Glenridding Ravine Neighbourhood Structure Plan

Office Consolidation December 2016

Prepared by:

City Planning
Sustainable Development
City of Edmonton

Bylaw 17798, as amended, was adopted by Council in December 2016. In December 2016, this document was consolidated by virtue of the incorporation of the following bylaws:

Bylaw 17798 Approved December 13, 2016 (to adopt the Glenridding Ravine Neighbourhood Structure Plan)

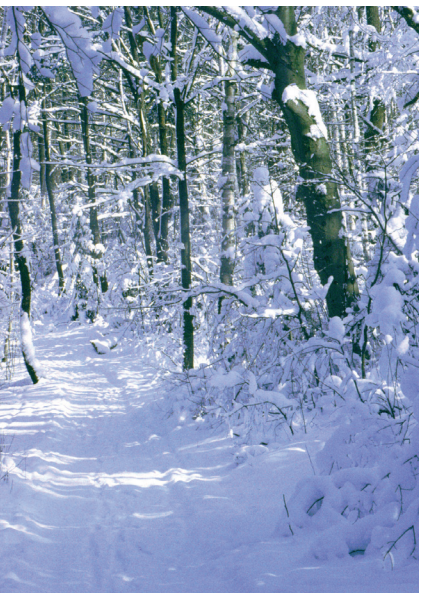
Editor's Note:
This is an office consolidation edition of the Glenridding Ravine Neighbourhood Structure Plan, Bylaw 17798, as approved by City Council on December 13, 2016.

For the sake of clarity, new maps and a standardized format were utilized in this Plan. Where it provides clarity, names of City departments have been standardized to reflect their present titles. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws. All text changes are noted in the right margin and are italicized where applicable.

This office consolidation is intended for convenience only. In case of uncertainty, the reader is advised to consult the original Bylaws, available at the office of the City Clerk.

City of Edmonton

Sustainable Development



GLENRIDDING RAVINE NEIGHBOURHOOD STRUCTURE PLAN

Stantec

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1.0 Administration

1.1 PURPOSE

The purpose of the Glenridding Ravine Neighbourhood Structure Plan (NSP) is to depict the land use framework as well as the development and servicing goals for Glenridding Ravine. The Glenridding Ravine NSP specifies the following:

- The location, configuration and area of various land uses including, residential, commercial, parks and open spaces, and public utility land uses;
- The anticipated density of residential development;
- The pattern and alignment of the arterial and collector roadway and pedestrian walkway systems;
- The required utility infrastructure concept; and,
- The implementation and phasing of development.

1.2 AUTHORITY

The Glenridding Ravine NSP was adopted by Edmonton City Council on _____as Bylaw _____ in accordance with Section 633 of the Municipal Government Act.

1.3 TIMEFRAME

Development in Glenridding Ravine is expected to commence in 2017 and is estimated, at current absorption rates, to be complete within 10 years.

1.4 INTERPRETATION

All symbols, locations, and boundaries shown in the NSP figures shall be interpreted as conceptual unless otherwise specified in the document, or where they coincide with clearly recognizable physical or fixed features within the plan area.

For each subsection under Land Use Concept, a description of applicable land use strategies and types is provided for the plan followed by applicable objectives, policies, implementation, rationale, and technical summary.

Where a policy proves impractical or impossible, an applicant may apply to amend the plan. A policy statement(s) containing "should" is an advisory statement and indicates the preferred objective, policy and/or implementation strategy. If the "should" statement is not followed because it is impractical or impossible, the intent of the policy may be met through other agreed-upon means.

That policies and maps contained in this document are not intended to be taken to affect, either directly or indirectly, any land held by non-participating landowners adjacent to the NSP. The location of the Top-Of-Bank and Urban Development Line was determined without the input or agreement of the non-participating landowners as it related to the Development Line as it related to the adjacent non-participating lands shall only take place at the time of development.

1.5 MONITORING

Policies, text, and mapping information contained within this document may be amended from time to time, by Council approved Bylaw, in order to respond to, and remain current with, planning and development issues and trends affecting suburban development.

1.6 AMENDMENTS

Amendments to Glenridding Ravine NSP document involving policies, text or mapping shall be completed in accordance with the *Municipal Government Act*, Windermere ASP (Bylaw 13717, as amended), and all other applicable bylaws, policies and procedures.

1.7 ORIENTATION

This document contains three sections and two appendices.

- Section 1 provides administrative information and an orientation to the plan.
- Section 2 describes the location of Glenridding Ravine.
- Section 3 describes the land use, transportation, and servicing concepts for Glenridding Ravine.
- Appendix 1 contains information on the broader policy context with which the NSP complies.
- Appendix 2 contains a listing of technical studies prepared to support and guide the preparation of the development and servicing concepts.

2.0 Glenridding Ravine NSP Context

2.1 LOCATION

Glenridding Ravine is comprised of 19 parcels listed in **Table 1 – Land Ownership.** Glenridding Ravine denotes one of six neighbourhoods in the Windermere Area Structure Plan (ASP), and covers approximately 197 hectares (486 ac) in the southwest portion of Edmonton. **Figure 1 – Location Plan** illustrates the plan area relative to the southwest portion of Edmonton.

The NSP area is defined by the following boundaries (see **Figure 2 – Context Plan**):

- **Northern Boundary:** Ellerslie Road (9th Avenue SW)
- **Eastern Boundary:** Whitemud Creek Ravine
- **Southern Boundary:** 41 Avenue S.W.
- **West Boundary:** Rabbit Hill Road S.W. and 170 Street S.W.

The Glenridding Ravine NSP is identified as Neighbourhood 4B in the Windermere ASP.

The Ambleside Neighbourhood (Windermere Neighbourhood 1) is located immediately north of Ellerslie Road (9th Avenue SW). The Ambleside NSP was adopted by City Council in July 2005, and is largely developed. The Keswick Neighbourhood (Windermere Neighbourhood 3) is located west of 170th Street S.W. The Keswick Neighbourhood was adopted by City Council in July 2010, and is currently developing. The Glenridding Heights NSP was adopted by City Council in July 2011 and is currently starting to develop. The Glenridding Ravine NSP was adopted by City Council in ____.

2.2 BACKGROUND

The Glenridding Ravine NSP was prepared in response to the current and anticipated market demands in the Edmonton area as well as the aspirations of the landowners in the plan area. Further information regarding land ownership, implementation and site context can be found in **Section 2 – Glenridding Ravine NSP Context** (see **Table 1 – Land Ownership** and **Figure 3 - Land Ownership Plan**).

The preparation of this NSP has been guided by existing City of Edmonton statutory plans and policies including The Way We Grow, The Way We Move, The Way We Green, The Way We Live, the Windermere ASP (Bylaw 13717, as amended), the Suburban Neighbourhood Design Principles (SNDP), the Urban Parks Management Plan (UPMP), and the City of Edmonton Housing Mix Guidelines as well as the Capital Region Growth Plan. Conformance to these plans and policies is referenced in **Appendix 1.**

The plan area is a sound planning unit that is suitable for a NSP and represents a logical extension of infrastructure and services related to currently planned neighbourhoods. It is designated as "Developing, Planned and Future Neighbourhoods" by The Way We Grow and is adjacent to the developing neighbourhoods of Windermere, Ambleside, Keswick, and Glenridding Heights. Proximity of other service infrastructure will provide the necessary means of meeting the required municipal standards for development of the neighbourhood.

The Glenridding Ravine NSP is designed in accordance with City of Edmonton servicing standards. Development staging and extension of infrastructure will be contiguous, efficient, and economical while having regard for potential environmental and ecological impacts.

2.3 LAND OWNERSHIP

The Glenridding Ravine NSP was prepared on behalf of several private developers who own approximately 89% of the land within the plan area at the time of plan preparation. Six parcels are held by non-participating landowners. Current (2015) land ownership is shown in **Figure 3 - Land Ownership Plan**, and a listing of the legal parcels is described in **Table 1** below.

Table 1 - Land Ownership

	Titled Owner	Legal Description	Titled Area	Area in NSP
1	Private Corporate	Lot F Block 1 Plan 1422586	35.88 ha	13.71 ha
2	Private Corporate	Lot B Block 1 Plan 1322811	16.00 ha	15.98 ha
3	Private Corporate	Lot D Block 1 Plan 1322811	56.30 ha	0.05 ha
4	Private Corporate [NP]	Portion of NW ¼ 23-51-25-W4	2.02 ha	1.98 ha
5	Private Non-Corporate [NP]	SW ¼ 23-51-25-W4	64.70 ha	0.15 ha
6	Private Corporate	NE ¼ 22-51-25-W4	26.96 ha	16.18 ha
7	Private Corporate	Block C Plan 8922649	14.50 ha	11.25 ha
8	Private Non-Corporate	Block D Plan 8922649	37.88 ha	27.78 ha
9	Private Corporate	SW ¼ 22-51-25-W4	62.70 ha	3.45 ha
10	Private Non-Corporate [NP]	Portion of NE ¼ 15-51-25-W4	32.40 ha	11.77 ha
11	Private Corporate	Portion of NW ¼ 15-51-25-W4	36.69 ha	34.42 ha
12	Private Corporate	Block OT Plan 4791TR	24.71 ha	24.70 ha
13	Private Corporate	Portion of NE ¼ 15-51-25-W4	18.88 ha	2.15 ha
14	Private Non-Corporate [NP]	Lot 1 Plan 8320698	3.31 ha	3.31 ha
15	Private Corporate	Portion of SW ¼ 15-51-25-W4	31.18 ha	1.52 ha
16	Private Corporate	Block A Plan 4769KS	16.00 ha	12.76 ha
17	Private Corporate	Block B Plan 4769KS	7.99 ha	2.20 ha
18	Private Corporate	Lot E Plan 5395MC	6.99 ha	3.58 ha
19	Private Non-Corporate [NP]	Lot F Plan 5395MC	1.13 ha	1.13 ha
20	Private Non-Corporate [NP]	Lot 1 Block 1 Plan 1321416	1.69 ha	1.69 ha
Ellerslie Road (9th Avenue S.W.), 41 Avenue S.W., 170 Street S.W., and 156 Street S.W. Road Rights-of-Way				8.17 ha
Total Area			**497.91 ha**	**197.93 ha**

[NP] Indicates a non-participating landowner

Figure 1 - Location Plan

Glenridding Ravine - Neighbourhood Structure Plan

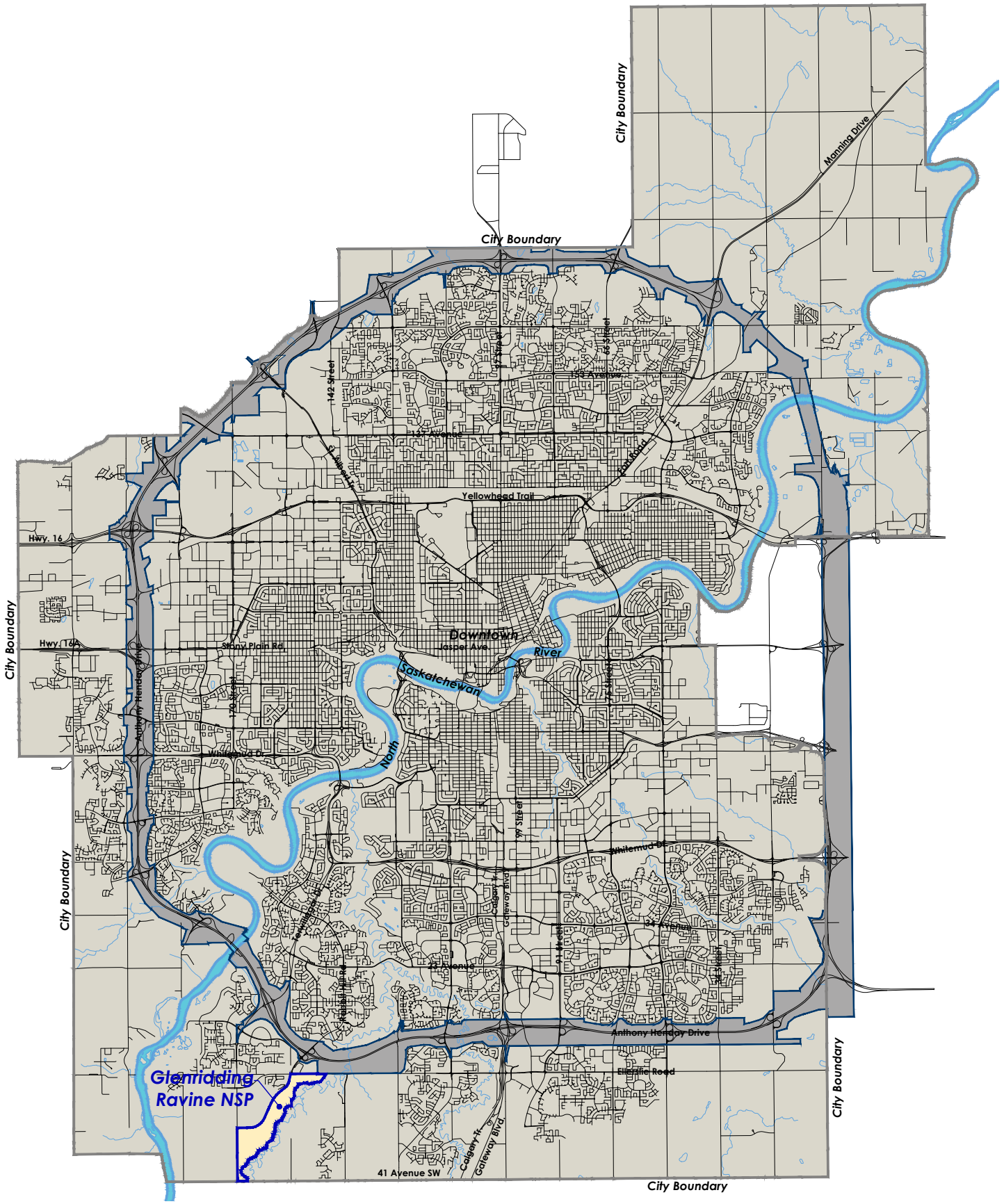


Figure 2 - Context Plan

Glenridding Ravine - Neighbourhood Structure Plan

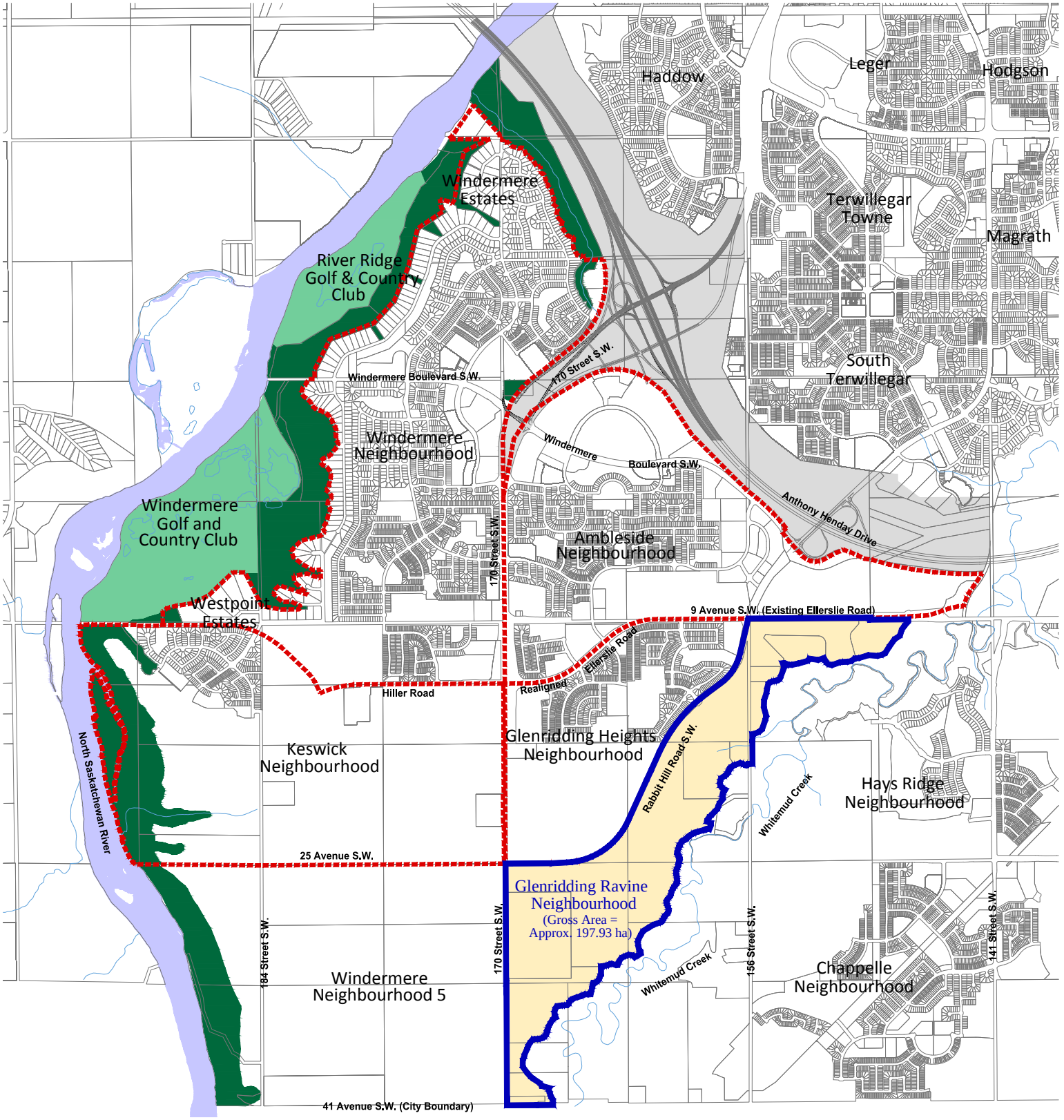
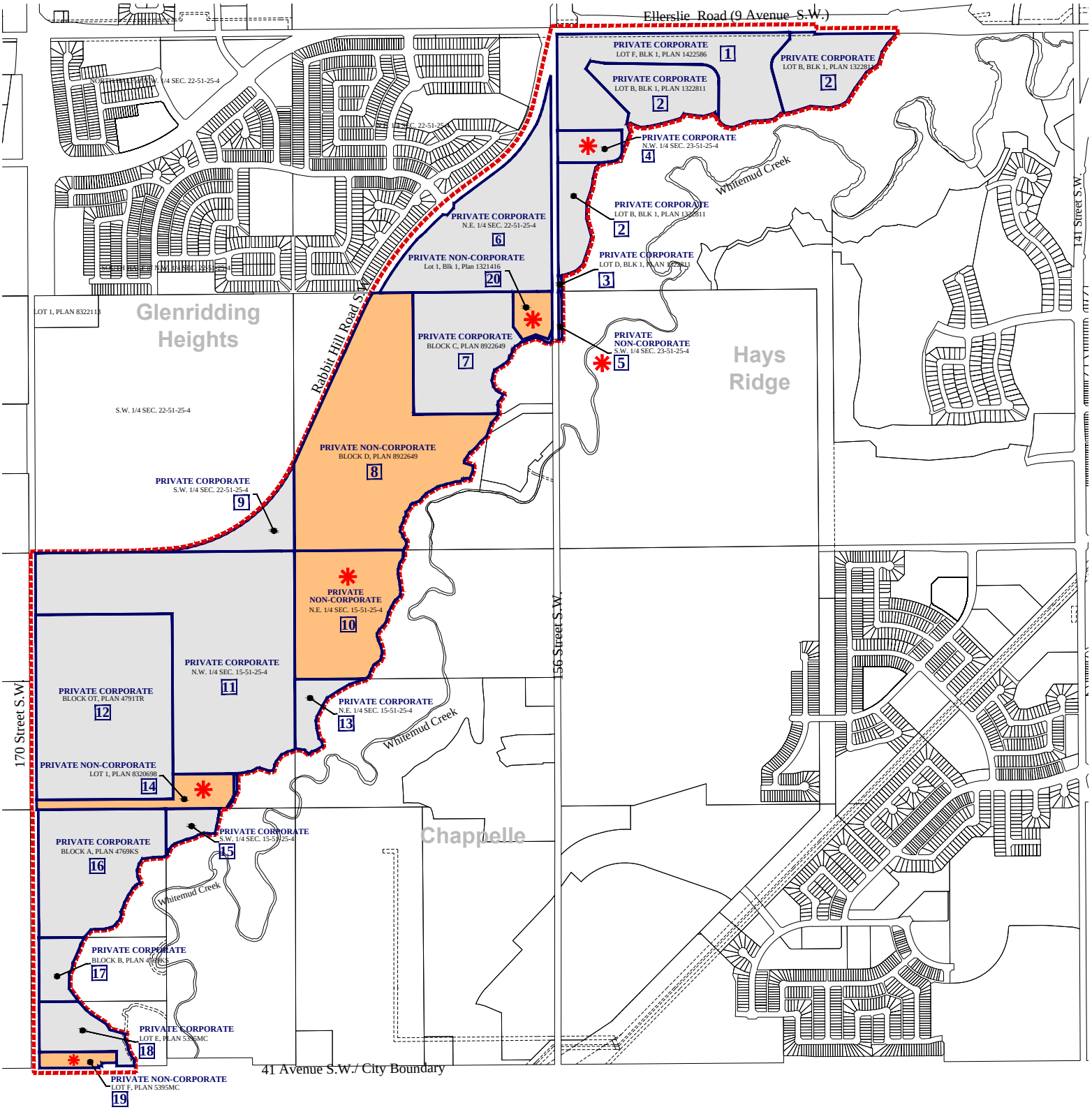


Figure 3 - Land Ownership

Glenridding Ravine - Neighbourhood Structure Plan



Legend

- Private Corporate
- Private Non-Corporate
- Non-Participating Land Owner
- # Map Reference Number
- NSP Boundary

2.4 SITE CONTEXT

2.4.1 Topography

The topography of the lands within Glenridding Ravine is generally flat with slight undulations, sloping down towards the Whitemud Creek running along the eastern boundary of the neighbourhood. Local variations in topography across the Plan area are shown in **Figure 4 – Site Contours Plan**. Elevations through the plan area vary from approximately 695 m in the southwest to approximately 662 m in the northeast of the plan boundary. Surface drainage throughout the plan area generally flows eastward towards the Whitemud Creek. **Figure 5 – Site Features Plan**, illustrates the majority of the Plan area has been cleared of vegetation.

2.4.2 Soil and Groundwater Conditions

The land is located within the Central Parkland sub region of Alberta. Soils within Glenridding Ravine are identified as primarily Malmo Silt Loam. The Malmo Silt Loam consists of Eluviated Black Chernozems developed on lacustrine material.

The local surficial geology of the plan area is classified as lacustrine deposit of Pleistocene and Holocene age. The lacustrine deposits generally consist of sand, silt and clay with local ice-drafted stoned, deposited as proglacial or recent lake sediments. The general bedrock geology in the region is identified as the Horseshoe Canyon Formation of late Cretaceous age. The Horseshoe Canyon Formation generally comprised of grey feldspathic clayey sandstone and bentonitic mudstone, with scattered coal and bentonite beds of various thickness.

The groundwater flow direction is generally to the north and east towards the Whitemud Creek. The estimated depth of the water table varies across the plan area from three to five metres away from the Whitemud Creek to eight to twelve metres closer to the top-of-bank.

Geotechnical Investigations were conducted for the participating landowner of the properties contained within the plan area. All Geotechnical Investigations will be reviewed by the City of Edmonton's Geotechnical Engineer.

2.4.3 Natural Areas and Ecological Resources

The City of Edmonton's Inventory of Environmentally Sensitive and Significant Natural Areas (Geowest, 1993) identifies one Environmentally Sensitive Area. The Environmentally Sensitive Area is the Whitemud Creek Ravine located adjacent to the eastern boundary of the neighbourhood (085RV). The Edmonton State of Natural Areas Report (Spencer[1], 2006) also identifies seven natural areas as listed below. These natural areas are located directly adjacent to the Whitemud Creek Ravine.

- SW6110, SW 6124, SW6128, SW6129, SW6132, SW6135, & SW6137

2.4.4 Wetland Assessment

A Wetland Impact Assessment prepared by Klohn Krippen Berger was submitted to the City Administration in May 2010. The Wetland Impact Assessment was conducted for all lands within Glenridding Heights (Neighbourhood 4A) and Glenridding Ravine (Neighbourhood 4B).

[1] Spencer Environmental Management Services Ltd. 2006. Edmonton State of Natural Areas Report. Edmonton.

The Wetland Impact Assessment for the Glenridding Ravine NSP contains several wetlands (as shown on **Figure 5 – Site Features Plan**) observed through field reconnaissance in August and October 2009, and assessed based upon aerial photo review dating back to 1950. The wetlands are classified as Ephemeral Class I, Class II and Class III wetlands. In addition, the Plan area includes four (4) manmade water features, located within the existing Jagare Ridge Golf Course.

