

#### Bylaw 15803

A Bylaw to amend Bylaw 13717, as amended, being the Windermere Area Structure Plan by adopting the Glenridding Heights Neighbourhood Structure Plan

WHEREAS pursuant to the authority granted to it by the <u>Municipal Government Act</u> on May 25, 2004, the Municipal Council of the City of Edmonton passed Bylaw 13717, being the Windermere Area Structure Plan; and

WHEREAS City Council found it desirable to from time to time to amend Bylaw 13717, as amended, being Windermere Area Structure Plan by adding new neighbourhoods; and

WHEREAS an application was received by the Planning and Development Department to amend Bylaw 13717, as amended, to incorporate the Glenridding Heights Neighbourhood Structure Plan; and

WHEREAS City Council considers it desirable to amend Bylaw 13717, as amended, the Windermere Area Structure Plan;

NOW THEREFORE after due compliance with the relevant provisions of the Municipal Government Act RSA 2000, ch. M-26, as amended, the Municipal Council of the City of Edmonton duly assembled enacts as follows:

- 1. Bylaw 13717, as amended, being the Windermere Area Structure Plan, is hereby further amended by adding as Appendix "C", the Glenridding Heights Neighbourhood Structure Plan, being:
  - a. the map entitled "Bylaw 15803 Glenridding Heights Neighbourhood Structure Plan" attached hereto as Schedule "A"; and
  - b. the land use and population statistics entitled "Glenridding Heights Neighbourhood Structure Plan Land Use and Population Statistics Bylaw 15803", attached hereto as Schedule "B"; and

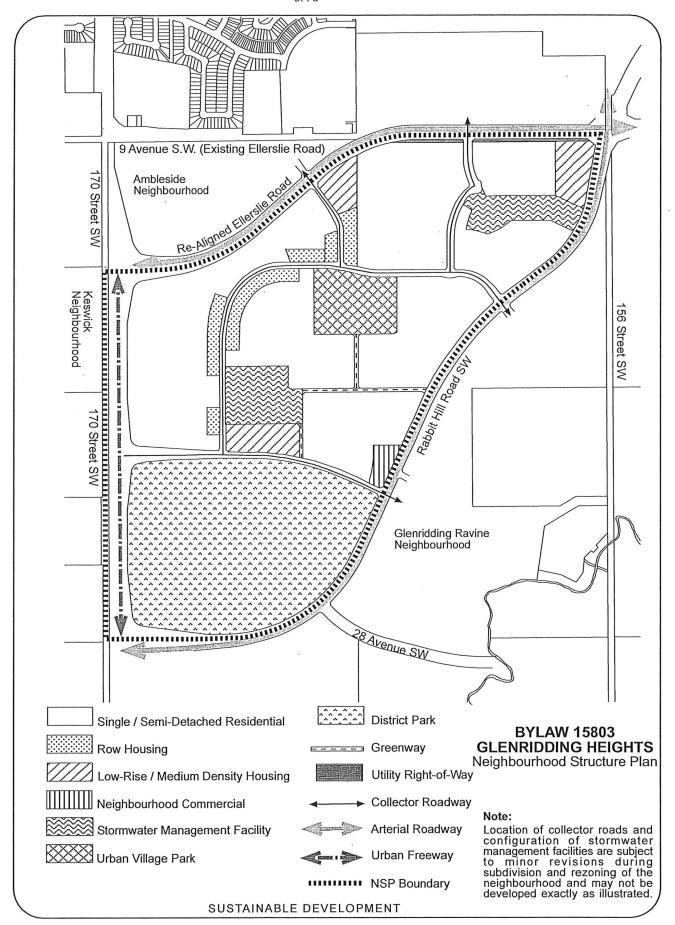
c. the report entitled "Glenridding Heights Neighbourhood Structure Plan", attached hereto as Schedule "C" are hereby adopted as Glenridding Heights Neighbourhood Structure Plan.

READ a first time this	4th	day of	July		, A. D. 2011;
READ a second time this	4th	day of	July		, A. D. 2011;
READ a third time this	4th	day of	July		, A. D. 2011;
SIGNED and PASSED this	4th	day of	July	×	, A. D. 2011.

THE CITY OF EDMONTON

MAYOR

CITY CLERK



#### GLENRIDDING HEIGHTS NEIGHBOURHOOD STRUCTURE PLAN LAND USE AND POPULATION STATISTICS BYLAW 15803

-	12111112000			•
LAND USE	Area (ha)		% of GA	
Gross Area	160.05			
Arterials Road Right-of-Way	19.63			
Utility Right of Way (Atco Gas)	0.58			
Gross Developable Area	139.84		100.0%	
Commercial				
Neighbourhood Commercial	0.86		0.6%	
Parkland, Recreation, School, Municipal Reserve*	42.83		30.6%	% of MR
District Park		37.40		26.74%
Urban Village Park		5.29		3.78%
Greenways		0.14		0.10%
Transportation	28.67		20.5%	
Circulation		27.97		
Greenways		0.70		
Infrastructure / Servicing				
Stormwater Management Facilities	7.76		5.5%	
Total Non-Residential Area	80.12		56.68%	
Net Residential Area (NRA)	59.72		42.71%	

#### RESIDENTIAL LAND USE, UNIT COUNT AND POPULATION

Land Use	Area	Units	Units	% of	People	Population
	(ha)	/ha		Total	/Unit	
Single/Semi-Detached	49.86	25	1,247	64%	2.80	3,490
Row Housing	3.94	45	177	9%	2.80	496
Low-Rise/Medium Density Housing	5.92	90	533	27%	1.80	959
Total	59.72		1,957	100%		4,946

#### SUSTAINABILITY MEASURES

Population Density (ppnrha)			8	3
Unit Density (upnrha)			3	3
Single/Semi-Detached // Rowhousing, Low Rise/Medium Density I	Housing		6	64% / 36%
Population within 500 m of Parkland			9	0%
Population within 400 m of Transit Service			1	00%
Population within 600 m of Commercial Service			8	66%
Presence / Loss of Natural Area Features	Land	Water		

Presence / Loss of Natural Area Features	Land	Water
Protected as Environmental Reserve (ha)	n/a	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)	n/a	n/a

#### STUDENT GENERATION STATISTICS 559 **Public School Board** 280 Elementary Junior High 140 Senior High 140 Separate School Board 280 Elementary 140 Junior High 70 Senior High 70 **Total Student Population** 839

<sup>\*</sup>Areas dedicated to Municipal Reserve to be confirmed by legal survey

Heigh Heigh

May 2011



Stantec



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#### 1.0 Administration

#### 1.1 PURPOSE

The purpose of the Glenridding Heights Neighbourhood Structure Plan (NSP) is to depict the land use framework as well as the development and servicing goals for Glenridding Heights. The Glenridding Heights 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 Heights NSP was adopted by Edmonton City Council on July 4, 2011 as Bylaw 15803 in accordance with Section 633 of the Municipal Government Act.

#### 1.3 TIMEFRAME

Development in Glenridding Heights is expected to commence in 2011 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.

A policy statement(s) containing "shall" is mandatory and must be implemented. 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.



#### 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 Heights 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 Heights.
- Section 3 describes the land use, transportation, and servicing concepts for Glenridding Heights.
- 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 Heights NSP Context

#### 2.1 LOCATION

Glenridding Heights is comprised of six parcels listed in **Table 1 – Land Ownership**. Glenridding Heights denotes one of five neighbourhoods in the Windermere Area Structure Plan (ASP), and covers approximately 160 hectares (395 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 (9<sup>th</sup> Avenue SW)

\* Eastern Boundary: Rabbit Hill Road

Southern Boundary: Rabbit Hill Road

• West Boundary: 170<sup>th</sup> Street S.W.

