts



Central Park



7] **Natural Park.** The largest part of Painted Sky's open space system is comprised of the existing wetland system on the west side of the community. An Environmental Reserve (ER) buffer and Municipal Reserve (MR) is provided to make this area a key component to the open space system. Open space "windows" allow for public access to the system which also provide direct connections to the streetscape and other open space parcels. The regional pathway from the east moves through the ER/MR open space and ties to Vale View Road and the two streetscape collectors entering the community.

This larger system supports both the need for a recreational component to the community, as well as respects the ecological component and habitat function of the area. A naturalized labyrinth is located at the northwest corner of the site which provides a whimsical element to the landscape for meditation or play. A large MR parcel compliments the natural open space system with land forming and increased vegetation for habitat and a buffer to the road. The southern portion of the park promotes education and interaction with the natural area with an outdoor classroom amphitheatre and seating/picnic opportunities with associated amenities. A small trail system allows nature lovers and bird enthusiasts to venture out into the natural area to take advantage of the proposed bird blinds and seating. Detailed design of park spaces will consider treatment of surfaces, setbacks and site furnishings.

8] **Stormwater Pond.** The southeast storm water pond and surrounding MR offer functional, recreation and visual benefits. From an open space perspective, a local pathway will provide recreational opportunity around the area and connectivity to adjacent streetscapes and the future pathway to the east. Benches and rock outcroppings offer various places to sit and relax with trees and native shrubs throughout the landscape.

Note: 'Full accessibility' implies functional use of the lands by users of all abilities including those who rely on or are dependent on the use of mobility aids.

4.7 Natural Environment

The proposed development concept has considered the long term conservation of valued wetlands and riparian areas through an extensive assessment throughout the plan preparation process. Wetland and associated riparian areas have been incorporated into the design of the neighbourhood and open space and parks system. A Wetlands Assessment and Biophysical Impact Assessment has been prepared and updated by Ecotone Environmental in August 2016 in support of the development concept.

The majority of the site is cultivated or previously disturbed. The study identified that the proposed development will have minimal impact on regional habitat fragmentation, loss of wildlife corridor potential, and loss of regional biodiversity. Conservation of two wetlands will be achieved by considering pre-development water quantity, water fluctuation, water quality and ecological conditions. A buffer or setback around the wetlands will be reserved and enhanced with native vegetation in coordination with the design of the Municipal Reserve (MR). Integrating the re-vegetation of the setback areas with the design for the MR parcels, could allow for the incorporation of educational features and opportunities that can benefit the proposed school site, area residents, and visitors to the community.

A review of all wetlands was conducted by Alberta Environment and Parks to determine if the wetlands were considered permanent and claimable under the Public Lands Act. None of the wetlands identified by Ecotone Environmental Ltd. were claimed by the Crown.

Policies

- 4.7.1 Conservation and effective management of riparian areas and wetlands should be in accordance with Provincial and County policy and guidelines;
- 4.7.2 Riparian protection area should be guided by the Province of Alberta's "Stepping Back from the Water Guidelines: A Beneficial Management Practices Guide for New Development near Water Bodies in Alberta's Settled Region;"

- 4.7.3 Source water protection strategies should be utilized where appropriate, in order to maintain source water quality and quantity for downstream users and the aquatic environment;
- 4.7.4 Identified wetlands #27 and 33 shall be preserved and incorporated into the proposed development and open space concept in consultation with Alberta Environment;
- 4.7.5 In order to mitigate impacts on rare plant populations associated with impacts to identified wetlands #4, 12 and 27, mitigation measures should be utilized to re-establish these species in consultation with Alberta Environment and Parks;
- 4.7.6 In order to mitigate impacts on bird species at risk, construction activity should be limited to times outside of the peak breeding season (May-July) in compliance with the Migratory Bird Convention Act;
- 4.7.7 Impacts on any of the identified wetlands shall require minimization and/or compensation of impacts and approval to construct shall be in accordance with Alberta Environment and Parks approvals under the Water Act;
- 4.7.8 Wetlands shall be classified according to the Alberta Wetland Classification System to the satisfaction of Alberta Environment and Parks;
- 4.7.9 Value of the wetlands shall be established based on the Alberta Wetland Rapid Evaluation Tool – Actual (ABWRET-A) Manual to the satisfaction of Alberta Environment and Parks;
- 4.7.10 Wetland compensation / mitigation proposal shall be based on the Alberta Wetland Mitigation Directive to the satisfaction of Alberta Environment and Parks; and
- 4.7.11 Water Act approvals shall be required after the completion of the Wetland classifications, value assessments and compensation / mitigation proposal has been accepted by Alberta Environment and Parks.

4.8 Reserve Analysis

A reserve analysis has been prepared to determine the amount, type, and use of reserves owing within Painted Sky. Areas to be dedicated ER, MR and MSR are shown on Figure 5. Concept Plan. The amount of land to be provided for municipal reserve will be equal to 10% of the Net Developable Area of the titled parcel(s) in accordance with Section 666 of the Municipal Government Act. MR can be a land dedication or can be paid as cash-in-lieu to Rocky View County. The Total MR and MSR dedicated is 25.30 +/- acres (+/- 10.24 hectares). The balance of the MR and MSR owing will be paid as cash-in-lieu.

Table 4 | Reserve Analysis

	+/- ac	+/- ha
Gross Developable Area (GDA)	266.65	107.91
Less Environmental Reserve (ER)	13.69	5.54
Net Developable Area (NDA)	252.96	102.37
MR Outstanding (@ 10%)	25.30	10.24
MR Dedicated	14.18	5.74
MSR Dedicated	11.12	4.50
Total Dedicated (MR & MSR)	25.30	10.24
Balance (to paid as cash-in-lieu)	0.0	0.00
MR remaining (10%)	0.00	0.00

Policies

- 4.8.1 Municipal and Environmental Reserve shall be provided as per the Reserve Analysis, and confirmed at the time of Subdivision;
- 4.8.2 Multi-purpose and joint use parks and recreation facilities will be encouraged wherever possible; and
- 4.8.3 Municipal Reserve (MR) and Municipal School Reserve (MSR) shall be dedicated and the balance owing paid as cash-in-lieu to Rocky View County as determined at the subdivision stage to the satisfaction of Rocky View County.



4.9 Emergency Services

The Painted Sky land use concept has addressed fire and protection (police) response measures and on-site firefighting requirements through consideration of such factors as efficient road design, safe and efficient access for emergency service vehicles, wildland fire protection, and fire control measures.

The Hamlet of Langdon is served by a volunteer fire department located within the Hamlet. This fire department will be the primary response for the Plan Area.

Police services are provided by the emergency dispatch center in Calgary (911). Rocky View County Peace Officers enforce selected government acts and municipal bylaws.

Emergency Response is dispatched through the local volunteer Fire Department in Langdon. The fire station is located at Railway Avenue and east of Centre Street.

These emergencies are directed to medical facilities in the City

of Calgary. The Plan area is located within 20-30 minutes of two major hospitals, namely the Peter Lougheed Centre and the South Health Campus.

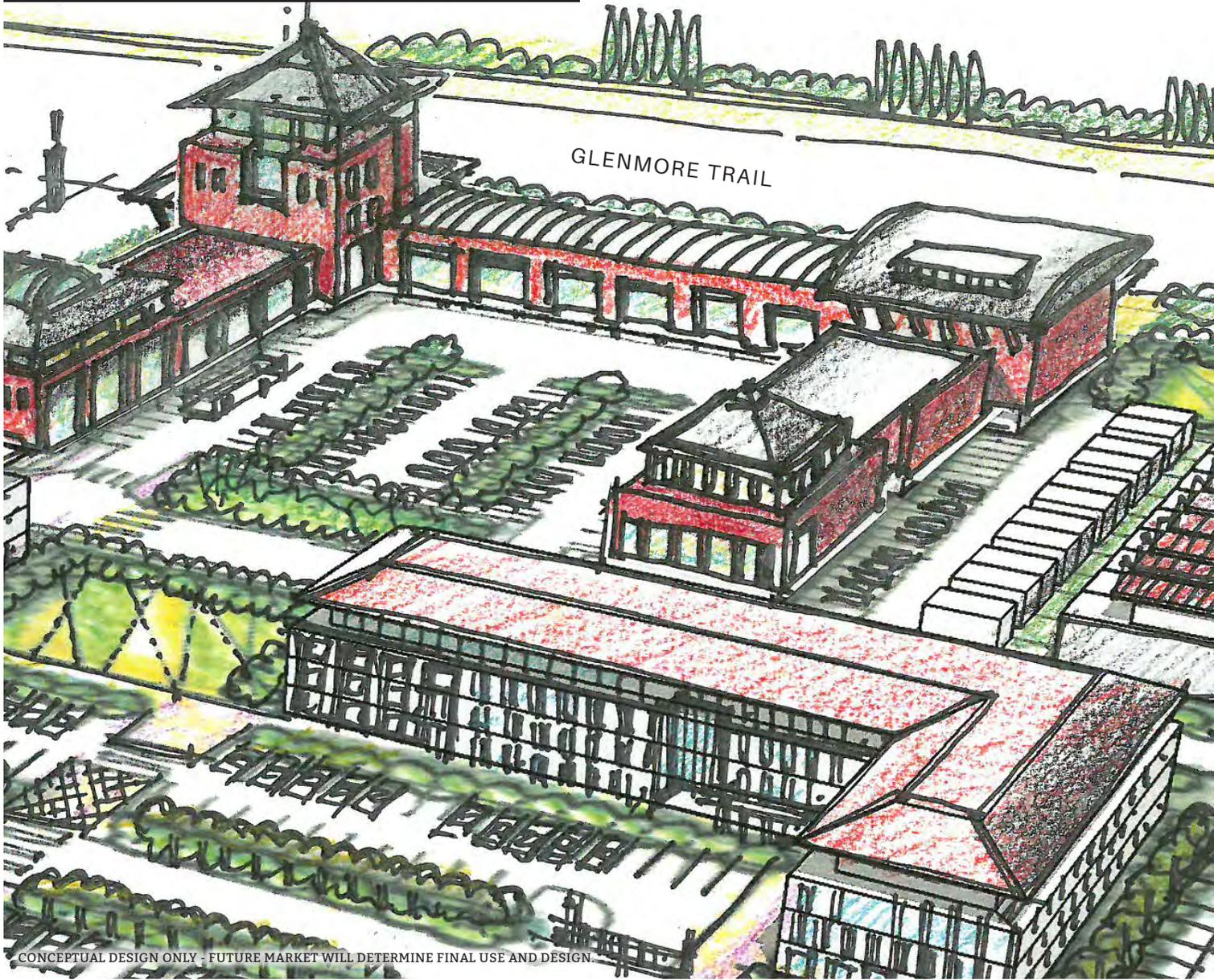
Policies

- 4.9.1 Crime Prevention Through Environmental Design features should be considered and incorporated into the design and construction of all new development, wherever possible; and
- 4.9.2 At the subdivision stage, water supply for fire suppression purposes must be provided.

Conceptual rendering of proposed Langdon Fire Hall



Sketch Conceptualization of Proposed Emergency Services



CONCEPTUAL DESIGN ONLY - FUTURE MARKET WILL DETERMINE FINAL USE AND DESIGN.

4.10 Transportation

The regional transportation system has been developed in general accordance with Map 8 of the Langdon ASP. The classifications of the grid road network have been refined through further transportation analysis. Where required, Painted Sky accommodated existing and / or potential changes in access to the provincial transportation network, as identified on Map 8 of the Langdon ASP.

The designation and design of local roads within the transportation network, including classification, street sizing, and intersection / access spacing, were determined during the preparation of Painted Sky. A Traffic Impact Assessment was prepared by Bunt and Associates in July 2016 to accompany the Painted Sky Local Plan in alignment with the Langdon ASP.

Regional Transportation Network

Access to the Painted Sky development will be from Vale View Road, Railway Avenue and Brander Avenue. Direct connections are provided between neighbouring residential areas and key destinations such as Centre Street and existing and planned schools within Langdon

Presently, Vale View Road and Railway Avenue are classified as Regional Low Volume Roads (As noted in the Langdon Network Analysis, prepared February 23, 2016, by Watt Consulting Group). Based on the results of the Langdon Network Analysis, Watt Consulting has recommended that:

- 1] Railway Avenue be upgraded from Centre Street to Vale View Road to an Urban Residential Collector (with protection for a 27m Right-of-Way) prior to the 2020 Horizon.
- 2] Vale View Road is also recommend to be upgraded to a 2-Lane Regional Arterial Roadway, with a 30m Right-of-Way, prior to the 2020 Horizon.

A Transportation Impact Assessment was prepared for the Painted Sky development by Bunt & Associates in July, 2016. The primary objectives of this study was to determine:

- Expected site generated traffic volumes for the proposed uses at 2020, 2030 and 2040 horizons based on the Institute of Transportation Engineers (ITE) Manual.
- Assign expected site generated traffic volumes to the road network based on anticipated site traffic distribution.
- Complete capacity analysis for post-development horizons during AM and PM peak hours at the following intersections:
 - Highway 797 (Centre Street North) / Highway 560
 - Centre Street North / Brander Avenue
 - Centre Street North / Railway Avenue (Township Road 233A)
 - Vale View Road / Railway Avenue
 - Vale View Road / Highway 560
 - Access points onto Vale View Road and Railway Avenue

The key recommendations provided by Bunt are as follows:

Intersections:

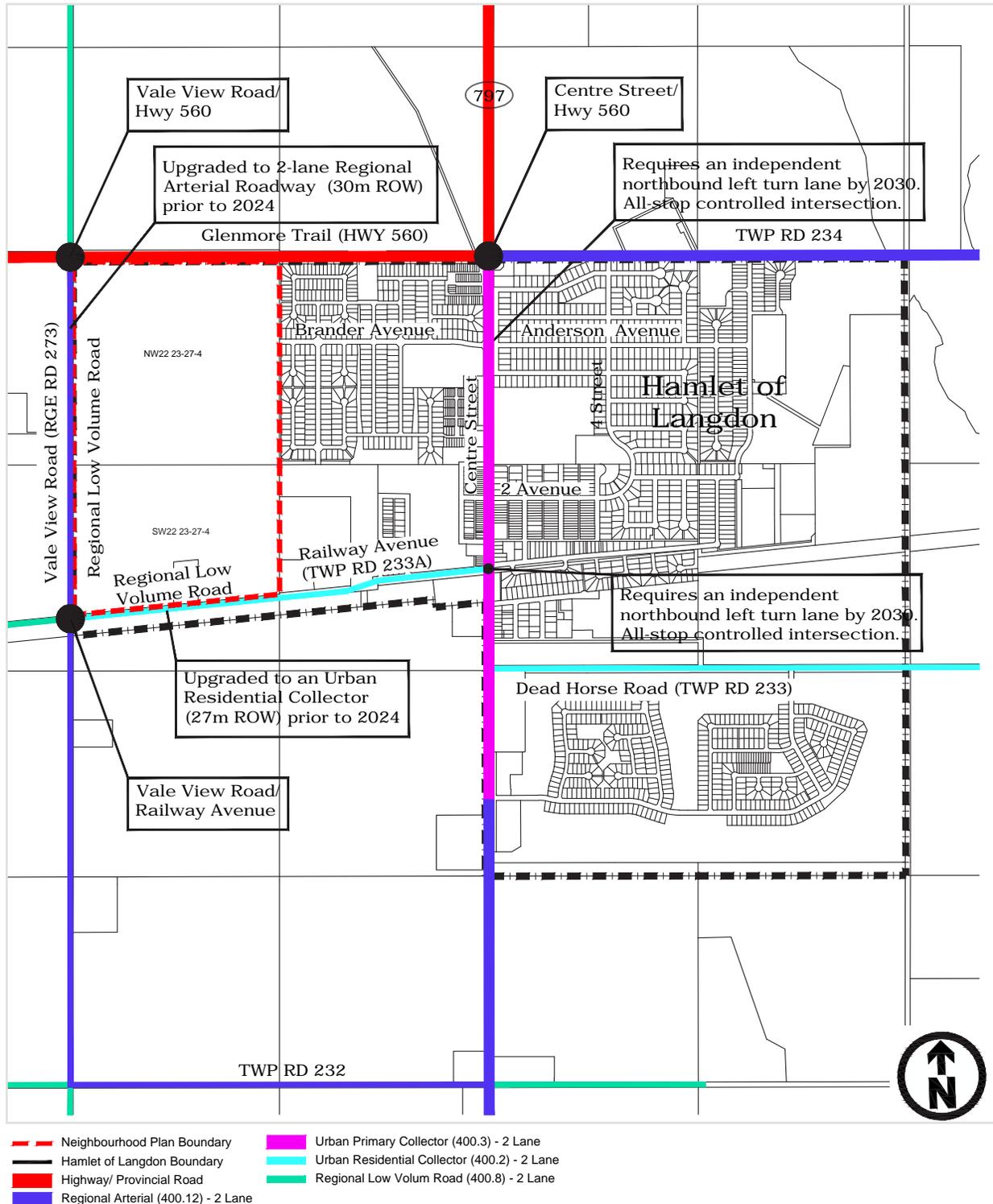
2020 – All intersection noted in the Langdon Network Analysis will operate at optimal conditions and no improvements will be required at the 5 year horizon.