Alberta Sustainable Resources Development (ASRD), now Environment and Parks (AEP) was consulted to verify whether the bed and shore of any wetland within the plan area will be claimed by the Provincial government under the *Public Lands Act*. A response was provided on June 4, 2013 stating that the only Crown claimable features within Sections 15, 22 and 23 of 51-25 W4M is the bed and shore of Whitemud Creek.

AEP administers the *Water Act* and will be contacted regarding any wetlands that may be disturbed. Within Glenridding Ravine, the wetlands identified in the associated Wetland Impact Assessment Report are to be disturbed as development proceeds and may require compensation under the Water Act.

2.4.5 Natural Site Assessment

A combined Stage I Natural Site Assessment Report (NSA) was completed for Glenridding Heights and Glenridding Ravine and submitted to the City in May 2010. The NSA indicated that there is one (1) environmentally sensitive area being the Whitemud Creek and no identifiable ecological network components identified within the Glenridding Ravine plan area. In addition, the NSA indicated that there are no wetlands of sufficient ecological value which could not be replaced or improved upon (in terms of connectivity and habitat value) by the development of naturally vegetated stormwater management facilities.

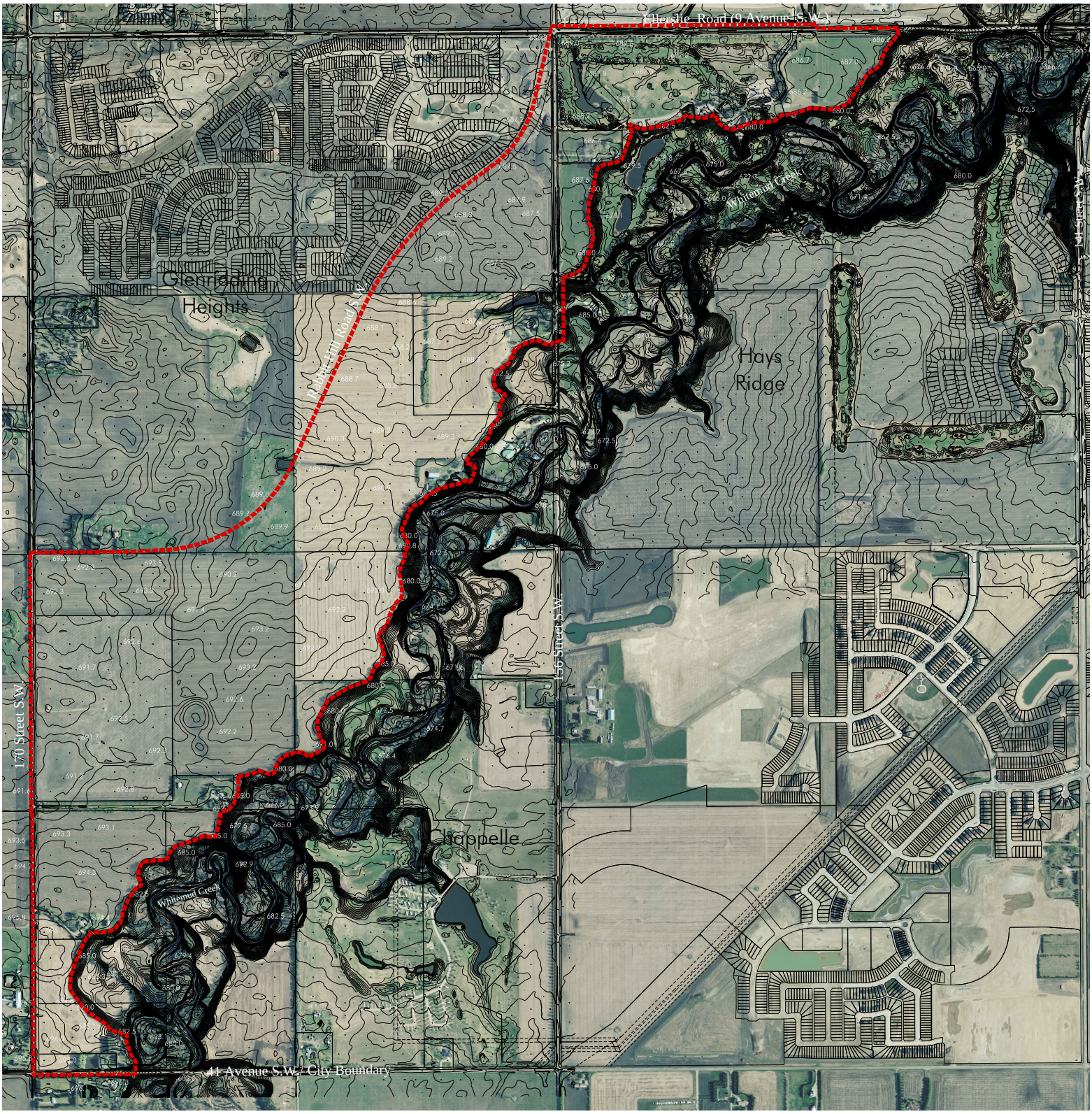
An addendum to the 2009 Stage I Natural Site Assessment was prepared by Stantec Consulting Ltd. for the Glenridding Ravine NSP to update the information to meet current City of Edmonton Policy standards including an analysis of connectivity for the entire neighbourhood and information relating to wetlands to assist with implementing the Way We Green and the Way We Grow Policy Frameworks pertaining to wetland conservation. The primary focus for this report was natural features located above the top-of-bank as the original Stage I NSA included details about the Whitemud Creek Ravine.

The natural features identified in the addendum included: the Whitemud Creek Ravine, nine (9) windrows, eight (8) Treed Areas, two (2) wetlands, three (3) ephemeral drainages four (4) man-made water features, and one (1) dugout. The majority of the windrows and treed areas and one of the wetlands were considered to be low habitat priority ranking. The windrows are not sustainable due to the disturbances caused by urban development. Due to the linear shape, the windrows' become susceptible to seed rain and to water and wind erosion and have a very low chance of survival. In addition, the Natural Site Assessment, shown in Figure 5.4 – Ecological Value Ranking**,** has identified all windrows as low ecological value. Three of the treed areas, the manmade water features on the Jagare Ridge Golf Course and a drainage channel on the Golf Course were assigned a moderate habitat priority. The Whitemud Creek Ravine and a wetland both located within the North Saskatchewan River Valley Area Redevelopment Plan were assigned a high priority ranking.

The Glenridding Ravine Land Use Concept incorporates the majority of the moderate ranked natural features. Recommendations from the Stage 1 NSA addendum include incorporating wildlife crossing mitigation measures, designing the SWMFs as constructed wetlands to mitigate for the loss of wetlands, implement tree protection zones around conserved trees during construction to minimize root damage and maintaining, wherever possible, the existing grades around conserved natural features. All of the high ranked natural features are located outside of the Glenridding Ravine neighbourhood boundary, within the North Saskatchewan River Valley Area Redevelopment Plan.

Figure 4 - Site Contours

Glenridding Ravine - Neighbourhood Structure Plan

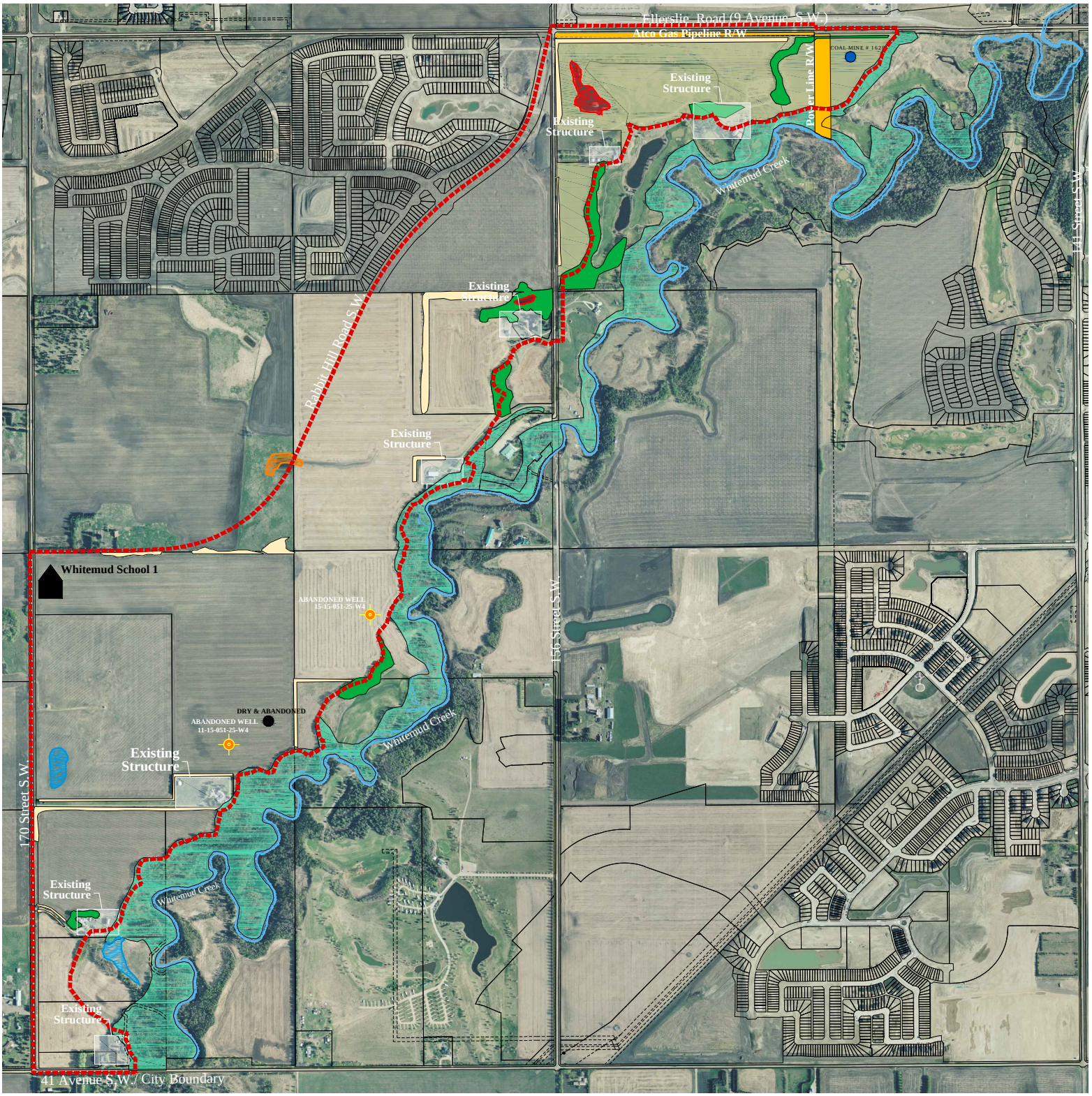


Legend

NSP Boundary

Figure 5 - Site Features

Glenridding Ravine - Neighbourhood Structure Plan



Legend

- Abandoned Wellhead Location
- Dry & Abandoned
- Coal Mine
- Atco Gas Pipeline R/W & Power Pipeline R/W
- Existing Structure
- Golf Course
- Natural Area
- Environmental Reserve
- Man-Made Water Hazards (Water Feature)
- Wetland
- Dugout
- Tree Patch
- Windrow
- NSP Boundary

2.4.6 Existing Land Uses

The majority of the plan area is currently (2015) used for agricultural purposes with eight (8) existing farmsteads and/or estate residential development. An existing 0.48 ha homestead located within Block D, Plan 8922649 and the Harvey Ashby Residence located within Lot 1, Block 1, Plan 1321416 shall be retained. The Jagare Ridge Golf Course is partially located in the northeast portion of the neighbourhood. The Oilfield Technical Society Centennial Park and Museum (OTS) and the Whitemud Creek Golf Course are both located adjacent to the eastern boundary of the Glenridding Ravine neighbourhood, within the North Saskatchewan River Valley Area Redevelopment Plan. None of these uses pose any particular constraints to future urban development in the plan area. However, future development proposals affecting any and all properties within the neighbourhood are expected to be initiated by land owners.

2.4.7 Environmental Assessments

The following information presented in **Table 2 – Environmental Site Assessments** and illustrated on **Figure 6 - Environmental Site Assessment Plan** is based on Phase I Environmental Site Assessments (ESAs) conducted for the participating landowners of the properties contained within the plan area. City Administration requires that individual landowners provide ESAs or disclosure statements prior to the rezoning stage. The Phase I ESA is meant to evaluate the types and location of surface and/or subsurface impacts that may be present on the subject site and adjacent areas.

Table 2 summarizes the status of completed Phase I ESA and Phase I ESA Update reports.

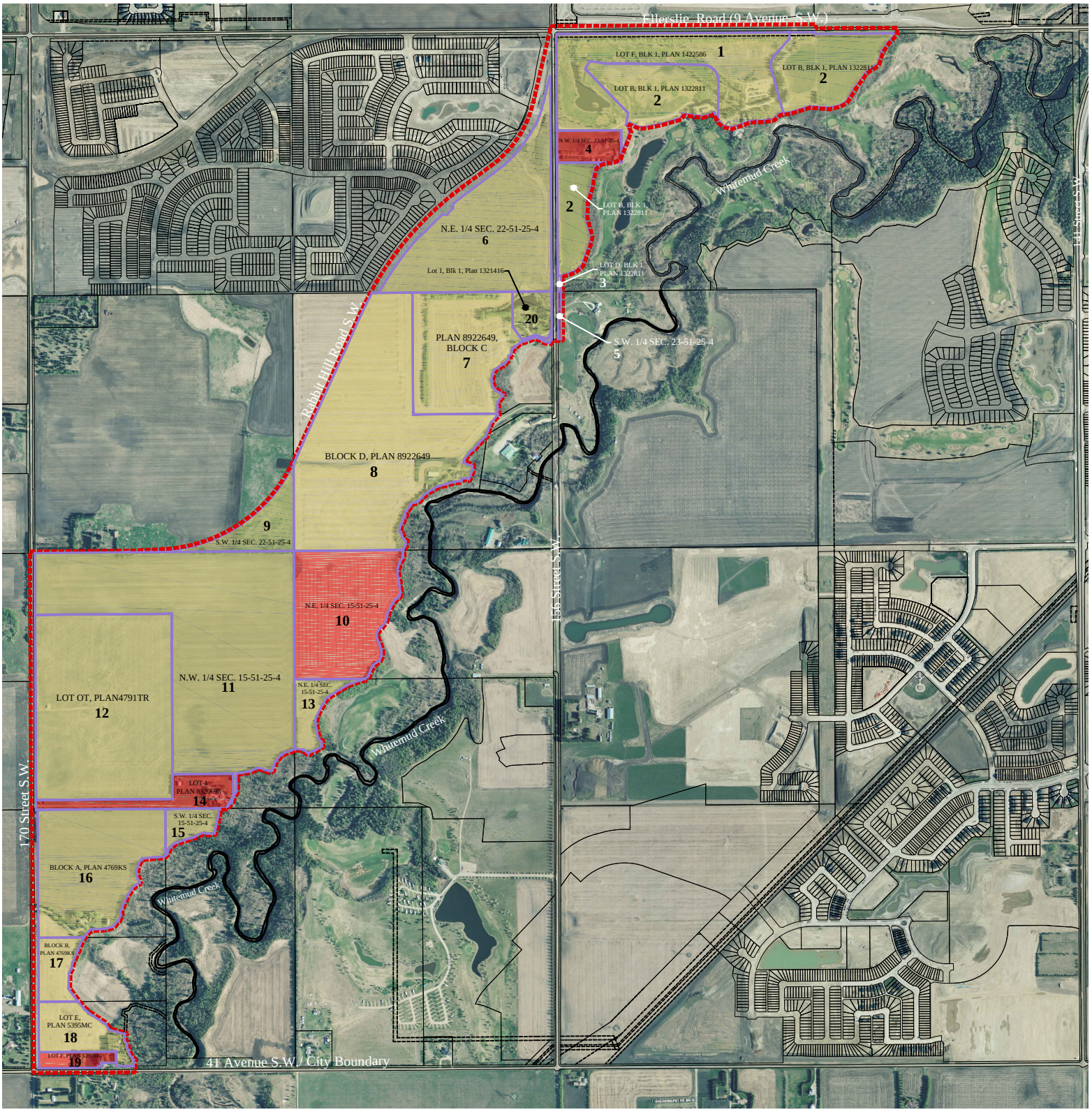
Table 2 - Environmental Site Assessments

	Titled Owner	Legal Description	ESA
1	Private Corporate	Lot F Block 1 Plan 1422586	Phase I ESA Completed
2	Private Corporate	Lot B Block 1 Plan 1322811	Phase I ESA Completed
3	Private Corporate	Lot D Block 1 Plan 1322811	Phase I ESA Completed
4	Private Corporate [NP]	Portion of NW ¼ 23-51-15-W4 [NP]	Required
5	Private Non-Corporate [NP]	SW ¼ 23-51-25-W4 [NP]	Required
6	Private Corporate	NE ¼ 22-51-25-W4	Phase I ESA Update Completed
7	Private Corporate-	Block C, Plan 8922649	Phase I ESA Update Completed
8	Private Non-Corporate	Block D, Plan 8922649	Phase I ESA Completed
9	Private Corporate	SW ¼ 22-51-25-W4	Phase I ESA Completed
10	Private Corporate [NP]	Portion of NE 15-51-25-W4 [NP]	Required
11	Private Corporate	Portion of NW 15-51-25-W4	Phase I ESA Update Completed
12	Private Corporate	Lot OT, Plan 4791TR	Phase I ESA Completed
13	Private Corporate	Portion of NE 15-21-25-W4	Phase I ESA Update Completed
14	Private Non-Corporate [NP]	Lot 1, Plan 8320698 [NP]	Required
15	Private Corporate	Portion of SW ¼ 15-51-25-W4	Phase I ESA Update Completed
16	Private Corporate	Block A Plan4769KS	Phase I ESA Update Completed
17	Private Corporate	Block B Plan 4769KS	Phase I ESA Update Completed
18	Private Corporate	Lot E Plan 5395MC	Phase I ESA Update Completed
19	Private Non-Corporate [NP]	Lot F Plan 5395MC [NP]	Required
20	Private Corporate [NP]	Lot 1 Block 1 plan 1321416 [NP]	Phase I ESA Update Completed

[NP] **Non-Participating Landowners**

Figure 6 - Environmental Site Assessment Overview

Glenridding Ravine - Neighbourhood Structure Plan



Legend

- Environmental Site Assessment Completed
- Environmental Site Assessment Required
- # Map Reference Number
- NSP Boundary

2.4.8 Historical Resources

A Statement of Justification (SoJ) for *Historic Resources Act* requirements has been completed for participating lands and submitted to Alberta Culture and Community Spirit (ACCS) in support of the Glenridding Ravine NSP. **Table 3 – Historical Resources Overview** presents a summary of the lands that have received clearance from ACCS and outlines properties of non-participating landowners for which a Historic Resources Overview will be required prior to development.

Pursuant to Section 31 of the *Historical Resources Act* (HRA), development proponents and/or their representative(s) are required to report the discovery of any archaeological, historic period or paleontological resources, which may be encountered during construction. Preservation, conservation and integration of cultural, historical, and/or archaeological resources with the Glenridding Ravine NSP is important to retaining local history and character that may also be of regional or provincial significance. As a result, priority will be given to the inclusion and repurposing of agricultural buildings and farm houses into future development.

Table 3 - Historic Resources Overview

	Titled Owner	Legal Description	HRO (SoJ)	HRIA
1	Private Corporate	Lot F Block 1 Plan 1422586	Completed	Not Required
2	Private Corporate	Lot B Block 1 Plan 1322811	Completed	Not Required
3	Private Corporate	Lot D Block 1 Plan 1322811	Completed	Not Required
4	Private Corporate [NP]	Portion of NW ¼ 23-51-15-W4 [NP]	Required	To be determined
5	Private Non-Corporate [NP]	SW ¼ 23-51-25-W4 [NP]	Required	To be determined
6	Private Corporate	NE ¼ 22-51-25-W4	Completed	Not Required
7	Private Corporate-	Block C, Plan 8922649	Completed	Not Required
8	Private Non-Corporate	Block D, Plan 8922649	Completed	Completed
9	Private Corporate	SW ¼ 22-51-25-W4	Completed	Not Required
10	Private Non-Corporate [NP]	Portion of NE 15-51-25-W4 [NP]	Required	To be determined
11	Private Corporate	Portion of NW 15-51-25-W4	Completed	Completed
12	Private Corporate	Block OT, Plan 4791TR	Completed	Not Required
13	Private Corporate	Portion of NE 15-21-25-W4	Completed	Completed
14	Private Non-Corporate [NP]	Lot 1, Plan 8320698 [NP]	Required	To be determined
15	Private Corporate	Portion of SW ¼ 15-51-25-W4	Completed	Completed
16	Private Corporate	Block A Plan4769KS	Completed	Completed
17	Private Corporate	Block B Plan 4769KS	Completed	Completed
18	Private Corporate	Lot E Plan 5395MC	Completed	Completed
19	Private Non-Corporate [NP]	Lot F Plan 5395MC [NP]	Required	To be determined
20	Private Corporate [NP]	Lot 1 Block 1 plan 1321416 [NP]	Completed	Not Required

[NP] **Non-Participating Landowners**

2.4.9 Pipelines and Oil Well Sites

A review of the information obtained from the Alberta Energy Resources Conservation Board (ERCB) shows two registered pipelines within the NSP area (see **Figure 5 – Site Features Plan**). The active (operating) pipelines travel parallel to Ellerslie Road (9 Ave. SW.) along the length of the northern boundary), carrying natural gas. All pipeline rights-of-way will be accommodated in the development concept.

Under MDP Policy 9.3 Pipelines and 9.4 Risk Management, a Risk Assessment may be required by the City to determine the feasibility of any proposed development along the two public utility rights-of way for natural gas pipelines in the plan area.

At the rezoning stage, in addition to requirements and recommendations of the Risk Assessment noted above, when a land parcel abuts or contains a high-pressure oil/gas pipeline right-of-way, a minimum separation distance of 7.5 m between the nearest edge of the pipeline right-of-way and any principle building is required. If a standard zone does not provide a minimum 7.5 m separation distance, then a Direct Control Provision shall be applied to accommodate this requirement.

A preliminary search identified three abandoned oil wells within the NSP area. Any potential soil and ground water contamination associated with these wells will be investigated and addressed through the Phase I, II, and/or III ESA review process of the City of Edmonton. With regards to the structural integrity of the abandoned wells, compliance with the Provincial regulations will be ensured through adherence to the Alberta Energy Regulator (formerly ERCB) Directive 079. Future development surrounding the abandoned oil well sites will adhere to the policies and requirements established by the Alberta Energy Regulator and the City of Edmonton. Proposed surface land uses surrounding each identified well is indicated in **Table 4 – Oil Well and Pipeline Information Summary.**

Table 4 - Oil Well and Pipeline Information Summary

Well ID	Licensee	Status	Proposed Surface Land Use
00 / 06-15-051-25 W4 / 0	West Plain Resources Ltd.	Abandoned	Environmental Reserve
00 / 11-15-051-25 W4	R W Development Company Ltd.	Abandoned	Low Density Residential
00 / 15-15-051-25 W4	West Plain Resources Ltd.	Abandoned	Low Density Residential

Pipeline License #	Licensee	Substance	Status	
15440-14	ATCO Gas and Pipelines	Natural Gas	Active	Existing Golf Course
37844-2	ATCO Gas and Pipelines	Natural Gas	Active	Existing Golf Course

2.5 PUBLIC INVOLVEMENT

Consistent with Policy C513 - City of Edmonton Public Involvement Policy, advance notification was sent to surrounding property owners and affected Community Leagues on January 21, 2016, advising them of an application to create the Glenridding Ravine NSP and encouraging them to contact either the Sustainable Development Department or the applicant (Stantec Consulting Ltd.) to communicate any possible concerns.

A public meeting was hosted by City Administration on February 25, 2016, at the Terwillegar Community Recreation Centre. Mailed notification letters were sent on January 25, 2016, to landowners in and surrounding the NSP area advising of this meeting. At the meeting landowners had an opportunity to review and comment on the proposed Glenridding Ravine NSP. All feedback received at the Public Meeting was summarized in the Sustainable Development Department's report to City Council.

Landowners have also been notified of the Public Hearing and have been given the opportunity to provide written comments or register to speak at Council. In accordance with the MGA, a public hearing was held in order to hear from persons regarding the proposed Glenridding Ravine NSP, and to pass the bylaw enacting the Glenridding Ravine NSP.

3.0 Land Use, Transportation, and Servicing Concept

3.1 VISION

Glenridding Ravine is a complete community in southwest Edmonton. The neighbourhood encourages liveability, connectivity and walkability by providing a variety of parks and open spaces integrated with the natural amenities of the adjacent Whitemud Creek. The proposed Transit Centre will enhance transportation options, in addition to housing options through the transit-oriented development within a vicinity of 400 metres that make up the Transit Centre Station Area. The neighbourhood offers a mix of housing types, opportunities for community interaction as well as recreation and community commercial activities.