The Glenridding Heights NSP is identified as Neighbourhood 4A in the Windermere ASP.

The Ambleside Neighbourhood (Windermere Neighbourhood 1) is located immediately north of Ellerslie Road (9<sup>th</sup> Avenue SW). The Ambleside NSP was adopted by City Council in July 2005, and is currently being developed. The Keswick Neighbourhood (Windermere Neighbourhood 3) is located west of 170<sup>th</sup> Street S.W. The Keswick Neighbourhood was adopted by City Council in July 2010, and is currently starting to develop. The Glenridding Heights NSP was adopted by City Council in July 2011. The lands south and east of Rabbit Hill Road are within the Glenridding Ravine Neighbourhood (Windermere Neighbourhood 4B). As of 2010, preliminary planning has begun for the Glenridding Ravine NSP.

#### 2.2 BACKGROUND

The Glenridding Heights 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 Heights NSP Context (see Table 1 – Land Ownership and Figure 3 - Land Ownership).

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 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 The Way We Grow and is adjacent to the developing neighbourhoods of Windermere, Ambleside and Keswick. Proximity of other service

infrastructure will provide the necessary means of meeting the required municipal standards for development of the neighbourhood.

The Glenridding Heights plan area consists of undeveloped agricultural land with a number of existing farmsteads and country residential / estate development.

The Glenridding Heights 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

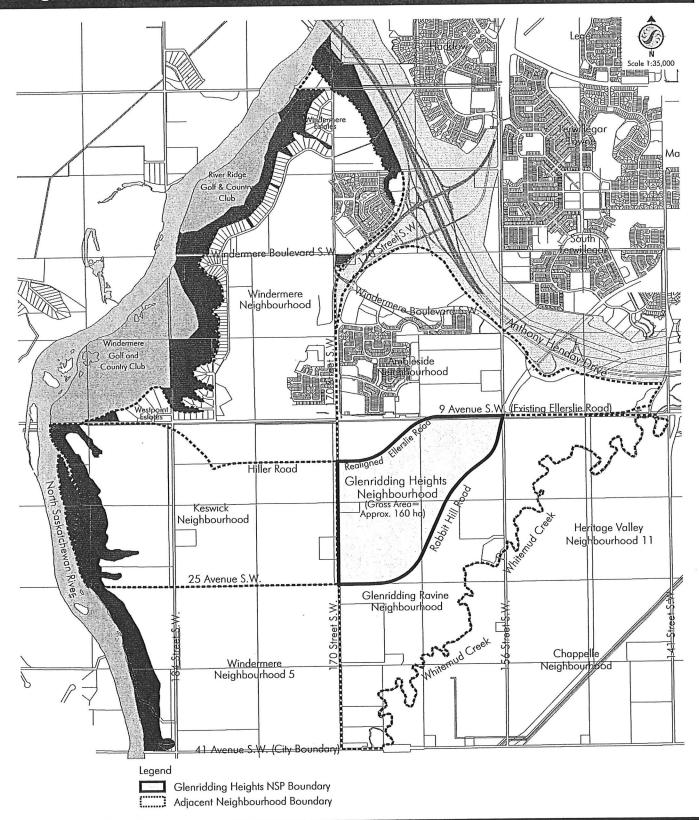
The Glenridding Heights NSP was prepared on behalf of several private developers who own approximately 97% of the land within the Plan area at the time of plan preparation. One parcel is held by a non-participating landowner(s). Current (2011) land ownership is shown in **Figure 3 - Land Ownership**, 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	N ½ NW ¼ 22-51-25-W4	32.4 ha	9.77 ha
2	Private Corporate	NE 1/4 22-51-25-W4	62.7 ha	48.79 ha
3	Private Corporate	S 1/2 NW 1/4 22-51-25-W4	32.3 ha	32.30 ha
4	Private Non-Corporate NP	Lot 1, Plan 832 2113 NP	2.0 ha <sup>NP</sup>	2.00 ha <sup>NP</sup>
5	Private Corporate	SW 1/4 22-51-25-W4	62.7 ha	59.70 ha
6	Private Non-Corporate	Block D, Plan 892 2649	38.2 ha	6.52 ha
	Ellerslie Road (9 <sup>th</sup> Avenue S.	W.) & 170 Street S.W. Road Rights	-of-Way	0.97 ha
Tot	al Area		230.3	160.05 ha

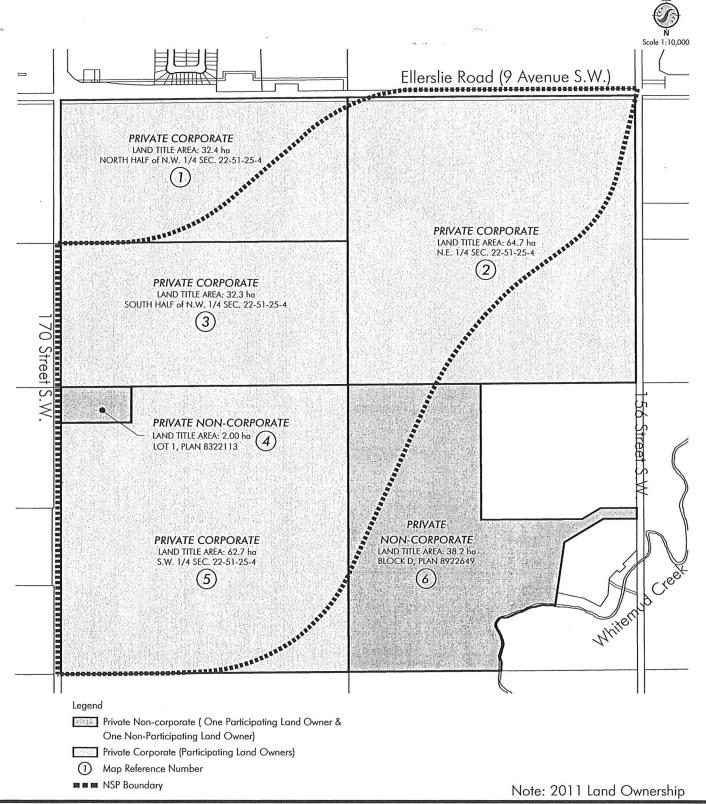
NP Indicates a non-participating landowner

igure 2 - Context Ban



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Figure 3 - Land Ownership



#### 2.4 SITE CONTEXT

#### 2.4.1 Topography

The topography of the lands within Glenridding Heights is generally flat with slight undulations (see **Figure 4 – Site Contours**). Elevations through the plan area vary from approximately 692m in the southwest to approximately 687 m in the northeast of the plan boundary. Surface drainage throughout the plan area generally flows eastward towards the Whitemud Creek Ravine. **Figure 5 – Site Features**, 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 Heights are identified as primarily Malmo Silt Loam. The Malmo Silt Loam consists of Eluviated Black Chernozems developed on lacustirne 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 northeast. The estimated elevation of the water table is approximately 670 metre but varies throughout the plan area.

Geotechnical Investigations were conducted for the participating landowner of the properties contained within the plan area. All Geotechnical Investigations have been 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) does not identify any Natural, Sensitive or Environmentally Significant Areas within the Glenridding Heights boundaries.

#### 2.4.4 Wetland Assessment

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

The Wetland Impact Assessment for the Glenridding Heights NSP contains several wetlands (as shown on Figure 5 – Site Features) observed through field reconnaissance in August and October 2009, and assessed based upon aerial photo review dating back to 1950.