2030 – Intersection of Centre Street / Railway Avenue will require an independent northbound left turn lane. Intersection to function optimally as an all-stop controlled intersection.

2030 – Intersection of Centre Street / Brander Avenue will require an independent northbound left turn lane. Intersection to function optimally as an all-stop controlled intersection.

2040 – All intersections noted in the Langdon Network Analysis will operate at optimal conditions and no improvements will be required.

Figure 9 | Regional Transportation Plan Off-Site Improvements



Internal Road Network

The internal road network for the proposed Painted Sky development shall consist of core collector standard, urban residential roadways and paved lanes.

Collector roadways will be designed with separate sidewalks on both sides of the street, linking the internal sidewalk and pathway network to municipal reserve lots, the future school site and to the regional pathway network. Boulevards along the collector roadways will be landscaped and planted to maximize the pedestrian experience. Residential streets will be constructed with monolithic sidewalk on one side of the street.

Painted Sky will be serviced by two east / west collector roadways and one north / south urban collector roadway. There will be two transportation connections to each of Vale View Road and Railway Avenue.

Roundabouts and other measures as seen in existing development to the east, will be incorporated to provide traffic calming. Roundabouts will be constructed at the intersection of the collector roadways to improve the efficiency of these intersections and movement of traffic while slowing traffic through the neighbourhood.

Rendering of typical street proposed for Painted Sky



Policies

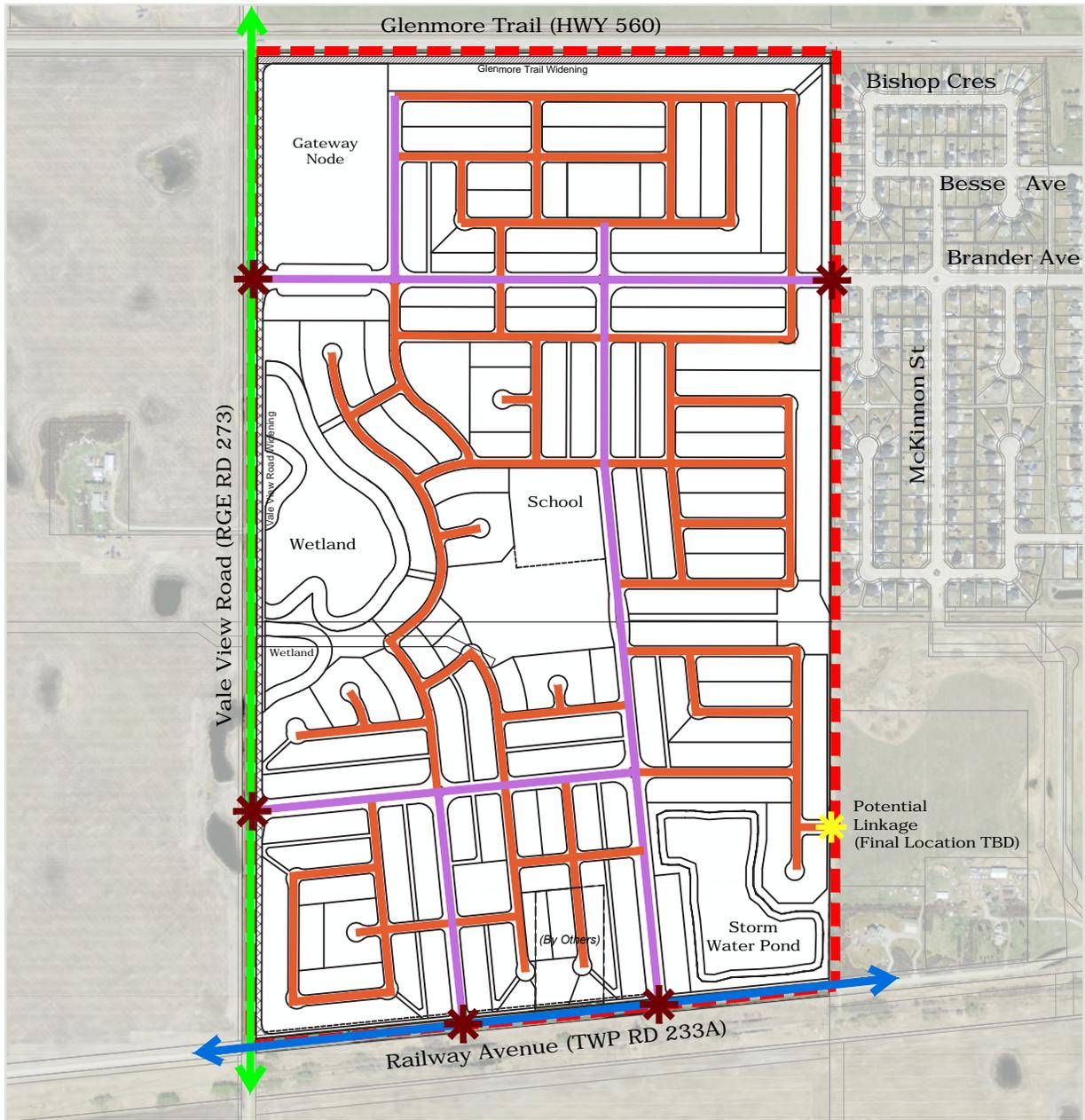
General

- 4.10.1 A Transportation Impact Assessment may be required as part of the subdivision application for each phase if deemed necessary;
- 4.10.2 A Transportation Impact Assessment may be required for the Gateway Node proposed in Phase 10 if deemed necessary;
- 4.10.3 Collaboration with the Province regarding regional road connections and access to Highway 560 shall occur at each phase of subdivision and Alberta Transportation shall be circulated for comment;
- 4.10.4 The proposed transportation network shall be designed to support an interconnected road and pedestrian system and promote a range of travel options;
- 4.10.5 Roads, pathways, and trails shall connect adjacent neighbourhoods and accommodate a range of users, including pedestrians, cyclists and vehicles;
- 4.10.6 The proposed transportation networks shall encourage alternative forms of transportation and be comprised of roads, sidewalks, pathways and trails;
- 4.10.7 The road classification and layout may be refined through further transportation analysis at the time of subdivision application. Minor changes or modifications will not require an amendment to this Neighbourhood Plan;

Regional Transportation Network

- 4.10.8 Development shall provide required road rights-of-way and road widenings in collaboration with Alberta Transportation and Rocky View County and shall be dedicated in Phase 1;

Figure 10 | Transportation Plan



- | | |
|--|---|
|  Neighbourhood Plan Boundary |  Core Collector (10.6m/21.0m R/W) |
|  Urban Residential (9.0m/15.0m R/W) |  Regional Arterial (10.0m/36.0m R/W) |
|  Country Collector (8.0m/25.0m R/W) |  Key Access Points |
|  Road Widening |  Potential Future Linkage (TBD) |

- 4.10.9 All boundary roadway and future intersection upgrades shall be designed in conformance with Rocky View County and Alberta Transportation design guidelines;
- 4.10.10 Noise Impact/Attenuation studies may be required at the time of subdivision and/or development permit for lands adjacent to and south of Highway 560 in order to determine if and when an interface treatment between adjacent lands and the roadway is required.
- 4.10.11 All boundary roadways shall be designed in conformance with the recommendations contained within the Langdon Network Analysis;
- 4.10.12 All applicable transportation off-site levies shall be collected upon endorsement of each phase of subdivision;
- 4.10.13 Agreements respecting oversize improvements (cost sharing / endeavour to assist) will be considered in collaboration with the County to ensure any benefiting or excess capacity resulting from required infrastructure improvements is appropriately compensated;

Internal Road Network

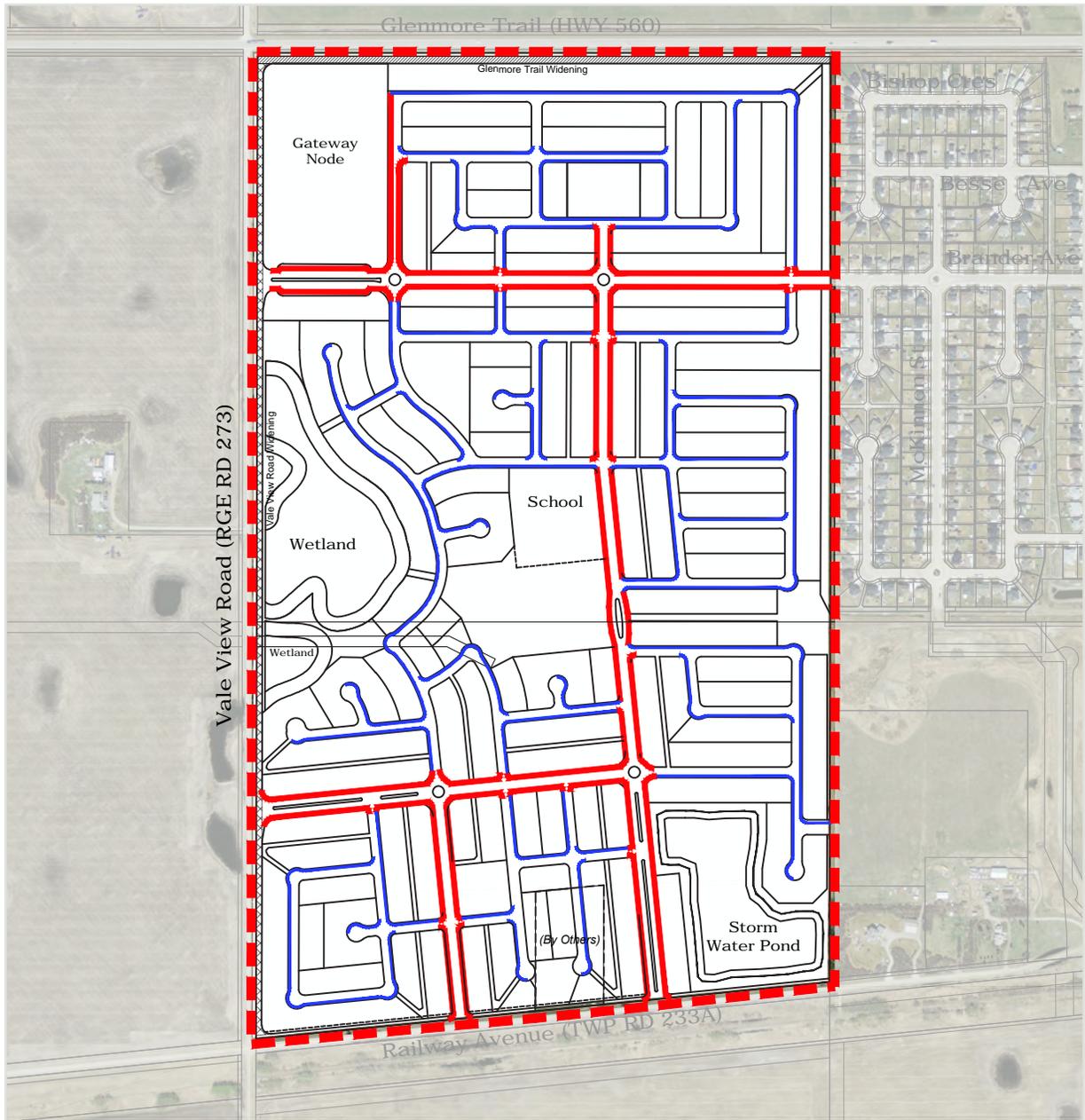
- 4.10.14 Vale View Road should be developed as a regional arterial road for industrial use to encourage the separation of residential, commercial, and industrial traffic;
- 4.10.15 The proposed internal road network should facilitate connectivity within and between the adjacent neighbourhoods of Langdon Crossings West and Mornington;
- 4.10.16 Further consultation with the developer of the planned neighbourhood of Mornington should occur respecting transportation connections for multi-use transportation options (ie. Pedestrian, Cycle and Vehicle);

- a. Prior to the approval of the subdivision application of Phase 5 by the Subdivision Authority, the proposed connection with the Mornington neighbourhood should be reviewed to determine if it is required;

- 4.10.17 Internal collector roadways should be designed and constructed to a Neighbourhood Core Collector Standard. (RVC Servicing Standard 800.7) A modified cross section for this roadway will be submitted by the developer to allow for a 21.0m Right-of-way;
- 4.10.18 Residential streets should be designed and constructed to an Urban Residential standard, (RVC Servicing Standard 400.1);
- 4.10.19 All internal roadways shall be designed and constructed in accordance with Rocky View County Servicing Standards;
- 4.10.20 Alternative standards shall be considered for internal roadway systems, provided they are coordinated with and, where necessary, separated from parks, pathways, bicycle trails, natural areas, and residential development in a safe, efficient, and logical manner;
- 4.10.20 Roadside signage and street lighting shall meet or exceed minimum Rocky View County Servicing Standards and shall be compatible with the character of the community.