3.2 Goals and Objectives

The Glenridding Ravine NSP was prepared in accordance with the policies and principles in The Way We Grow, The Way We Move, The Way We Live, The Way We Green, the Windermere ASP and other relevant municipal policies and statutory documents (see **Appendix 1**). The overall goals of the Glenridding Ravine Plan are to establish a neighbourhood that:

- Addresses comfort and safety in response to year-round weather through appropriate urban design principles;
- Encourages diversity by providing a variety of housing forms and residential densities;
- Combines land use decisions with sustainable development and urban design principles;
- Emphasizes access to public open space, including Stormwater Management Facilities, to provide active and passive recreational opportunities;
- Promotes connectivity within the community and encourages pedestrian oriented environments;
- Encourages the development of community places which are safe and utilized to promote community interaction;
- Achieves a balanced transportation system that provides connectivity to neighbourhood focal points and integrates an efficient transit system;
- Provides efficient, contiguous and staged infrastructure and urban development; and,
- Achieves a transit-oriented, walkable community around the transit centre.

The following plan objectives were developed to assist in achieving the above noted goals:

Green Development

1. Consider sustainable development principles in the planning and design of the neighbourhood.
2. Ensure a compact, integrated urban form that uses land resources responsibly and efficiently.
3. Landscaping of parks and open spaces should include native and adaptive plant species and develop/restore clusters of natural vegetation or habitats.
4. Design NSP land use concept, zoning and subdivision layout to significant environmental features.

Urban Design

5. Design residential streets which are pedestrian friendly, safe and form an integral and attractive component of the public realm within the neighbourhood.
6. Create identifiable focal points that are integrated with the open space system of the neighbourhood.
7. Develop park spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.
8. Develop mixed residential uses in the form of single/semi-detached housing and row housing, and medium density residential uses in the form of low-rise/medium density housing to a high urban design standard.
9. Locate buildings to optimize views and vistas to the Whitemud Creek Ravine, focal points, significant heritage constructions and the existing Jagare Ridge Golf Course.
10. Ensure integration of portions of the existing Jagare Ridge Golf Course.
11. Provide signage that is complementary to the theme of the neighbourhood.
12. Ensure neighbourhood infrastructure and design elements address year round weather conditions.
13. Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.
14. Establish gateways into the neighbourhood that enhance way-finding and conveys a sense of arrival.
15. Design streets with alternative designs, as per the Complete Streets Guidelines as well as design built-form within 400 metres of the transit centre to create a transit-oriented, walkable community around the transit centre.

Ecology

16. Protect the Whitemud Creek Ravine from urban development.
17. Strengthen Edmonton's ecological network.
18. Retain sustainable natural features (i.e. wetlands, woodlots, etc.) above the Whitemud Creek Top-of-bank line to enhance ecological network.
19. Ensure that development is setback adequately from the top-of-bank, by providing view point parks and low impact pedestrian linkages to ecologically sensitive areas.

Environment

20. Ensure the environmental status of the lands within the Glenridding Ravine NSP is suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.
21. Ensure urban development around abandoned well-sites adheres to the requirements of the Alberta Energy Regulator (AER) and City of Edmonton Policy and minimizes potential environmental hazards and disruption of future residential areas through neighbourhood design that allows for proactive assessment and future testing of the integrity of the abandoned wells.
22. Establish appropriate horizontal separation distance between residential uses and pipeline corridors.

Historical Resources

23. Identify and protect items with historical significance, such as buildings and areas of cultural significance, in the Glenridding Ravine NSP.

Residential

24. Establish an overall residential density that meets or exceeds the Suburban Housing Mix Guidelines and the density targets set out by the Capital Region Growth Plan.

25. Provide a range of housing choices in a variety of physical forms to meet the needs of different household types, income levels and ages.

26. Establish affordable housing opportunities in Glenridding Ravine.

27. Locate Row Housing and Low-Rise/Medium Density Housing development to facilitate access to arterial and/or collector roadways, commercial uses and public transit service.

28. Ensure that all residential development within 400 metre walking distance of the transit centre will be developed as part of a transit-oriented, walkable community around the transit centre.

Parks and Open Space

29. Accommodate City of Edmonton requirements for park sites within the neighbourhood.

30. Locate park spaces centrally within the neighbourhood to ensure accessibility via pedestrian linkages and automobiles.

31. Design a connected and integrated open space system that encourages active transportation.

32. Promote public access to the Whitemud Creek Ravine.

Commercial

33. Minimize the impact of commercial development on adjacent land uses.

34. Provide the opportunity for commercial needs to be met within the neighbourhood.

35. Locate and orient commercial sites along arterial or collector roadways to ensure high visibility and convenient access opportunities.

36. Ensure that all commercial sites within 400 metre walking distance of transit will be developed as part of a transit-oriented, walkable community around the transit centre.

Transportation

37. Recognize that 170 Street S.W. is a highway connector and is designated as an urban freeway connecting Anthony Henday Drive to the surrounding region. Implement the City of Edmonton road hierarchy system of an integrated arterial, collector and local roadway network.

38. Implement the City of Edmonton road hierarchy system of an integrated arterial, collector and local roadway network.

39. Provide the opportunity for roadways to be developed with alternative standards.

40. Minimize traffic congestion and enhance safety on internal collector roadways.

41. Promote connectivity and pedestrian access to amenity areas such as parks, open spaces, commercial uses and transit facilities by providing an alternative circulation system.

42. Ensure the maximum length of cul-de-sacs in residential settings do not compromise City emergency response plans and operations.

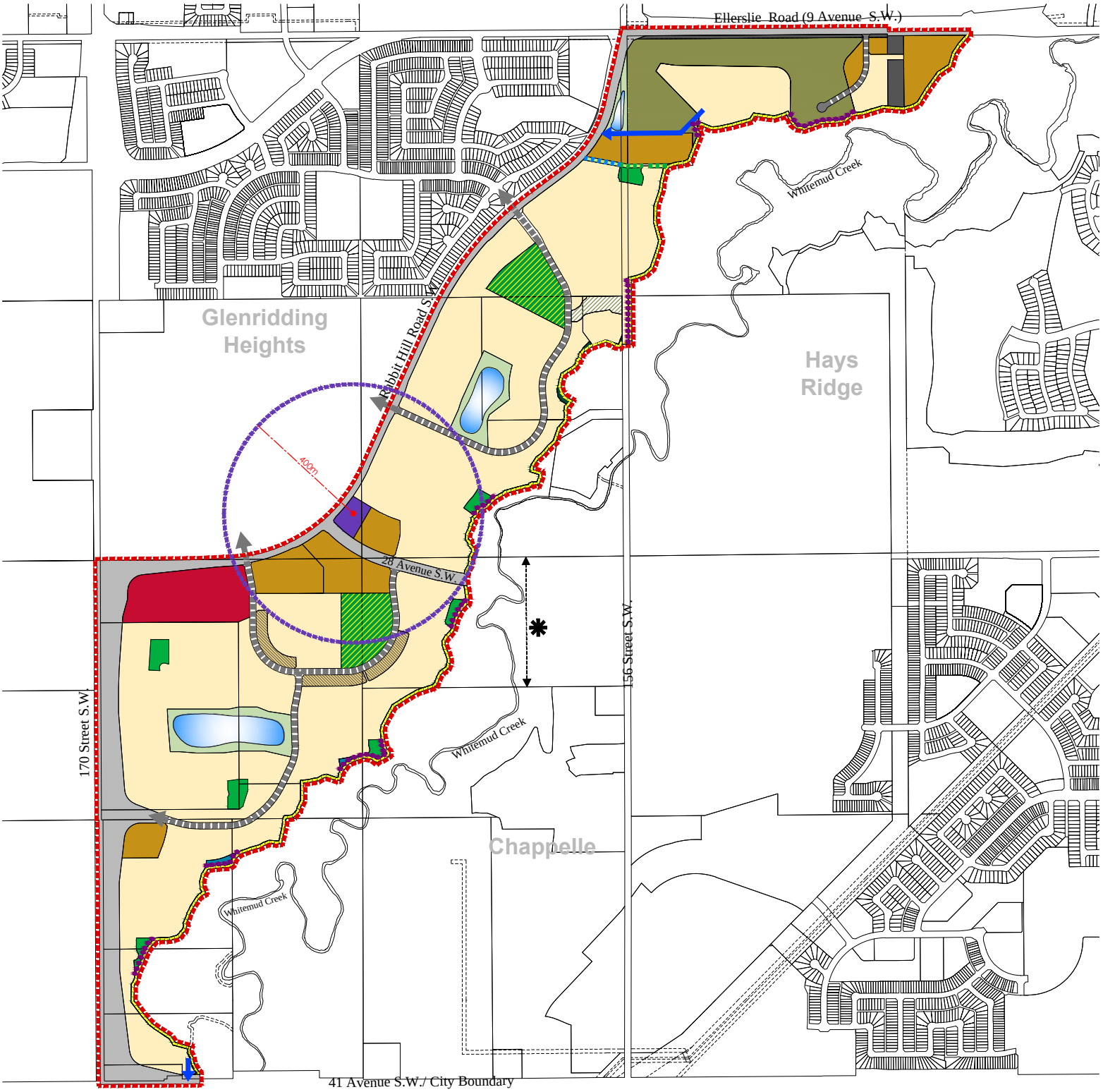
43. Create adequate locations for neighbourhood access.
44. Maximize access to transit facilities for the greatest number of residents in accordance with City of Edmonton Transit System Guidelines and demands.
45. Provide noise attenuation where residential uses back onto major transportation corridors (i.e. arterial roadways).
46. Utilize alternative, street-oriented roadway design standards guided by the Complete Streets Guidelines, for all arterial and collector roadways within 400 metres walking distance of transit to contribute to a transit-oriented, walkable community around the transit centre.
47. Address and identify future wildlife passage locations where required.

Infrastructure, Servicing and Staging

48. Ensure that Glenridding Ravine is serviced to a full urban standard, in an efficient, contiguous and staged manner.

Figure 7 - Land Use Concept

Glenridding Ravine - Neighbourhood Structure Plan



Legend

- Single/ Semi-Detached Residential (Includes Existing Homesite & Historical Site)
- Row Housing
- Low Rise / Medium Density Housing
- Transit Centre
- Community Commercial
- Stormwater Management Facility
- Park
- Urban Village Park
- Existing Golf Course/ Club House
- Environmental Reserve Easement (No Public Access)
- Greenway (MR)
- Greenway (ROW)
- Public Upland Area
- Top-of-Bank Shared-use Path
- Lands Between UDL & Top-of-Bank Roadway
- Emergency Access
- Top-of-Bank Roadway / Park
- Arterial Roadway
- Collector Roadway
- Public Utility Right-of-Way
- NSP Boundary
- ✱ Top-of-Bank & Public Upland Area interpreted by aerial photograph, to be confirmed at the time of rezoning.

Note: This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined at the zoning and subdivision stage.

Table 5 - Land Use & Population Statistics

Glenridding Ravine Neighbourhood Structure Plan Land Use and Population Statistics

LAND USE	Area (ha)		% of GA	
Gross Area	**197.93**			
Environmental Reserve Easement (ER)	0.74			
Public Upland Area (Lands between Urban Development Line and Top-of-Bank)	5.51			
Utility Right-of-Way	1.76			
Existing Jagare Ridge Golf Course	12.39			
Arterial Road Right-of-Way	23.09			
	Area (ha)		**% of GDA**	
Gross Developable Area	**154.44**		**100.0%**	
Commercial				
Community Commercial	6.02		3.9%	
Parkland, Recreation, School, Municipal Reserve*	9.14		5.9%	% of MR
Urban Village Park		6.50		4.21%
Pocket Parks		1.40		0.91%
Greenway (MR)		0.15		0.10%
Top-of-Bank Parks		1.09		0.71%
Transportation				
Circulation	30.89		20.0%	
Greenway (ROW)	0.14		0.1%	
Transit Centre	0.79		0.5%	
Infrastructure / Servicing				
Stormwater Management Facilities	8.91		5.8%	
Total Non-Residential Area	**55.89**		**36.19%**	
Net Residential Area (NRA)	**98.55**		**63.81%**	

RESIDENTIAL LAND USE, UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units/ha	Units	% of NRA	People/Unit	Population
Low Density Residential (LDR)						
Single/Semi-Detached Residential	82.27	25	2,057	60%	2.80	5,759
Medium Density Residential (MDR)						
Row Housing	2.12	45	95	3%	2.80	267
Low-Rise/Medium Density Housing	14.16	90	1,274	37%	1.80	2,294
Total	**98.55**		**3,427**	**100.00%**		**8,320**

SUSTAINABILITY MEASURES						
Population Density (ppnrha)					84	
Unit Density (upnrha)					35	
Single/Semi-Detached // Rowhousing, Low Rise/Medium Density Housing	**60%**	**/ 40%**	**/**			
Population (%) within 500 m of Parkland					81%	
Population (%) within 400 m of Transit Service					100%	
Population (%) within 600 m of Commercial Service					61%	
Presence / Loss of Natural Area Features		Land	Water			
Protected as Environmental Reserve (ha)		0.74	n/a			
Conserved as Naturalized Municipal Reserve (ha)		n/a	n/a			
Protected through other means (ha)		n/a	n/a			
Lost to Development (ha)		5.69	n/a			

STUDENT GENERATION STATISTICS		
Public School Board		**618**
Elementary	309	
Junior High	154	
Senior High	154	
Separate School Board		**309**
Elementary	154	
Junior High	77	
Senior High	77	
Total Student Population		**927**

*As per TOB Policy C542, the area between the TOB roadway and the Urban Development Line shall be deducted from the gross area. Exact areas will be confirmed at the time of subdivision and through legal survey.

***Areas dedicated to Municipal Reserve to be confirmed by legal survey.

3.2.1 Green Development

This NSP will consider integrating green building techniques as well as the preservation of natural ecological features into the neighbourhood.

Objective (1)	NSP Policy	Implementation
Consider sustainable development principles in the planning and design of the neighbourhood.	Where appropriate the neighbourhood should incorporate alternative development standards such as energy efficient lighting and alternative road construction standards.	Allow for flexibility between developers, homebuilders and the City Administration in regulating the introduction and implementation of alternative designs, techniques and technologies that support ecological sustainability, cost effectiveness and environmental stewardship in the development of the neighbourhood. All alternative development standards shall be reviewed and approved by the City Administration.
Rationale The use of alternative development standards such as reduced roadway widths will be addressed within the design of the neighbourhood and at the site specific building level. This plan encourages consultations with the City and affected agencies to explore the use of alternative development standards (i.e. consideration of alternative design and servicing techniques, roadway cross sections or infrastructure provisions that differs from the City of Edmonton standards) as a way of achieving sustainability.		

Objective (2)	NSP Policy	Implementation
Ensure a compact, integrated urban form that uses the land resources responsibly and efficiently.	The neighbourhood shall be designed to efficiently provide increased densities to make more efficient use of land.	**Figure 7 – Land Use Concept Plan** and **Table 5 - Land Use & Population Statistics** illustrates the planned overall density for the NSP that meets the City of Edmonton Council approved Suburban Housing Mix Guidelines and minimum density target for Priority Growth Area Cw of the Capital Region Growth Plan.
Rationale Compact development increases residential densities, and contributes to increased efficiency in the provision of municipal services, public transit, schools and nearby commercial developments and neighbourhood amenities.		

Objective (3)	NSP Policy	Implementation
Landscaping of parks and open spaces should include native and adaptive plant species and develop/restore clusters of natural vegetation or habitats.	Landscaping of parks and open space should include native and adaptive plant species.	Specific species for landscaping should be determined between the developer and City Administration at the time of review of landscaping plans and as part of engineering drawing review.
Rationale Using native and adaptive plant species promotes a healthier natural ecosystem that over time will integrate with the surrounding landscape. Native and/or adaptive plant species generally requires less irrigation and maintenance than non-native species, which will minimize costs associated with development and maintenance. Naturalized landscaping within open spaces provides opportunities to create wildlife habitats, and strengthens the ecological network within the neighbourhood. Non-native species, on the other hand, require more maintenance and weaken an ecosystem's biodiversity and ecological network.		

Objective (4)	NSP Policy	Implementation
Where applicable, design NSP land use concept, zoning, and subdivision layout to retain significant environmental features.	i) Development shall comply with the policies and directives under the North Saskatchewan River Valley Area Redevelopment Plan and Top-of-bank Policy C542. ii) Setbacks shall be provided as a buffer surrounding areas identified as Natural Area.	i) Environmental Reserve lands shall be dedicated to the City of Edmonton, in accordance with the Municipal Government Act, at the time of subdivision. ii) The boundary of all natural areas shall be established through a top-of-bank walk prior to rezoning. Buffers shall be determined through geotechnical studies and Natural Area Management Plans to ensure sustainability.
Rationale Significant environmental features provide habitat for wildlife and support biodiversity in the area. Since these areas are concentrated within the Whitemud Creek Ravine which is adjacent to the Glenridding Ravine neighbourhood, the areas will be protected by Environmental Reserve and surrounding parks within the neighbourhood will be provided to strengthen the ecological network.		

Technical Summary

No specific technical requirements were further identified.

3.2.2 Urban Design

The Glenridding Ravine NSP incorporates relevant principles of urban design to establish a sustainable community in support of the NSP Vision.

Objective (5)	NSP Policy	Implementation
Design residential streets which are pedestrain friendly, safe and form an integral and attractive component of the public realm within the neighbourhood.	i) Streetscape design should consider symmetry, variety, massing and opportunities for innovative building and site design. ii) Major pedestrian linkages along collector and arterial roadways should provide treed boulevards (appropriate landscaping) and sidewalks. Tree species which are salt tolerant shall be included in the detailed landscape design of boulevards.	i) Details regarding the specific type and location of residential uses shall be determined at the rezoning and subdivision application stage where consideration for these elements shall be given. iii) The design of roadways, including provision of landscaping (i.e. boulevard trees) and sidewalks shall be implemented at the detailed design stage of development, to the satisfaction of Transportation Services and Sustainable Development. Selection of appropriate tree species shall be implemented at the detailed design stage of development, to the satisfaction of Transportation Services and Sustainable Development.
Rationale Designing attractive residential streetscapes by using compatible housing forms and zoning designations provides a comfortable environment. At the detailed design stage, the function of the roadway will dictate the appropriate cross sections to be used. To ensure comfortable pedestrian movement and safety, sidewalks should be separated from carriageways by treed boulevards and front drive access should be minimized to reduce pedestrian-vehicle conflict. Orienting buildings towards residential streets encourages pedestrian activity, varies the streetscape, and increases resident's awareness of community activities and promoting neighbourhood safety by placing "eyes on the street."		

Objective (6)	NSP Policy	Implementation
Create identifiable focal points that are integrated with the open space system of the neighbourhood.	i) Focal points include the urban village parks, pockets parks, top-of-bank viewpoint parks, existing golf course, stormwater management facilities and the adjacent (Whitemud Creek Ravine). Focal points shall function as amenity space for residents and	i) **Figure 9 – Pedestrian Network Plan** illustrates the connectivity of key neighbourhood focal points. ii) Details regarding the provision and placement of architectural elements within focal points shall be determined at the detailed design stage of development.

	should be comprised of one or a combination of the following elements: public art, seating area, plaza, street furniture, gazebo, fountain/water feature or other architectural elements. iii) Convenient, safe and efficient pedestrian connections for the neighbourhood into and through open spaces/focal points shall be provided.	iii) Details regarding the placement of pedestrian connections/crossings shall be determined at the subdivision approval or development stage.
Rationale Neighbourhood focal points create community destinations within the neighbourhood. The development of these focal points creates active neighbourhood spaces which are alive and utilized and promote community interaction. This shall be achieved through the design of parks and SWMFs with roadway frontage as supported by the UPMP, pedestrian connectivity extending through cul-de-sacs and site planning of developments following CPTED and Active Transportation principles. Neighbourhood focal points within the neighbourhood include the urban village parks, existing golf course, stormwater management facilities, pocket parks, environmental reserve, and top-of-bank viewpoint parks abutting the Whitemud Creek Ravine. These provide key amenity spaces for local residents and add to the neighbourhood's attractiveness, character and image as well as promote social interaction between residents.		

Objective (7)	**NSP Policy**	**Implementation**
Develop park spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.	i) The stormwater management facilities (SWMF) shall be designed using Crime Prevention Through Environmental Design (CPTED) principles, accessible through public lands, and not land–locked by private development. ii) Street frontage along roadways that abut the SWMF and Urban village parks and other park spaces shall be provided in order to maximize public access and provide clear sightlines and views. iii) The SWMFs should be designed to include naturalized shoreline planting intended to provide habitat opportunities for wildlife and improve water quality.	i) The location and configuration of the SWMFs and park spaces are conceptually illustrated in **Figure 7 – Land Use Concept Plan** and may be refined prior to zoning. ii) SWMF street frontage is determined through Crime Prevention Through Environmental Design Principles (CPTED) which applies to all park development and open space design. SWMFs shall be accessible by public lands and not land-locked by private development, shown in **Figure 7- Land Use Concept Plan.** iii) SWMF landscaping shall be determined between the Developer and City Administration at the time of review of landscaping plans and as part of engineering drawing

	iv) Emergency access to the SWMFs shall be provided.	review as part of the subdivision process. iv) The location of the emergency access to the SWMFs shall be determined at the subdivision approval stage.
Rationale The location, configuration and design of the SWMFs and park spaces integrate these uses into the pedestrian network and provide vistas from the abutting roadways, thereby heightening resident awareness of these facilities. This will promote them as walking destinations, and enhance their surveillance to prevent crime. In addition, the visibility provided by the street frontage along SWMFs and the accessibility of the SWMFs through public and private lands further CPTED principles. The SWMFs and park spaces will be designed to serve as a destination for pedestrians and cyclists and to provide passive recreational opportunities.		

Objective (8)	**NSP Policy**	**Implementation**
Develop mixed residential uses in the form of single/semi-detached housing and row housing, and medium density residential uses in the form of low-rise/medium density housing to a high urban design standard.	i) Low Density (single/semi-detached and row housing) and Medium Density (low-rise/medium density housing) residential uses shall be appropriately designed to ensure a diversity of the built form, unit siting, use of architectural elements and transitioning.	i) Low Density Residential development shall be implemented though Section 900 (Special Area) of the Edmonton Zoning Bylaw. The intent of the Special Area Zoning is to accommodate a range of dwelling types and densities and provide flexibility in the design and development of the neighbourhood. ii) Medium Density Residential development shall be implemented through Sections 100 and 200 of the Edmonton Zoning Bylaw or through a Direct Control as warranted. In addition to the use of standard zones, the character of the Medium Density Residential will be enhanced through regulation of the built form by means of architectural controls. iii) The developer/landowner shall implement specific architectural controls to be adhered at the time of development in the neighbourhood.

Rationale
The character of the neighbourhood will be enhanced through regulation of the built form by means of architectural controls. While parcels of low-rise/medium density housing will likely be developed on a self-contained basis, opportunity exists to develop street-oriented row housing alongside single/semi-detached housing through sensitive urban streetscape design, attention to transitioning and landscaping.

Objective (9)	NSP Policy	Implementation
Locate buildings to optimize views and vistas to the Whitemud Creek Ravine, focal points, significant heritage constructions and the existing Jagare Ridge Golf Course.	i) Buildings adjacent to the Ravine should be oriented to provide views of the Ravine for residents and viewpoint opportunities shall be provided along the top-of-bank shared-use path. ii) View subjects include, but are not limited to, the Ravine, the golf course, and some significant heritage constructions. At the zoning stage, a view analysis shall guide suitable locations for view corridors and the impact of building heights. iii) The Development Officer shall have regard for the placement of buildings relative to creating/maintaining views and vistas where opportunities exist.	Viewpoints and vista opportunities shall be provided through the application of the City of Edmonton Top-of-bank Policy C542.

Rationale
Portions of the Jagare Ridge Golf Course will be integrated into the neighbourhood providing views and vistas. Amenity areas including the golf course, parks and stormwater management facilities create community destination and focal points.