Alberta Sustainable Resources Development (ASRD) has been 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. If any of the wetlands are to be disturbed, confirmation is required to ensure there are no

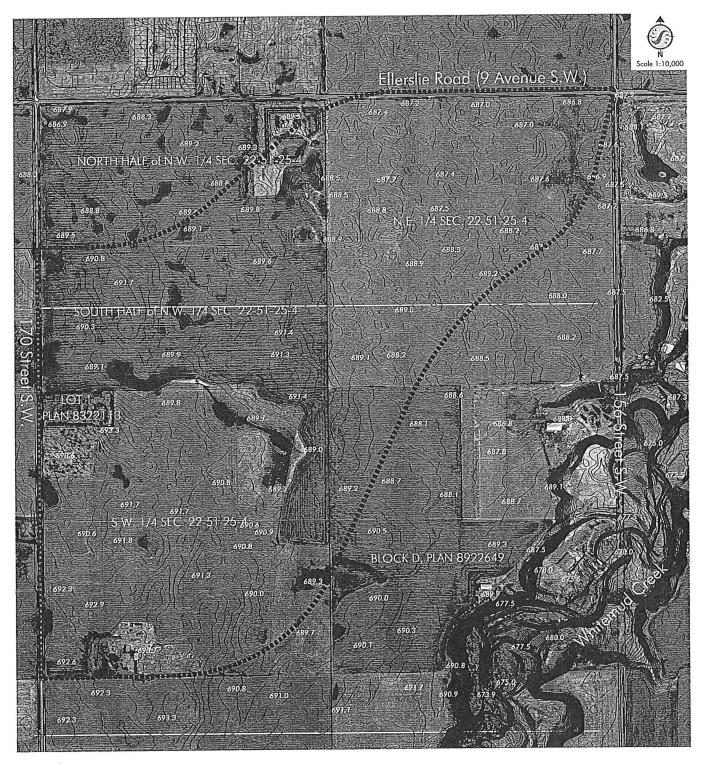
claims under the Public Lands Act. Should ASRD claim the bed and shore of any wetland in the NSP area, they may not allow disturbance and may require compensation as either constructed wetlands on site or financial compensation.

Alberta Environment administers the Water Act and has been contacted regarding any wetlands that are to be disturbed. Alberta Environment has a policy of no net loss in regards to wetlands in Alberta, and as such, requires compensation to be made if a wetland is to be disturbed. Within Glenridding Heights, 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

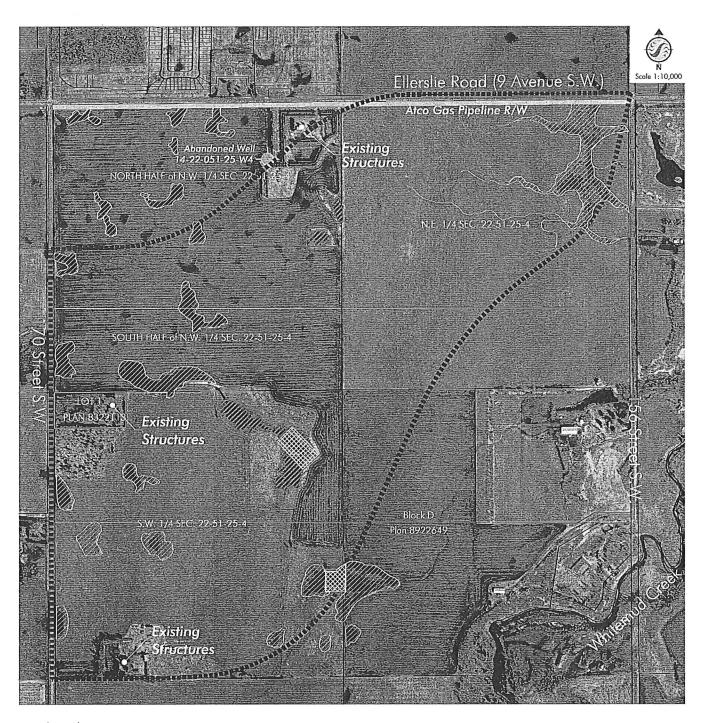
A combined Stage I Natural Site Assessment Report (NSA) was completed for Glenridding Heights and Glenridding Ravine and submitted to the City in May 2010. The NSA indicated that there are no environmentally sensitive areas and no identifiable ecological network components identified within the Glenridding Heights plan area. 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.

# Glenridding Heights Neighbourhood Structure Plan Figure 4 - Site Contours



Legend

■■■ NSP Boundary



Legend

- Abandoned Wellhead Location Atco Gas Pipeline R/W

Wetland Class 1

**■■■** NSP Boundary

Existing Structure

Dugout



#### 2.4.6 Existing Land Uses

The majority of the plan area is currently (2011) used for agricultural purposes with three existing farmsteads and estate residential development. None of these uses pose any particular constraints to future urban development. However, future development of any and all properties within the neighbourhood is at the discretion of the respective landowners.

#### 2.4.7 Environmental Assessment

The following information presented in Table 2 – Environmental Site Assessments and illustrated on Figure 6 - Environmental Site Overview is based on Phase I Environmental Site Assessments (ESAs) conducted for the participating landowners of the properties contained within the plan area. The City of Edmonton's Sustainable Development Department requires that individual landowners provide ESAs or disclosure statements prior to 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	N ½ NW ¼ 22-51-25-W4	Phase I ESA
		14 721444 74 22-51-25-444	Signed-Off
2	Private Corporate		Phase I ESA and
		NE 1/4 22-51-25-W4	Phase I ESA
		NL 74 22-51-25-VV 4	Update Signed- Off
3	Private Corporate		Phase I ESA and
		S ½ NW ¼ 22-51-25-W4	Phase I ESA
		3 72 11 17 74 22-51-25-17 4	Update Signed-
			Off
4	Private Non-Corporate NP	Lot 1, Plan 832 2113	Required
5	Private Corporate		Phase I ESA and
		SW 1/4 22-51-25-W4	Phase I ESA
		3 74 22-51-25-77 4	Update Signed-
			Off
6	Private Non-Corporate	Block D, Plan 892 2649	Phase I ESA
L		DIOCK D, Flatt 692 2049	Signed-Off

Non-Participating Landowners

Figure 6 - Endiguinental Site Assessment Overview



Legend

Environmental Site
Assessment Completed



Map Refernce Number

■■ NSP Boundary

#### 2.4.8 Historical Resources

Historic Resource Overviews (HROs) have been completed for participating lands and submitted to Alberta Culture and Community Spirit (ACCS) in support of the Glenridding Heights 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.

Based on ACCS's review of the HROs, a Historical Resources Impact Assessment (HRIAs) is required for one of the titled areas; however the majority of this titled area is within the Glenridding Ravine Neighbourhood. The HRIA that is required for the one titled area specifically applies to land adjacent to the Whitemud Creek Ravine within the Glenridding Ravine NSP and not to land within the Glenridding Heights NSP area; therefore, submission of the required HRIA will be provided with the submission of the Glenridding Ravine NSP.

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 Heights NSP is important to retaining local history and character that may also be of regional or provincial significance.