Figure 11 | Pedestrian Circulation



- Neighbourhood Plan Boundary
- Separate Sidewalk
- Road Widening
- Monowalk

Figure 12 | Collector Cross Sections for Local Roadway

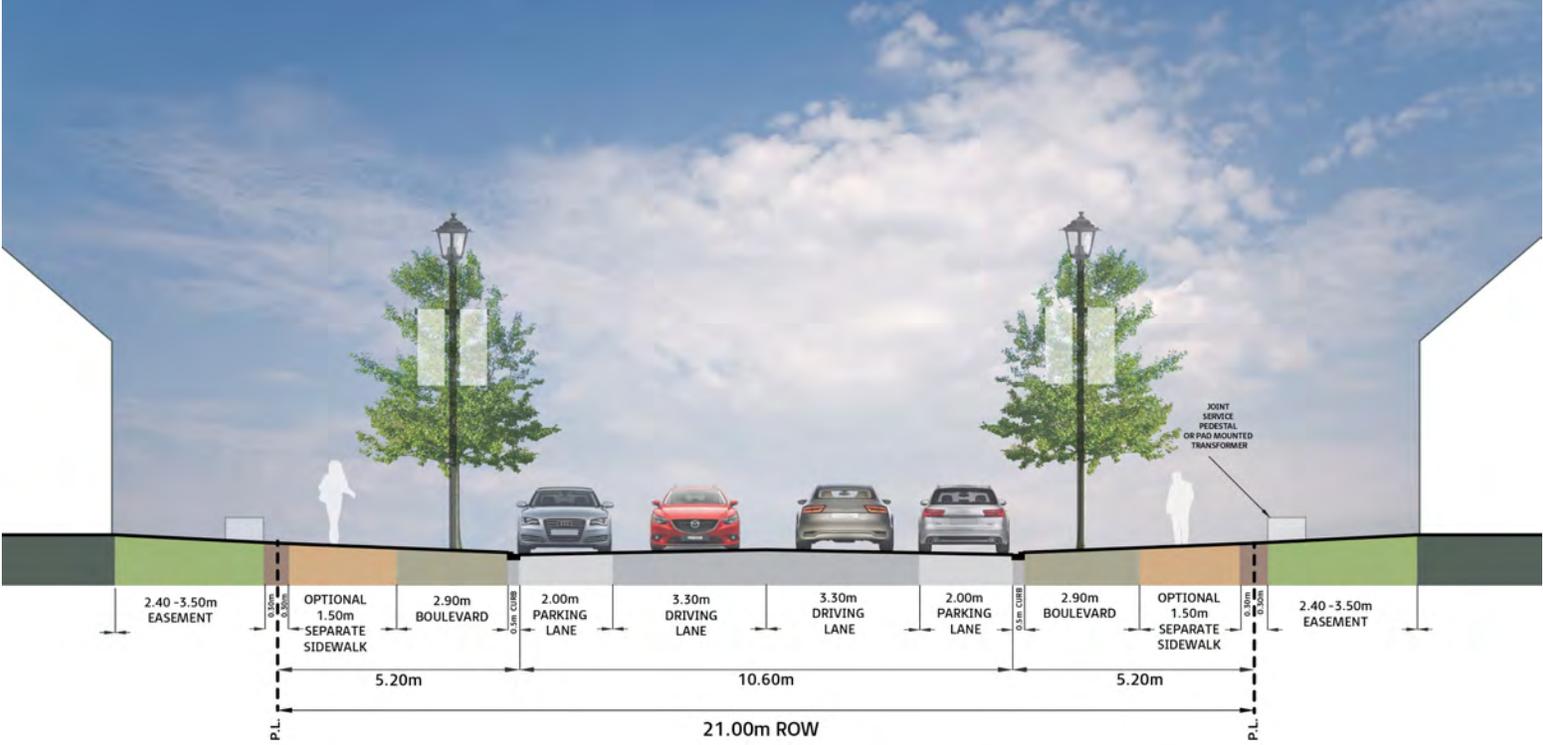
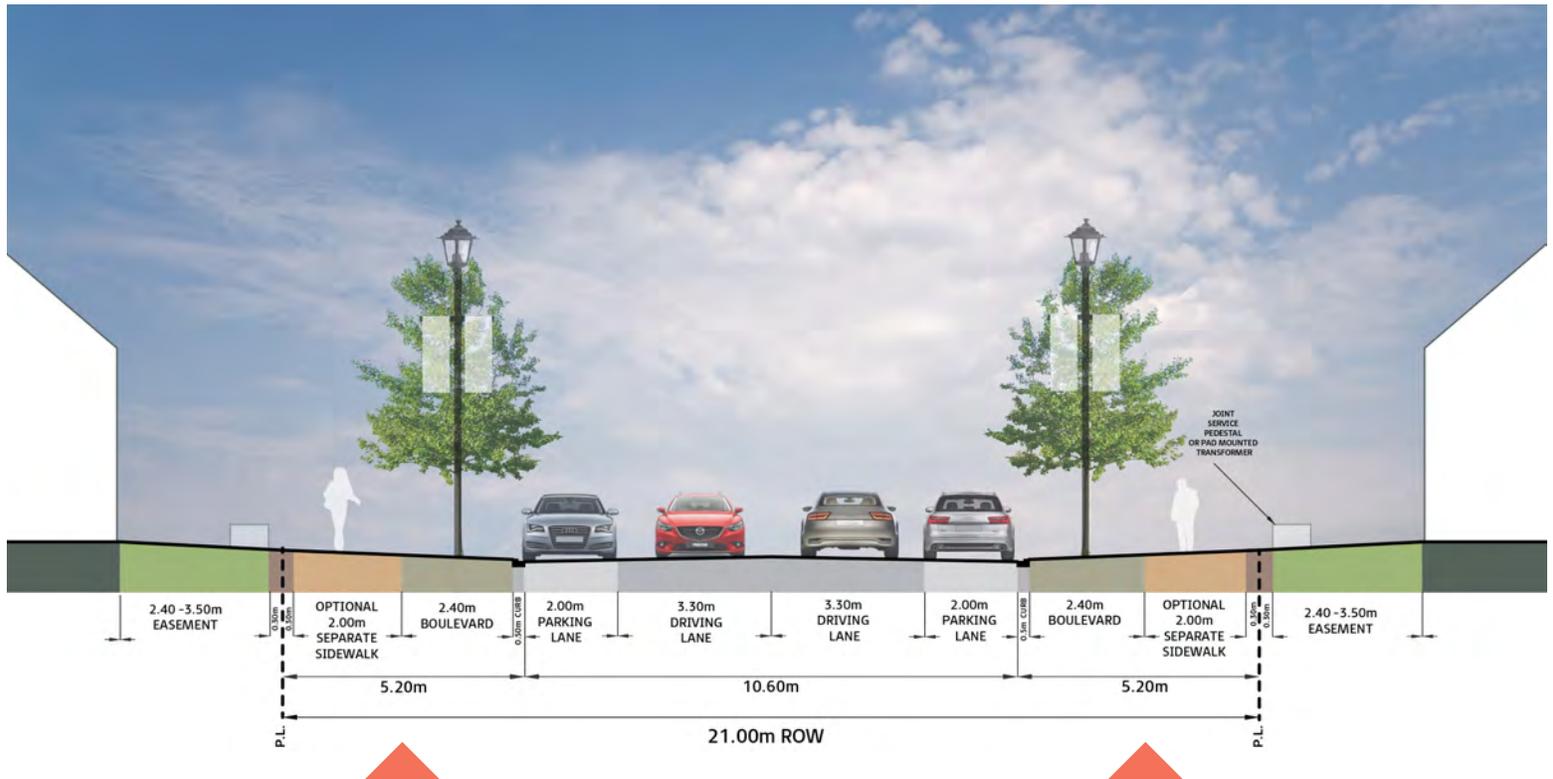


Figure 13 | *Collector Cross Sections for Brander Avenue*

The difference between the two cross sections is found within the width of the boulevard. The boulevard is narrowed to 2.40m from 2.90m. This difference of 0.50m is transferred into the optional separate sidewalk, to ensure the overall ROW of 21.00m is met. The optional separate sidewalk is expanded from 1.50m to 2.00m. This expansion will give pedestrians greater mobility throughout Painted Sky and will encourage increased usage.

4.11 Utility Services

Utility Infrastructure has been planned to support the proposed land use concept in order to provide essential services to the future residents within the Painted Sky neighbourhood. Utilities will be provided in an efficient and cost-effective manner, through logical extension of existing services.

The general location and size of utility rights-of-way, and line assignments, have been determined through the preparation of Painted Sky to the mutual satisfaction of the County, the developer, and franchise utilities (natural gas, electricity, telecommunications).

Potable Water Supply

A Water Use Assessment has been prepared by BSEI to determine water demand and infrastructure requirements.

Water supply systems for the Hamlet of Langdon all access groundwater sources for potable water. Components of the water distribution system include groundwater supply wells, a treatment facility, pumps for distribution and fire flow, and conventional piping, valves and hydrants.

Water supply has been confirmed with Langdon Waterworks to service this development and provision of services will be verified with application for each phase of subdivision. Provision of water to each phase will be planned in association with Langdon Waterworks infrastructure projections and the staged upgrading of their water treatment plant and distribution system.

Shallow Utilities

Painted Sky will be fully serviced at each phase with shallow utilities (natural gas, electricity, and telecommunications). Expansion and connection to each utility will be provided by extensions to existing services in the area.

The current water supply system has sufficient capacity to service the required demand anticipated for the initial phases of development. Section 5.5.1 of the Langdon Infrastructure Report (Sim-Flo Systems Inc. April 5, 2015) identified staged upgrades for the water treatment plant to meet the future growth projected for the servicing area. With the completion the Stage 1 upgrade, Langdon Waterworks will be able to service the entire Painted Sky development.

Two primary connection points to the existing Langdon network is planned, with the installation of a 300mm water main that will create an internal grid main network. One connection will be located at the west end of Brander Avenue. The second connection will be adjacent to the West Wastewater Lift Station, north of Railway Avenue and west of Cowan Street.

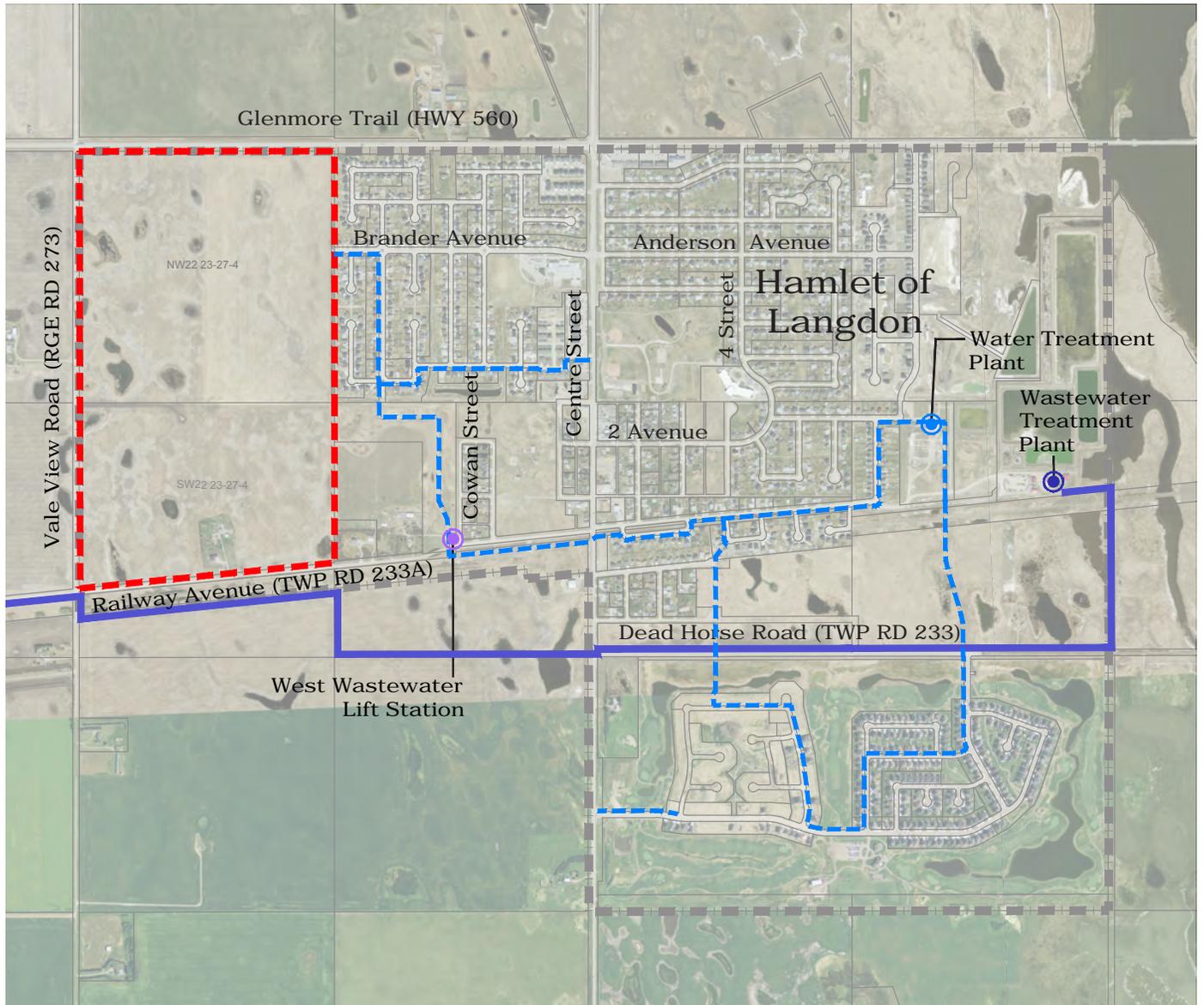


Minimum Projected Average Day water Demand of 950L/day/unit.



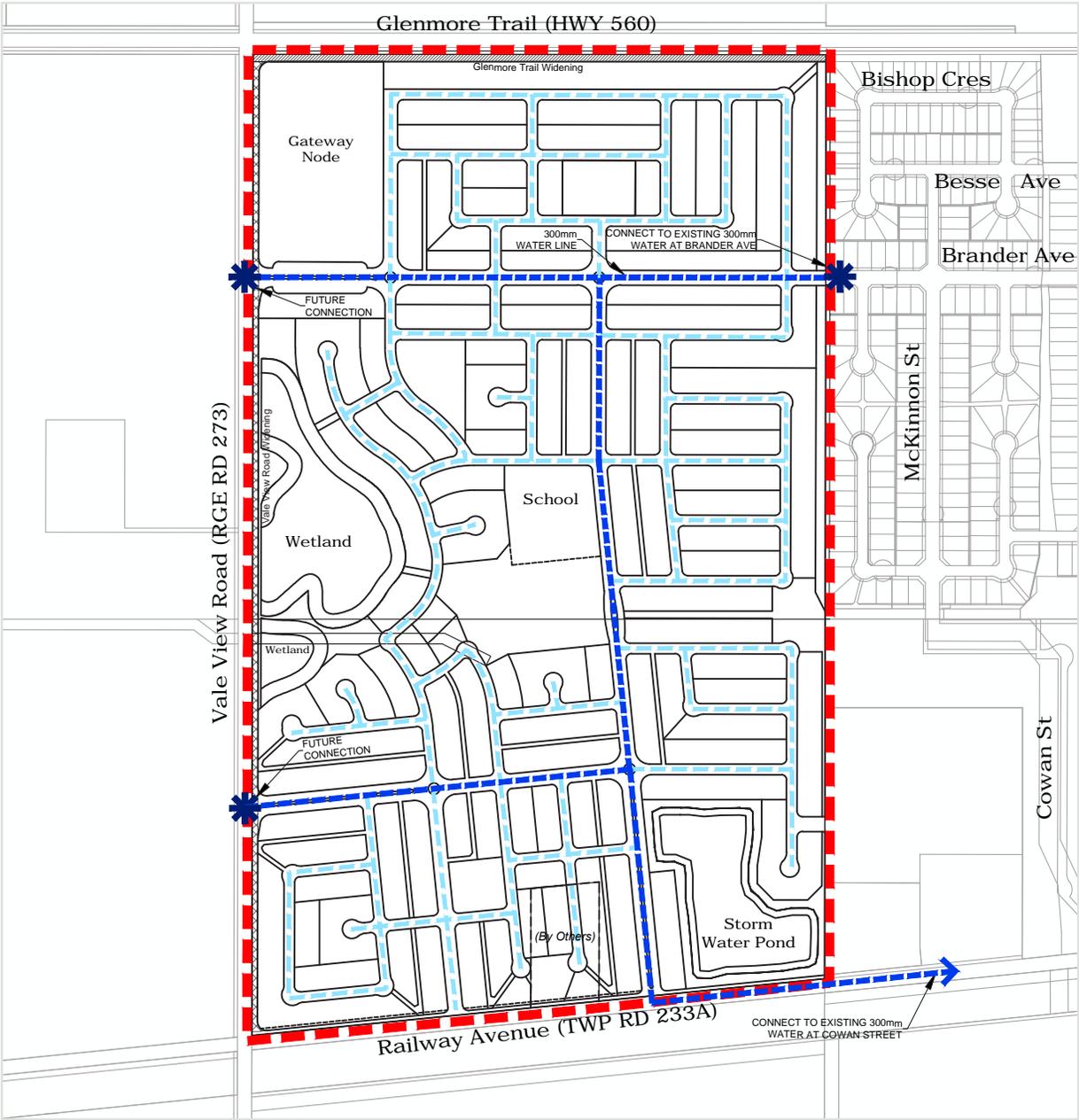
Water use projections for the proposed Painted Sky development are approximately 458,000m³/year.