Objective (10)	NSP Policy	Implementation
Ensure integration of portions of the existing Jagare Ridge Golf Course.	i) The neighbourhood shall be designed to integrate portions of the existing golf holes of the Jagare Ridge Golf Course that lie above the top-of-bank with the surrounding residential development. The lands occupied by the	i) The portions of the existing Jagare Ridge Golf Course that shall be maintained are identified in Figure 7 – Land Use Concept Plan. Residential streets should be designed to orient lots backing onto portions of the existing golf course and to provide opportunities for public viewpoints. Additionally, the

	Jagare Ridge Golf Club shall continue to be privately owned and managed. ii) Golf holes located above the top-of-bank shall be redesignated to residential or open space if the golf course ceases to exist.	shared-use path should be designed to connect and integrate residents to portions of the Golf Course. A Top-of-bank road will also be provided along a portion of the existing Jagare Ridge Golf Course. ii) Signage and other design features such as fencing or landscaping to delineate the golf course from public lands shall be considered and installed at the time of development. If the golf course ceases to exist, an amendment to the Glenridding Ravine NSP would be required in order to redesignate the lands to residential or open space. An agreement for a deferred reserve dedication caveat between the developer and the City has been reached which shall distribute the lands if the Jagare Ridge Golf Club ceases to operate as a golf course. This agreement requires that if the golf club ceases to operate as a golf course, any deferred reserve owing on the golf lands located above the top-of-bank shall be paid upon any future subdivision of the golf course lands. The City and developer have agreed that the golf club lands located above the top-of-bank shall dedicate a sufficient amount of MR as land to ensure the planned MR land requirements in this NSP are achieved. The remainder of the 10% owing on golf course land located above the top-of-bank will be in a Deferred Reserve Caveat on title until such time as the golf club ceases to function as a golf course and the lands are further subdivided. The existing deferred reserve dedication caveat will apply at the time of subdivision.
Rationale Proper integration of the existing Jagare Ridge Golf Course lands with residential development into the neighbourhood will be provided through appropriate design and site planning. The golf course will be		

easily accessible, aesthetically pleasing and will add visual interest to the neighbourhood's attractiveness and character. Signage shall be used to ensure there is no confusion on where public and private spaces exist. The Jagare Ridge Golf Club is planned to operate as a private business indefinitely. In the event that the golf club ceases to exist, the lands could be redesignated as residential development or public open space, subject to an amendment to the Glenridding Ravine NSP. The deferred reserve dedication caveat will apply at the time of subdivision on the former golf course lands.

Objective (11)	NSP Policy	Implementation
Provide signage complementary to the theme of the neighbourhood.	i) Way finding signage shall be provided along pedestrian and cycling routes to encourage safe and efficient movement. ii) Signs should be designed in an aesthetically pleasing manner and in harmony with the architecture theme of the respective building.	i) ii) Details shall be determined at the engineering drawing stage. The Development Officer shall seek to ensure that the Development Permit is in conformance with the Sign Regulations of the Edmonton Zoning Bylaw.
Rationale Signage plays an important role in way-finding and creating an identity for the neighbourhood. Ensuring signage is complementary to the theme of the neighbourhood will complement the overall design of the neighbourhood while aiding residents. When appropriately designed and located, signage can improve navigability of the neighbourhood without creating visual clutter.		

Objective (12)	NSP Policy	Implementation
Ensure neighbourhood infrastructure and design elements address year round weather.	i) The neighbourhood shall be designed to accommodate infrastructure programming requirements in the public realm including snow clearing and landscaping maintenance. ii) Neighbourhood entrances and outdoor gathering spaces/focal points shall be designed to accommodate year round activity. iii) The design of streetscapes should take into account opportunities to capture sunlight and reduce potential high winds.	i) Boulevards should be used to accommodate snow removal and year round service vehicles. Alternative development standards shall meet infrastructure programming needs for all seasons. ii) The location and design of outdoor spaces for neighbourhood activities shall consider the incorporation of design elements that respond to all seasons, through such measures as the creative use of light, colour, and ways to provide breaks from wind and extreme temperatures. iii) Higher density residential and commercial sites shall be designed considering building orientation and variations in facade treatment that

		reduce the amount of sun shadowing and prevent wind tunnelling.
Rationale Winter is a dominant season in Edmonton. Designing for winter conditions will help to alleviate the negative attitudes towards the cold climate. Effective landscaping and wind control measures in parks and public spaces (such as natural and constructed wind barriers and park orientation) can enliven public spaces even on the coldest days.		

Objective (13)	**NSP Policy**	**Implementation**
Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.	i) Linking sidewalks and shared-use paths to all of the public open spaces within the neighbourhood, including focal points, urban village parks, the golf course, pocket parks, top-of-bank viewpoint parks, SWMFs, transit centre and community commercial land. ii) Link sidewalks and key pedestrian crossings along Rabbit Hill Road.	i) Three key pedestrian crossings are located along Rabbit Hill Road, one located north of the District Park , approved as part of the Glenridding Heights NSP, one adjacent to the transit centre, and one to the District Park in Glenridding Heights. ii) **Figure 9 – Pedestrian Network Plan** identifies the shared-use paths, key pedestrian crossings, and public open spaces within the neighbourhood. iii) Details regarding the location of streets and sidewalks shall be determined at the zoning and subdivision stage.
Rationale Providing alternative transportation options within the neighbourhood and surrounding areas promote a healthy and active lifestyle for residents. Additionally, providing alternatives to vehicle use encourages environmental sustainability and stewardship within the neighbourhood.		

Objective (14)	**NSP Policy**	**Implementation**
Establish gateways into the neighbourhood that enhance way-finding and identify a sense of arrival.	i) Identify major entrances into the neighbourhood at major intersections and key pedestrian crossing along realigned Ellerslie Road, Rabbit Hill Road and 170 Street, as noted in **Figure 9 – Pedestrian Network Plan.** ii) Neighbourhood entrances should include signage and design features that distinguish the entry.	i) Entrance features and signage shall be developed in accordance with the Zoning bylaw and applicable policies.

Rationale
Entrances serve an important function of way-finding for visitors and residents alike. Entrances also distinguish between areas within the city, encouraging diverse and distinct neighbourhoods. For residents, entrances provide recognition of their home neighbourhood, fostering an attachment and pride in the place they live.

Objective (15)	NSP Policy	Implementation
Design streets with alternative designs, as per the Complete Streets Guidelines as well as design built-form within 400 metres of the transit centre to create a transit-oriented, walkable community around the transit centre.	i) Streets and land uses within 400 m of the transit centre shall be designed to provide a safe, convenient and attractive connection to the transit centre through a combination of shared-use paths, walkways and sidewalks. ii) Consideration shall be given to land uses which are within 400 m of the transit centre to ensure where possible street oriented products are provided.	i) Streets and land uses will conform to the City of Edmonton's Transit Oriented Guidelines for areas within 400 m of the transit centre ii) At rezoning and subdivision parcels which front onto roadways providing connections to the transit centre, shall be street oriented where possible.
Rationale Developing the street network to accommodate pedestrians and transit encourages transportation alternatives to the vehicle. Transit-oriented development creates a more sustainable, vibrant and healthy community.		

Technical Summary

No specific technical requirements were further identified.

3.2.3 Ecology

The Glenridding Ravine NSP ensures that the appropriate areas of the adjacent Whitemud Creek Ravine (within the North Saskatchewan River Valley Area Redevelopment Plan) are maintained and protected through the establishment of an Urban Development Line (UDL).

The Glenridding Ravine NSP complies with the Municipal Government Act and ensures that the appropriate areas of the Whitemud Creek Ravine are maintained and protected as Environmental Reserve. Public access to the Whitemud Creek Ravine shall be provided via a combination of Top-of-bank (TOB) roadway, totalling a minimum of 30% of the length of the UDL, and a TOB Shared-Use Path along the entire length of the Public Upland Area, unless otherwise agreed to with City Administration. Furthermore, consideration is given to ecological linkages between the Ravine, parks, and stormwater management facilities.

Due to the unique configuration of the neighbourhood, the percentage of top of bank roadway proposed is less than the minimum 30% typically required in Policy C542. City Administration will review more precise measurements of the top of bank roadway length at the rezoning and subdivision stage in order to maximize the greatest amount possible. In this case, given geographical features that limit development potential in the neighbourhood, its proximity to the district park in Glenridding Heights with a larger area of influence, along

with a proposed continuous top of bank public access trail with numerous pocket parks and vistas along it, and the opportunity for future Whitemud Creek Ravine accesses to be provided in strategic locations along this edge of the ravine, City Administration is satisfied that sufficient public access to the edge of the ravine and a sufficient variety of active and passive recreational options are proposed to serve the future residents of the area.

There are three terrace areas (plateaus) between the eastern boundary of the Glenridding Ravine neighbourhood and Whitemud Creek Ravine, within the Whitemud Creek Ravine. The terrace areas may be acquired by the City, through a mechanism to be determined at the time of rezoning and subdivision. Should the City acquire the terrace areas, the terrace areas could be considered for public use.

Objective (16)	**NSP Policy**	**Implementation**
Protect the Whitemud Creek Ravine from urban development.	i) The Urban Development Line (UDL) shall separate developable from non-developable area or Environmental Reserve to preserve and protect the appropriate areas of the Whitemud Creek Ravine, ensuring that urban development is reasonably safe from environmental hazard risk and that public access, visual amenities and recreational opportunities are maximized. ii) Lands below the UDL shall be protected from urban development. iii) Lands identified as potential Environmental Reserve (to be confirmed by studies) in **Figure 7 – Land Use Concept Plan** are owned by non-participating landowners which shall require a top-of-bank walk, geotechnical assessment, slope stability analysis and an amendment to the Glenridding Ravine NSP in order to delineate the appropriate land use designations. iv) A minimum setback of 10 m, or the setback recommendation of the approved Geotechnical and Slope Stability Analysis – whichever is greater – shall be provided between the Top-of-bank and the Urban Development Line, in accordance	i) A Geotechnical report and Slope Stability analysis have been submitted for the plan area demarcating the UDL. ii) Lands that meet the criteria for Environmental Reserve (ER) under Section 664(1) of the MGA shall be dedicated to the City of Edmonton at the time of subdivision. iii) Non-participating landowner's top-of-bank is based on survey information in accordance with Alberta Land Surveyor code of practice. This provides important information on existing natural resources, regulations affecting future development, and identifies outstanding Crown and Municipal interest in lands for preservation (i.e. Environmental Reserve) for conservation purposes. The Top-of-bank shall be confirmed with a top-of-bank walk and submission of a geotechnical study and slope stability analysis at the time of application for development (rezoning and/or subdivision). iv) The Urban Development Line shall be demarcated in accordance with the City Policy C542. v) The Subdivision Authority shall ensure all subdivisions abutting the Urban Development Line provide restrictive covenants.

	with Policy C542. This area shall provide for public access circulation, and civic purposes including geotechnical monitoring and repair, firefighting, emergency and public safety. v) A restrictive covenant to meet the requirements of the geotechnical review shall be registered on all properties abutting the Urban Development Line. vi) The stormwater outfall locations shall be further evaluated from a geotechnical perspective prior to the subdivision stage to ensure that the hydrologic flow requirements of the Whitemud Creek and maintained.	vi) Additional geotechnical analysis shall be completed concurrent with an Environmental Screening Report for the stormwater outfall prior to development.

Rationale

The Top-of-Bank (TOB) and Urban Development Line (UDL) have been identified through several site visits with the participating landowners and City Administration, with regard to geotechnical and slope stability analysis, and the requirements of Policy C542. A minimum 10 m Public Upland Area has been provided in all instances along the entire length of the TOB between the TOB and UDL (open space), except where a greater setback is warranted due to geotechnical considerations. Lands deemed to be designated as Environmental Reserve as per Section 664 (1) of the Municipal Government Act shall be determined at the time of rezoning and/or subdivision.

A TOB Shared-Use Path along the entire length of the UDL, within the Public Upland Area and a Top-of-bank (TOB) roadway, totalling a minimum of 30% of the length of the UDL, will maximize access for local residents and the general public. This access is provided for circulation and amenity purposes, slope repair and geotechnical monitoring, firefighting, emergency and public safety, drainage control and for dealing with encroachment issues. The minimum 30% TOB roadway will be reduced due to the unique configuration of the neighbourhood. City Administration is satisfied that sufficient public access along the edge of the ravine is proposed to serve future residents of the area as well as the general public.

A restrictive covenant will be required as a condition of subdivision approval for all properties on or abutting the Urban Development Line. Legal, surveyed demarcation of the UDL will be undertaken to or concurrent with subdivision and development approval.

In the event that the terrace areas are not acquired by the City, the terrace areas could be designated as residential development or open space, subject to an amendment to the Glenridding Ravine NSP.

Objective (17)	NSP Policy	Implementation
Strengthen Edmonton's ecological network.	i) Glenridding Ravine is designed to integrate and link land use components (i.e. Whitemud Creek Ravine, SWMFs, Parks, open spaces and shared-use paths) to provide habitat and encourage ecological connectivity. ii) Plantings of native species should be utilized to add to the habitat value of the green network within the neighbourhood. iii) A Wetland Assessment shall be completed for each titled area within the NSP. iv) Low impact lighting should be considered in areas adjacent to natural areas to minimize light pollution.	i) **Figure 7 – Land Use Concept Plan** guides the development of the NSP. ii) Relevant City of Edmonton conservation planning and policy shall be adhered to (e.g. Policy C531). The recommendations and regulations of the City and Provincial environmental agencies shall be followed. iii) A Wetland Assessment shall be required for each titled area prior to the rezoning approval. The Wetland Assessments shall: identify any potential wetlands, determine required regulatory approvals, and determine potential sustainability of wetlands in the context of future development. iv) Low impact lighting should be provided along the shared-use path network, as shown on **Figure 9 – Pedestrian Network Plan**.
Rationale The function and integrity of the ecological network in the Glenridding NSP is limited. The plan area is primarily agricultural land and the only ecological component identified by the City of Edmonton Ecological Network map is the adjacent Whitemud Creek Ravine. Developing a new network with plantings of native species is a preferable approach to create connectivity and habitat value within the NSP area and between ecological network components located within and outside the NSP boundaries. From an ecological perspective, the network includes the following components: Whitemud Creek Ravine, stormwater management facilities, park spaces and top-of-bank shared-use path.		

Objective (18)	NSP Policy	Implementation
Retain sustainable natural features (i.e. wetlands, woodlots, etc.) above the Whitemud Creek Top-of-bank line to enhance ecological network.	i) Identify natural features beyond the Urban Development Line that shall be protected from urban development.	i) Natural features shall be designated as Environmental Reserve or included in a parks area.

Objective (18)	NSP Policy	Implementation
Rationale Natural features throughout the neighbourhood contribute to the ecological network and provide essential environmental services. These natural areas should be integrated with surrounding development and the Whitemud Creek Ravine.		

Objective (19)	NSP Policy	Implementation
Ensure that development is setback adequately from the top-of-bank, and by providing view point parks and low impact pedestrian linkages to ecologically sensitive areas (Whitemud Creek Ravine).	i) A minimum setback of 10 m, or the setback recommendation of the approved Geotechnical and Slope Stability Analysis – whichever is greater – shall be provided between the Top-of-bank and the Urban Development Line, in accordance with Policy C542. ii) Parks should be located along the top-of-bank to provide access and view points of the Whitemud Creek Ravine for residents.	i) The Urban Development Line shall be demarcated in accordance with the City Policy C542. ii) Parks should be located along the top-of-bank, acting as viewpoint parks. The shared-use path shall be constructed along the top-of-bank to provide access to natural areas for residents.
Rationale Designating the appropriate setbacks from the top-of-bank will ensure development protects and enhances ecologically sensitive areas. View point parks and the shared-use path will provide and facilitate resident access to the Ravine.		

Technical Summary

A Stage I Natural Site Assessment (NSA) was completed by Klohn Crippen Berger Ltd. as well as an NSA Addendum has been prepared by Stantec Consulting Ltd. for Glenridding Ravine. The reports were based on field reconnaissance, historical air photo review and records review, including the Alberta Heritage Information Centre, the Fish and Wildlife Management Information System, the Federal Species at Risk Act and Provincial Species at Risk Program. The NSA reports states that there are no environmentally sensitive areas and no identifiable ecological network components identified within Glenridding Ravine.

A Wetland Assessment was prepared on behalf of the participating landowners. The Wetland Assessment identifies any potential wetlands, determines potential sustainability of wetlands in the context of future development, and outlines required regulatory approvals.

Geotechnical Reports and Slope Stability Analysis reports were prepared on behalf of the participating landowners and have been submitted under separate cover in support of the NSP.

3.2.4 Environment

In order to ensure that the lands within the NSP area are suitable for development, the environmental status of the land must be evaluated. The City requires that Phase I Environmental Site Assessments (ESA) be submitted, reviewed, and endorsed prior to the rezoning stage of development.

Objective (20)	NSP Policy	Implementation
Ensure the environmental status of the lands within the Glenridding Ravine NSP is suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.	i) Determine the likelihood, types, and location of environmental concerns that may be present on the lands prior to rezoning. ii) Phase I ESA reports older than 1 year from the date of rezoning application shall be updated, and any Phase I ESA report older than 5 years from the date of rezoning application shall be redone. iii) Where necessary, contaminated material shall be removed and disposed of in an environmentally sensitive manner, in accordance with Federal, Provincial, and Municipal regulations.	i) ii) ESAs and any follow-up shall receive sign-off by City Administration prior to the rezoning stage of development. iii) Site remediation, where necessary, shall be conducted prior to rezoning. An environmental site assessment report verifying the remediation shall be submitted for approval by City Administration prior to rezoning of the subject lands.
Rationale Lands within the Glenridding Ravine NSP boundary will be suitable for development and their environmental status confirmed prior to rezoning. Those lands identified as contaminated must undergo remediation according to Federal, Provincial, and Municipal standards.		

Objective (21)	NSP Policy	Implementation
Ensure urban development around abandoned well-sites adheres to the requirements of the Alberta Energy Regulator (AER) and City of Edmonton Policy and minimizes potential environmental hazards and disruption of future residential areas through neighbourhood design that allows for proactive assessment and future testing of the integrity of the abandoned wells.	i) When a land parcel to be subdivided, developed, and/or re-developed contains an abandoned well, adherence to the requirements of the Alberta Energy Regulator (formerly ERCB) and City Policy shall occur. This includes, but is not limited to, adherence to the Alberta Energy Regulator Directive 079. The Directive 079 applies to all abandoned wells licensed and regulated by the Alberta Energy Regulator, regardless of its production history. ii) Abandoned well areas shall	i) Setback requirements shall be confirmed at time of subdivision approval. Also, confirmation of compliance with the Alberta Energy Regulator (formerly ERCB) Directive 079 shall be provided at time of subdivision. If a lot to be developed contains an abandoned well and does not require subdivision, then the confirmation of compliance shall be provided at time of development or re-development in accordance to the Directive 079. ii) Consideration for appropriate

	only assume land uses that will allow for immediate maintenance, should the well ever require servicing. iii) A temporary identification marker shall be placed as precisely as possible on the abandoned wells to prevent damage both to the structure of the well and to the construction or excavation equipment. The temporary identification marker should be placed based on the confirmed well location on site, either through the Abandoned Well Locating and Testing Protocol as described in the Alberta Energy Regulator (formerly ERCB) Directive 079, Phase II Environmental Site Assessment (ESA), or independent surveying. iv) Should the status of a well site change, an assessment of risk factors shall be undertaken.	land uses shall be determined at time of rezoning. iii) Appropriate temporary identification markers shall be placed on site prior to Subdivision. Photographic confirmation shall be provided at time of subdivision application by the applicant. iv) A Risk Assessment, or other requirements by the City, shall be conducted at the rezoning stage.
Rationale Policies relating to existing and abandoned oil and gas uses will ensure conscientious residential development around oil and gas well sites and pipelines at all stages of the plan implementation and construction process while minimizing potential disturbances to the area's future residents. Urban development in the vicinity of all resource well sites will be planned in accordance with the City policy and procedure City procedures. Development of lands involving abandoned wells shall comply with ERCB guidelines for development around abandoned wells. An assessment of risk and nuisance will be conducted on operating or suspended oil and gas wells, as directed by existing or future City policy for the integration of oil and gas facilities prior to any rezoning of the parcel where the facility is located.		

Objective (22)	**NSP Policy**	**Implementation**
Establish appropriate horizontal separation distance between residential uses and pipeline corridors.	i) Residential development adjacent to pipeline corridors shall comply with the City's Policy Guidelines for the Integration of Transmission Pipelines and Urban Development (1985), Planning for the Interface of Pipeline Right-of-ways and the Subdivision of Land (2003), Alberta Energy and Utilities	i) The Subdivision Authority shall have regard for lot and site design ensuring the appropriate setback distance between pipeline corridors and residential uses.

	Board policies and any other relevant policies to be employed in consideration of urban development within and or adjacent to well sites, pipeline or facility rights-of-way.	
Rationale **Figure 5 – Site Features Plan** illustrates the location of existing and future rights-of-way. Development abutting the pipeline corridor shall be implemented according to the Zoning Bylaw with respect to setbacks from development to ensure the safe and ongoing operations of these facilities.		

Technical Summary

Phase I ESAs and Phase I ESA Updates have been completed and submitted to the City Administration confirming the majority of the Plan area is free of contamination and therefore suitable for development (**see Table 2: Phase I – Environmental Site Assessments and Figure 6 – Environmental Site Assessment Plan**). Follow-up items identified within the respective ESAs shall be addressed prior to the rezoning of the subject areas, as per the implementation strategy.

3.2.5 Historical Resources

Pursuant to Section 31 of the Historical Resources Act, development proponents and/or their representatives are required to report the discovery of any archaeological, historic period or paleontological resources, which may be encountered during construction.

Objective (23)	NSP Policy	Implementation
Identify and protect items with historical significance, such as buildings and areas of cultural significance, in the Glenridding Ravine NSP.	i) Participating landowners within the plan area shall submit a Statement of Justification (SoJ) for Historical Resources Act Requirements (formerly Historical Resources Overview) and, if necessary, a Historical Resources Impact Assessment (HRIA). ii) The Ashby Farm House Residence at 1810A 156 Street, and those Agricultural buildings deemed noteworthy should be included and repurposed into future development plans.	i) **Table 3 – Historical Resources Overview** confirms that SoJs have been completed for all participating landowners within the plan area and submitted to Alberta Culture and Community Spirit (ACCS). i) Where required, Historical Resources Impact Assessments (HRIA) shall be submitted prior to rezoning approval. i) Those lands which have not received clearance on HRO studies shall be required to submit and receive sign off prior to rezoning. ii) The Ashby Residence must be included in any future development and zoned appropriately, the heritage planners can assist in repurposing opportunities or exploring alternative options.

Rationale
Based on ACCS's review of the Statement of Justification (SoJs) submitted, Historical Resources Impact Assessments (HRIA) are required for five of the titled areas, as outlined on **Table 3 – Historical Resources Overview**. The HRIAs that are required will be submitted to ACCS for clearance prior to rezoning the subject lands.

Those lands which have not completed HRO reports must submit documentation to ACCS prior to initiating development.

Technical Summary

Fourteen (14) Statement of Justifications (SoJ) have been submitted to Alberta Culture and Community Spirit (ACCS) in support of the Glenridding Ravine NSP. Based on ACCS's review of the submitted SoJs, Historical Resources Impact Assessments for five (5) parcels are required. The HRIAs will be submitted to ACCS prior to rezoning the subject lands. Per Section 31 of the Historical Resources Act, development proponents and/or their representatives are required to report any archaeological, historic or paleontological resources encountered during construction and cease all work.

3.2.6 Residential

Approximately 98.55 hectares (ha) of the plan area is designated for residential land uses. The specific land uses will be determined on the basis of market conditions and consumer preferences at the time of zoning approval and are identified on **Figure 7 – Land Use Concept Plan.**

Low Density Residential (*Single/Semi-Detached housing*) will be developed on approximately 82.27 ha of land within the plan area. Single/Semi-Detached housing will be developed at a maximum density of 25 units/ha. Residential uses anticipated would be consistent with the RSL, RPL, RF4 or RMD zoning designations under the Zoning Bylaw. In order to facilitate innovative and/or more affordable low density housing forms, DC1 Direct Development Control Provisions may be utilized.

Medium Density Residential (*Row Housing*) will be developed on approximately 2.12 ha of land within the plan area, with alley access, at a maximum height of 3 storeys and density of 45 units/ha. Residential uses anticipated would be consistent with the RF5 and UCRH zoning designations under the Zoning Bylaw.

Medium Density Residential (*Low-Rise/Medium Density Housing*) will be developed on approximately 14.16 ha within the plan area, at a maximum height of 4 storeys and an average density of 90 units per ha. Residential uses anticipated would be stacked row housing or low rise apartments consistent with the RF6 and RA7 zoning designation under the Zoning Bylaw.

There are three terrace areas (plateaus) between the eastern boundary of the Glenridding Ravine neighbourhood and Whitemud Creek, within the Whitemud Creek Ravine. The terrace areas may be acquired by the City, through a mechanism to be determined at the time of rezoning and subdivision. Should the City not acquire the terrace areas, a range of uses may occur on them as developable land not consisting of being a swamp, gully, ravine, coulee or natural drainage course; are not subject to flooding, and are not unstable, for example, low density residential, low intensity institutional, and others. An amendment to the Glenridding Ravine would be required should the terrace areas be developed for residential purposes.