Table 3 - Historic Resources Overview

	Titled Owner	Legal Description	HRO	HRIA
1	Private Corporate	N ½ NW ¼ 22-51-25-W4	Clearance	n/a
2	Private Corporate	NE 1/4 22-51-25-W4	Clearance	n/a
3	Private Corporate	S 1/2 NW 1/4 22-51-25-W4	Clearance	n/a
4	Private Non-Corporate NP	Lot 1, Plan 832 2113	Required	
5	Private Corporate	SW 1/4 22-51-25-W4	Clearance	n/a
6	Private Non-Corporate	Block D, Plan 892 2649	Completed	Required for lands within Glenridding Ravine NSP - adjacent to ravine

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 three registered pipelines within the NSP area (see Figure 5 – Site Features). Two of these active (operating) pipelines travel parallel to Ellerslie Road (9 Ave. SW.) along the length of the northern boundary), while the third is proposed and will run parallel to 170 St. SW. All pipelines carry natural gas. All pipeline rights-of-way will be accommodated in the development concept.

In addition, a preliminary search identified one abandoned oil well within the NSP area. A Phase I ESA has been completed for the subject lands and a Phase II ESA will be required in order to confirm well

location, status and potential impact on future development prior to rezoning the subject lands within the Glenridding Heights NSP. Future development surrounding the abandoned oil well sites will adhere to the policies and requirements established by the ERCB and the City of Edmonton.

Table 4 - Oil Well and Pipeline Information Summary

Well License #	Licensee	Licence Date Abandoned	
00 / 14-22-051-25 W4 / 0	D.L.P. Drilling Co. Ltd.	Jul 1951 – Aug 1951	
Pipeline License #	Licensee	Substance	Status
15440-14	ATCO Gas and Pipelines	Natural Gas	Active
37844-2	ATCO Gas and Pipelines	Natural Gas	Active
37844-10	ATCO Gas and Pipelines	Natural Gas	Proposed

#### 2.5 PUBLIC INVOLVEMENT

Consistent with Policy C<sub>5</sub>13 (City of Edmonton Public Involvement Policy), advance notification was sent to surrounding property owners and affected Community Leagues on September 4, 2008, advising them of an application to create the Glenridding NSP and encouraging them to contact either the Planning and Development Department or the applicant (Stantec Consulting Ltd.) to communicate any possible concerns.

On March 24, 2011 surrounding property owners and affected Community Leagues were advised of the revised application to create the Glenridding Heights NSP (Windermere Neighbourhood 4A) through mailed notification of a Public Meeting invitation.

A public meeting was hosted by the City of Edmonton's Planning and Development Department on April 13, 2011 at Ellerslie Rugby Club. At the meeting landowners had an opportunity to review and comment on the proposed Glenridding Heights NSP. All feedback received at the Public Meeting was summarized in the Sustainable Development Department's report to City Council.

Landowners have also be notified of the Public Hearing and requested to provide either written or verbal comments to Council.

#### 3.0 Land Use, Transportation, and Servicing Concept

#### 3.1 VISION

Glenridding Heights is a vibrant, healthy and complete community in southwest Edmonton. The neighbourhood promotes principles of liveability, connectivity and walkability by offering an integrated system of parks, stormwater management facilities and open spaces, providing a pedestrian friendly environment. The neighbourhood is designed to provide a mix of housing types for a variety of age and income groups.

#### 3.2 Goals and Objectives

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

- Enables people from a wide range of economic levels and age groups to live within the community by establishing a variety of housing types and residential densities;
- Combines land use decisions with sustainable development and urban design principles;
- Emphasizes access to public open space that provides 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;
- Provides a balanced transportation system that connects major inter- and intraneighbourhood focal points and maximizes transit access; and,
- Provides efficient, contiquous and staged infrastructure and urban development.

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 the land resources responsibly and efficiently.
- 3. Ensure sustainable and cost effective landscaping of open space with the use of native plant species.

#### **Urban Design**

- 4. Promote residential streets which are pedestrian friendly, safe and form an integral and attractive component of the public realm within the neighbourhood.
- 5. Provide signage complementary to the theme of the neighbourhood.
- 6. Develop Low-Rise/Medium Density Housing sites to a high urban design standard.
- 7. Site buildings to optimize views and provide access to neighbourhood amenities and features.
- **8.** Develop park spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.
- **9.** Create identifiable focal points which will be directly linked and incorporated into the open space system.

#### **Ecology**

10. Strengthen Edmonton's ecological network.

#### Environment

- **11.** Ensure the environmental status of the lands within the Glenridding Heights NSP is suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.
- **12.** Ensure urban development around abandoned well-sites adheres to the requirements of the ERCB and City of Edmonton Policy and minimizes potential environmental hazards and disruption of future residential areas through careful neighbourhood design.
- **13.** Establish appropriate horizontal separation distance between residential uses and pipeline corridors.

#### **Historical Resources**

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

#### Residential

- **15.** Provide a range of housing choices in a variety of physical forms to meet the needs of different household types, income levels and ages.
- **16.** 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.
- 17. Provide affordable housing opportunities in Glenridding Heights.
- **18.** 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.
- 19. Provide a transition between residential uses of significantly different densities.

#### Commercial

- **20.** Provide a neighbourhood convenience commercial shopping node to meet the needs of residents and provide local employment opportunities within the neighbourhood.
- **21.** Locate the neighbourhood convenience commercial site along arterial or collector roadways to ensure high visibility and convenient access opportunities.
- **22.** Provide convenient pedestrian access to commercial development so that residents have opportunity to walk to commercial services.

#### Parks and Open Space

- 23. Accommodate City requirements for school / park sites within the neighbourhood.
- 24. Provide a variety of opportunities for passive and active recreation experiences.
- **25.** Design a connected and integrated open space system that encourages all modes of movement (e.g. pedestrians, bicycles, wheelchairs, in-line skates, etc).
- **26.** Design safe park space, in accordance with the Design Guide for a Safer City, Crime Prevention Through Environmental Design and the Urban Parks Management Plan.

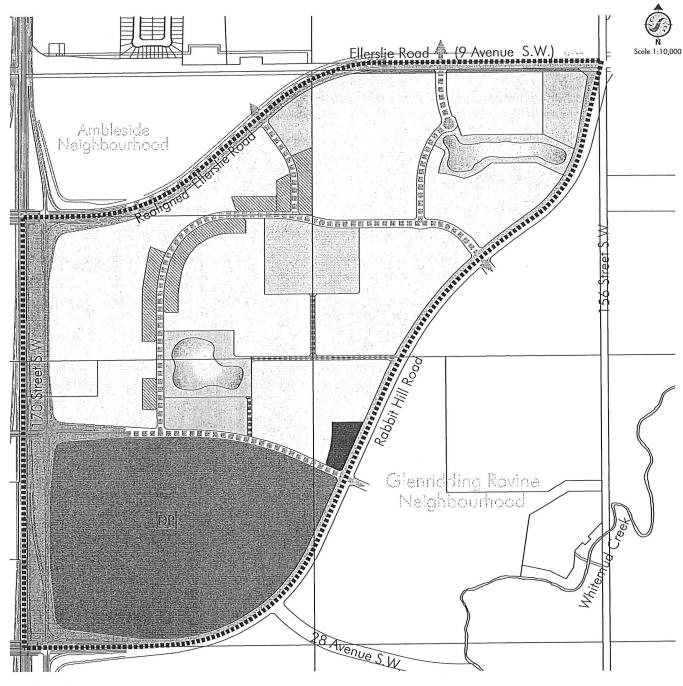
#### Transportation

- **27.** Recognize that 170 Street S.W. is a highway connector and is designated as an urban freeway connecting Anthony Henday Drive to the potential Outer Ring Road and the surrounding region.
- **28.** Implement the City of Edmonton road hierarchy system of an integrated arterial, collector and local roadway network.
- 29. Minimize traffic congestion and enhance safety on internal collector roadways.
- **30.** Promote connectivity and pedestrian access to amenity areas such as parks, open spaces, commercial uses and transit facilities by providing an alternative circulation system.
- 31. Mitigate the impact of vehicular traffic associated with Commercial and Low-Rise/Medium Density Housing development on Single/Semi-Detached areas.
- **32.** Ensure the maximum length of cul-de-sacs in residential settings do not compromise City emergency response plans, operations and maintenance.
- 33. Create adequate locations for neighbourhood access.
- 34. Integrate land use and circulation patterns considering safety.
- 35. Provide accessible public transit to residents and schools.
- **36.** Provide noise attenuation where residential uses back onto major transportation corridors (i.e. 170 Street) which have been designated or will be designated as truck routes.