Figure 14 | Regional Water & Sanitary Servicing



- - - Neighbourhood Plan Boundary
- Hamlet of Langdon Boundary
- Wastewater Transmission Main
- - - 300mm Water Main

Figure 15 | Water Servicing Plan



- Neighbourhood Plan Boundary
- Proposed Water Distribution System (Various Sizes)
- Proposed W300mm PVC
- Road Widening
- Connection

Wastewater / Sanitary Sewers

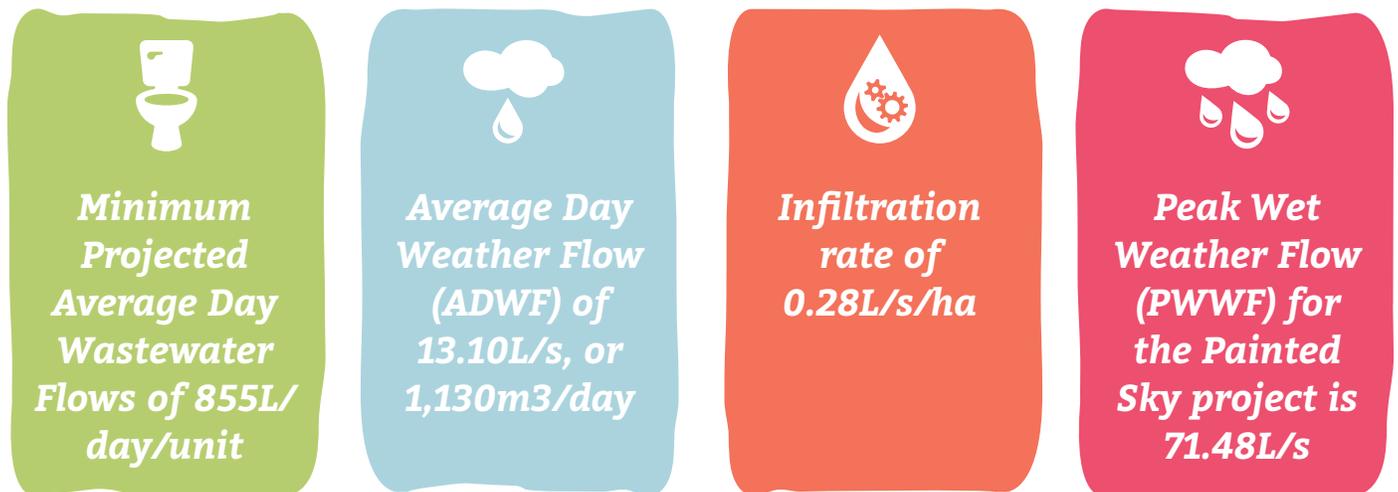
Wastewater servicing for the Langdon occurs by way of a wastewater sewage collection system and wastewater treatment facilities owned and operated by Rocky View County.

The existing west sanitary lift station currently services the west side of Langdon. It was anticipated that the lift station was adequate to accommodate Painted Sky. Analysis of the west lift station, however, has determined that it is currently being utilized to its maximum capacity and cannot be upgraded to service the Painted Sky development.

Consequently, wastewater generated by the Painted Sky development will be conveyed via gravity to a proposed new wastewater lift station located adjacent to the storm pond in the southeast portion of the plan area. The proposed lift station will

convey the wastewater flow via force main to the 600mm force main that connects Balzac to the Langdon Wastewater Treatment Facilities with ultimate discharge of treated effluent being released into the Weed Lake wetland.

As growth continues within the community, upgrading of the existing wastewater facilities will be required. A Wastewater Servicing Study has been provided by BSEI Engineering to determine wastewater demand and infrastructure requirements.



Water Conservation

Langdon Waterworks philosophy is to consider water as a precious and important resource and one that should be used as sparingly and as efficiently as possible. Proper water stewardship benefits the environment in many ways; including reduced sewage treatment and disposal needs and costs, an increase to servicing capacity, reduction of energy and chemical costs, and the reduction of wasting water in general. This respect for water has been incorporated into the design of the Painted Sky

neighbourhood.

As a part of the EQWell program, all new residential and business construction will have dual-flush toilets and low flow fixtures. This aids in the reduction of potable water demands daily, and ensures that less water is wasted. Water conservation methods will be incorporated into the design of the water distribution and delivery to new construction and homes within the development.

Figure 16 | Sanitary Plan



-  Road Widening
-  Proposed 300mm Forcemain
-  Existing 600mm Forcemain
-  Potential Future Connection
-  Lift Station

Policies**General**

- 4.11.1 The County shall determine servicing wastewater capacity requirements and allocation within and external to Langdon.
- 4.11.2 Potable water and wastewater systems are to be provided in a safe, cost-effective, and fiscally sustainable manner;
- 4.11.3 The County and the water supplier shall determine potable water capacity requirements and allocation within the Langdon;
- 4.11.4 Painted Sky will abide by current and future water conservation practices and methods;
- 4.11.5 Utility rights-of-way and easements shall be provided to accommodate County and potable water utilities and shallow utilities at the subdivision or development permit stage, as deemed necessary;
- 4.11.6 The costs to extend all required utility infrastructure as well as offsite costs deemed necessary by the County to serve the proposed development, shall be the responsibility of the developer;
- 4.11.7 Cost recovery for utility oversizing as required by Rocky View County will be negotiated and any benefiting users and/or landowners will be required to share in construction and operating costs;
- 4.11.8 All submissions shall be circulated to Alberta Environment and Parks for review and comment in accordance with the "Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems;"

Shallow Utilities

- 4.11.9 Each phase of the development shall be fully serviced with private shallow utility systems such as electrical, natural gas, and telecommunications;
- 4.11.10 Locations for easements and line assignments for shallow utility extensions shall be determined at the subdivision endorsement stage;

Water

- 4.11.11 A Water Use Assessment shall be reviewed with subdivision applications, and / or development permit applications to determine water demand and infrastructure requirements in order to confirm that sufficient potable water is available to service the proposed development;
- 4.11.12 The detailed design for the Painted Sky water distribution system, on a per phase bases, shall be completed in accordance with the current Rocky View County Servicing Standards, and all applicable provincial guidelines;
- 4.11.13 Applications for subdivision and development should include design elements that facilitate fire prevention methods and accessibility by emergency response vehicles for the suppression of fire, and the enhancement of police protection including, but not limited to, adequate site access and property identification;

Wastewater

- 4.11.14 The Wastewater Servicing Study shall be reviewed and updated to determine wastewater demand and infrastructure requirements to confirm that sufficient wastewater treatment capacity exists to service the proposed development;
- 4.11.15 The detailed design for the Painted Sky wastewater collection system shall be completed in accordance with the current version of the Rocky View County Servicing Standards, and all applicable provincial guidelines;
- 4.11.16 The detailed design shall incorporate measures to mitigate groundwater infiltration into the wastewater collection system;
- 4.11.17 The proposed wastewater lift station and force main shall be designed in accordance with Rocky View County and Alberta Environment and Parks design guidelines.

4.12 Stormwater and Geotechnical Considerations

A Staged Master Drainage Plan (SMDP) has been submitted under separate cover and has been designed to conform to the approved Master Drainage Plan for Langdon, County Policy and Servicing Standards, Langdon Comprehensive Stormwater Review and Provincial regulations. A geotechnical assessment was also completed to determine the appropriate stormpond requirements. The assessment also includes recommendations for other structures and for this reason these are also included in this section. At the time of subdivision, the stormwater report and pond design will be updated to implement new geotechnical data obtained through groundwater monitoring and further recommendations from the geotechnical consultants regarding lining requirements for the pond and canal system.

On-Site Stormwater Management

The Painted Sky stormwater management system will be comprised of major / minor collection and conveyance systems that will direct stormwater flow to a stormwater retention facility (storm pond) located in the south east portion of the planning area.

Discharge from the proposed Painted Sky wet pond will be pumped at a controlled rate of 1.65L/s/ha through a force main that will connect to the existing overland drainage ditches along the south side of Railway Avenue and on to Weed Lake. Best Management Practices will facilitate the implementation of a volume control target of 40mm. A sedimentation fore-bay will be incorporated into the storm pond design to treat stormwater to Alberta Environment targets, prior to release into the Langdon conveyance system.

Off-Site Stormwater Management

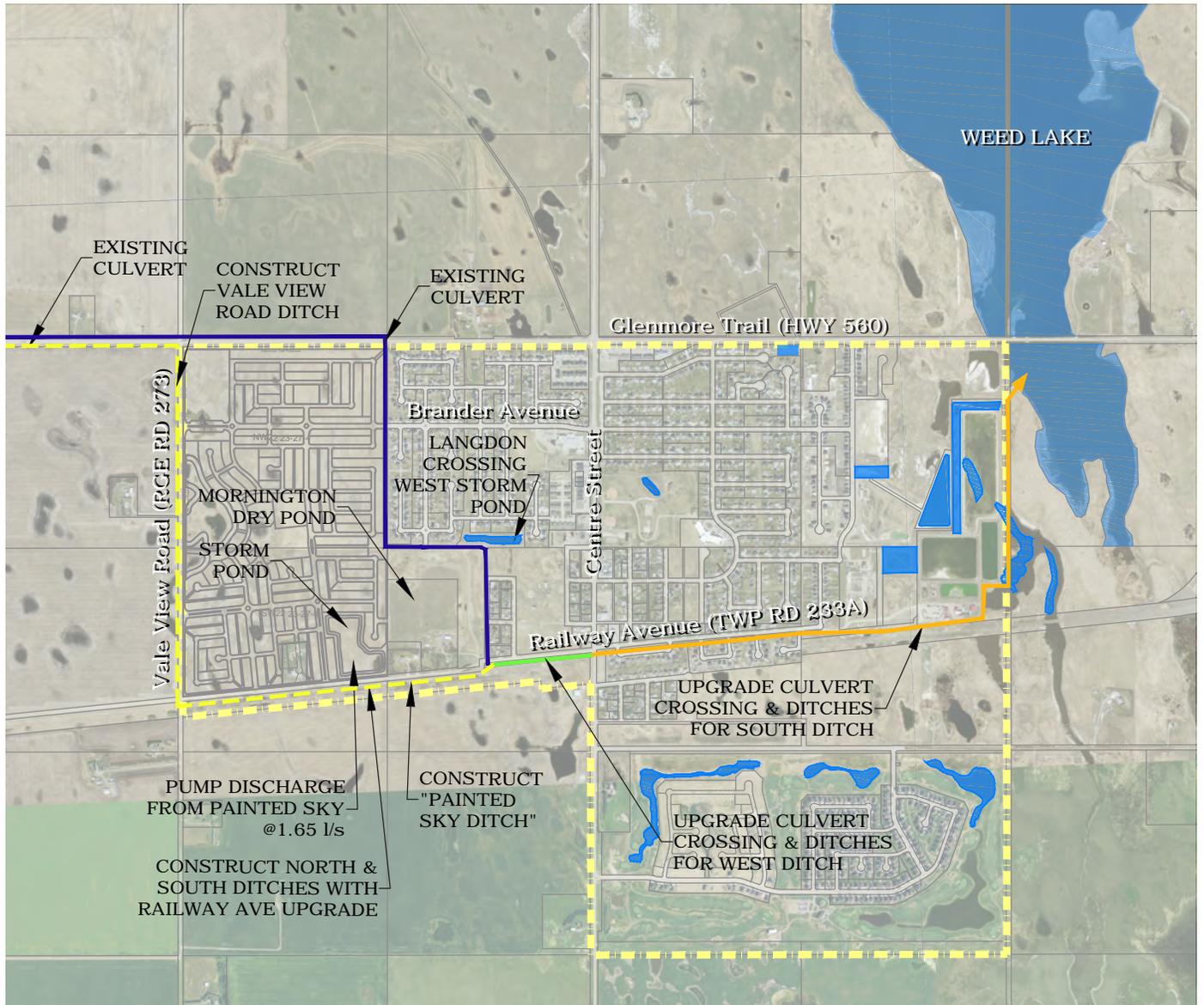
The Painted Sky storm pond will be designed as a wet pond and sized to accommodate up to a 1:500 year storm event. The volume of the Painted Sky Pond has allowed for contribution from off-site lands including portions of Vale View Road and the future development of the former railway lands lying to the south of the Painted Sky Planning area (south of Railway Avenue).

It has been presumed that the future Mornington residential development, which is located immediately to the east of the proposed stormwater pond, will not contribute stormwater as the currently approved Conceptual Scheme for this area notes that the stormwater from the Mornington Dry Pond will be released into the West Ditch, via the Langdon Crossing West Wet Pond. However, it is recognized that these lands remain undeveloped and could be subject to revisions in the future. The placement and sizing of the Painted Sky stormwater pond can accommodate alternate design criteria if required, in consultation with the developer of the adjacent lands and the County.

Environmental Mitigation Measures

As part of the ongoing commitment to environmental stewardship, Painted Sky will include Low Impact Design (LID) measures that could be implemented during detailed design to further improve the water quality being discharged from Painted Sky. An analysis has also been conducted in order to supply the existing high valued wetland with sufficient water to ensure the wetland survival. This is achieved by directing good quality storm runoff from back of lots, MR sites and adjacent roads, that will try mimic pre-development water level conditions.

Figure 17 | Regional Storm Discharge & Off-Site Improvements



- - - Neighbourhood Plan Boundary
- - - Hamlet of Langdon Boundary
- ▭ Storm Pond
- West Ditch
- South Ditch
- East Ditch
- - - Proposed Ditch

Figure 18 | Stormwater Servicing Plan



- - - - - Neighbourhood Plan Boundary
- Road Widening
- - - - - Proposed Storm Sewer Collection System (Gravity - Various Sizes)
- * Storm Water Lift Station
- Proposed 300mm Forcemain

Policies

- 4.12.1 All proposed subdivision applications shall be supported by a Stormwater Management Plan;
- 4.12.2 Stormwater management and infrastructure shall be designed and constructed in accordance with the approved Master Drainage Plan, County Servicing Standards, County Policy, Langdon Comprehensive Stormwater Review and Provincial regulations;
- 4.12.3 Stormwater management shall include conservation methods such as Low Impact Development (LID) and Best Management Practices (BMPs) and should incorporate stormwater reuse principles in subdivision and development designs;
- 4.12.4 Community and stormwater design should provide wetland treatment systems that improve the stormwater quality;
- 4.12.5 Stormwater shall be conveyed in a manner that protects downstream properties;
- 4.12.6 Stormwater conveyance systems must provide a right-of-way of sufficient width to accommodate upstream stormwater flow;
- 4.12.7 Existing stormwater drainage conveyance systems should be maximized, building on past infrastructure investments within the community;
- 4.12.8 The Staged Master Drainage Plan should be done in consultation with adjacent landowners contained within the Mornington Conceptual Scheme to ensure potential servicing opportunities are explored;
- 4.12.9 As a condition of subdivision, the applicant must provide verification of AESRD approvals and registration (EPEA) for the stormwater system;

- 4.12.10 As a condition of subdivision, the applicant will be required to prepare an erosion and sediment control (ESC) plan, identifying ESC measures to be taken to protect on-site wetlands and municipal infrastructure;
- 4.12.11 The applicant will be required to obtain all Water Act approvals from AEP for the disturbance of wetland areas prior to entering into a Development Agreement with the County;

Geotechnical Considerations

- 4.12.12 Perimeter weeping tile drainage at footing elevation is recommended for structures with below grade development;
- 4.12.13 All unheated structures should be founded at a depth of 2.1 metres below grade to protect against frost heave; footings within heated structures should be founded at a depth of 1.4 metres below grade;
- 4.12.14 Final site grading plans should be reviewed by a geotechnical engineer; and
- 4.12.15 Recommendations in this geotechnical analysis should be reviewed as part of the development process and specifically for construction of the stormpond.

4.13 Solid Waste & Recycling

Solid waste and recycling in Painted Sky will be managed during all stages of development. The Langdon waste transfer site will serve the Painted Sky Neighbourhood. The established curbside and disposal of solid waste will be expanded to serve this new neighbourhood.

Policies

- 4.13.1 The developer shall be responsible for the management and disposal of solid waste generated through all stages of construction and encourage opportunities to divert the range of material from landfill sites;
- 4.13.2 The Langdon Waste Transfer Site shall be the local site to serve the Painted Sky neighbourhood;
- 4.13.3 Residential development consisting of more than two attached dwelling units (e.g. rowhouses) shall coordinate lot layout with the County's Solid Waste and Recycling Services department to ensure that solid waste collection can be collected efficiently; and
- 4.13.4 Condominium residential development shall make their own arrangements for the proper removal and disposal of garbage, recyclables, and other waste materials, as per Rocky View County's Solid Waste Bylaw.