The Glenridding Ravine NSP proposes an overall residential density of approximately 84 persons per net residential hectare and 35 net residential units per hectare. The area, number of dwelling units, and population attributed to each form of residential development is shown in **Table 5 – Land Use and Population Statistics.**

Objective (24)	NSP Policy	Implementation
Establish an overall residential density that meets or exceeds the Suburban Housing Mix Guidelines and the density targets set out by the Capital Region Growth Plan.	i) The Glenridding Ravine NSP shall meet or exceed the approved Suburban Housing Mix ratio for new neighbourhoods. ii) The Glenridding Ravine NSP shall meet or exceed the approved density target as set out by the Capital Region Growth Plan.	i) **Figure 7 – Land Use Concept Plan** and **Table 5 – Land Use Concept and Population Statistics** shall guide intensified suburban development. ii) The Glenridding Ravine NSP density is approximately 35 units per net residential hectare.
Rationale The approved Suburban Housing Mix ratio for new neighbourhoods in the City of Edmonton recommends the provision of 65% to 85% Low Density Residential (Single/Semi-Detached) development and 15% to 35% Medium Density Residential (Row Housing and Low Rise/Medium Density Housing). The Glenridding Ravine NSP's ratio is approximately 60% Low Density Residential to 40% Medium Density Residential. Establishing higher residential densities results in better use of municipal infrastructure and facilities. It also supports the use of transit, innovative design through encouraging enhanced architectural features, and helps meet the demand for housing in the City's growing suburban neighbourhoods. Glenridding Ravine is located in the Capital Region Growth Plan's Priority Growth Area "Cw" which sets a minimum density target of 30 units per net residential hectare. The Glenridding Ravine NSP meets this target.		

Objective (25)	NSP Policy	Implementation
Provide a range of housing choices in a variety of physical forms to meet the needs of different household types, income levels and ages.	A mixture of residential dwelling types including single/semi-detached, row housing and low rise/medium density housing shall be provided, allowing consumer choice, and a range of affordability options.	i) **Figure 7 – Land Use Concept Plan** illustrates the general location of residential land use designations. ii) The City of Edmonton Zoning Bylaw provides for a range of densities and housing forms that shall be applied at the rezoning stage.
Rationale Providing a variety of housing types, choices and densities encourages the creation of a well-balanced neighbourhood, accommodating an array of income groups and market segments, as well as various types and sizes of families. *Single/Semi-Detached Housing:* Opportunities to provide various forms of Single/Semi-Detached housing are provided within the neighbourhood and include single detached housing with and without rear lanes (e.g. use of zones such as (RSL) Residential Small Lot Zone, (RPL) Planned Lot Residential Zone, (RF1) Single Detached Residential Zone) and semi-detached housing (e.g. use of (RF4) Semi-Detached Residential Zone).		

Special attention will be given to the development of high quality design, massing, and building treatment that are human-scale.

Row Housing:
Row Housing areas will employ land use zones such as (RF5) Row Housing Zone and (UCRH) Urban Character Row Housing.

Low-Rise/Medium Density Housing:
Low-Rise/Medium Density Housing areas will employ land use zones (RF6) Medium Density Multiple Family Zone, or (RA7) Low Rise Apartment Zone.

Objective (26)	**NSP Policy**	**Implementation**
Establish affordable housing opportunities in Glenridding Ravine.	i) Developments shall comply with the City of Edmonton's affordable housing policies and guidelines. ii) The NSP shall allow for a wide variety of housing types, with a wide range of price points, to create a more inclusive neighbourhood. iii) Opportunities such as secondary suites, garage suites or garden suites should be encouraged among builders.	i) City of Edmonton's affordable housing policies and guidelines shall be applied prior to rezoning. ii) **Figure 7 – Land Use Concept Plan** indicates the location of various residential land uses. iii) Secondary suites, garage suites or garden suites shall be implemented through Sections 100 and 200 of the Edmonton Zoning Bylaw.
Rationale Providing a variety of housing types creates affordable housing options for a variety of households. Secondary suites can further provide an important potential source of affordable housing for singles and other small households, and create mortgage helpers for the owner of the principle dwelling.		

Objective (27)	**NSP Policy**	**Implementation**
Locate Row Housing and Low-Rise/Medium Density Housing development to facilitate access to arterial and/or collector roadways, commercial uses and public transit service.	Row Housing and Low-Rise/Medium Density Housing development should be located abutting collector and/or arterial roadways, near commercial use and along transit routes.	**Figure 7 – Land Use Concept Plan** conceptually illustrates the location of Row Housing and Low-Rise/Medium Density Housing development along collector and arterial roadways (possible bus routes).
Rationale Location of Low-Rise/Medium Density Housing along transit routes and within walking distance of commercial uses, creates a more compact, walkable and liveable neighbourhood.		

Objective (28)	NSP Policy	Implementation
Ensure that all residential development within 400 metres of the transit centre will be developed as part of a transit-oriented, walkable community around the transit centre.	The NSP shall incorporate land uses such as Low Rises / Medium Density Residential and Street Oriented Residential designations to provide increased residential densities within walking distance of the transit centre.	**Figure 7: Land Use Concept Plan** illustrates the general location of all residential uses. Low Rise / Medium Density Residential and Street Oriented Residential have been located within the 400 m as well as near arterials and collectors, commercial uses, park sites and transit routes.
Rationale Higher densities situated adjacent to the transit centre will encourage increased transit ridership. Low Rise, Medium Density and Street-Oriented Residential will also provide more housing choice, more efficient use of land and infrastructure, and encourage a greater social mix.		

Technical Summary

No specific technical requirements were further identified.

3.2.7 Parks and Open Space

The Glenridding Ravine NSP proposes a variety of parks spaces within the neighbourhood. This includes: two urban village parks, three pocket parks, land between the UDL and the Top-of-bank roadway (public upland/open space) and four top-of-bank viewpoint parks. Three stormwater management facilities (SWMF), as well as the adjacent Whitemud Creek Ravine provide additional open space within and adjacent to the neighbourhood. Accordingly, an integrated open space system is proposed for Glenridding Ravine, as shown in **Figure 9 - Pedestrian Network Plan**. The area attributed to Park and Open Space is shown in **Table 5 – Land Use & Population Statistics**.

Objective (29)	NSP Policy	Implementation
Accommodate City of Edmonton requirements for park sites within the neighbourhood.	i) The NSP shall follow the guidelines for the hierarchy and distribution of park spaces as prescribed in the Urban Parks Management Plan, while considering the natural geographic characteristics of the neighbourhood. ii) Municipal Reserve owing for Glenridding Ravine shall be dedicated in full as land, cash-in-lieu of land or an acceptable combination thereof. The values for cash in place of land shall be agreed upon prior to subdivision. iii) Servicing shall be provided as prescribed in the Urban Parks Management Plan.	i) The parks, pedestrian linkages, and open spaces are conceptually illustrated in **Figure 7 – Land Use Concept Plan.** ii) The Subdivision Authority shall determine the MR owing for the Glenridding Ravine NSP and the areas dedicated as MR shall be confirmed by legal survey at the time of subdivision. iii) The neighbourhood servicing scheme shall ensure that the type and amount of servicing provided within roadways adjacent to parkland adequately meets the needs of parkland facilities into the future. No utilities will be located on MR unless it solely

	iv) The NSP shall consider winter issues in the landscaping of parks and open spaces, plazas and boulevards.	serves an MR parcel or has been approved by Parks and Biodiversity. iv) Selection of tree species shall be implemented at the detailed design stage of development, to the satisfaction of Transportation Services and Sustainable Development.

Rationale

The Urban Parks Management Plan (UPMP) provides strategic direction for the acquisition, design, development, and management of Edmonton's parkland until the year 2016. The NSP uses the hierarchy of park sites and land assembly guidelines set out in UPMP.

The Glenridding Ravine neighbourhood provides a variety of parks and open spaces for residents. Park spaces are located throughout the neighbourhood in order to meet the recreational needs of all residents. The neighbourhood plan links parks space, open space, SWMFs and the Whitemud Creek Ravine through a system of pedestrian linkages and walkways.

Urban Village Parks:

Two urban village parks, totalling 6.5 ha in size, are located within the neighbourhood. The northern Urban village park is approximately 3.3 ha and provides approximately 25% roadway frontage along the abutting collector roadway while the southern Urban village park is 3.2 ha in size and provides approximately 45% roadway frontage along the abutting collector roadway. Both parks are intended to serve as neighbourhood gathering places and can accommodate a potential Community League facility, if required.

Pocket Parks:

The neighbourhood will feature three pocket parks located throughout the area, totalling 1.40 ha. These parks provide gathering places for residents, as well as adding greenery and increasing the aesthetic quality of the neighbourhood. Pocket Parks shall have a minimum 25% roadway frontage.

Top-of-Bank Viewpoint Parks:

Four top-of-bank viewpoint parks, totalling 1.09 ha, are located along the eastern boundary of the neighbourhood, adjacent to the Whitemud Creek Ravine. The parks will provide public access, and will enhance views and vistas associated with the North Saskatchewan River Ravine system.

Greenway:

One greenway, totalling 0.29 ha (0.15 ha as municipal reserve and 0.14 ha as right-of-way) is located in the northern portion of the neighbourhood The greenway corridor provides a linear, multi-model connection from the Glenridding Heights neighbourhood to the northern pocket park and to the top-of-bank shared use trail along the Whitemud Creek Ravine.

Stormwater Management Facility:

Three Stormwater Management Facilities (SWMF) are proposed in Glenridding Ravine. The facilities provide amenity areas and are part of the open space system within the plan area. In addition, the location and configuration of the SWMFs integrates well with the pedestrian network and provides vistas from abutting roadways, thereby heightening resident awareness and use of this public facility. This in turn will promote it

as a walking destination, and enhance surveillance to prevent crime and will serve as a destination for pedestrians and cyclists and provide passive recreation opportunities. . The SWMFS shall have adequate public roadway frontage to ensure adequate surveillance and accessibility to the community is provided and the satisfy CPTED principles. The extent of public open space around the facility will depend on City policies at the time of development.

A fourth stormwater management facility may be located east of the neighbourhood boundary, within the North Saskatchewan River Valley Area Redevelopment Plan. This SWMF would serve the lands within the southern terrace area contemplated to be developed as residential. Options for servicing of the terrace lands for both stormwater management and sanitary drainage will be reviewed and addressed separately should the lands be considered for development. In the event that the terrace areas are not acquired by the City, the terrace area could be designated as public utility lot, residential development, and/or open space, subject to an amendment to the Glenridding Ravine NSP.

Whitemud Creek Ravine:
The Whitemud Creek Ravine, located immediately east of the Glenridding Ravine neighbourhood will be a protected natural area, defined by the top-of-bank boundaries. The Ravine will act as a destination for residents through pedestrian linkages and the shared-use path.

Municipal Reserve:
Land provided for municipal reserve dedication in the Glenridding Ravine NSP is approximately 9.28 ha or 5.9%. Given geographical features that limit development potential in the neighbourhood, its proximity to the district park in Glenridding Heights with a larger area of influence, along with a proposed continuous top of bank public access trail with numerous pocket parks and vistas along it, and opportunities for future Whitemud Creek Ravine accesses to be provided in strategic locations along this edge of the ravine, City Administration is satisfied that sufficient public access to the edge of the ravine and a sufficient variety of active and passive recreational options are proposed to serve the future residents of the area.

Overall, Windermere Neighbourhood 4 (Glenridding Heights NSP and Glenridding Ravine NSP) dedicates approximately 17.8% for municipal reserve dedication, which exceeds the municipal reserve entitlement of 10%. The remainder of MR requirements will be secured by the City in accordance with the deferred reserve dedication caveat.

Utility Servicing:
Utility servicing (i.e. water, gas, electrical, sewer, etc.) for the park sites will be provided, as required, through the engineering drawings and servicing agreement processes and will be done to relevant City standards.

The area and percentage of Gross Developable Area attributed to each form of park and open space development is shown in **Table 5 – Land Use & Population Statistics.**

Objective (30)	**NSP Policy**	**Implementation**
Locate park spaces centrally within the neighbourhood to ensure accessibility via pedestrian linkages and automobiles.	i) Street frontage along roadways that abut the SWMFs and park spaces shall be provided in order to ensure sightlines, natural surveillance, and adequate lighting.	i) ii) The Subdivision Authority shall have regard for the subdivision design to ensure adequate public roadway frontage on all parks illustrated in **Figure 7– Land Use Concept Plan.**

	ii) Landscaping and design of park spaces shall take into consideration basic CPTED principles and design principles included in the Design Guide for a Safer City and Urban Parks Management Plan (UPMP). iii) Park space shall be designed to accommodate active or passive recreation activities for different age groups.	iii) Design and development of future parks and open spaces shall consider programming needs of the community and be implemented based on requirements of the Sustainable Development Department.
Rationale The park spaces are located adjacent to roadways, and are connected through a network of shared-use paths, walkways and sidewalks to ensure that the park spaces are accessible and dispersed with the residential uses in the plan area.		

Objective (31)	**NSP Policy**	**Implementation**
Design a connected and integrated open space system that encourages active transportation.	i) The NSP shall incorporate an array of pedestrian linkages along sidewalks, walkways and shared-use paths that connects the park space, stormwater management facility and various other focal points. ii) Shared-use paths shall be constructed along a minimum of 50% of the perimeter of each SWMF.	**Figure 7 – Land Use Concept Plan** and **Figure 9 – Pedestrian Network Plan** conceptually guide the location of the neighbourhood park spaces, open spaces, pedestrian connections and SWMFs which should connect residents to the focal points.
Rationale Glenridding Ravine provides an internal pedestrian network that is highly connected, direct and convenient via linkages along sidewalks, walkways, and shared-use paths. All parks and open spaces are connected to the pedestrian network within the neighbourhood to ensure that they are accessible to the residential land uses in the plan area and the surrounding developing neighbourhoods. The park locations are linked with linear corridors, enabling additional recreational options and increasing active transportation (i.e. walking, bicycling, in-line skating) possibilities within the neighbourhood. These connections will be provided by a combination of minor pedestrian linkages and shared-use paths. In addition, a walkway system (top-of-bank shared-use path) along the Whitemud Creek Ravine is proposed on the eastern boundary of the neighbourhood. The walkway system spans the full length of the Top-of-bank and connects to the internal pedestrian network which links all parks and open space areas in the neighbourhood.		

Objective (32)	**NSP Policy**	**Implementation**
Promote public access to the Whitemud Creek Ravine.	Access to the Whitemud Creek Ravine shall be provided via a top-of-bank shared-use path, pedestrian connections such as	**Figure 7 – Land Use Concept Plan** shall guide the development of top-of-bank viewpoint parks and roadways.

	sidewalks, and a combination of top-of-bank viewpoint parks and roadways.	
Rationale The neighbourhood plan will include a top-of-bank shared-use path along the entire length of the adjacent Whitemud Creek Ravine. Access to the Top-of-bank walkway is proposed via a combination of roadway, parks and pedestrian connection.		

Technical Summary

A Parkland Impact Assessment (PIA) has been completed outlining Glenridding Ravine's compliance with the UPMP vision and guidelines.

A Community Knowledge Campus Needs Assessment (CKC NA) was completed. The Edmonton Catholic School Board (ECSB) advised that they do not require a school site within Glenridding Ravine. The Edmonton Public School Board (EPSB) advised that they require a K-6 school site in Windermere Neighbourhood 4A/4B (Glenridding Heights and/or Glenridding Ravine). Through discussions with City Administration and the Edmonton Public School Board, it was determined that the K-6 Public School will be located on the urban village park (School/Park) site in Glenridding Heights.

Geotechnical Investigations and Slope Stability Assessments for participating landowner's lands adjacent to the Whitemud Creek Ravine have been submitted to City Administration for review. The studies identify factors that affect bank stability and establish an Urban Development Line (UDL) along the Whitemud Creek Ravine.

3.2.8 Commercial

The Glenridding Ravine NSP includes one Community Commercial site which is envisioned to be a destination point within the NSP. The area attributed to Commercial development is shown in **Table 5 – Land Use & Populations Statistics.**

Objective (33)	NSP Policy	Implementation
Minimize the impact of commercial development on adjacent land uses.	Site planning of neighbourhood commercial areas shall take into consideration the layout and location of all structures, parking and loading facilities to ensure that impacts on adjacent land uses are minimized.	The Development Officer shall have regard for the appropriate application of setbacks, landscaping, buffering, and façade treatments available under the City of Edmonton's Zoning Bylaw at the Development Permit stage.
Rationale Impacts associated with the commercial development have been minimized and integrated with surrounding residential development by including physical and aesthetic attenuation measures. Attention to site design will separate incompatible use activities and minimize potential impacts. In particular, activity associated with commercial uses shall be oriented towards the arterial or collector roadways, away from residential uses and low density residential lots adjacent to commercial uses shall either back or flank against commercial uses.		

Objective (34)	NSP Policy	Implementation
Provide the opportunity for commercial needs to be met within the neighbourhood.	Community Commercial development opportunities shall be provided to serve the needs of residents located within Glenridding Ravine and adjacent communities.	**Figure 7– Land Use Concept Plan** illustrates the location of the Community Commercial site.
Rationale The Glenridding Ravine NSP identifies one Community Commercial site within the neighbourhood. Commercial uses provide local employment opportunity for residents to live and work in the same neighbourhood, reducing the dependency on commuting outside of the community and offering the appeal of being closer to home. The commercial site is sized and configured to accommodate a range of commercial uses under the (CSC) Shopping Centre Zone of the Zoning Bylaw.		

Objective (35)	NSP Policy	Implementation
Locate and orient commercial sites along arterial or collector roadways to ensure high visibility and convenient access opportunities.	The Community Commercial site shall be placed along arterial and/or collector roadways, transit routes and along major pedestrian corridors to ensure high visibility and accessibility.	**Figure 7– Land Use Concept Plan** illustrates the location and the conceptual configuration of the Community Commercial site, which shall be confirmed prior to the rezoning approval.
Rationale The Community Commercial site is located in the south west part of the NSP, at the intersection of Rabbit Hill Road S.W. and 170 Street S.W. The site is intended to serve the commercial needs of the neighbourhood and surrounding community. The site offers excellent visibility and accessibility due to its location at one of the neighbourhood's main points of entry. Prominent frontage along 170 Street S.W. and Rabbit Hill Road S.W. are significant components influencing the location of the commercial site. The site provides opportunities for access from arterial and/or collector roadways, minimizing traffic shortcutting through residential areas, and maintaining appropriate traffic patterns and volumes within the neighbourhood core. The location of the commercial site is also within walking distance of residential areas and accessible by internal pedestrian linkages.		

Objective (36)	NSP Policy	Implementation
Ensure that all commercial sites within 400 metres of the transit centre be developed as part of a transit-oriented, walkable community around the transit centre.	i) Building(s) should be oriented to align with the abutting street wherever possible, to create a pedestrian friendly streetscape. ii) All other commercial areas outside of the 400 metre transit boundary should also create a pedestrian-oriented frontage and/or a pedestrian commercial walkway.	i) ii) The Development Officer shall have regard for building placement, pedestrian accessibility and activity areas in assessing development applications for commercial development under the applicable zone.
Rationale There is one community commercial site along 170 Street S.W. and Rabbit Hill Road S.W. The location provides great access and visibility and is in close proximity to the transit centre. Street-oriented commercial buildings and adjacent transit will encourage residents to walk, encouraging a healthy and sustainable community.		

Technical Summary

No specific technical requirements were further identified.

3.2.9 Transportation

The overall transportation network within the Glenridding Ravine NSP is based on the provision of efficient vehicular, transit and pedestrian circulation. This is conceptually illustrated **in Figure 8 – Transportation Network Plan** and **Figure 9 – Pedestrian Network Plan** which identifies the roadway network and alternative circulation system that accommodates the movement of automobiles, transit, bicycles and pedestrians within the neighbourhood and the connections to adjacent communities.

Objective (37)	NSP Policy	Implementation
Recognize that 170 Street S.W. is a highway connector and is designated as an urban freeway connecting Anthony Henday Drive to the surrounding region.	i) 170 Street S.W. is a highway connector and shall be designed as an urban freeway with direct access from Glenridding Ravine only at the interchange identified at Rabbit Hill Road / 25 Avenue S.W. ii) A frontage road parallel to 170 Street S.W. shall provide for limited access into the plan area. c) The approved 170 Street Concept Plan shall guide development of land within the "Area of Influence".	i) **Figure 8 – Transportation Network Plan** conceptually illustrates the interchange locations and the frontage road along 170 Street S.W. ii) Final location and access to the frontage road shall be determined prior to subdivision approval and development, as per approved 170 Street Concept Planning Study. iii) The "Area of Influence" is identified on **Figure 8 – Transportation Network Plan.**
Rationale 170 Street S.W. is a highway connector and has been designated as an urban freeway, with grade-separated interchanges at Rabbit Hill Road/25 Avenue S.W. and 41 Avenue S.W. A frontage road along the east side of		

170 Street S.W. will provide a direct connection between 41 Avenue S.W. to Rabbit Hill Road and will provide access to the collector roadway in the western part of the plan area.

The 170 Street S.W. Concept Plan was approved by City Council in May 2011. The "Area of Influence" identifies the lands adjacent to the 170 Street S.W. corridor and future interchanges where access will be limited.

Objective (38)	NSP Policy	Implementation
Implement the City of Edmonton road hierarchy system of an integrated arterial, collector and local roadway network.	A well-integrated system of arterial, collector and local roadways shall be established for vehicular and pedestrian circulation within the NSP boundaries and the adjacent neighbourhoods.	Road right-of-way and arterial road widening shall be dedicated to the City of Edmonton in accordance with the approved Concept Plans at the subdivision stage of development.

Rationale

The transportation network has been designed to meet both the internal and external traffic flow requirements generated by the neighbourhood in accordance with City of Edmonton's guidelines and standards. A hierarchy of roads are intended to facilitate the efficient movement of vehicular traffic (see **Figure 8 - Transportation Network Plan)**. Vehicular access to the surrounding arterial roadways will be provided via seven neighbourhood entrance/exits.

Regional Roadway Network

The Glenridding Ravine NSP will benefit from a high level of accessibility to the metropolitan Edmonton area as a result of its close proximity to the following existing regional roadways (see **Figure 8- Transportation Network Plan**). These roadways include:

- Anthony Henday Drive
- Terwillegar Drive / 170 Street S.W.

Arterial Roadways

Arterial roadways facilitate the movement of intra-municipal traffic and generally maintain limited direct access to adjacent land uses. Within the Glenridding Ravine NSP area, 170 Street S.W., Rabbit Hill Road S.W., 28 Avenue S.W., Ellerslie Road S.W., and 41 Avenue S.W. are designated as arterial roadways. Appropriate spacing of intersections and access-egress requirements as per the City's Access Management Guidelines are respected along these arterial roadways. The 41 Avenue S.W. corridor is anticipated to be upgraded to a limited access major arterial status to ensure provision of a major east-west corridor. This facility will accommodate longer distance regional and provincial trips, in addition to providing transportation benefits to the development area in the future.

A high level concept plan has been completed for the 28 Avenue SW crossing of Whitemud Creek, which corresponds to the alignment shown on **Figure 8 - Transportation Network Plan**. The alignment of the 28 Avenue SW crossing of Whitemud Creek is subject to change with a detailed concept planning study, which will include the relevant geotechnical and environmental studies to determine the optimum location of the crossing.

Lands within the NSP will be subject to an Arterial Road Assessment (ARA) to cost-share the construction of arterial roadway facilities needed to service the area. In general terms, the ARA outlines the developer's responsibility for roadway construction within a catchment area and is based on the estimated costs of constructing arterial roads in a catchment area.

Developers within the Windermere Area shall provide quality transportation services to residents and patrons, while ensuring the appropriateness, sustainability, and cost effectiveness of the overall transportation system. A strategic and fiscally sound traffic plan will provide a foundation upon which to assess and evaluate the need for roadway (upgrading/twinning) and intersection improvements that will allow appropriate levels of traffic service to be maintained while enhancing the area's ability to continue to grow and expand.

Traffic growth and development patterns in the Windermere ASP area will be monitored on a yearly basis by the developers within the Windermere Area in conjunction with the City of Edmonton. The monitoring program will aid in identifying and prioritizing arterial roadway priorities and construction requirements, traffic signalization requirements, anticipated City funding needs, and in general assessing the overall impact of new development activity on the roadway system. The projects identified that are included in the Arterial Roadway Assessment Bylaw will be the developers' responsibility and a requirement of future development. The traffic monitoring plan will also assist in identifying and prioritizing arterial roadway construction to be included in the City's Capital Priority Plan for Council's consideration.

Collector Roadways

Collector roadways, which provide internal/external accesses and accommodate transit service, are spaced at appropriate intervals to facilitate traffic progression and to ensure that sufficient distance is available to allow for right and left turn-bay development. The collector roadway network provides efficient and convenient access to residential areas, prevents cut-through traffic, and enhances overall safety in the neighbourhood.

Local Roadways

Local roadways provide access to adjacent land uses and maintain a limited role in the overall movement of traffic within the Glenridding Ravine NSP.

Parking

Parking for vehicles will be provided off-street in conjunction with residential development applications as per Section 54 of the Zoning Bylaw 12800.