#### Infrastructure, Servicing and Staging

**37.** Ensure that Glenridding Heights is serviced to a full urban standard, in an efficient, contiguous and staged manner.

igure 7 - Land Use Concept



Legend

Single/ Semi-Detached Residential

Row Housing

Low-Rise/ Medium Density Housing

Neighbourhood Commercial

Stormwater Management Facility

Urban Village Park

District Park

FEEL Greenway

Utility R/W

■ 5 E Collector Roadway

Arterial Roadway

■■■ NSP Boundary

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	Heights				
Neign	bourhood		Plan			
Land Us	e and Pop	ulation St	atistics			isipotentiid. Gastanina
LAND USE	Area (ha)		% of GA			
Gross Area	160.05					
Arterials Road Right-of-Way	19.63					
Utility Right of Way (Atco Gas)	0.58					
	Area (ha)		% of GDA			
Gross Developable Area	139.84		100.0%			
Commercial						
Neighbourhood Commercial	0.86		0.6%			
Parkland, Recreation, School, Municipal Reserve**	42.83		30.6%	% of MR		
District Park		37.40		26.74%		
Urban Village Park		5.29		3.78%		
Greenways		0.14		0.10%		
Transportation	28.67	• • • • • • • • • • • • • • • • • • • •	20.5%			
Circulation	20.07	27.97	20.070			
Greenways		0.70				
Infrastructure / Servicing		0.70				
Stormwater Management Facilities	7.76		5.5%			
Total Non-Residential Area	80.12		56.68%			
Net Residential Area (NRA)	59.72		42.71%			
	,		42.7170			
RESIDENTIAL LAND USE, UNIT COUNT AND PO	57 957 J. 10 92 J. 194 J. 184 J. 184 J.	CONTRACTANCE	andrones volg specialis	n hay in the section for	Telepara hada Aestabat	agujar uajado
Land Use	Area (ha)				People/Unit F	
Single/Semi-Detached	49.86	25	1,247	64%	2.80	3,490
Row Housing	3.94 5.92	45	177	9%	2.80	496
Low-Rise/Medium Density Housing			F00	070/	4.00	
		90	533	27%	1.80	959
Total	59.72	90	533 <b>1,957</b>	27% 100%	1.80	959
Total Sustainability Measures		90				959
Total SUSTAINABILITY MEASURES Population Density (ppnrha):		90			83	959
Total SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha)	59.72		1,957		83 33	959 <b>4,945</b>
Total SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise//	59.72		1,957		83 33 64%/3	959 <b>4,945</b>
Total SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland	59.72		1,957		83 33 64%/3 90%	959 <b>4,945</b>
Total SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service	59.72 Medium Dens		1,957		83 33 64%/3 90% 100%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES  Population Density (ppnrha):  Unit Density (upnrha)  Single/Semi-Detached // Rowhousing, Low Rise/I  Population (%) within 500 m of Parkland  Population (%) within 400 m of Transit Service  Population (%) within 600 m of Commercial Servi	59.72 Medium Dens	sity Housing	1,957		83 33 64%/3 90%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES  Population Density (ppnrha):  Unit Density (upnrha)  Single/Semi-Detached // Rowhousing, Low Rise/I  Population (%) within 500 m of Parkland  Population (%) within 400 m of Transit Service  Population (%) within 600 m of Commercial Servi  Presence / Loss of Natural Area Features	59.72 Medium Dens	sity Housing Land	1,957		83 33 64%/3 90% 100%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES  Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha)	59.72  Medium Dens	sity Housing  Land  n/a	1,957		83 33 64%/3 90% 100%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES  Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features  Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha)	59.72  Medium Dens	sity Housing  Land  n/a  n/a	Water n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES  Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha)	59.72  Medium Dens	Land n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES  Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha)	59.72  Medium Dens	sity Housing  Land  n/a  n/a	Water n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise// Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha) STUDENT GENERATION STATISTICS	59.72  Medium Dens	Land n/a n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha)  STUDENT GENERATION STATISTICS Public School Board	59.72 Medium Dens	Land n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha)  STUDENT GENERATION STATISTICS Public School Board Elementary	59.72  Medium Dens	Land n/a n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
Total  SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise// Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha)  STUDENT GENERATION STATISTICS Public School Board Elementary Junior High	280 140	Land n/a n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise// Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha) STUDENT GENERATION STATISTICS Public School Board Elementary Junior High Senior High	59.72  Medium Dens	Land n/a n/a n/a n/a n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha) STUDENT GENERATION STATISTICS Public School Board Elementary Junior High Separate School Board	280 140 140	Land n/a n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha) STUDENT GENERATION STATISTICS Public School Board Elementary Junior High Separate School Board Elementary	280 140 140	Land n/a n/a n/a n/a n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha) STUDENT GENERATION STATISTICS Public School Board Elementary Junior High Separate School Board Elementary Junior High	280 140 140 70	Land n/a n/a n/a n/a n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>
SUSTAINABILITY MEASURES Population Density (ppnrha): Unit Density (upnrha) Single/Semi-Detached // Rowhousing, Low Rise/I Population (%) within 500 m of Parkland Population (%) within 400 m of Transit Service Population (%) within 600 m of Commercial Servi Presence / Loss of Natural Area Features Protected as Environmental Reserve (ha) Conserved as Naturalized Municipal Reserve (ha) Protected through other means (ha) Lost to Development (ha) STUDENT GENERATION STATISTICS Public School Board Elementary Junior High Separate School Board Elementary	280 140 140	Land n/a n/a n/a n/a n/a n/a n/a	Water n/a n/a n/a		83 33 64%/3 90% 100%	959 <b>4,945</b>



#### 3.2.1 Green Development

One of the goals of this plan is to consider green initiatives and innovations.

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 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 potentially approved by the City of Edmonton.

#### Rationale

Several aspects of sustainability can 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 provision that differs from City of Edmonton standards) as one 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 support increased densities to make more efficient use of land.	Figure 7 – Land Use Concept and Table 5 - Land Use & Population Statistics illustrate increased densities at which the NSP has been planned, which exceed the Council- approved Suburban Housing Mix Guidelines.

#### Rationale

Compact development increases residential densities, promotes alternative forms of transportation (cycling, walking) and contributes to increased efficiency in the provision of municipal services, public transit, schools and use of nearby commercial developments and neighbourhood amenities.

Objective (3)	NSP Policy	Implementation
Ensure sustainable and cost effective landscaping of open space with the use of native plant species.	Landscaping within the plan area should incorporate the use of native plant species within all open spaces and stormwater management facilities.	Develop open space areas using native 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 or Development Permit review.

#### Rationale

Using native plant materials promotes a healthier natural ecosystem that over time will integrate with the surrounding landscape. Specific species for landscaping should be determined by the developer and City.