4.14 Oil and Gas

Development of Painted Sky along with the planned phasing of development will be coordinated with the decommissioning of existing petroleum and well facilities on site. There is currently a producing natural gas well and pipeline on the SW 1/4 of Section 22-23-27-W4M. The facilities are currently owned and operated by EMBER Resources Ltd. When the well surface lease reverts back to the property owner, Alberta provincial environmental law requires the well sites to be reclaimed in an appropriate manner. It is anticipated that the existing well and pipeline is anticipated to be decommissioned prior to the development of Phase 7.

A Land Development Information package from the AER was obtained and has identified the locations of all petroleum wells and pipelines (abandoned and operating) in the Plan area.

Policies

- 4.14.1 Appropriate development setbacks for the well and the pipeline apply shall be respected until such time the well has been abandoned and reclaimed to the standards required by the Alberta Energy Regulator (AER)
- 4.14.2 Crossing and access agreements shall be in place prior to conditional subdivision plan approval for lands encumbered by a pipeline right-of-way.
- 4.14.3 Pathways and other recreational uses may be allowed on pipeline rights-of-way with the consent of the easement holder and at the discretion of the Approving Authority.

Implementation

5.1 Plan Implementation

Implementation of the Local Neighbourhood Plan will be through the development process including subdivision and development permits. Architectural Controls will be developed to guide the development permit process.

Servicing constraints and market conditions will determine the lands that are able to develop. Development will progress in an orderly manner based on predetermined criteria in Section 27 of the Langdon ASP.

5.2 Phasing

Development of the Painted Sky Neighbourhood Plan will be phased in accordance with infrastructure improvements required, market timing and implemented in a logical and efficient order.

- As a condition of subdivision, the applicant will be required to provide a detailed landscaping plan for all open space and recreational areas associated to each proposed phase of development to the satisfaction of the County's Municipal Lands Department.
- A Construction Management Plan must be submitted for each phase as a condition of subdivision.
- As a condition of subdivision, the applicant will be required to implement a groundwater measurement program in accordance with the procedures and duration indicated in the County's Servicing Standards for each phase for consideration at the detailed design stage.

Appendix Interpretation

- 1] The appendices do not form part of this Neighbourhood Local Plan. The intent of the appendices is to provide information and guidelines to support the policies.

Infrastructure Costs and Levies

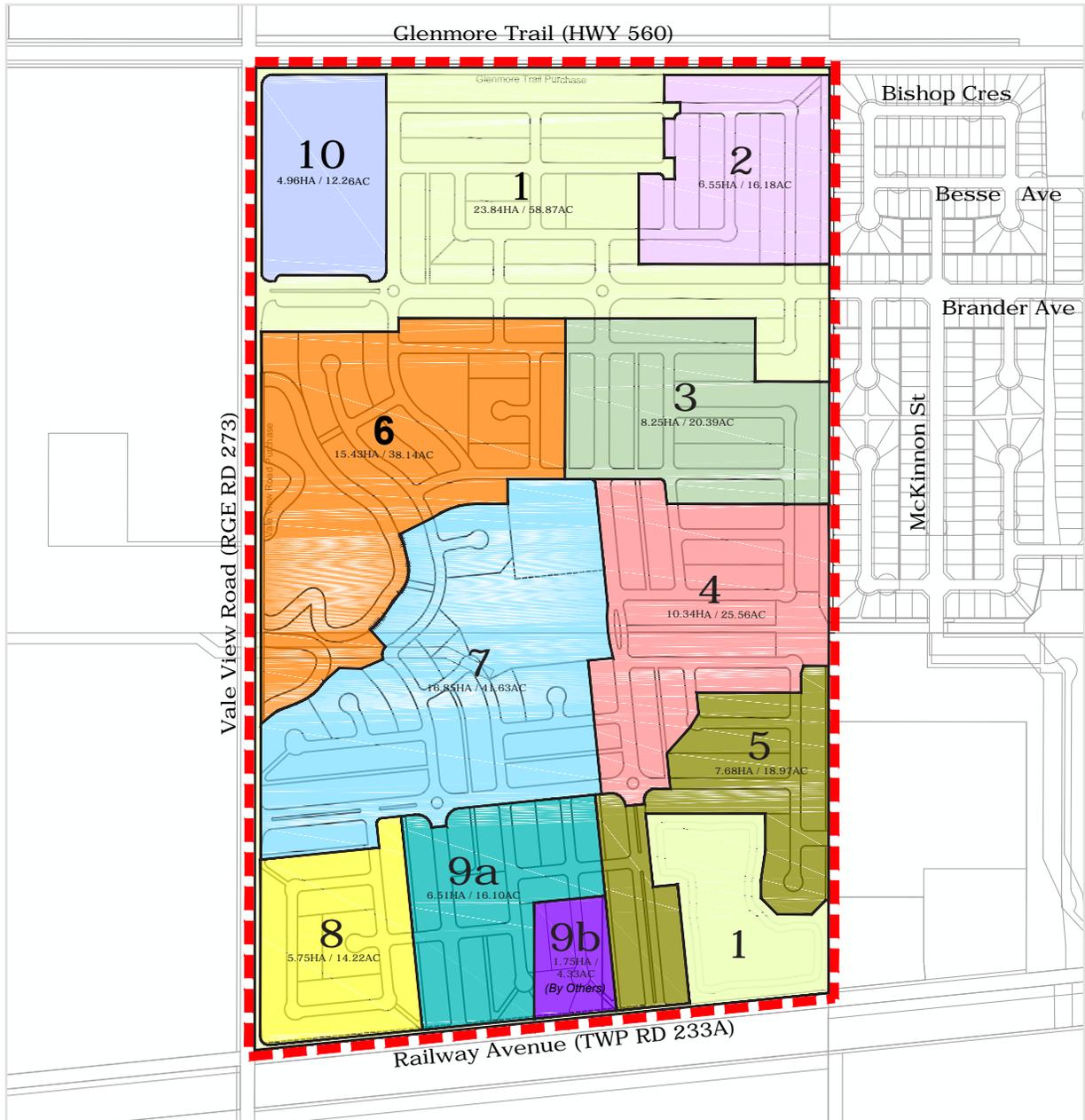
- 2] The identification, implementation and timing of any required off-site improvements and / or community services should be determined to the satisfaction of the County.

Policies

- 5.2.1 Phasing should be generally in accordance with the anticipated Phasing Plan;
- 5.2.2 The proposed Phasing Plan is conceptual only and will be confirmed at the time of subdivision; and
- 5.2.3 No amendments to this plan will be required due to changes in the boundary or number of phases.

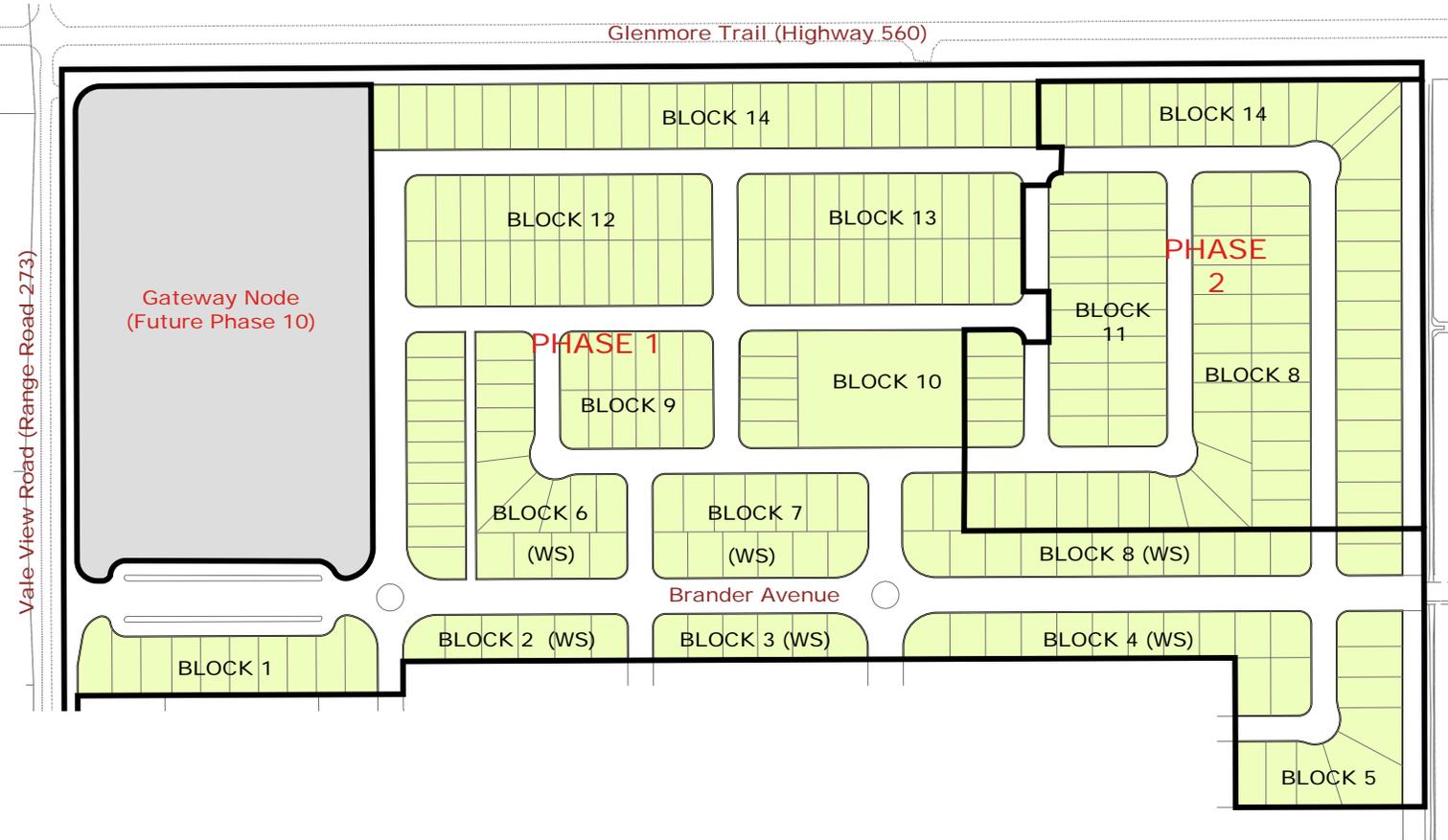


Figure 19 | Phasing Plan



--- Neighbourhood Plan Boundary

Figure 19A | Anticipated Lot Configurations for Phase 1 and 2



Phases 1 & 2 Anticipated Lot Mix				
BLOCK	Anticipated Lot Width Range	Avg.	Anticipated Lot Area Range	Avg.
1	56 - 60 ft.	58	6440 - 6900 sq. ft.	6670
2	66 ft. (WS)	66	5940 sq. ft.	5940
3	66 ft. (WS)	66	5940 sq. ft.	5940
4	66 ft. (WS)	66	5940 sq. ft.	5940
5	56 - 60 ft.	58	7168 - 7680 sq. ft.	7424
6	40 - 60 ft.	50	4600 - 6900 sq. ft.	5750
	66 ft. (WS)	66	5940 sq. ft.	5940
7	50 - 60 ft.	55	5750 - 6900 sq. ft.	6325
	66 ft. (WS)	66	5940 sq. ft.	5940
8	50 - 60 ft.	55	5750 - 6900 sq. ft.	6325
	66 ft. (WS)	66	5940 sq. ft.	5940
9	44 - 46 ft.	45	5060 - 5290 sq. ft.	5175
10	40 - 50 ft.	45	4600 - 5750 sq. ft.	5175
12	48 - 52 ft.	50	6144 - 6656 sq. ft.	6400
13	48 - 52 ft.	50	6144 - 6656 sq. ft.	6400
14	50 - 60 ft.	55	6400 - 7680 sq. ft.	7040
	56 - 60 ft.	58	7168 - 7680 sq. ft.	7424
		57		6220

(WS) = Wide Shallow

- Phase 1 & 2 includes the connection of Brander Avenue with Vale View Road to the west. This opens up a much anticipated second access for the residents on the west side of Langdon.
- Blocks 5 and 14 include deep wide lots, close to 7500 sq. ft. in size. They provide a compatible transition from the existing neighbourhood on the east edge of Painted Sky.
- The Average lot width in Phases 1 & 2 is 57 feet, consistent with older neighbourhoods in Langdon.
- Subsequent phases will provide additional medium density product in order to meet the objectives of the Painted Sky Conceptual Scheme and the Langdon Area Structure Plan. The overall anticipated density for Painted Sky is approximately 4.5 units per acre. This is half the density you would see in a new community in the City of Calgary or bedroom communities such as Airdrie, Chestermere or Cochrane.

Appendix A

Site Evaluation

The following section provides a description and evaluation of the plan area that aided in the formulation of the proposed development concept and community design. Potential constraints and development influences were evaluated as part of the technical submissions, provided in support of this Neighbourhood Local Plan.

Biophysical Considerations

ECOTONE Environmental Ltd. was commissioned in 2016 to conduct the terrestrial and wetland ecological components of a Biophysical Impact Assessment (BIA) and a Wetland Impact Assessment (WIA) for the subject lands. Some of the conclusions are highlighted below:

- The vast majority (92.6-ha or 86.1%) of the study area is covered by previously disturbed upland habitats (i.e. cultivated fields and anthropogenic features). Upland habitats were rated as having low floristic and structural diversity, low native habitat integrity, and low potential to harbour rare plants and wildlife species at risk.
- Development of upland areas will not result in a significant negative effect on wildlife or native vegetation in the study area.
- The existing conditions within and adjacent to the Painted Sky Lands has resulted in severe habitat fragmentation effects on the property. As such, many sensitive species have already been significantly impacted. The relatively abundant supply of uplands with low ecological significance dampens the likelihood of additional incremental development contributing significantly to regional habitat fragmentation.
- The Painted Sky Lands are not considered to be a potential wildlife corridor/route.
- Local and sub-regional fragmentation of corridor areas, specifically those linking the property to adjacent waterways and semi-native pastures, has already significantly taken place due to historical agricultural activities and urban residential development.
- Thirty-four (34) wetlands were identified, mapped, and classified. Wetlands account for 14.9-ha or 13.9% of the study area. Historical air photo review suggests a long history of agricultural activity on the property. Wetlands in and around the property have been frequently tilled, either partially or totally.
- The Wetland Functionality of the thirty-four wetlands was rated as low to moderate (i.e. value category results D, C, and B).
- All wetlands, with the exception of the two (2) most significant that will be preserved and incorporated into the development, will be lost due to Painted Sky property development activities. The Developer is choosing to pursue compensation for the loss of twenty-two wetlands under the Water Act rather than to retain the wetlands, because:
 - the wetlands have low to moderate overall functionality and,
 - the small size and temporary/seasonal water permanence of the majority of these wetlands limits the likelihood of permanence of these wetlands within a residential development setting.
- In addition, 10 Wetlands are classified as ephemeral. Loss of ephemeral wetlands does not require compensation under the new Wetland Policy.
- The proponent will financially compensate for the wetland loss caused by the proposed development.

Drainage

The subject lands are characterized by relatively flat to gently rolling topography, varying from approximately 1007.0 to 1009.5 meters in elevation. There are numerous wetlands present on the site; however there are no natural drainage channels. Stormwater solutions to post-development drainage within the eastern portions of Rocky View County, including the Hamlet of Langdon, are a challenge due to the flat topographic character of the terrain. As a result, careful consideration will be given to the Staged Master Drainage Plan in addressing design issues associated with the existing topography. Stormwater management in Langdon is comprised of a network of overland drainage ditches, culverts and storm water retention facilities that collect and convey stormwater runoff to Weed Lake. (Receiving body for all stormwater in the region)

There are two primary overland drainage ditches within the Hamlet of Langdon / Langdon ASP area that service the Hamlet of Langdon Regional Drainage Area: the 'West Ditch' and the 'South Ditch'. These ditches are identified in the Langdon Comprehensive Stormwater Review, which was prepared by MPE Engineering Ltd., February 18, 2016.