Objective (39)	NSP Policy	Implementation
Provide the opportunity for roadways to be developed with alternative standards.	i) The NSP shall provide opportunity for roadways to be developed with alternative designs, as per Complete Streets Guidelines, provided that essential services are met. Design of roadway boulevards should incorporate snow removal and storage.	i) Roadway design shall be completed to the satisfaction of Transportation Services with Sustainable Development as an approval agency as Parks Planning reviews and approves boulevard landscaping for operational departments. Alternative cross-sections must be reviewed and approved prior

	ii) The developer shall provide the land necessary for roads and public utilities to achieve the goals and objectives of the NSP.	to subdivision approval. Collectors and roundabouts must be designed to accommodate transit service where applicable. All alternative designs shall be reviewed and approved by the City Administration, and shall follow the principles outlined in the Complete Streets Guidelines. ii) **Table 5 – Land Use and Population Statistics** and **Figure 7 – Land Use Concept Plan,** illustrate the approximate land dedication requirements for roadways and public utilities to adequately service the NSP. Areas shall be confirmed at the time of subdivision to the satisfaction of the Subdivision Authority and Transportation Services.
Rationale The Glenridding Ravine NSP has been designed, in part, with a goal of minimizing roadway infrastructure through narrower roadways, innovative housing forms, and dispersal of vehicular traffic flow throughout the neighbourhood. To achieve this goal, less land for internal roadways is anticipated. These factors will facilitate a compact, walkable and connected community with a balanced transportation system. An alternative cross section may be used which may reduce the width of the carriageway, provide sidewalks on both sides and parking on one side, as guided by the Complete Streets Guidelines.		

Objective (40)	**NSP Policy**	**Implementation**
Minimize traffic congestion and enhance safety on internal collector roadways.	i) The number of residential lots fronting onto and having direct access to a collector road should be in accordance with the applicable City Policies. ii) Traffic calming should be employed to reduce automobile speeds, increase pedestrian safety and improve the streetscape.	i) The Subdivision Authority, in consultation with Transportation Services shall have regard for the number of lots having direct access onto a collector roadway. The number of lots having direct access onto a collector roadway shall be determined at the subdivision stage and shall not exceed 30%. ii) Traffic calming measures such as roundabouts, raised intersections or curb extensions may be incorporated along roadways. Details shall be approved by Transportation at the time of subdivision.

Rationale

Along collector roadways with high traffic volumes, front drive access will be restricted in order to promote a safe and pedestrian-friendly streetscape and to reduce vehicular conflicts. The provision of front drive access within the overall plan area will be consistent with applicable City of Edmonton policies and will be determined prior to rezoning and subdivision approval.

Traffic calming such as roundabouts, pedestrian islands, raised intersections or curb extensions at significant roadway locations (i.e. collector to collector or local to collector intersections) may be beneficial as they reduce vehicular speeds and enhance pedestrian safety.

Objective (41)	NSP Policy	Implementation
Promote connectivity and pedestrian access to amenity areas such as parks, open spaces, commercial uses and transit facilities by providing an alternative circulation system.	i) A network of hard-surfaced sidewalks, walkways, and shared-use paths shall be provided to promote walkability and access to open spaces, stormwater management facilities, amenities and transit facilities. ii) Minor walkways should be provided to promote walkability and access to future transit facilities and neighbourhood amenities.	i) **Figure 9 – Pedestrian Network Plan** shall guide the future application of walkways, sidewalks and shared-use paths. ii) The Subdivision Authority should have regard for the dedication of walkways to promote walkability and appropriate access to transit facilities and neighbourhood amenities. All local and collector roadways in Glenridding Ravine should be developed with sidewalks. iii) Public and emergency access to the Top-of-bank shall be provided every 120 metres as prescribed in Policy C542.

Rationale

Neighbourhood connectivity contributes to the development of a compact, integrated community with a balanced transportation network. Neighbourhoods that have a high degree of connectivity encourage residents to walk to places, reduce the number of trips made by vehicles and promote health and neighbour interaction. Connectivity is characterized by a logical network of movement that links destinations, provides access and is integrated with its environment.

Pedestrian Network:
An efficient and continuous walkway network connecting key nodes within the NSP will provide pedestrian circulation throughout the neighbourhood. All local and collector roadways in Glenridding Ravine should be developed with sidewalks providing a sufficient level of pedestrian access within the NSP. The pedestrian circulation network has been designed to encourage the continuation of a pedestrian route from Glenridding Heights through Glenridding Ravine to the Whitemud Creek Ravine.

Greenway:
The NSP proposes one greenway, as identified on Figure 9 – Pedestrian Network. The Greenway will function as a multi-model linear corridor and is intended to be approximately 12 m wide with a 3 m wide paved trail. In addition to the paved trail, the greenway will include grassed or naturalized planting, park furniture (e.g. benches, garbage receptacles), trees and shrub beds, and directional and interpretative signage. The greenway will connect the adjacent Glenridding Heights neighbourhood with a residential sub-area of the neighbourhood, along with parks, public spaces and the Whitemud Creek Ravine.

Walkways:
A number of walkways are proposed in the plan area, which serve as minor pedestrian connections. These walkways enhance pedestrian connectivity in the NSP as well as provide connections to adjacent residential enclave and major pedestrian facilities (e.g., sidewalks along collectors/arterial roadways).

Shared-Use Paths:
The NSP proposes shared-use paths, as identified on **Figure 9 –Pedestrian Network Plan**. The shared-use paths will function as a multi-use (e.g., pedestrian, bicycle, other) trail with logical connections provided within the neighbourhood. The top-of-bank shared-use path will be constructed along the eastern boundary of the neighbourhood, adjacent to the Whitemud Creek Ravine; as well as shared-use paths along portions of the collector roadways; and, along a minimum of 50% of the perimeter of the stormwater management facilities. The design of the shared-use paths shall be reviewed by the City Administration at the roadway design stage.

Bicycle Circulation:
Bicycle circulation within the Glenridding Ravine NSP is designed to follow collector and local roadways. Bicycle routes will be integrated with shared-use paths and walkways connecting internal and adjacent residential areas and amenities. Routes will be clearly marked using appropriate signage and markings in order to minimize potential conflicts between vehicles, cyclists, and pedestrians in the neighbourhood.

Objective (42)	**NSP Policy**	**Implementation**
Ensure the maximum length of cul-de-sacs in residential settings do not compromise City emergency response plans and operations.	Development of long cul-de-sacs should be avoided.	Cul-de-sac lengths in residential settings shall be determined prior to subdivision approval. Two emergency accesses will be provided; one along 41 Avenue S.W. and another along the north side of the Golf Course residential in the northeastern portion of the plan. The provision of emergency access will need to meet the requirements of a swept path analysis for a City of Edmonton fire truck and will be subject to review and approval by the City's Fire Rescue Service (FRS) and Facility and Capital Planning (FCP) The Subdivision Authority should ensure cul-de-sacs are in accordance with the applicable City Policies and Directives.
Rationale Subdivision design should ensure that cul-de-sac length does not exceed 120 m to reduce impacts to City operations (e.g., fire and medical access). Where the length of cul-de-sac must exceed 120 m due to land characteristics, the provision of an emergency access to an adjacent development will be required.		

Objective (43)	NSP Policy	Implementation
Create adequate locations for neighbourhood access.	Collector roadways shall have adequate access to arterial roadways in order to maintain appropriate traffic flow in and out of the neighbourhood.	**Figure 8 – Transportation Network Plan** illustrates collector roadway accesses to arterial roadways. Subdivision design in residential settings shall be determined prior to subdivision approval.
Rationale The location of access points are illustrated in **Figure 8 – Transportation Network Plan**, and have been developed to ensure that adequate access by a variety of transportation modes is provided throughout the plan area with the support of the Transportation Impact Assessment (TIA).		

Objective (44)	NSP Policy	Implementation
Maximize access to transit facilities for the greatest number of residents in accordance with City of Edmonton Transit System Guidelines and demands.	i) The location of all residential land uses should be within 400 m walking distance of transit. ii) Transit service shall be initiated in the initial stages of development of the neighbourhood. iii) A Transit Centre shall be provided within the central portion of the neighbourhood.	i) Edmonton Transit Systems shall determine the routing for public transit along the arterial and collector roadways which have been identified as future transit routes. ii) In an effort to provide transit service earlier in the development of the neighbourhood, participating landowners shall cooperatively fund transit service for the first two years of service. Following this two year period, Edmonton Transit shall undertake the full responsibility of providing transit service. iii) A Transit Centre is planned for the central portion of the neighbourhood, at the intersection of Rabbit Hill Road S.W. and 28 Avenue S.W. The design of the Transit Centre shall be confirmed by Transportation Services and Edmonton Transit.
Rationale Future public transit services will be extended into the Glenridding Ravine NSP area in accordance with City of Edmonton Transit System Guidelines and demands. The neighbourhood has been designed to ensure that all residents are within 400 m (approximately 5 minute walk) walking distance of transit. Convenient and accessible transit areas are reinforced through a continuous network of pedestrian walkways and shared-use paths.		

Future transit routes will be established on the basis of the proportion of trips, which are expected to be generated from within the neighbourhood and adjacent areas. Future transit service will be accommodated within the neighbourhood and internal collector roadways will be developed to a suitable standard to accommodate transit service and provide readily accessible service to all areas of the neighbourhood.

Objective (45)	NSP Policy	Implementation
Provide noise attenuation where residential uses back onto major transportation corridors (i.e. arterial roadways).	Appropriate noise attenuation shall be provided for residential uses adjacent to all arterials.	Transportation Services shall require a noise attenuation assessment for residential development at the subdivision approval stage, in accordance with the City of Edmonton Urban Traffic Noise Policy C506A. A noise impact study shall be required prior to subdivision. Any noise attenuation required adjacent to any arterials must be identified prior to subdivision approval.
Rationale Where residential development will be constructed adjacent to arterials, the City of Edmonton requires the developers to address noise concerns. Therefore, a noise attenuation needs assessment will be carried out in accordance with City of Edmonton's Urban Traffic Noise Policy at the time of subdivision. Noise level evaluations will be carried out by the developers prior to subdivision application at the design phase of the project, as required by Transportation Services. Based on the results of the study, noise attenuation devices may be required (i.e. berm and fence) to be incorporated in the design of subdivisions bordering 170 Street S.W. and other arterial roadways.		

Objective (46)	NSP Policy	Implementation
Utilize alternative, street-oriented roadway design standards guided by the Complete Streets Guidelines, for all arterial and collector roadways within 400 metres walking distance of transit to contribute to a transit-oriented, walkable community around the transit centre.	Where appropriate, buildings should be oriented to align with the abutting street to create a pedestrian friendly streetscape.	The Development Officer shall have regard for building placement, pedestrian accessibility and activity areas in assessing development applications for commercial development under the applicable zone.
Rationale A transit centre is located along 28 Avenue S.W. and Rabbit Hill Road S.W. and is in close proximity to low rise / medium density residential and a commercial site (see **Figure 7 – Land Use Concept Plan**). Alternative road standards would be better suited to accommodate this mix of uses, creating a pedestrian and transit-oriented road network within the transit-centre area.		

Objective (47)	NSP Policy	Implementation
Address and identify future wildlife passage locations where required.	Roadways that span Whitemud Creek should be designed in accordance with the Wildlife Passage Engineering Design Guidelines.	Details regarding the specific design measures and implementation of wildlife passage locations at Ellerslie Road S.W., 28th Avenue S.W., and 41 Avenue S.W. will be discussed at the detailed engineering stage with Transportation Services and Sustainable Development.

Rationale

The preservation and integration of the Whitemud Creek Ravine will facilitate movement of wildlife throughout the neighbourhood and connect surrounding natural areas. Roadway crossings will further facilitate the movement of wildlife.

In accordance with the City of Edmonton Wildlife Passage Engineering Design Guidelines (Stantec 2010), some form of wildlife crossing mitigation is recommended to maintain connectivity and minimize the conflicts of wildlife with the transportation network. The Ecological Design Groups (EDGs) targeted for Glenridding Ravine include amphibians, large mammals, and birds. These EDGs will encompass the potential sensitive wildlife species identified in the Addendum to Stage 1 Natural Site Assessment and mitigation measures should be targeted to address the EDGs.

For the three locations where arterial roads pass over Whitemud Creek, the following items should be considered to reduce the barrier effect for the targeted EDGs:

- Wildlife friendly lighting that minimizes spill and glare;
- Reduced speeds;
- Planting tall vegetation adjacent to the road, in the center median (if applicable)and the crossing to direct flight of birds up and over the road;
- Clearing of tall trees alongside the road and the crossing should be limited (as allowed by safety regulations) to accommodate passage of birds up and over the road;
- Where road safety permits, ecological curb construction may be considered to prevent amphibians moving within upland habitat from being trapped on the road. This could include selective placement of roll faced curbs or installation of ramps;
- Fencing may be required along the roads to direct wildlife to the crossing structure rather than allowing wildlife to move over the road. The type of fencing used and placement will vary depending on site conditions;
- Use an appropriately sized structure that allows for dry passage on either side of Whitemud Creek by large mammals and amphibians. Ideally a bridge should be used. Depending on the length of the structure, an open median design should be considered to allow for incorporation of natural light;
- If the crossing structure is long and tall, the design should include logs, stumps or other materials to provide overhead cover and reduce avoidance of the structure by wildlife; and

- Natural ground material (i.e., soil) should be incorporated within the crossing structure. Large boulders (rip rap) should be avoided as this is often a barrier for amphibians.

For the SWMF located near the Whitemud Creek Ravine in the south portion of the Study Area, the following items should be considered to reduce the barrier effect for the targeted EDGs including small mammals and birds:

- Include traffic calming measures such as boulevard extensions or "bump-outs", reduced speed limits, reduced traffic lanes, etc.;
- Wildlife friendly lighting that minimizes spill and glare;
- Where road safety permits, ecological curb construction may be considered to prevent amphibians moving within upland habitat from being trapped on the road. This could include selective placement of roll faced curbs or installation of ramps; and
- Boulevard trees could be planted near the road (as permitted by traffic safety requirements) to facilitate avian passage up and over the road.

Other measures that can be considered to enhance the ecological network within the Study Area include, reducing the length of sight lines, creating traffic calmed areas, and strategic vegetation planting (Stantec 2010).

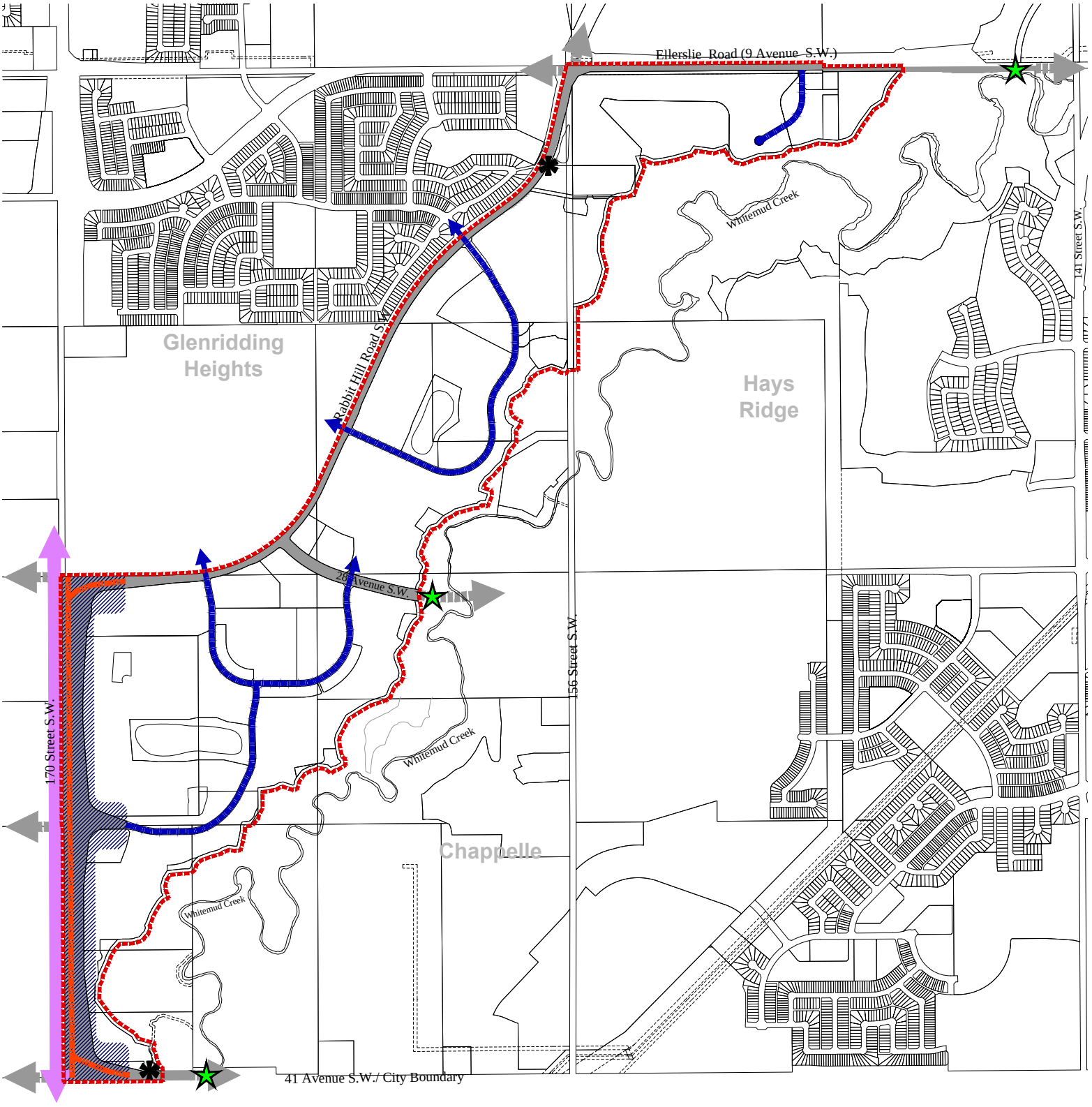
Technical Summary

The transportation network for the NSP will be provided in accordance with the requirements of the City Administration. A Transportation Impact Assessment (TIA) will be submitted for review and approval by City Administration. Other access and roadway requirements will be determined at the rezoning and subdivision stages to the satisfaction of City Administration.

A future Noise Attenuation Needs Assessment will be required at the time of subdivision, in accordance with City of Edmonton's Urban Traffic Noise Policy.

Figure 8 - Transportation Network

Glenridding Ravine - Neighbourhood Structure Plan

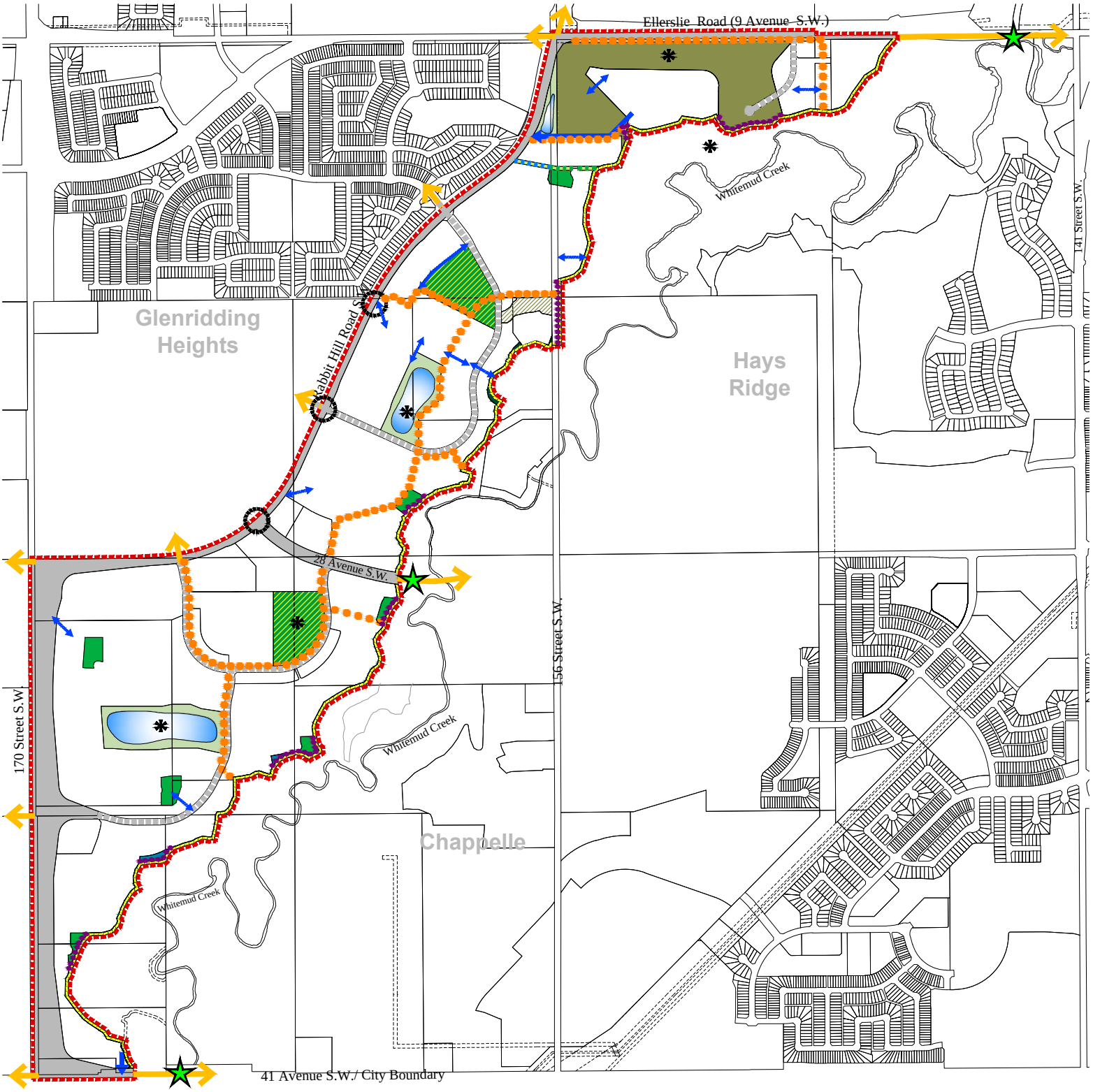


Legend

- Collector Roadway
- Arterial Roadway
- 170 Street S.W. Urban Freeway
- 170 Street S.W. Frontage Road
- Emergency Access
- Wildlife Crossing
- Area Of Influence - Road Right-of-Way based on 170 Street Concept Plan
- NSP Boundary

Figure 9 - Pedestrian Network

Glenridding Ravine - Neighbourhood Structure Plan



Legend

- Stormwater Management Facility
- Park
- Urban Village Park
- Existing Golf Course/ Club House
- Public Upland Area
- Environmental Reserve Easement (No Public Access)
- Top-of-Bank Roadway / Park
- Top-of-Bank Shared-use Path
- Greenway (MR)
- Greenway (ROW)
- Lands Between UDL & Top-of-Bank Roadway
- Linkage To Adjacent Community
- Minor Pedestrian Linkages
- Shared Use Path
- Emergency Access
- Focal Point
- Key Pedestrian Crossing
- Wildlife Crossing
- NSP Boundary

3.2.10 Infrastructure, Servicing and Staging

The Glenridding Ravine NSP will be a fully serviced neighbourhood designed and constructed in accordance with City servicing standards.

Objective (48)	NSP Policy	Implementation
Ensure that Glenridding Ravine is serviced to a full urban standard, in an efficient, contiguous and staged manner.	i) Sanitary and stormwater servicing shall be provided in accordance with the approved Neighbourhood Design Report for the Glenridding Ravine NSP. ii) Water servicing to the NSP area shall be provided in accordance with the approved Water Network Analysis. iii) Shallow utilities shall be extended into the plan area as required.	i) ii) Approval of engineering drawings and servicing agreements shall be required for installation of water, sanitary, and stormwater servicing. iii) Installation of shallow utilities shall be executed through servicing agreements.

Rationale

Sanitary Servicing

The flow of the sanitary system designed for Glenridding Ravine moves from south to north. Sewage will be directed north to the South Edmonton Sanitary Sewer (SESS SW). The sanitary servicing system is illustrated on **Figure 10 - Sanitary Servicing Plan**. Further details regarding the sanitary drainage schemes for Glenridding Ravine are provided in the associated Neighbourhood Design Report to be submitted under separate cover.

Stormwater Servicing

As shown on **Figure 11 - Stormwater Servicing Plan**, three stormwater management facilities are designated within the NSP. The stormwater management facilities have been located based on natural drainage patterns and pre-development sub-basin drainage boundaries. Top-of-bank restrictions for stormwater drainage, location of facilities, restrictions on lot drainage and hydrologic requirements for tree stands and natural areas will be provided in the subdivision level Neighbourhood Design Report.

A fourth stormwater management facility may be located east of the neighbourhood boundary, within the North Saskatchewan River Valley Area Redevelopment Plan. This SWMF would serve the lands within the southern terrace area contemplated to be developed as residential. Options for servicing of the terrace lands for both stormwater management and sanitary drainage will be reviewed and addressed separately should the lands be considered for development. An amendment to the Glenridding Ravine NSP as well as a detailed servicing report would be required.

Overall, stormwater drains to the eastern portion of the plan area and then discharges into the Whitemud Creek, as per the Southwest Area Master Plan. More details regarding the stormwater drainage schemes for Glenridding Ravine are provided in the associated Neighbourhood Design Report.