#### **Technical Summary**

No specific technical requirements were further identified.

#### 3.2.2 Urban Design

The Glenridding Heights NSP incorporates relevant principles of urban design to establish an attractive, pedestrian friendly community in support of the NSP Vision.

Objective (4)	NSP Policy	Implementation
Promote residential streets which are pedestrian friendly, safe and form an integral and attractive component of the public realm within the neighbourhood.	Streets that are part of the primary pedestrian linkage system (i.e. arterial or collector roads) should have treed boulevards and sidewalks that are not interrupted by frequent front drive access.	Details shall be determined at the rezoning and subdivision application stage.

#### 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.

a) Way finding signage shall be provided along pedestrian and cycling routes to encourage safe and efficient movement.	a) b) c) Details shall be determined at the engineering drawing stage. The
b) Signs should be designed in an aesthetically pleasing manner and in harmony with the architecture theme of the respective building. c) Directional signage is encouraged to provide information at critical locations relating to primary tenants, parking lots, loading zones and pick up areas, entrances, exits and amenity areas.	Development Officer shall ensure that the Development Permit application is in conformance with the Sign Regulations of the Edmonton Zoning Bylaw.
t r c e ii le t z e	o) Signs should be designed in an aesthetically pleasing manner and in harmony with the architecture theme of the espective building. c) Directional signage is encouraged to provide information at critical ocations relating to primary enants, parking lots, loading cones and pick up areas, entrances, exits and amenity

#### Rationale

Signage plays an important role in way-finding and creating an identity within a 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 the navigability of the neighbourhood without creating visual clutter.

Objective (6)	NSP Policy	Implementation
Develop Low-Rise/Medium Density Housing sites to a high urban design standard.	Low-Rise/Medium Density Housing developments should be designed to have a strong street presence, with parking areas located underground or away from the street.	The Development Officer should have regard for site design, parking areas and building articulation.

#### Rationale

While parcels of Low-Rise/Medium Density Housing are likely to 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. Ground oriented Row Housing can be provided as a transition between Low-Rise/Medium Density Housing and Single/Semi-Detached housing.

Objective (7)	NSP Policy	Implementation
Site buildings to optimize views and provide access to neighbourhood amenities and features.	Maximize views and vistas of park spaces and storm water management facilities.	The Developer and City Administration shall have regard for the orientation of buildings to ensure public access and view potential.

#### Rationale

The orientation of buildings towards public areas such as streets, parks and stormwater management facilities should be designed to enable public access and view potential thereby increasing visibility and surveillance.

Objective (8)	NSP Policy	Implementation
Develop park spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.	a) The stormwater management facilities (SWMFs) shall be designed using Crime Prevention Through Environmental Design principles, accessible through public lands, and not land-locked by -private development. b) Street frontage along roadways that abut SWMFs and parks shall be provided in order to maximize public access and provide clear sightlines and views. c) SWMFs should be designed to include naturalized shoreline plantings intended to provide habitat opportunities for wildlife and improve water quality.	a) The location and configuration of SWMFs and parks are conceptually illustrated in Figure 7 – Land Use Concept and may be refined prior to rezoning. b) The Subdivision Authority shall have regard for the provision of adequate street frontage abutting parks and SWMFs to maintain and enhance view and surveillance opportunities. c) 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 review as part of the subdivision process. d) The location of the emergency access to SWMFs shall be determined at the subdivision approval stage.
·	d) Emergency access to SWMFs shall be provided.	,,



#### Rationale

The location, configuration and design of the SWMFs and parks 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. Stormwater management facilities and parks will be designed to serve as a destination for pedestrians and cyclists and to provide passive recreation opportunities.

Objective (9)	NSP Policy	Implementation
Create identifiable focal points which will be directly linked and incorporated into the open space system.	a) Focal points shall function as amenity space for residents and should be comprised of one or a combination of the following elements: public art, seating area plaza, street furniture, fountain/water feature or other architectural elements. b) Convenient, safe and efficient pedestrian connections from the neighbourhood into and through open spaces/focal points shall be provided.	a) Focal points shall include the District Park Site, Urban Village Park, Neighbourhood Commercial site and Stormwater Management Facilities (SWMFs). b) Figure 9 – Pedestrian Network conceptually illustrates the location of pedestrian connections, which shall be determined at rezoning and subdivision approval stage. Details regarding the provision and placements of architectural elements within focal points shall be determined at the detailed design stage of development.

#### Rationale

Neighbourhood focal points are developed to create community destinations within the neighbourhood. Through careful design and site planning, the development of these focal points creates active neighbourhood places which are alive and utilized and promote community interaction. Neighbourhood focal points within Glenridding Heights include the District Park Site, Urban Village Park, SWMFs and Commercial Area. These provide key amenity spaces for local residents and the larger community and add to the neighbourhood's attractiveness and character. The perception and identity of community focal points differ, depending on the user.

#### **Technical Summary**

No specific technical requirements were further identified.

#### 3.2.3 Ecology

The Glenridding Heights NSP ensures that natural systems are protected or enhanced, where applicable.

Objective (10)	NSP Policy	Implementation
Strengthen Edmonton's ecological network.	a) Integrate components (e.g. stormwater management facilities, parks) to provide habitat and encourage ecological connectivity. b) Plantings of native species should be utilized to add to the habitat value of the green network within the neighbourhood.	a) Figure 7 - Land Use Concept guides the development of the NSP. b) Relevant City of Edmonton conservation planning and policy shall be adhered to (e.g. Policy C <sub>53</sub> 1). The recommendations and regulations of the City and Provincial environmental agencies shall be followed.

#### Rationale

The function and the integrity of the ecological network in the Glenridding Heights NSP area are extremely limited. The plan area is primarily agricultural land and the only ecological network components identified by the City of Edmonton Ecological Network map are outside the plan area boundaries and include the Whitemud Creek Ravine to the east and the SW40 Natural Area to the north. Aside from developing a new network, little can be done to restore connectivity.

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 network components located within and outside the plan boundaries. From an ecological perspective, the NSP concept includes the following components: a central, linear greenway corridor, two SWMFs, parks and open spaces.

#### **Technical Summary**

A Stage I Natural Site Assessment (NSA) was completed by Klohn Crippen Berger Ltd. for Glenridding Heights and Glenridding Ravine. The report was 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 states that there are no environmentally sensitive areas and no identifiable ecological network components identified within Glenridding Heights.

#### 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 (11)	NSP Policy	Implementation
Ensure the environmental status of the lands within the Glenridding Heights NSP is suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.	a) Determine the likelihood, types, and location of environmental concerns that may be present on the lands prior to rezoning. b) 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. c) Where necessary, contaminated material shall be removed and disposed of in an environmentally sensitive manner, in accordance with Federal, Provincial, and Municipal regulations.	a) b) ESAs and any follow-up shall receive sign-off by City administration prior to the rezoning stage of development. c) 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 Heights 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 (12)	NSP Policy	Implementation
Ensure urban development around abandoned well-sites adheres to the requirements of	a) Where development is proposed around an abandoned well site,	a) Setback requirements will be confirmed at time of subdivision approval.
the ERCB and City of Edmonton Policy and minimizes potential environmental hazards and	adherence to the requirements of the ERCB and City Policy shall occur.	b) <b>Figure 5 – Site Features</b> illustrates the location of abandoned the well site.
disruption of future residential areas through careful	b) Abandoned well areas should only assume land uses	Figure 7 – Land Use Concept illustrates land designations.

neighbourhood design.	that will allow for immediate maintenance should the well ever require servicing.	Consideration for appropriate land uses shall be determined at time of rezoning.
	c) A temporary identification marker should be placed as precisely as possible on the abandoned well site to prevent damage both to the well site and to the construction or excavation equipment. d) Should the status of a well site change, an assessment of risk factors shall be undertaken.	<ul> <li>c) Appropriate temporary identification markers shall be placed on site prior to rezoning approval.</li> <li>d) A Risk Assessment, or other requirements by the City, shall be conducted at the rezoning stage.</li> </ul>

#### 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 (13)	NSP Policy	Implementation
Establish appropriate horizontal separation distance between residential uses and pipeline corridors.	Residential uses shall comply with the City's policies regarding development adjacent to pipeline corridors.	The Subdivision Authority shall have regard for lot and site design ensuring the appropriate setback distance between pipeline corridors and residential uses.