The West ditch collects and conveys the overland flow from the following catchments, as referenced in the Langdon Comprehensive Stormwater Review:

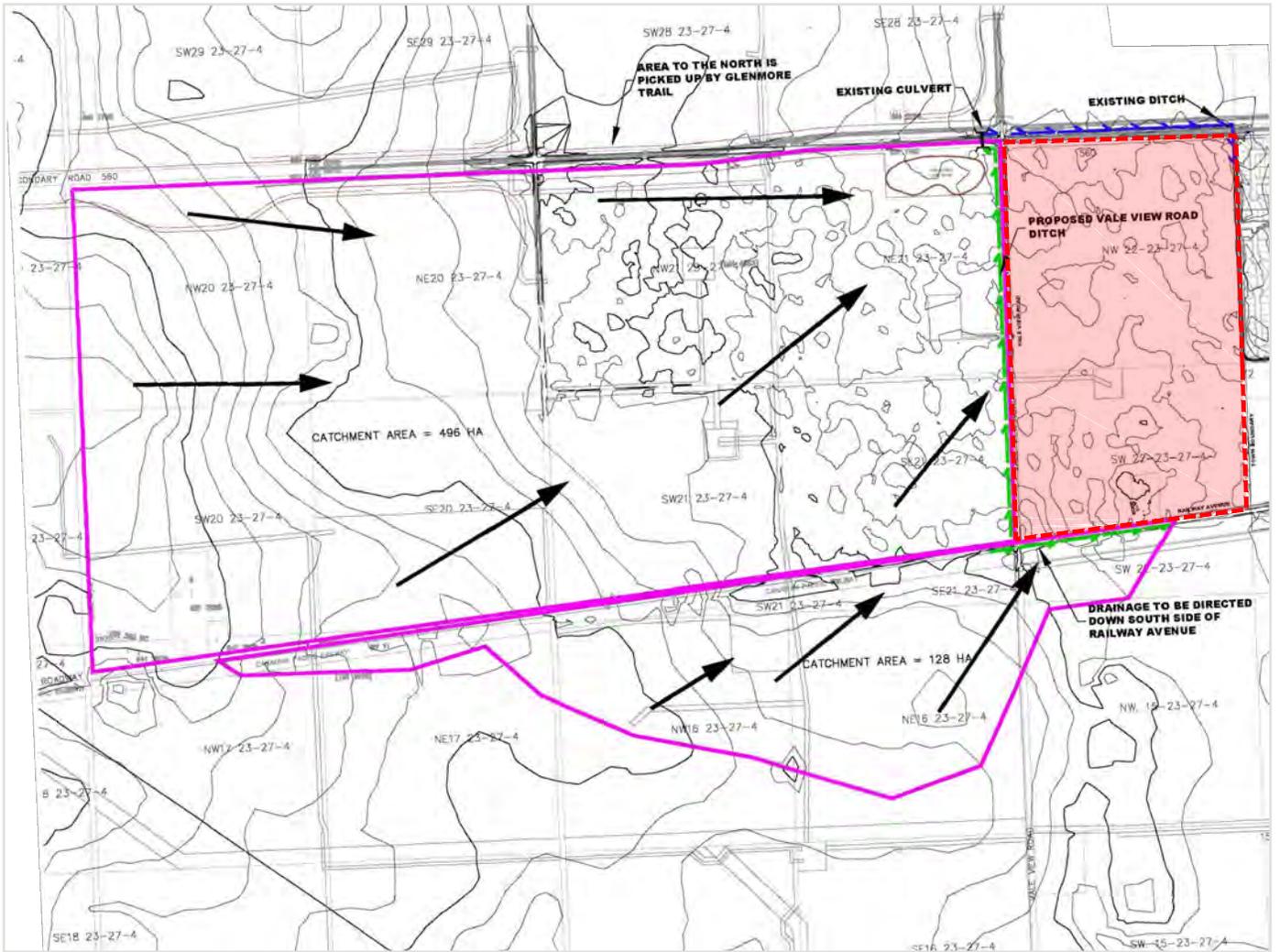
- The Northwest Catchment Area (1,043ha);
- A portion of the West Catchment Area, (900ha);
- The stormwater discharge from Langdon Crossing West Development; and
- The proposed Mornington residential subdivision.

The stormwater runoff from the Northwest Catchment Area is currently conveyed through Painted Sky via the West Ditch. The design of the Painted Sky development will not alter the current drainage path.

The stormwater runoff for the West Catchment Area flows generally from west to east and south to north. The runoff generated from the lands north of Railway Avenue flows towards the northeast corner of Section 21 (immediately west of Painted Sky) where it is conveyed north across Highway 560 (Glenmore Trail) by culvert where it joins up with the stormwater runoff from the Northwest Catchment and flows east along the north side of Glenmore Trail and into the West Ditch in the northeast corner of the Painted Sky lands.

The South Ditch is the primary conveyance for all stormwater within the Hamlet of Langdon. All flow from the West ditch enters the South ditch on the south side of Railway Avenue, at the Cowan Street intersection. The South Ditch will require upgrades to increase the conveyance capacity within the ASP area. The culvert crossings at the driveway and roadway locations on the south side of Railway Avenue will require removal and re-installation of larger diameter pipes to accommodate the future stormwater flow.

Figure i | West Catchment Area



--- Neighbourhood Plan Boundary

Environmental Site Assessment (ESA)

A Phase One and Limited Phase Two Environmental Site Assessment (ESA) was completed by Base Property Consultants Ltd. in March 2006. Historical uses of the lands and surroundings have been primarily agricultural with limited country residential. The site reconnaissance revealed no obvious environmental concerns, and there has been no record of impairment or environmental violations on the site. There is a producing natural gas well and pipeline on the SW 1/4 of Section 22-23-27-W4M currently owned and operated by EMBER Resources Ltd. The lease area right of way and infrastructure will be relocated in accordance with provincial regulations.

There are two active water wells located on each of the developable areas of NW and SW 1/4s of Section 22-23-27-W4 (one recovery and one observation well at each location). This infrastructure will form part of the Langdon Water Works potable water supply and distribution network and will be considered in future expansion opportunities for their franchise area.

There was no obvious evidence of water wells noted during the site reconnaissance of the 5 wells noted in Alberta Environment's Water Well Database on the NW 1/4 of Section 22-23-27-W4M. This database also notes the presence of three water wells on the SW 1/4 of Section 22-23-27-W4M, all of which are located on a private parcel. Any water wells located on the subject lands no longer required, must be reclaimed as per provincial policy.

No ESA was prepared for the existing ± 1.62 HA (± 4.0 acre) subdivided acreage located adjacent to Railway Avenue (TWP RD 233A), on the SW 1/4 of Section 22-23-27-W4M. The property appears to be maintained in an appropriate manner.

Based upon the results of the historical records review, site reconnaissance and soil and groundwater sampling information, no significant environmental impairment exists on the subject lands and therefore, no further environmental investigation is required.

Geotechnical Analysis

Geotechnical Analyses have been ongoing on the site and on the external County road network periodically by McIntosh Lalani Engineering since March 2006 with the exception of the existing ± 1.62 HA (± 4.0 acre) subdivided acreage and the special development area located in the northwest portion of the planning area. An updated report (July 14, 2016) has been submitted that incorporates previous and current geotechnical field investigations. The purpose of the report is to provide a summary of the site and soil conditions in order to inform the design and construction of the proposed development and stormwater infrastructure. The recommendations are based on the findings of 50 boreholes and 18 test pits and are considered reasonably representative of the site.

The geotechnical assessment indicates that the subject lands are considered suitable for the proposed development. The submitted report and recommendations provide overall geotechnical recommendations for site development, grading, surface works, utility installation, stormwater pond liner requirements and residential building design.

Groundwater

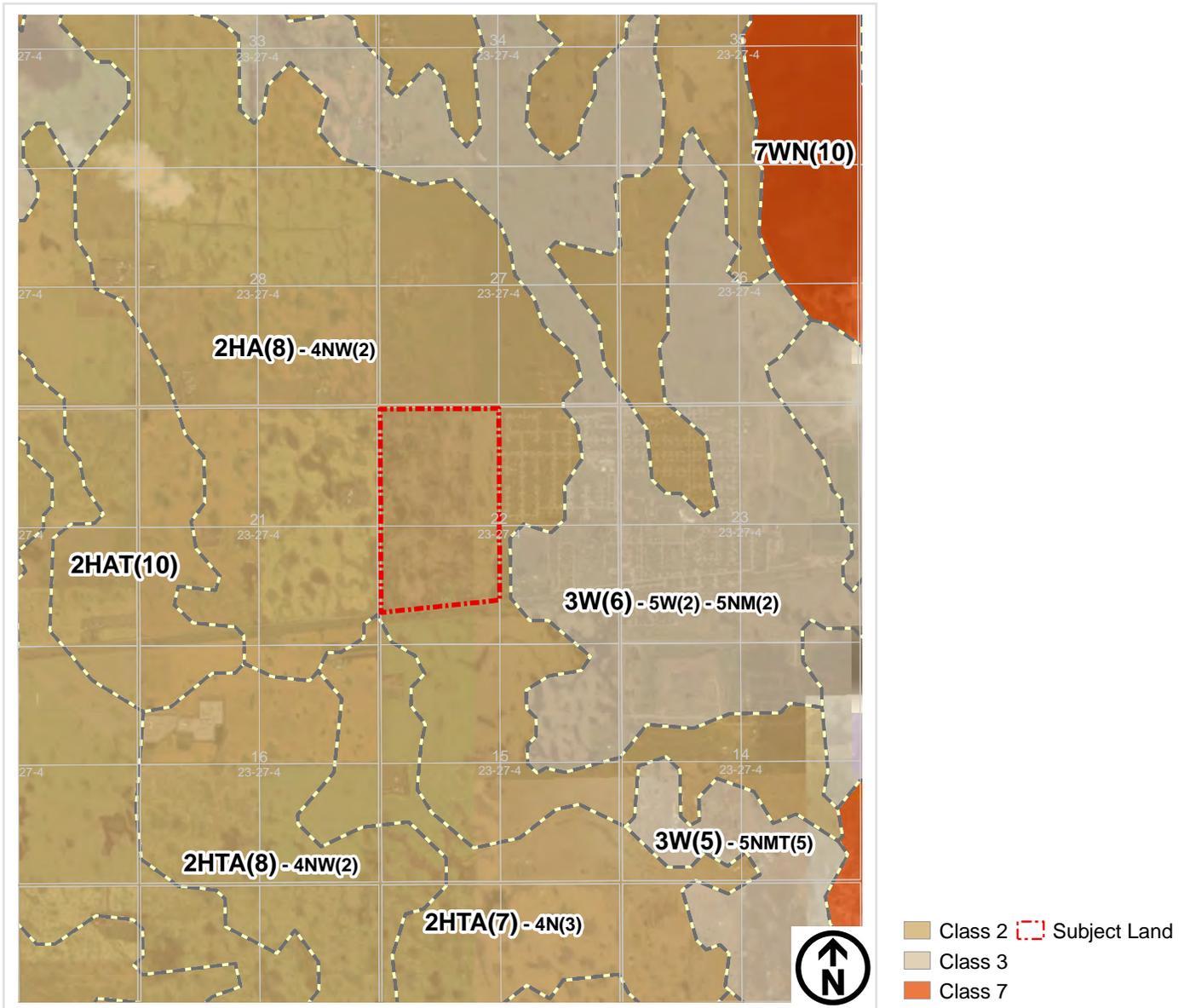
Ongoing groundwater monitoring and testing has occurred, including test pitting in the proposed location of the stormwater management facility. Findings indicate that the groundwater table is at depths of approximately 3 to 5 meters below the existing grade. Recommendations are provided for the construction of a wet pond.

Soils

Geotechnical evaluations have been conducted on the site by McIntosh Lalani Engineering. The general subsurface stratigraphy consists of silty clay glacial tills overlying sedimentary bedrock. At the surface, topsoil and organic browns are present with thicknesses ranging from approximately 250 to 400 millimetres.

The glacial soils are of variable composition, sometimes approaching clayey silt and in discontinuous seams and pockets, sandy silt. The sand and gravel content was generally in trace amounts. Sandstone bedrock was encountered at depths ranging from approximately 6.1 to 9.75 metres below grade.

Figure ii | Land Suitability Rating System

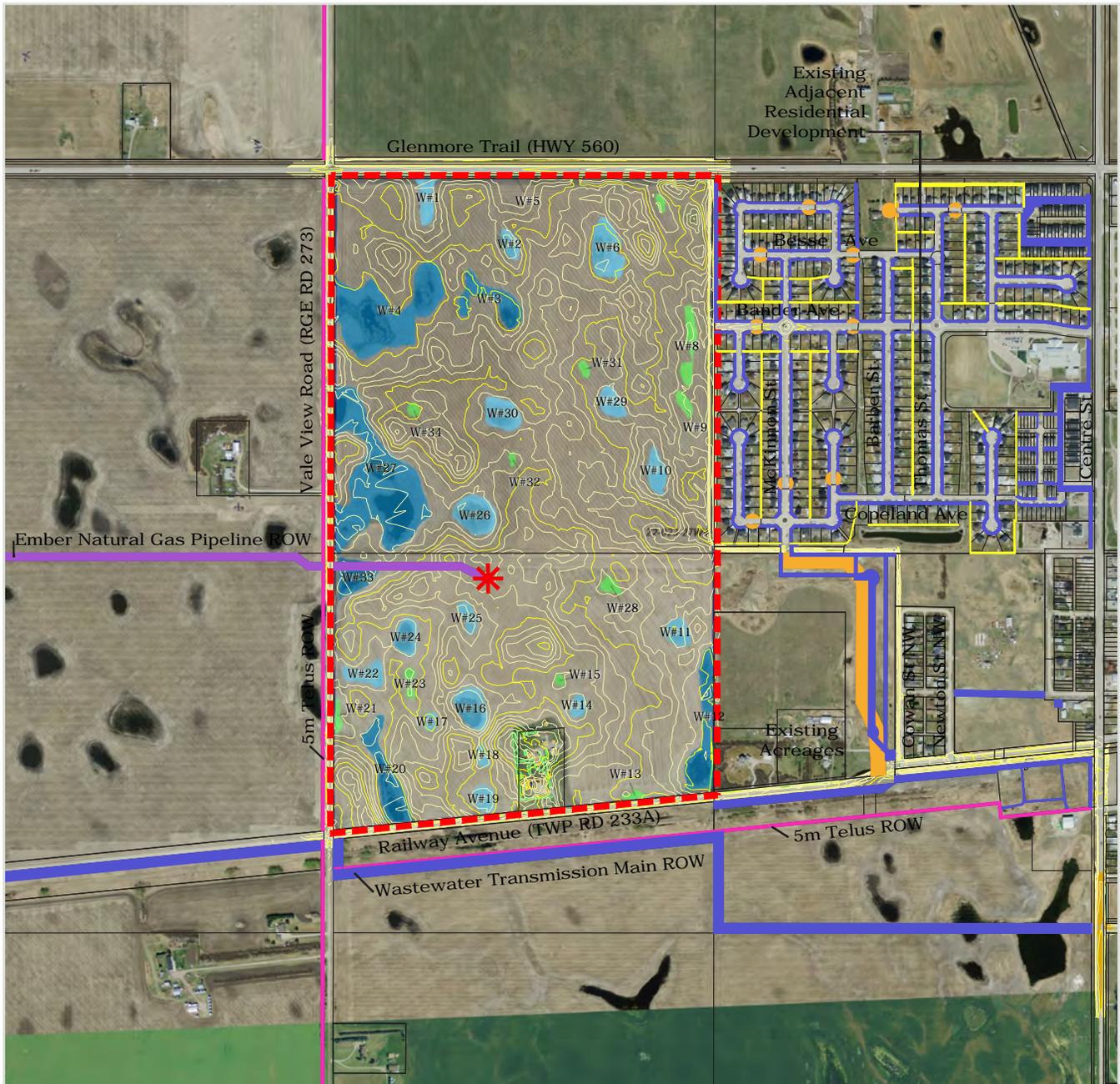


Development Influences

The subject lands are currently cultivated and have been farmed for a number of years. A producing natural gas well, pipeline and lease access road are located on the north-central portion of the SW 1/4 22-23-27-W4M. Adjacent land uses include agricultural to the north, south and west and residential development to the east. An existing acreage has been subdivided out of the SW 1/4 22-23-27-W4M. Limited country residential acreages exist in the vicinity. Site access is from Rge. Rd. 273 (Vale View Road) at the west property line and Twp. Rd. 233 (Railway Avenue) at the south property line. HWY. 560 (Glenmore Trail) is adjacent to the north property line. An abandoned railway right-of-way is located south of Twp. Rd. 233 across from the SW 22-23-27-W4M.