Water Servicing

The conceptual design for the water distribution network for Glenridding Ravine is shown in **Figure 12 - Water Servicing Plan**. Water services for the neighbourhood will be extended from Rabbit Hill Road and

170 Street. Water servicing within the neighbourhood will be designed to provide peak hour flows and fire flows for low, medium, and high density residential uses. Water looping will be provided in accordance with the requirements of EPCOR Water as per the Water Network Analysis.

For the existing Oilfield Technical Society which is located within the North Saskatchewan River Valley Area Redevelopment Plan, the municipal fire flow is not achievable without the potential for water quality issues. Should this site require fire protection in the future, private services may be required. Collaboration with EPCOR will be required to determine the best solution. An amendment to the Glenridding Ravine NSP as well as a detailed servicing report would be required.

Shallow Utilities

Power, gas and telecommunication services are all located within close proximity to the NSP and will be extended into the plan area as required.

Development Staging

Figure 13 - Staging Concept Plan shows the anticipated direction of development for Glenridding Ravine.

The anticipated sequence of development for Glenridding Ravine is expected to proceed from the north and the west portions of the plan area with the general direction of the development to the south.

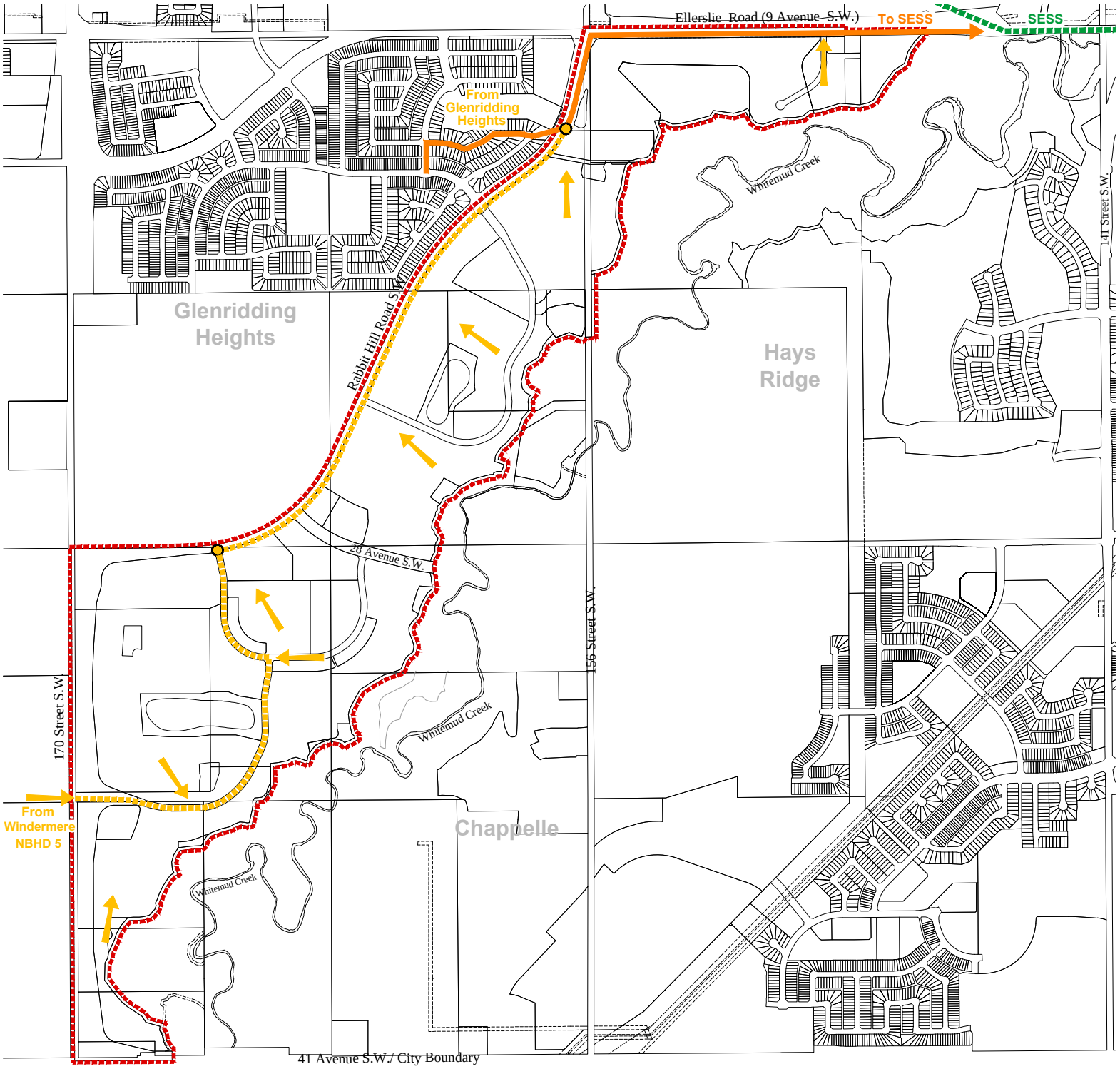
In general, development will proceed in a manner that is contiguous, logical and economical with respect to municipal servicing. Development of individual phases may vary from the actual zoning and subdivision applications depending on contemporary market demands and aspirations of the respective landowners. Should sufficient demand warrant or engineering design be made more efficient, portions of separate phases may be developed concurrently.

Technical Summary

The Glenridding Ravine NSP will be designed in accordance with City of Edmonton servicing standards. Development staging and extension of infrastructure will be contiguous, efficient, and economical while having regard for potential environmental and ecological impacts.

Details regarding stormwater drainage and sanitary service schemes for the Glenridding Ravine NSP are provided in the associated Neighbourhood Design Report to be submitted by Stantec Consulting Ltd. Water looping will be provided in accordance with the requirements of EPCOR Water Services Inc. A Water Network Analysis (WNA) was previously prepared and reviewed by EPCOR. EPCOR has advised that a neighbourhood level and subdivision level WNA will be required at the time of subdivision.

Figure 10 - Sanitary Servicing
Glenridding Ravine - Neighbourhood Structure Plan

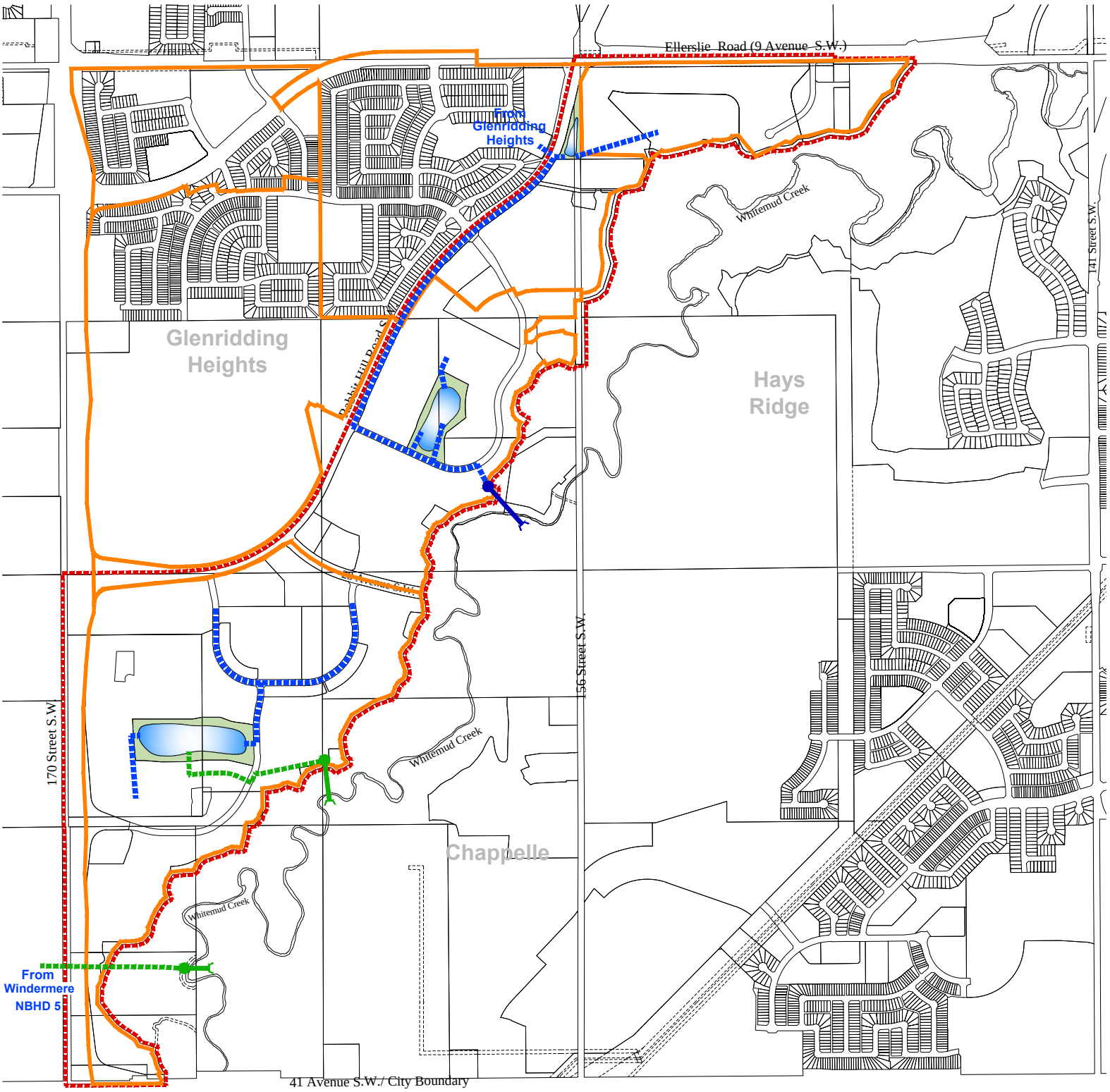


Legend

- Sanitary Trunk
- Existing Sanitary Trunk
- SESS
- Direction of Sanitary Flow
- NSP Boundary

Figure 11- Stormwater Servicing

Glenridding Ravine - Neighbourhood Structure Plan

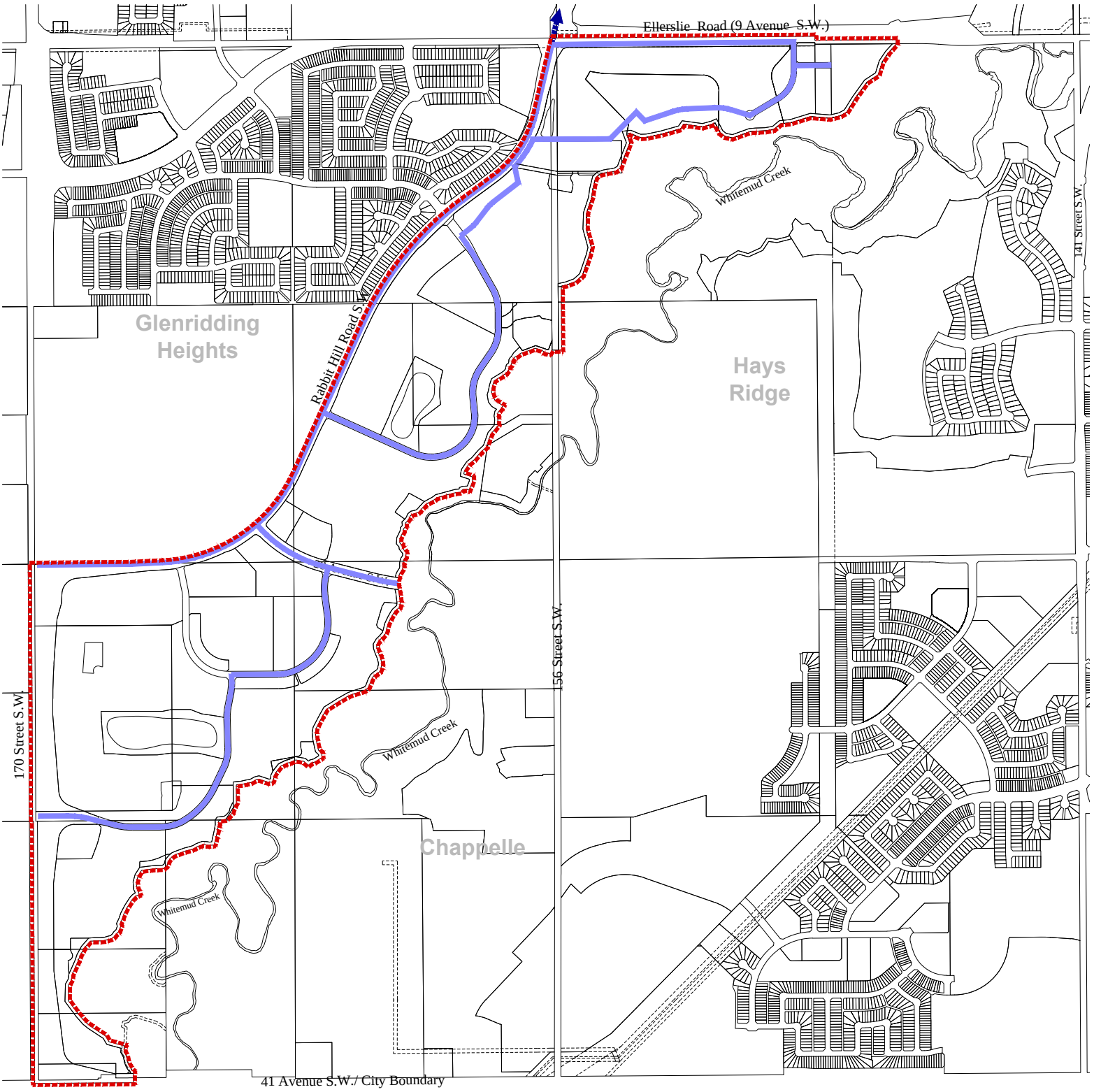


Legend

- Stormwater Management Facility
- Storm Trunks
- Outfall
- Potential Outfall
- Potential Storm Trunks
- Storm Basin Boundary
- NSP Boundary

Figure 12- Water Servicing

Glenridding Ravine - Neighbourhood Structure Plan

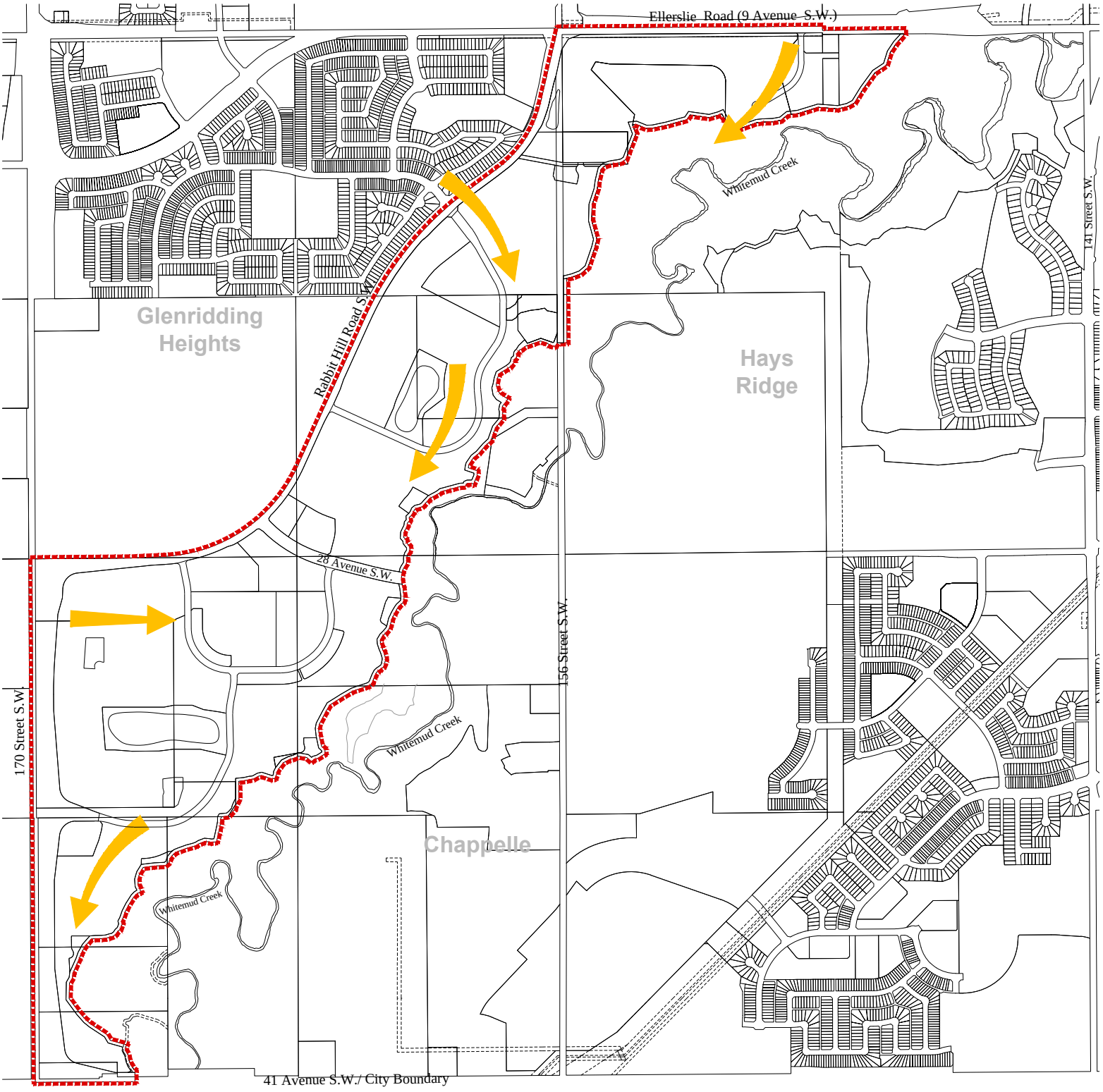


Legend

- Water Main
- Connection to Existing Waterline
- NSP Boundary

Figure 13- Staging Concept

Glenridding Ravine - Neighbourhood Structure Plan



Legend

- General Direction & Sequence Of Development
- NSP Boundary

Appendix 1: Planning Policy Context

The Glenridding Ravine NSP is in conformance with and supports a number of policies and guidelines identified in the "Capital Region Land Use Plan", "The Way We Grow", "The Way We Move", the "City of Edmonton's Suburban Neighbourhood Design Principles", "Windermere Area Structure Plan", and other relevant policy / statutory documents. This section of the Plan describes the relevant policies from these documents and outlines the NSP's conformance to each policy. Applicants seeking amendments to the NSP or applying for rezoning, subdivisions or development permits are required to consult the actual documents for specific guidance on detailed requirements as they apply to particular properties.

- **Capital Region Growth Plan (CRGP) "Growing Forward" –** *The CRGP was approved by the Government of Alberta on March 11, 2010. The Growth Plan provides a vision for the Capital Region in the future.*
- **Municipal Development Plan (MDP) "The Way We Grow" -** *The MDP is a document that provides the policies and strategies to help guide growth and development in Edmonton over the long-term.*
- **Transportation Master Plan (TMP) "The Way We Move" –** *The TMP is the overarching strategic document that provides the framework for how the City of Edmonton will address its future transportation needs.*
- **People Plan "The Way We Live" -** *Edmonton's People Plan is a strategic plan that sets the direction, establishes priorities, and guides decisions about current and future people services in the City of Edmonton.*
- **Environmental Strategic Plan—"The Way We Green" -** *is the City of Edmonton's environmental strategic plan that sets out principles, goals, objectives and strategic actions and approaches for Edmonton to live in balance with nature.*
- **Windermere Area Structure Plan (ASP) –** *The ASP is a statutory document governing the development of this portion of southwest Edmonton.*
- **Suburban Neighbourhood Design Principles (SNDP)** *- The City of Edmonton's Suburban Neighbourhood Design Principles describes a variety of design principles intended to encourage flexibility and innovation in the design and servicing of new neighbourhoods.*
- **Smart Choices for Developing Our Community – Council Recommendations** *- The Smart Choices Recommendations were approved by City Council on March 23, 2004, to promote urban sustainability.*
- **Crime Prevention Through Environmental Design (CPTED)** *– These guidelines are based upon the theory that the proper design and effective use of the built environment can reduce crime, the fear of crime, and improve the quality of life.*
- **Urban Parks Management Plan (UPMP)** *– These guidelines provide strategic direction for the acquisition, design, construction, maintenance, preservation and animation (or use) of parks.*

The following tables summarize key objectives from the above-noted policy documents applicable to the design of the Glenridding Ravine NSP, and demonstrate how each has been incorporated in to the NSP.

Capital Region Growth Plan, "Growing Forward"

The primary purpose of the Capital Region Land Use Plan is to manage sustainable growth that protects the region's environment and resources, minimizes the regional development footprint, strengthens communities, increases transportation choice and supports economic development. The Glenridding Ravine NSP aims to accomplish these objectives through an integrated and strategic approach to planning which coordinates planning and development decisions in the Region and identifies a regional development pattern to complement existing infrastructure, services and land uses.

The Glenridding Ravine NSP complies with the following Growth Plan strategies:

Capital Region Land Use Policy	NSP Compliance with Policy
I. Protect the Environment and Resources:	
A. Preserve and Protect the Environment	
Policy (ii) Any development which fragments contiguous natural features, functions and habitat, such as water systems, moraines, forests, wetlands and wildlife habitat and corridors shall be discouraged. **Policy (vi)** Manage land use distribution patterns to reduce reliance on automobiles.	The Glenridding Ravine NSP preserves and protects the Whitemud Creek Ravine. A network of roadways, along with sidewalks, walkways and shared-use paths will provide residents with the ability to drive, walk, or cycle, through the neighbourhood or into the surrounding region.
II. Minimize Regional Footprint:	
B. Concentrate New Growth Within Priority Growth Areas	
Policy (i) Most new growth shall occur within priority growth areas. **Policy (ii)** Priority shall be given to accommodating growth in major employment areas and in locations that meet at least three of the following four criteria: a) Existing and proposed multi-movement corridors, including transit nodes; b) Adjacent to existing and proposed major employment areas; c) Redevelopment and intensification opportunities within existing urban areas; and d) Locations that utilize existing infrastructure and servicing capacity or logically and efficiently extend that infrastructure. **Policy (v)** Priority growth areas shall incorporate intensive forms of development that significantly exceed existing development patterns.	The Glenridding Ravine neighbourhood is located in Priority Growth Area "C_W" which sets a density target of 30-40 units per net residential hectare in order to facilitate development within existing development patterns. The NSP meets the density target. Glenridding Ravine NSP is situated near Anthony Henday Drive, Ellerslie Road and 170 Street, and takes advantage of existing infrastructure and servicing capacity in south Edmonton. The NSP continues the trend of residential intensification in suburban areas.

D. Support Expansion of Medium and Higher Density Residential Housing Forms	
Policy (i) New residential development shall provide a greater proportion of higher density residential units. **Policy (iii)** Greenfield development shall make a provision for a mixture of uses including a diversity of housing forms, community services, local retail, and employment opportunities. **Policy (iv)** Transit accessibility must be included in the design of all new developments.	The Glenridding Ravine NSP provides a greater proportion of residential units as medium density housing. The NSP is bounded on three sides by arterial roadways all of which will accommodate transit service. The internal roadway network has also been designed with transit routing through the neighbourhood. The proximity of these roadways along with close attention to subdivision design will ensure the NSP meets the goals of the Capital Region Growth Plan in providing transit accessibility.
III. Strengthen Communities:	
B. Support Healthy Communities	
Policy (ii) Improve accessibility to community services by providing sidewalks, bicycle trails to encourage walking and cycling and locate these services within proximity to transit, where possible.	Glenridding Ravine has a well-connected and integrated open space system which allows residents the opportunity to choose alternative modes of transportation other than the single occupancy vehicle, with great access to transit and community services.
C. Support Public Transit	
Policy (i) Provide a mix of higher intensity land uses along transit corridors, at nodes, and employment centres. **Policy (iii)** New developments shall be designed for connectivity and accessibility to transit facilities.	Higher residential densities have been located adjacent to arterial and/or collector roadways to promote walkability and transit usage.
D. Support Innovative and Affordable Housing Options	
Policy (ii) All residential developments shall provide a greater variety of housing types.	The Glenridding Ravine NSP allows for the development of a range of residential housing types based on Single/Semi-Detached, Row Housing, and Low-Rise/Medium Density Housing.
IV. Increase Transportation Choice:	
A. Integrate Transportation Systems with Land Use	
Policy (iii) Design transportation infrastructure to support multiple modes of transport. **Policy (iv)** Support development of inclusive communities to reduce the need for travel.	A network of roadways, along with sidewalks, walkways and shared-use paths will provide residents with the ability to drive, walk, or cycle, through the neighbourhood or into the surrounding region.

B. Support the Expansion of Transit Service in Various Forms	
Policy (i) Expand and extend the level, quality and range of public transportation options available to serve the Region. **Policy (iv)** Support multi-modal transportation options by providing multi-use streets sufficient to accommodate bicyclists, motorists and pedestrians.	The Glenridding Ravine NSP has been designed to support public transportation ridership. A transit centre along with a network of roadways, sidewalks, walkways and shared-use paths will provide residents with the ability to drive, walk, or cycle, through the neighbourhood or into the surrounding region.