#### Rationale

**Figure 5 – Site Features** illustrates the location of existing and future right-of-ways. 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 approved by the City of Edmonton 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 Overview). ESA Flagging Maps for Glenridding Heights and Glenridding Ravine was provided to the City of Edmonton. Follow-up items identified within the respective ESA and Flagging Maps 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 (14)	NSP Policy	Implementation
Identify and protect items with historical significance, such as buildings and areas of cultural significance, in the Glenridding Heights NSP.	Past and current activities within the Glenridding Heights NSP shall be reviewed to identify items of historical significance.	Table 3 – Historical Resources Overview, confirms that Historical Resource Overview (HRO) studies for five (5) of the six (6) parcels within the plan area have been approved by Alberta Culture and Community Spirit (ACCS).
	*,	A Historical Resources Impact Assessment (HRIA) for one (1) parcel has been identified as requiring report submission to ACCS prior to rezoning and development.
		Those lands which have not received clearance on HRO studies will be required to submit and receive sign off prior to rezoning.

#### Rationale

Based on ACCS's review of the HRO, a Historical Resources Impact Assessment (HRIA) is required for one of the titled areas, as outlined on **Table 3 – Historical Resources Overview**; however the majority of this titled area is within the Glenridding Ravine Neighbourhood. The HRIA that is required for the one titled area will be provided with the submission of the Glenridding Ravine NSP.

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

#### **Technical Summary**

Historical Resource Overviews have been approved by ACCS for five (5) of the six (6) parcels within the plan area. A Historical Resources Impact Assessment for (1) parcel is required. The HRIA will be addressed at the time of submission of the Glenridding Ravine NSP, as the majority of the land is within this neighbourhood.

#### 3.2.6 Residential

Approximately 60 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.** 

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 or RF4 zoning designations under the Zoning Bylaw.

Row Housing will be developed 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.

Low-Rise/Medium Density Housing sites will be developed 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.

The Glenridding Heights NSP proposes an overall residential density of approximately 83 persons per net residential hectare and 33 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 (15)	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.	Figure 7 – Land Use Concept illustrates the general location of residential land use designations.  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

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 (RF<sub>5</sub>) 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 (16)	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.	a) The Glenridding Heights NSP shall meet or exceed the approved Suburban Housing Mix ratio for new neighbourhoods. b) The Glenridding Heights NSP shall meet or exceed the approved density target as set out by the Capital Region Growth Plan.	a) Figure 7 – Land Use Concept and Table 5 – Land Use Concept and Population Statistics shall guide intensified suburban development. b) The Glenridding Heights NSP neighbourhood density is approximately 33 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 Heights NSP exceeds this ratio. Establishing higher residential results in a better use of municipal infrastructure and facilities. It also supports the use of transit, innovative design and helps meet the demand for housing in the City's growing suburban neighbourhoods.

The Glenridding Heights neighbourhood 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 Heights NSP exceeds this target.

Objective (17)	NSP Policy	Implementation
Provide affordable housing opportunities in Glenridding Heights.	a) Developments shall comply with the City of Edmonton's affordable housing policies and guidelines.	a) City of Edmonton's affordable housing policies and guidelines shall be applied prior to rezoning.
	b) The NSP shall allow for a wide variety of housing types, with a wide range of price points, to create a more inclusive neighbourhood.  c) Opportunities such as secondary suites, garage suites or garden suites should be encouraged among builders.	b) Figure 7 – Land Use Concept indicates the location of various residential land uses. c) Secondary suites, garage suites or garden suites shall be implemented through Section 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 (18)	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 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 (19)	NSP Policy	Implementation
Provide a transition between residential uses of significantly different densities.	Encourage appropriate transitions between Low - Rise/Medium Density Housing and Single/Semi-Detached Residential.	Figure 7 – Land Use Concept illustrates the general location of land uses. Proposed residential uses will be designed with attention to compatibility with adjacent planned uses.

#### Rationale

Provision of Semi-Detached housing or Row-Housing as a transitional land use will serve to moderate the differences between Single Detached and higher density developments such as Low-Rise/Medium Density Housing or commercial development.

#### **Technical Summary**

No specific technical requirements were further identified.

#### 3.2.7 Commercial

The Glenridding Heights NSP includes one neighbourhood convenience 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 (20)	NSP Policy	Implementation
Provide a neighbourhood convenience commercial shopping node to meet the needs of residents and provide local employment opportunities within the neighbourhood.	Neighbourhood Convenience Commercial development opportunities shall be provided to serve the small scale needs of residents located within the Glenridding Heights NSP area.	Figure 7 – Land Use Concept illustrates the location and general configuration of the neighbourhood convenience commercial area, which shall be confirmed prior to rezoning approval. Neighbourhood Convenience Commercial shall be implemented through the CNC Zone of the Edmonton Zoning Bylaw.

#### Rationale

The Glenridding Heights NSP identifies one neighbourhood convenience commercial site within the neighbourhood. Commercial uses provide local employment opportunities 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. Community Commercial needs shall be met in adjacent neighbourhoods.

Objective (21)	NSP Policy	Implementation
Locate the neighbourhood convenience commercial site along arterial or collector roadways to ensure high visibility and convenient access opportunities.	Neighbourhood convenience commercial sites 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 illustrates the location and conceptual configuration of the neighbourhood convenience commercial area, which will be confirmed prior to rezoning approval.

#### Rationale

The neighbourhood convenience commercial site is located at the intersection of Rabbit Hill Road and a collector roadway in the central portion of the neighbourhood allowing for convenient access to commercial activities. The location of the commercial site serves the small format retail needs of Glenridding Heights and Glenridding Ravine residents.

Objective (22)	NSP Policy	Implementation
Provide convenient pedestrian access to commercial development so that residents have opportunity to walk to commercial services.	Neighbourhood convenience commercial development should be designed with pathways that interconnect building entrances, parking, transit stops, public sidewalks and crossings, adjacent properties, adjoining off-street paths or pedestrian walkways and other key destinations on or adjacent to the site.	The Development Officer should have regard for building placement, pedestrian accessibility and activity areas in assessing and conditioning development applications for neighbourhood convenience commercial development under the applicable zone.

#### Rationale

Safe and attractive pedestrian linkages should be provided between various uses within commercial sites, into the neighbourhood and to nearby transit routing. The internal pedestrian system and linkages should foster connectivity from various parts of the site and surrounding area. Pedestrian routes should be direct and should minimize potential conflicts with vehicles.

#### **Technical Summary**

No specific technical requirements were further identified.



#### 3.2.8 Parks and Open Spaces

The NSP proposes one District Activity Park site, one Urban Village Park and a greenway network. Accordingly, an integrated open space system is proposed for Glenridding Heights, as shown in **Figure 9 - Pedestrian Network**. The area attributed to Park and Open Space is shown in **Table 5 - Land Use & Population Statistics**.