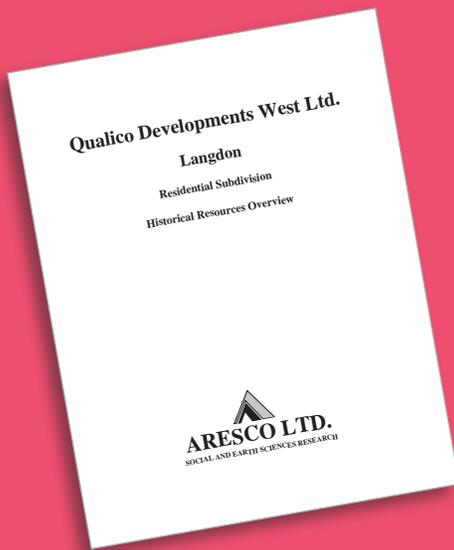
Figure iii | Development Influences



- - - - Neighbourhood Plan Boundary
- Natural Gas Pipeline ROW
- Buried Cable ROW
- Utility ROW
- Access ROW
- 0.25m Contours
- Overland Drainage ROW
- Temporal Wetland - Class 2
- Seasonal Wetland - Class 3
- Semi-Permanent Wetland - Class 4
- * Gas Well (to be decommissioned)
- ← Drainage

Archaeological and Historical Considerations

A Historical Resources Overview was completed for the Subject Lands in May 2006 by Aresco Ltd. Field and archival investigations demonstrated that there are no historical resources of significance on the Subject Lands. No further investigation concerning historical resources is recommended for the proposed development. Clearance from Alberta Culture and Community Spirit was given in June 2011. Historic Resources Act approval was again received May 8, 2017.



Utility and Telecommunication (Shallow Utilities)

Langdon is served by a developing shallow utility network which is located adjacent and to the east of the proposed first phases within Langdon Crossings West development. These utilities are located within existing rights-of-way and contain gas, electrical, telecommunication lines for homes and businesses. This developing shallow utility service network will be expanded to include:

1. Natural Gas

- a. Atco Gas

2. Communications

- a. Telus Communications
- b. Telus – Fibre Optic
- c. Cable

3. Electricity

- a. Fortis Alberta

Existing Transportation Network

Painted Sky builds upon an existing road transportation network for the community which consists of the primary network roadways of Centre Street, Highway 560 (Glenmore Trail), Railway Avenue (TWP RD 233A/B), Vale View Road and Brander Avenue. The Painted Sky development will initially have a single access on Vale View Drive and through the adjacent community via Brander Avenue. Later phases of development will see access expanded to include a second connection to Vale View Drive, a second connection through the adjacent undeveloped lands of Mornington; and two connections to Railway Avenue.

Centre Street

Centre Street is a 2-lane road that runs north-south through the Hamlet of Langdon. The posted speed limit is 40 km/h south of Highway 560 to just south of Boulder Creek Drive and north of Highway 560 the posted speed limit is 90 km/h. All study area intersections that intersect Centre Street are two-way stop controlled with the exception of Highway 560 where there is currently an all-way stop with Centre Street.

Highway 560 (Glenmore Trail)

Highway 560 (Glenmore Trail) is currently a two-lane highway running east/west with a connection to Calgary and a posted speed of 100 km/h west of Highway 797 (Centre Street), and 60 km/h east of Highway 797. Highway 560 intersects Centre Street at a four-way stop controlled intersection and Vale View Road at a two-way stop controlled intersection. The intersection at Centre Street is currently illuminated, while the intersection at Vale View Road has no illumination.

Railway Avenue (Twp Rd 233A/B)

Railway Avenue (Twp Rd 233A/B) is a two-lane paved roadway east of the site that runs east-west and has a posted speed limit of 40 km/h. Railway Avenue has a gravel surface treatment adjacent to the site.

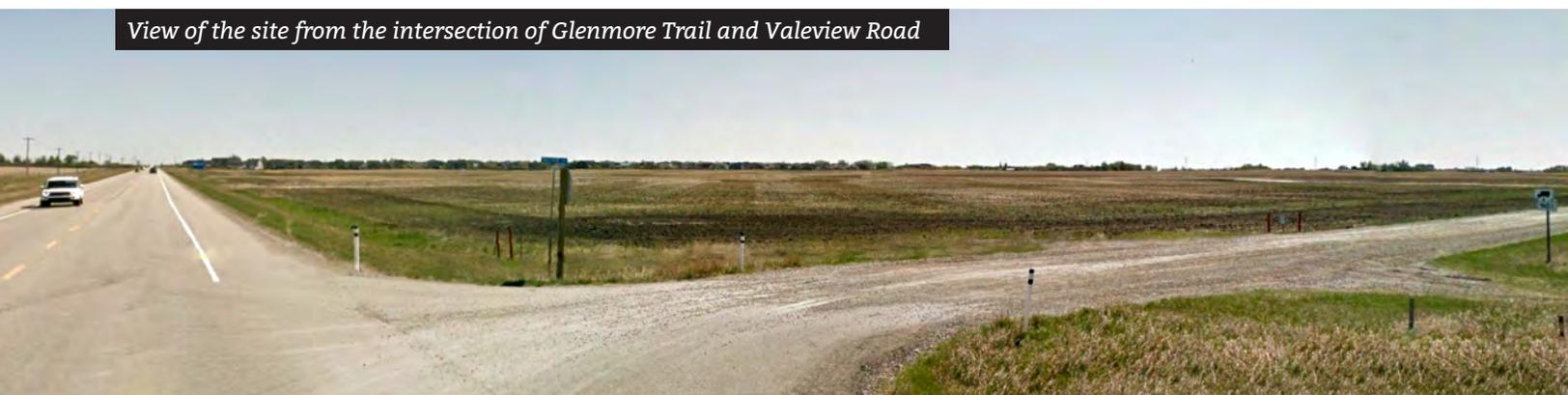
Vale View Road

Vale View Road is a two-lane gravel roadway running north-south adjacent to the west boundary of the site.

Brander Avenue

Brander Avenue is a two-lane paved roadway running east/west, intersecting Centre Street and currently terminating at the east site boundary of the site. The posted speed limit on Brander Avenue is 40 km/h, slowing down to 30 km/h in the school zone near Centre Street. Based on data available, it is assumed to be classified as UCU 50 in TAC, which corresponds approximately to the Urban Residential Collector (URC) designation in the new Rocky View County road standards. Currently there is a pedestrian corridor and flashing signal crossing at the intersection of Brander Avenue to cross Centre Street due to a school nearby.

View of the site from the intersection of Glenmore Trail and Valeview Road



Existing Water Servicing

Painted Sky will tie into the existing water system at Brander Avenue. The Water Treatment Plant is located in the east part of Langdon.

Existing Wastewater Servicing

A wastewater transmission main extends south of Railway Avenue terminating at the Langdon Wastewater treatment plant. Painted Sky will connect to this transmission main at a point to the southeast of the Plan area.

Emergency Services

Langdon Fire Station 111 serves the southeast area of the County on a volunteer basis. Inter-municipal Agreements with neighbouring municipalities also provide coverage to Langdon. Ambulance services are provided in Rocky View County by Alberta Health Services .

The nearest RCMP detachment is located in Strathmore, which along with County peace officers provide policing services in the Langdon area.

Development Rationale

The Painted Sky lands have been considered for development since 2005 as a logical extension of development for the community, meeting a number of sound planning considerations.

- 1] **Logical Progression.** This proposal is considered a logical progression of existing transportation and servicing infrastructure from Langdon Crossings West which is fully built out.

- 2] **Appropriate Development Timeframe.** Development is anticipated to develop over the next 10-15 years which is in alignment with the vision and expected timeframes of the Langdon Area Structure Plan.

- 3] **Phasing.** Planned phasing of the development is in alignment with existing and proposed development located to the east as seen in the Langdon Crossings West and Mornington neighbourhoods. Development is proposed to be from north to south in association with anticipated residential growth and servicing to the east.

- 4] **Natural Planning Boundary.** The proposed boundary is a natural planning boundary for the community, providing master planning and infrastructure planning in respect to major transportation and servicing infrastructure. Glenmore Trail, Vale View Road, Railway Avenue form a logical planning boundary.

- 5] **Transportation Efficiencies.** One of the primary considerations of this proposal is to improve and provide safer pedestrian and traffic connections with the existing community. The extension of Brander Avenue to Vale View Road, which is one of the two primary east / west collectors, will fulfill an important second link into the neighbourhood of Langdon Crossings West and an alternative route out of the community.

- 6] **Improved Open Space and Park Network.** The extension and development of the community pathway, park and open space system will directly benefit existing residents on the west side of the community.

7] **Joint Use School Site.** The planned second school site for the west side will benefit the community and meet the needs of the expected school population for the community at full build out.

8] **Gateway Development Opportunity.** The opportunity to develop an attractive neighbourhood activity centre development along the community gateway which provides for housing choice, seniors opportunities, local neighbourhood commercial and potential future community services uses such as an emergency service facility to support future growth in policing and fire services has been considered.

9] **Servicing and Infrastructure Improvements.** Servicing and Off-site infrastructure upgrades to facilitate development of the subject lands are proposed on existing road and utility networks.

10] **Context-sensitive Design and Land Use Compatibility.** Painted Sky is planned as a predominately large lot, single family residential neighbourhood that is in keeping with the established development patterns within the community while incorporating diversity in housing choice.

11] **Respect for the Past.** Painted Sky will respect the past and heritage of the Langdon community which will be seen in the proposed architectural and site design. The rural 'look and feel' is a core development objective for the neighbourhood.

Open Space Landscape Concepts

The Painted Sky lands have been considered for development since 2005 as a logical extension of development for the community, meeting a number of sound planning considerations.

1] **Community Transition / Gateway**

2] **Phase 1 - MR**

3] **MR3 Enlargement**

4] **MSR / School Site**

5] **Phase 6 - MR**

6] **Phase 9 - MR**

7] **Wetlands**

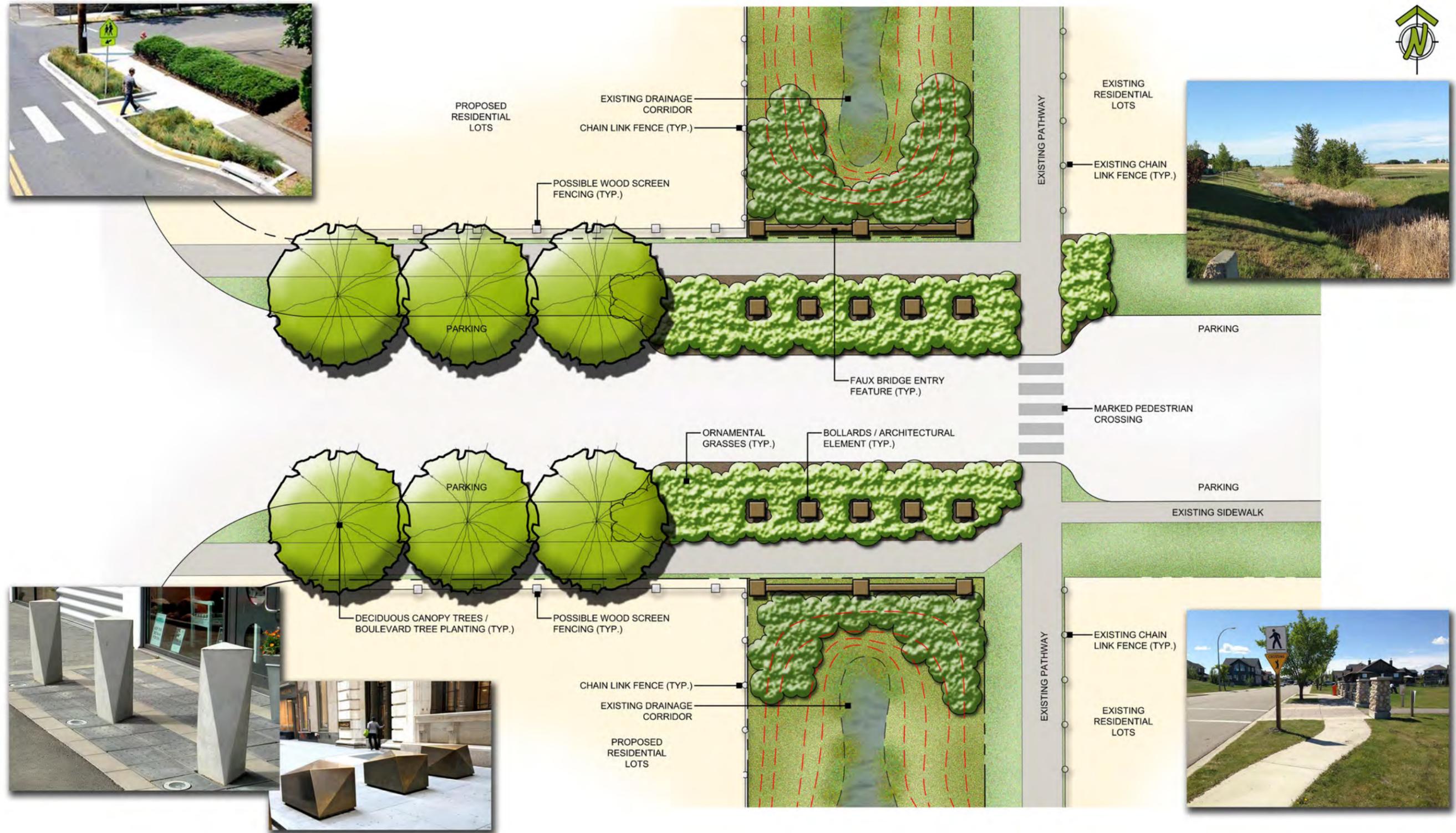
7A] **NW MR @ Wetland**

7B] **SW MR @ Wetland**

8] **South Pond**

9] **Crosswalk**

10] **Municipal Gateway Buffering**



Community Transition / Gateway

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Phase 1 - MR

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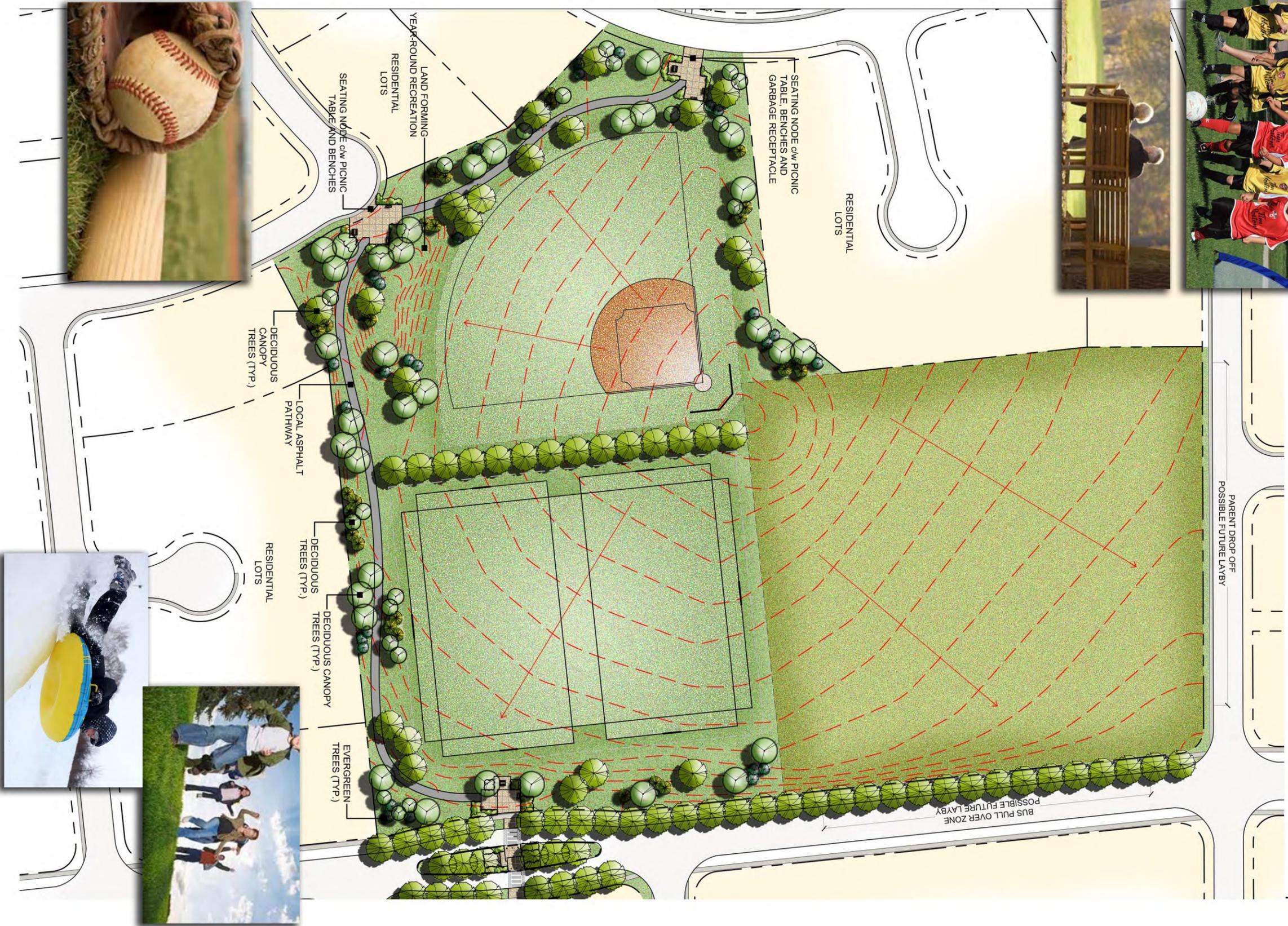