MUNICIPAL DEVELOPMENT PLAN, "THE WAY WE GROW"

The Municipal Development Plan (MDP), "The Way We Grow," approved by City Council in May 2010, is the City's strategic growth and development plan. Through its MDP, the City of Edmonton will shape the city's urban form and direct the development and implementation of more detailed plans.

The plan is closely integrated with the Transportation Master Plan (TMP) to achieve more coordinated decision-making. The plan also includes a regional component which addresses the coordination of future land use, growth patterns and transportation systems with Edmonton's neighbouring municipalities.

The Glenridding Ravine NSP complies with the following policies:

MDP Policy	NSP Compliance with Policy
3.2.1.1 - Ensure a combination of single family and multi-family housing development potential is available for the next 30 years.	The NSP will provide single family and multi-family housing for approximately 10 years at current absorption and development rates in south-west Edmonton.
3.2.1.3 - Achieve a balance between residential, industrial, commercial, institutional, natural and recreational land uses in the city through land development policies and decisions.	The NSP establishes a variety of development opportunities through the provision of various land use components – residential, community commercial, and parks.
3.6.1.6 - Support contiguous development and infrastructure in order to accommodate growth in an orderly and economical fashion.	The NSP represents contiguous development in south Edmonton, and extends infrastructure in an orderly and economical fashion.
4.3.1.1 - The City of Edmonton will take municipal reserve, school reserve or municipal and school reserve, or cash-in-lieu in accordance with the Municipal Government Act and will use the land or money for purposes as defined by the Municipal Government Act.	Municipal reserve shall be provided as a combination of land and cash-in-lieu of land.
4.3.1.5 – Time the development of parks as closely as possible with the development they are intended to serve.	The development of parks and open spaces will coincide with residential development in Glenridding Ravine.

MDP Policy	NSP Compliance with Policy
4.4.1.1 - Provide a broad and varied housing choice, incorporating housing for various demographic and income groups in all neighbourhoods.	The Glenridding Ravine NSP allows for the development of a range of residential housing types based on Single/Semi-Detached, Row Housing, and Low-Rise/Medium Density Housing.
4.6.1.1 – Support Corporate initiatives to improve walkability and other active transportation modes.	The NSP has a well-connected and integrated roadway network and open space system which allows residents the opportunity to choose modes of transportation other than the private vehicle.
4.6.1.3 – Support the design of accessible and safe active transportation networks in accordance with best practices in universal design.	The network of roadways, sidewalks, walkways and shared-use paths will be designed according to best practices in universal design and will provide residents with the ability to walk, cycle, in-line skate, etc. within the neighbourhood.
5.5.1.2 – Incorporate sustainable neighbourhood design principles, low impact development and ecological design approaches when planning and building new neighbourhoods.	Where possible, the NSP will incorporate low impact development principles that promote stormwater infiltration, filtering, storage, evaporating, in addition to the detention of runoff close to its source.
5.6.1.4 – Design density, land uses and buildings to benefit from local transit service by minimizing walking distances to transit service and by providing safe and comfortable pedestrian streetscapes and high quality transit amenities.	Higher density residential areas have been located near arterial and/or collector roadways to promote walkability and transit use. All other uses have a high degree of access to arterial and collector roadways with transit service.
5.7.1.1 – Design streets, sidewalks and boulevards to provide safe, accessible, attractive, interesting and comfortable spaces for pedestrians, cyclists, automobiles and transit and to accommodate utilities, landscaping and access requirements for emergency response services.	The NSP supports the use of enhanced pedestrian crossings and traffic calming measures as a means of providing pedestrian safety and attractive street designs. Boulevards and medians may be used to improve the appearance and function of the streetscape.
7.4.1.1 – Link parks and open spaces with natural systems through development and design to strengthen the connectivity of Edmonton's ecological network, where feasible.	Parks, storm water management facilities and other open spaces are inter-connected in order to serve as neighbourhood destinations for pedestrians and cyclists and to provide passive recreation opportunities. These same trails and connections will also contribute to enhancing ecological connectivity.

MDP Policy	NSP Compliance with Policy
8.1.3.1 – Plan for residential and economic development within the City which supports the Capital Region Growth Plan. 8.1.7.3 – Upon provincial approval of the Capital Region Plan Addendum, Edmonton's new Area Structure and Neighbourhood Structure Plans in the Capital Region Plan's priority growth area B, F, Cw or Ce will be required to meet or exceed the Capital Region's minimum density targets.	The Glenridding Ravine neighbourhood is located in the Capital Region Growth Plans Priority Growth Area "C_W" which sets a minimum density target of 30 units per net residential hectare. The NSP exceeds this target.
9.3.1.4 - In consultation with the Energy and Resources Conservation Board (ERCB), ensure development setbacks from oil and gas pipelines are achieved through the subdivision approval process.	Urban development in the vicinity of all resource well sites will be planned in accordance with the City policy and procedures. Development of lands involving abandoned wells will comply with ERCB guidelines for development around abandoned wells. An assessment of risk and nuisance will be conducted on operating or suspending oil and gas wells or when the status of existing facilities change as directed by existing or future City policy for the integration of oil prior to any rezoning of the parcel where the facility is located.

TRANSPORTATION MASTER PLAN, "THE WAY WE MOVE"

The Transportation Master Plan (TMP) "The Way We Move", is the framework that responds to the City of Edmonton's future transportation needs. It anticipates, describes and plans the way we move. The TMP directs policies and gives guidance for funding projects and programs that work toward an integrated transportation network. The TMP strives to: ensure transit sustainability and increase transit ridership; improve travel options to reduce barriers between different modes of transportation; increase traffic safety; and manage traffic congestion to facilitate travel through and around the city.

The Glenridding Ravine NSP complies with the following TMP strategic goals:

TMP Strategic Goal	NSP Compliance with Strategic Goal
Transportation and Land Use Integration The transportation system and land use/urban design complement and support each other so that the use of transit and transportation infrastructure is optimized and supports best practices for land use.	The NSP provides a network of roadways which are compatible and complementary to the primarily residential development within the neighbourhood, with access to transit which meets the City's walkability requirement. Higher density residential areas are located close to high capacity roadways and public transit service.

TMP Strategic Goal	NSP Compliance with Strategic Goal
Access and Mobility The transportation system is interconnected and integrated to allow people and goods to move efficiently throughout the city and to provide reasonable access with a variety of modes for people across geographic, socio-economic and mobility spectrums.	The NSP has been designed to provide transit access to the greatest number of residents through an inter-connected system of roadways, sidewalks, walkways and shared-use paths. Areas of higher density residential uses have been located adjacent to transit routes to promote shorter walking distances and increased use of transit service.
Transportation Mode Shift Public transportation and active transportation are the preferred choice for more people making it possible for the transportation system to move more people more efficiently in fewer vehicles.	Glenridding Ravine has been designed to support direct, safe, convenient and accessible routes for all residents and provides a well-integrated network between sidewalks, walkways and shared-use paths connecting people to transit, schools/parks, and shopping areas.
Sustainability Transportation decisions reflect an integrated approach to environmental, financial and social impacts thereby creating sustainable, liveable communities that minimize the need for new infrastructure and increase residents' quality of life.	The NSP supports sustainable development by providing increased residential densities, public transit and active transportation opportunities. Services are located nearby and are readily accessible.
Health and Safety The transportation system supports healthy, active lifestyles, and addresses user safety and security including access for emergency response services, contributing to Edmonton's liveability.	The network of sidewalks, walkways and shared-use paths provide residents with the ability to walk, or cycle through the neighbourhood, improving health and wellness.

People Plan – The Way We Live

The City of Edmonton's People Plan "The Way We Live," approved by Council in July 2010, sets the direction, establishes priorities, and guides decisions about current and future people services. This 10-year strategic plan is intended to help the City of Edmonton connect people and create communities where people can age in place and actively nurturing an arts, culture and athletic community.

The Glenridding Ravine NSP complies with the following objectives from "The Way We Live":

The Way We Live	NSP Compliance with Objectives
Objective 2.1 The City of Edmonton celebrates and promotes healthy living.	The NSP allocates park space and recreational trails to connect neighbourhood focal points within the neighbourhood and between surrounding communities.

The Way We Live	NSP Compliance with Objectives
Objective 2.2 The City of Edmonton provides for the well-being of its citizens through outstanding parks, natural, green, and public spaces.	The NSP provides two urban village parks, three pocket parks, four top-of-bank viewpoint parks, open space, stormwater management facilities, and a recreational trail along the Top-of-bank adjacent to the Whitemud Creek Ravine.

Environmental Strategic Plan – The Way We Green

The City of Edmonton's Environmental Strategic Plan—"The Way We Green"—is a framework to guide the protection and preservation of Edmonton's environmental resources. It sets out the principles, goals, objectives, and strategic actions for Edmonton to live in balance with nature. The Way We Green describes the 10-year route Edmonton will take to become a national leader in setting and achieving the highest standards of environmental preservation and sustainability, in our own civic practices and those of our partners.

The Glenridding Ravine NSP complies with the following objectives from "The Way We Green":

The Way We Green	NSP Compliance with Objectives
Objective 6.1 Edmonton's overall built environment (i.e. an urban form that includes buildings, roads, and infrastructure) is designed to minimize energy consumption.	The NSP encourages alternative development standards such as energy efficient lighting and alternative road construction standards.
Objective 6.3 Edmonton's building stock is energy-efficient.	The NSP encourages sustainable development practices and energy efficient buildings.
Objective 6.6 Edmonton is conserving and efficient in its use of light.	The NSP encourages energy efficient lighting in public spaces.
Objective 7.3.1 Protect, preserve and enhance the North Saskatchewan River Valley and Ravine System as Edmonton's greatest natural asset.	The eastern boundary of the neighbourhood has been defined by the top-of-bank to ensure that appropriate areas of the Whitemud Creek Ravine are preserved and enhanced as well as protected from urban development.
Objective 7.3.2 Protect, preserve, promote and improve the North Saskatchewan River Valley and Ravine System as an accessible year round place for recreation and activity for people of all ages.	The NSP provides a shared-use path along the top-of-bank, facilitating access to the Whitemud Creek Ravine through various activities including walking, biking, cross-country skiing, and snowshoeing.
Objective 7.3.3 Mitigate the impact of development upon the natural functions and character of the North Saskatchewan River Valley and Ravine System.	The NSP designates setback areas along the top-of-bank, providing mitigation of development adjacent to the Whitemud Creek Ravine.

The Way We Green	NSP Compliance with Objectives
Objective 7.4.1 Utilize parks and open spaces to complement and enhance biodiversity, linkages, habitat and the overall health of Edmonton's ecological network.	The NSP integrates park space with Environmental Reserve areas (i.e. appropriate areas of the adjacent Whitemud Creek Ravine) to strengthen the ecological network.
Objective 7.4.2 Expand and enhance Edmonton's inventory of parks and open spaces for the ecological, health, recreation and educational benefits they provide.	The NSP provides urban village parks, pocket parks and several viewpoint parks along the top-of-bank to enhance Edmonton's inventory of parks and open spaces.
Objective 7.5.1 Mitigate impacts upon Edmonton's water resources by ensuring that new developments in Edmonton embody an exemplary standard of ecological design.	The NSP provides appropriate buffers adjacent to the Whitemud Creek Ravine to mitigate pollution, enhance water quality. The NSP encourages the development of the neighbourhood and buildings to manage stormwater run-off to ensure that the integrity of the Whitemud Creek is maintained.

Windermere Area Structure Plan

The Windermere ASP establishes a general framework for land use planning, and infrastructure and service provision within the Windermere area. It provides policy and design directions for urban development with an emphasis on servicing. Windermere ASP is a statutory plan; adopted by City Council to make it an active planning instrument. This has enabled the ASP to serve as a policy context for subsequent NSPs in the Windermere area. The relevant Community Design Principles applicable to the Glenridding Ravine NSP are listed below:

Windermere ASP Principle	Glenridding Ravine NSP Compliance
4.2.1 Community Design and Enhancement • Establish a unique character and sense of place for each neighbourhood. Provide unique entrances or gateways, landscaped transportation corridors, identifiable streetscapes, distinctive neighbourhood boundaries and districts, innovative natural and open spaces, landmarks and / or focal points within a community. • Ensure each neighbourhood is designed with a focal point. A neighbourhood centre, park or school which offers a range of convenience commercial uses, services and / or amenities can function as a gathering place for neighbourhood residents. The focal point should be activity oriented and combine uses and services which draw people to the area.	These elements, patterns and connections will continue to evolve over time as the community creates its' own authentic image, character and sense of place. The Glenridding Ravine NSP encourages high quality urban design in concert with higher densities, pedestrian environments and commercial nodes which support attractive, innovative building design and street amenities. The main focal points for the NSP are the urban village parks, pocket parks, top-of-bank viewpoint parks, SWMFs, Jagare Ridge golf course, Whitemud Creek Ravine and open space system. The Glenridding Ravine NSP will incorporate the CPTED principles and guidelines.

Windermere ASP Principle	Glenridding Ravine NSP Compliance
• Design for an attractive environment. High quality building design and streetscaping enhance local urban design. A variety of urban spaces, landscaped areas and architecturally designed features contributes to a rich human scale living environment. • Urban design / Crime Prevention Through Environmental Design (CPTED) features (e.g. consideration of enhanced shelters, strategic lighting, wayfinding features, viewpoints, and universal design devices).	
4.2.2 Sustainable Local Employment Area(s) • Designate business areas in location with well linked transportation connections and good visibility to strengthen their viability • Place employment centres along major transportation corridors, and integrate complementary uses in the vicinity such as housing options, entertainment and transit facilities which help link the community together. • Locate a transit centre in the principal commercial area(s) to provide linkages which help link the community together. • Develop commercial and mixed-use areas which are safe, comfortable and attractive to pedestrians.	The Glenridding Ravine NSP supports a future transit centre as well as adjacent transit facilities and internal transit routes by integrating and clustering higher densities around amenities, near commercial sites, along arterial roadways, and on the periphery of the neighbourhood. Commercial development is strategically located at high visibility and accessible intersections.
4.2.4 Balanced Transportation Network • Provide a transportation network that reflects the character of intended developments, meets the unique demands of each neighbourhood, and the City's wider transportation objectives. • Provide a logical, safe and efficient transportation system within the plan area to address the pedestrian, bicycle and vehicular transportation needs of residents in the Windermere area. • Provide opportunity to initiate transit service	The NSP design reflects an Integrated Community Circulation System composed of parks, open space and shared-use paths which support pedestrian connectivity, options, and movement throughout the community. 170 Street S.W. is designated as a highway and transit corridor for the City of Edmonton. Proximity to transit service will be provided for all residential areas. Transit will be provided by the developers for the first two years of service. Following this two year period, Edmonton Transit shall undertake the full

Windermere ASP Principle	Glenridding Ravine NSP Compliance
early in development. • Explore opportunities to partner with the City of Edmonton on the development of transit facilities (e.g. Transit Centre / Station; attractive stops and comfortable waiting areas). • Plan for the provision of transit service within 400 m of residential areas that include a range of housing densities, types and choices. • Provide an attractive pedestrian environment connected by streets with a high degree of connectivity. • Establish an Integrated Community Circulation System of parks, Multi-Use Corridor Trails and or connections that encourages pedestrian connectivity, activity and social contact. • Integrate existing transportation, utility and pipeline corridors into the ASP making use of potential greenways and pedestrian linkages while having regard for the safe, ongoing operation of these transmission facilities. • Provide Multi-Use Trail Corridors and connections that include the North Saskatchewan River Valley and Whitemud Creek Ravine systems, Transportation / Utility Corridor, and major pipeline utility rights of way.	responsibility of providing transit service. Transit service will be provided in accordance with City standards.
4.2.6 Sustainable Infrastructure • Encourage extension of services into the Windermere area in a co-ordinated, efficient and cost-effective manner. • Encourage compact land use patterns and shared infrastructure that optimise land use and building efficiency. • Incorporate necessary stormwater management facility design elements to enhance stormwater runoff quality, mitigate potential environmental impacts and reduce water treatment costs. • Integrate pipeline and utility corridors within	The Row Housing and Low-Rise/Medium Density Housing is designed to complement each other and the NSP through servicing, land use transitioning, transportation and proximity to parkland. The SWMFs are incorporated into the existing contours of the land to maximize their respective efficiency. The location and design of the SWMFs provides vistas into the site from the abutting roadways, and thereby heightens resident awareness of these facilities. This will promote them as walking destinations, and enhance their surveillance to prevent crime. SWMFs will be designed to serve as a destination for pedestrians and cyclists and to

Windermere ASP Principle	Glenridding Ravine NSP Compliance
the plan and, where appropriate, integrate corridors with pedestrian linkages, Greenways, multi-use trails / corridors, and open space areas.	provide passive recreation opportunities. These facilities will be constructed as naturalized ponds to provide possible wildlife habitat and improve water quality via their natural filtration systems. A network of roadways, along with sidewalks, walkways and shared-use paths will provide residents with the ability to drive, walk, or cycle, through the neighbourhood or into the surrounding region.

EDMONTON SUBURBAN NEIGHBOURHOOD DESIGN PRINCIPLES

The purpose of the Suburban Neighbourhood Design Principles is to encourage flexibility and innovation in the design and servicing of new neighbourhoods. The applicable principles are listed below:

SND Principle	Compliance with SND Principle
Principle 1: Design neighbourhoods with the intent of sharing common infrastructure facilities among neighbourhoods	Through site orientation and location, proximity to future transit system and connectivity these developments will provide options for service delivery for adjacent neighbourhoods.
Principle 2: Design and locate school and community facilities to provide inter-neighbourhood focal points	The urban village parks within the Glenridding Ravine NSP are central to the perceived catchment area and will be used by neighbourhood residents.
Principle 3: Design the arterial and collector roads along a grid pattern, peripheral to the neighbourhoods.	The arterial roads along the periphery of the Glenridding Ravine NSP are designed in a grid pattern.
Principle 4: Design neighbourhood streets (both neighbourhood design and cross section of roadway) with standards that cater to the main intended use of the road	City standards and regulations ensure that streets are designed to accommodate pedestrians, cyclists and vehicles. Streets, sidewalks and pathways have standardized widths and materials depending on their function. Street types are organized in a hierarchical fashion, depending on their use.
Principle 5: Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.	Pathways, walkways, sidewalks and shared-use paths connect pedestrians and cyclists to community focal points and destinations such as the urban village parks, pocket parks, top-of-bank viewpoint parks, SWMFs, the Whitemud Creek Ravine, adjacent neighbourhood, future transit system and employment centres.
Principle 6: Provide Transit Services to the edges of new neighbourhoods using the arterial and collector	Future transit service is appropriate along the arterial and collector roadway network.

SND Principle	Compliance with SND Principle
roadways in conjunction with appropriately designed, strategically located and conveniently accessed transit waiting zones.	Alignment of collector roadways and the strategic location of walkways are designed so that all areas of the neighbourhood are accessible to transit stops within a 400 m walking distance.
Principle 7: At the area and neighbourhood planning stage, plan the location of the school / park facilities relative to neighbourhood staging such that they can be consolidated, serviced, and available early in the development of a neighbourhood or catchment area	Distribution of park sites throughout the neighbourhood ensures that parkland will be developed on a timely basis.
Principle 8: Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of education over time	In time, the park sites may be redeveloped to address the changing needs and uses of the community. The central location of the park sites will support this evolution.
Principle 9: Explore opportunities to provide smaller, dispersed open space and parks in a neighbourhood to provide for localized needs while meeting the recreational needs of residents of the catchment area	There are smaller, dispersed open space and parks located throughout the Glenridding Ravine NSP.
Principle 10: Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and storm water management	Park sites and stormwater management facilities are located either adjacent to or in close proximity to one another to maximize their use potential.
Principle 11: Create a linked open space system through open spaces created by stormwater management facilities, some utility rights-of-way, preservation of appropriate natural areas and drainage courses, and school and park open spaces	The Glenridding Ravine NSP provides excellent opportunities for linkages throughout and beyond the plan area to connect residents with amenities and potential commercial service areas. An integrated open space system and pedestrian network provides linkages between stormwater management facilities, urban village parks and additional park sites, as well as access to visual amenities, and passive and active recreation opportunities.
Principle 12: Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points	Higher density residential uses have been strategically located in close proximity to collector/arterial roadways, neighbourhood entrances, open spaces and pedestrian corridors.
Principle 13: Use storm water management techniques which promote alternate(s) to the manmade lakes and dry ponds typical to Edmonton	Alternative stormwater management techniques should be considered, such as constructed wetlands, where appropriate, and will be pursued at the subdivision stage to the satisfaction of City Administration.

URBAN PARKS MANAGEMENT PLAN

The Urban Parks Management Plan (UPMP) provides strategic direction for the acquisition, design, development, and management of Edmonton's parkland until the year 2016. This plan was adopted by City Council in August 2006.

UPMP Principle	Compliance with UPMP Principle
Principle 1 – Active Living: City and partner actions demonstrate a strong commitment to active living through the acquisition of a network of connected parks and open spaces.	The NSP identifies a network of parks, open spaces, stormwater management facilities and shared-use paths which together create a connected and public open space system.
Principle 2 – Urban Wellness: City and partner actions demonstrate a strong commitment to building social capital and urban wellness in the community through the development of urban parks.	The Glenridding Ravine NSP ensures visual and physical access to parks, and public safety through applications of CPTED principles.
Principle 3 – Natural Capital: City and partner actions demonstrate a strong commitment to preservation of natural capital through ecological decision making.	Naturalized landscaping along open space corridors should work to sustain ecological connections within the area.
Principle 4 – Creative Urban Design: City and partner actions demonstrate a strong commitment to a higher quality of life and urban sustainability through placemaking, creative urban design and the provision of diverse landscape opportunities and experiences.	The design of Glenridding Ravine NSP promotes opportunities to enhance the community's quality of life through placemaking, creative urban design, and provision of diverse landscape opportunities. The NSP ensures land uses adjacent to public parks are complementary. Examples of desirable adjacent land use include Row Housing, Low-Rise/Medium Density Residential Housing, Stormwater and Management Facilities.
Principle 5 – Safe Parks: City and partner actions demonstrate a strong commitment to user safety through the creation and management of safe parks environments.	The Glenridding Ravine NSP ensures visual and physical access to parks, and public safety through application of CPTED principles.
Principle 7 – Integrated Parks: City and partner actions demonstrate a strong commitment to the integration of the City, school and community facilities into the park system to meet community need.	The Glenridding Ravine NSP provides two central park sites as well as smaller dispersed park sites to meet community needs.

As a requirement of the UPMP, a Parks Impact Assessment (PIA) for the Glenridding Ravine NSP (which outlines various parkland parameters) has been submitted separately. The more specific aspects related to parkland design and development will be addressed during the subdivision and rezoning stages.

CITY OF EDMONTON HOUSING MIX GUIDELINES

Council approved (1991) guidelines recommend the ratio of dwelling types in new suburban neighbourhoods be based on a mix of 65% to 85% Low Density Residential (Single/Semi-Detached Residential) units and 15% to 35% Medium Density Residential (Row Housing and Low-Rise/Medium Density Housing) units. These guidelines encourage a mix of housing types, a range of choice in housing, and a measure of intensification. The resulting housing mix ratio for the Glenridding Ravine NSP exceeds this ratio. The housing mix ratio for the NSP is in compliance with more recent Council direction on urban sustainability to create a more efficient, compact, and connected (i.e. walkable) city form which also supports early transit service.

RESOURCE WELL SITES AND PIPELINES

Development of lands within Glenridding Ravine will be in accordance with policies from the City: "Policy Guidelines for the Integration of Resource Operations and Urban Developments" and "Policy C515: Oil and Gas Facilities", and the Energy Resources Conservation Board (ERCB). Development will comply with any future updates or revisions to City policy regarding integration of resource operation. These guidelines focus on:

- Resource consolidation by the operators
- Development setbacks
- Urban design
- Surface improvements for resource leases and flow-line right-of-way; and
- Operation guidelines.

The ERCB is the agency with jurisdiction on matters related to oil and gas resource activities. It has rules, regulations and guidelines for these activities in their predevelopment, operating and post-operating (abandoned) stages.

The NSP will follow the ERCB guidelines governing development around operating facilities.

The ERCB has well-established procedures for well site abandonment and guidelines for development around abandoned facilities.

Appendix 2: Technical Studies

The following technical studies have been completed in support of the Glenridding Ravine NSP:

- Neighbourhood Designs Report (NDR)
- Water Network Analysis (WNA)
- Transportation Impact Assessment (TIA)
- Environmental Site Assessment (ESA) Phase I
- Natural Site Assessment (NSA)
- Wetland Impact Assessment (WIA)
- Historical Resources Overview (HRO)
- Geotechnical Reports
- Parkland Impact Assessment (PIA)
- Community Knowledge Campus Needs Assessment (CKC NA)

GLENRIDDING RAVINE NEIGHBOURHOOD STRUCTURE PLAN

Stantec