MR3 Enlargement

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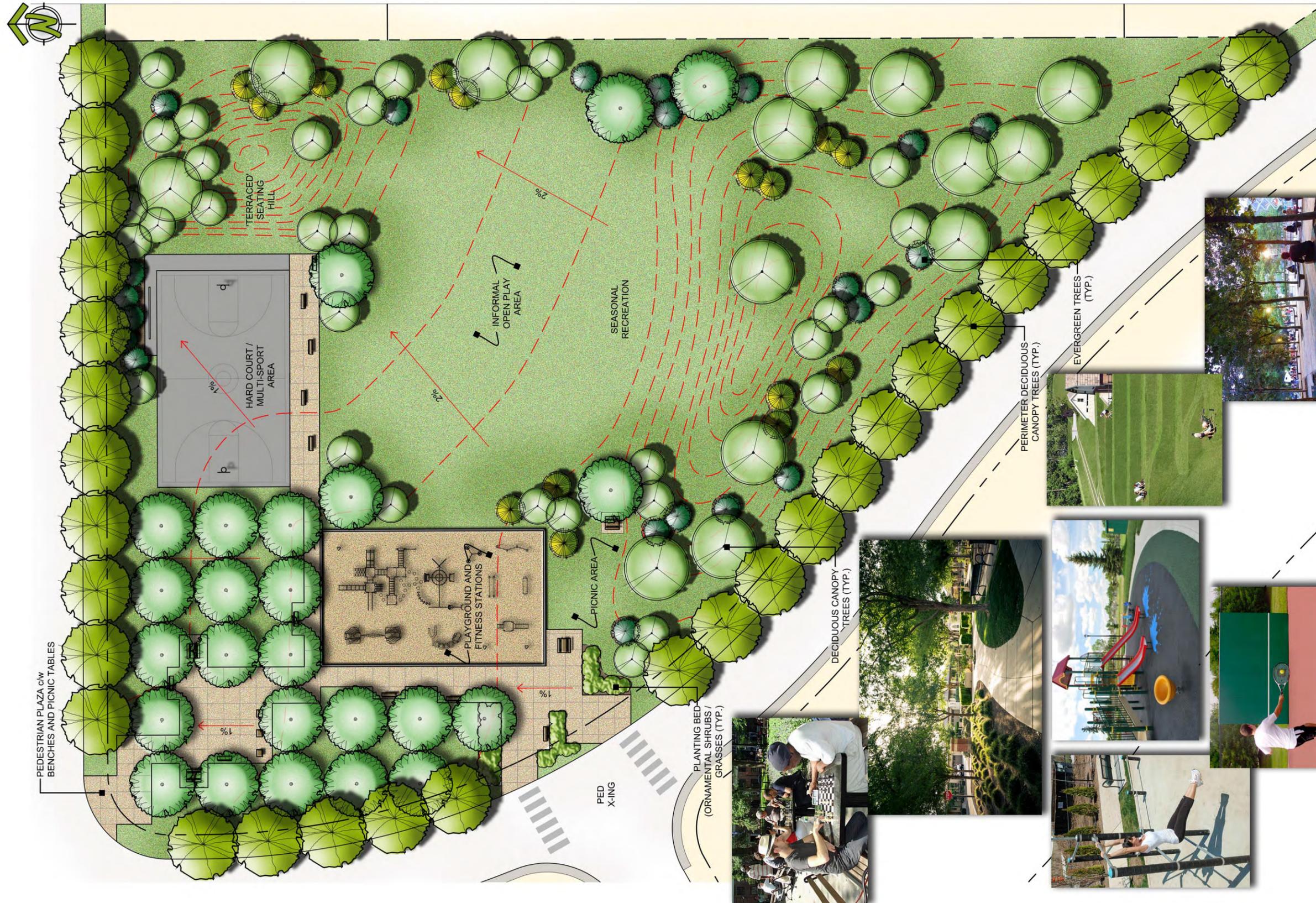


MSR / School Site

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Phase 6 - MR

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RESIDENTIAL LOTS

EVERGREEN TREES (TYP.)



BOULEVARD LANDSCAPING CANOPY TREES (TYP.)

DECIDUOUS TREES (TYP.)

RESIDENTIAL LOTS

DECIDUOUS ORNAMENTAL TREES (TYP.)

ENTRY PLANTING BED (TYP.)

2.5m CONCRETE SIDEWALK (TYP.)



Phase 9 - MR

SCALE n.t.s.



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RANGE ROAD 273



Wetlands

SCALE n.t.s.



L.A. West
Landscape - Architectural - Design - Consultants

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NW MR @ Wetland

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SW MR @ Wetland

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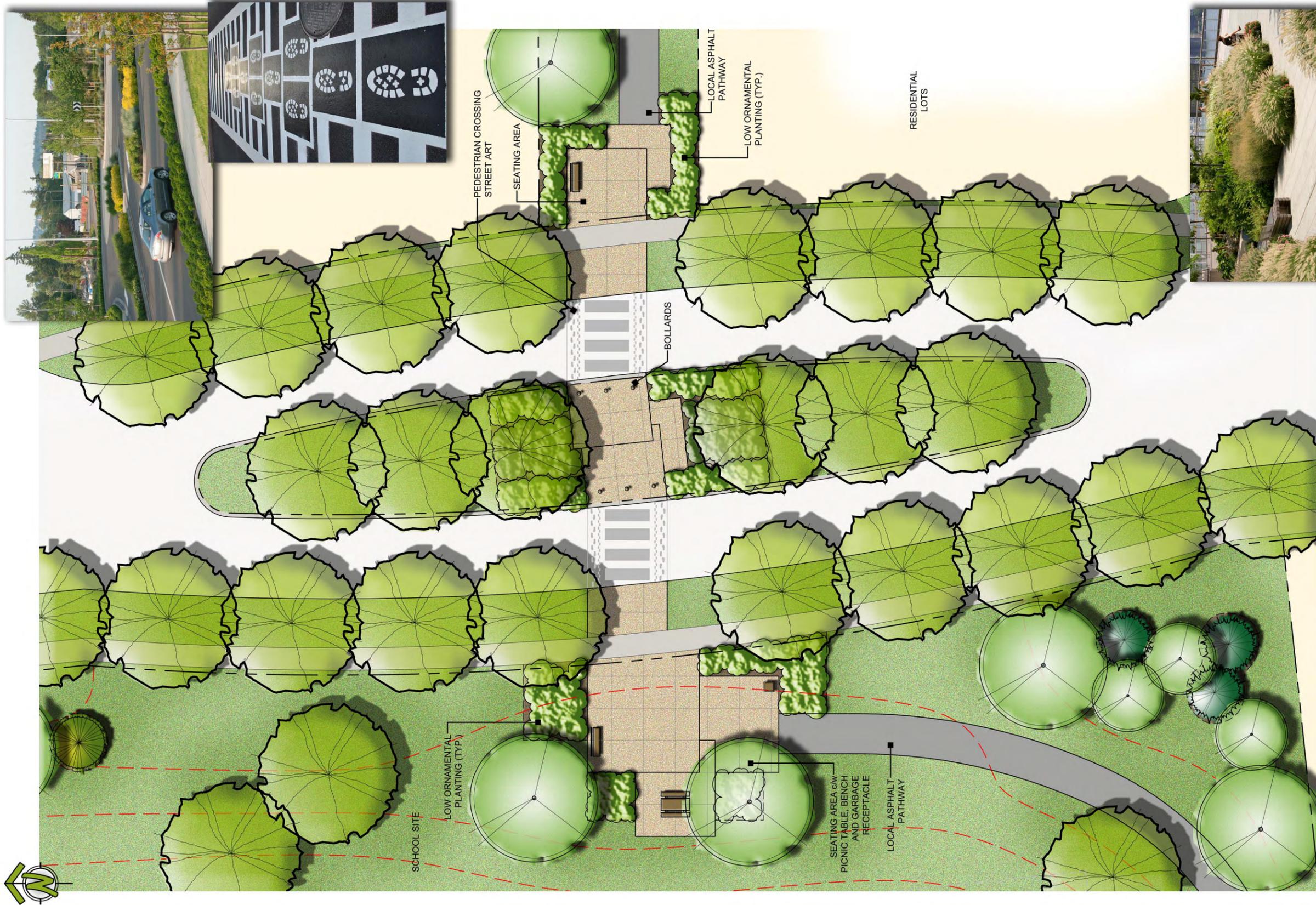


South Pond

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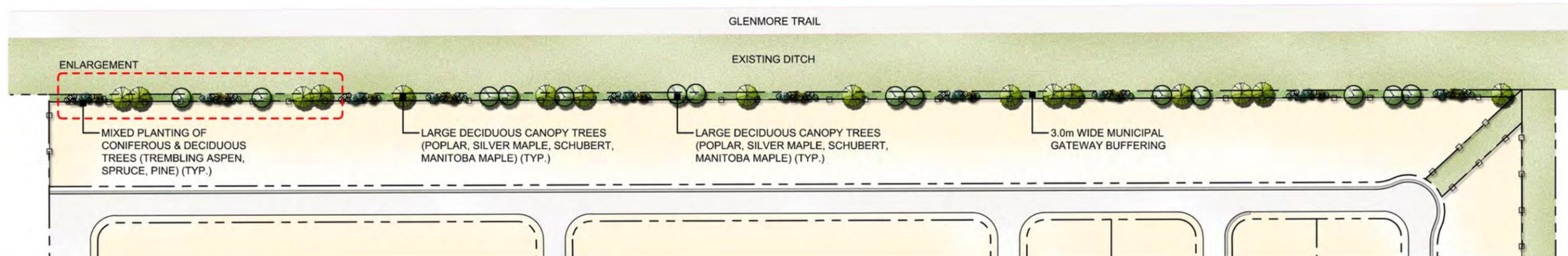


Crosswalk

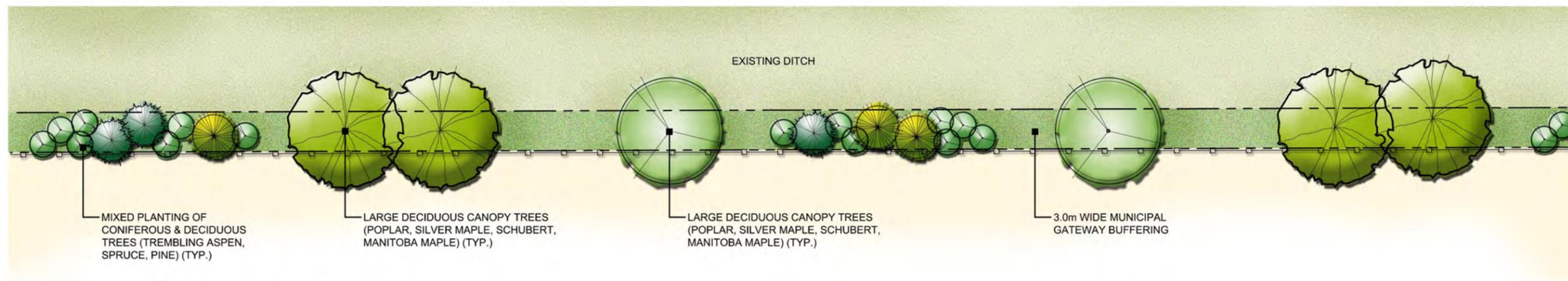
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L.A. West
Landscape - Architectural - Design - Consultants

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Overall



Conceptual Planting Enlargement / Typical

Municipal Gateway Buffering

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Appendix D

Policy Framework

The following documents were used in the preparation of this Conceptual Scheme and community design and should be consulted directly for detailed guidance and reference:

Rocky View County Policy (Statutory)

- County Plan (Municipal Development Plan) Bylaw C-7280-2013
- Langdon Area Structure Plan (Bylaw C-7564-2016)

Rocky View County Policy (Non-Statutory)

- Parks and Open Space Master Plan
- Solid Waste Master Plan

Rocky View County Design Guidelines (Non-Statutory)

- Commercial, Office and Industrial Design Guidelines
- Agricultural Boundary Design Guidelines
- Parks and Pathways Planning, Development, and Operational Guidelines

Rocky View County Technical Guidelines and Policy (Non-Statutory)

- County Servicing Standards (2013)
- Co-operative Stormwater Management Initiative (CSMI)
- Shepard Regional Drainage Plan
- Policy #419: Riparian Land Conservation and Management
- Policy #420: Wetland Conservation and Management
- Policy #318: Pathways and Trails

Province of Alberta Policy and Guidelines (Non-Statutory)

- Stepping Back from the Water Guidelines: A Beneficial Management Practices Guide for New Development near Water Bodies in Alberta's Settled Region

Other

- Rocky View County Senior Housing Needs Assessment (2015) SHS Consulting

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Appendix E

Technical and Supporting Studies

The following technical and supporting documents and studies were prepared or referenced in support of the preparation of this Conceptual Scheme and community design:

Site Assessment

- Environmental Site Assessment Phase 1 and Phase 2 (Limited) by Base Property Consultants, March 2006
- Historical Resources Overview by ARESKO Ltd., May 2006
- Biophysical Impact Assessment by Sweetgrass Consultants Ltd., December 2006
- Biophysical Assessment and Wetlands Assessment – Ecotone Environmental Ltd., September 2016

Transportation

- Painted Sky Traffic Impact Analysis by Bunt and Associates, July 28, 2016
- Langdon Network Analysis study prepared by Watt Consulting Group

Stormwater Management

- Staged Master Drainage Plan by LGN Consulting Engineering Ltd., July 2016
- Langdon Comprehensive Stormwater Review

Servicing

- Langdon Infrastructure Report
- Painted Sky Potable Water Use Assessment by CIMA, September 2016
- Painted Sky Wastewater Servicing Assessment by CIMA, September 2016

Geotechnical

- Geotechnical Report Painted Sky by McIntosh Lalani Engineering Ltd., July 14, 2016

Market Demand Projections

- Langdon Residential and Commercial Demand Projection – Altus Group Economic Consulting, Q2 2016

Public Engagement

- What We Heard Report - February 2017