Objective (23)	NSP Policy	Implementation
Accommodate City requirements for school / park sites within the neighbourhood.	a) The NSP shall follow the guidelines for the hierarchy and distribution of park spaces as prescribed in the Urban Parks Management Plan. The NSP shall include the District Activity Park for the Windermere ASP area. b) Municipal Reserve owing for Glenridding Heights shall be dedicated in full as land, cashin-lieu of land or an acceptable combination thereof. The values for cash in place of land shall be agreed upon prior to subdivision. c) Servicing shall be provided within roadways fronting onto the District Activity Park and Urban Village Park in order to accommodate any and all facilities which may be developed on site.	a) The District Activity Park, Urban Village Park, greenways, and open spaces are conceptually illustrated in Figure 7 – Land Use Concept. b) The Subdivision Authority shall determine the MR owing for the Glenridding Heights NSP and the areas dedicated as MR Shall be confirmed by legal survey at the time of subdivision. c) 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. Any proposal that seeks to provide less than full services along the entire roadway adjacent to parkland will need to be negotiated with the City of Edmonton. The farmstead buildings located within the future District Park site shall be removed and the area environmentally clean prior to acceptance into City inventory.

#### 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 District Activity Park Site is located in the south portion of the neighbourhood, adjacent to 170 Street, Rabbit Hill Road and a collector road achieving 100% roadway frontage. The site is intended to provide regional life-long educational and recreational opportunities including, sports fields, senior high school(s) and major recreation centres (e.g. arena, pool, fitness centre complex). The District Activity Park site will provide opportunities for passive and active recreation opportunities and ensures sufficient access by pedestrians, cyclists, transit users and automobiles.

The Urban Village Park is located in the north central portion of the plan area and provides approximately 30% of roadway frontage along the abutting collector roadway. This park is intended to serve as a gathering place for the neighbourhood and accommodate a potential Community League facility and may also provide the opportunity for both passive and active recreation.

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 (24)	NSP Policy	Implementation
Provide a variety of opportunities for passive and active recreation experience.	a) Park space shall be designed to accommodate active and passive recreation activities. b) All park space within the neighbourhood should be universally accessible. c) An integrated pedestrian system shall link the major park components.	a) b) Design and development of future parks and open spaces shall consider programming needs of the community and be implemented based on requirements of Infrastructure Services, Parks Design and Construction. c) Greenways shall be dedicated as outlined in Objective 30, at the time of subdivision.

#### Rationale

The Glenridding Heights NSP provides a range of parks, stormwater management facilities, and open spaces for residents in order to meet their passive and active recreation needs.

The Urban Village Park is located in the north central portion of the plan adjacent to a collector roadway and provides opportunities for more formalized active recreation due to its larger area.

The District Activity Park Site is located adjacent to 170 Street, Rabbit Hill Road and a collector road. The site is readily accessible to vehicular, transit or pedestrian traffic from most parts of the neighbourhood.

Three Greenways are centrally located within the plan area. The greenway corridor system provides a linear, multi-modal connection from the (north) Urban Village Park to the (west) stormwater management facility to the (south) District Activity Park and to the (east) Glenridding Ravine Neighbourhood.

Two stormwater management facilities (SWMFs) are proposed in Glenridding Heights. These



facilities provide an amenity area and are part of the open space system within the plan area. All SWMFs are linked with the neighbourhood trail network (including sidewalks) and provide additional areas for recreation. The extent of public open space around the facilities will depend on City policies at the time of development.

All parks and SWMFs are connected to the trail network (including sidewalks) within Glenridding Heights to ensure that all residents have convenient access to open space for everyday activities.

Objective (25)	NSP Policy	Implementation
Design a connected and integrated open space system that encourages all modes of movement (e.g. pedestrians, bicycles, wheelchairs, in-line skates, etc).	a) The NSP shall incorporate an array of pedestrian linkages along sidewalks, walkways and multi-use trail corridors that connect all park spaces, stormwater management facilities and various other focal points.	a) Figure 7 – Land Use Concept and Figure 9 – Pedestrian Network conceptually guide the location of neighbourhood parks, open spaces, pedestrian connections and SWMFs which should connect residents to the focal points.

#### Rationale

Glenridding Heights provides an internal pedestrian network that is highly connected, direct and convenient via linkages along sidewalks, walkways, greenways and multi-use corridor. All parks and open space are connected to the pedestrian network within Glenridding Heights 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 greenways and minor pedestrian connections.

Objective (26)	NSP Policy	Implementation
Design safe park space, in accordance with the Design Guide for a Safer City, Crime Prevention Through Environmental Design and the Urban Parks Management Plan.	Park space should have frontage along public roadways to ensure sightlines, natural surveillance, and adequate lighting. 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 UPMP.	Design and development of future parks and open spaces shall consider safety needs of the community and be implemented based on the requirements of Infrastructure Services, Parks Design and Construction.

#### Rationale

A well designed park space can contribute to the sense of safety and security of its users.



#### **Technical Summary**

A Parkland Impact Assessment (PIA) was completed confirming that 90% of Glenridding Heights residents are within 500 metres (approximately 6 minute walk) of the District Activity Park, Urban Village Park or to neighbouring parks and open spaces in Ambleside, Windermere and/or Keswick.

A Community Knowledge Campus Needs Assessment (CKC NA) was completed to determine the best location, size, configuration and orientation for a future potential CKC site and to facilitate communication and consultation in the planning and development of future school sites.

#### 3.2.9 Transportation

The overall transportation network within the Glenridding Heights NSP is based on the provision of efficient vehicular, transit and pedestrian circulation. This is conceptually illustrated in Figure 8 – Transportation Network and Figure 9 – Pedestrian Network 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 (27)	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 potential Outer Ring Road and the surrounding region.	a) 170 Street S.W. is a highway connector and shall be designed as an urban freeway with direct access from Glenridding Heights only at interchanges identified at Rabbit Hill Road/25 Avenue S.W. and re-aligned Ellerslie Road. b) A frontage road parallel to 170 Street S.W. shall provide for limited access into the plan area. c) The 170 Street Conceptual Planning Study shall guide development of land within the "Area of Influence".	a) Figure 8 – Transportation Network conceptually illustrates the interchange locations and the frontage road along 170 Street S.W. b) Final location and access to the frontage road will be determined prior to subdivision approval and development. c) The "Area of Influence" is identified on Figure 8 – Transportation Network. Subdivision of lands within this area shall not occur prior to the completion of the 170 Street Conceptual Planning Study.

#### Rationale

170 Street S.W. is a highway connector and has been designated as an urban freeway, with grade-separated interchanges at the realigned Ellerslie Road and at Rabbit Hill Road/25 Avenue S.W. A frontage road along the east side of 170 Street S.W. will provide a direct connection between Ellerslie Road 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. Conceptual Planning Study is currently underway for the City and the concept 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 road right-of-way requirements have not yet been identified. Subdivision of lands within this area shall not proceed until completion of this study.

Objective (28)	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 NSP 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). Vehicular access to the surrounding arterial roadways will be provided via seven neighbourhood entrance/exits.

#### Regional Roadway Network

The Glenridding Heights 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**). These roadways include:

- Anthony Henday Drive
- Terwillegar Drive / 170 Street
- Whitemud Drive
- Calgary Trail / Gateway Boulevard

#### **Arterial Roadways**

Arterial roadways facilitate the movement of intra-municipal traffic and generally maintain limited direct access to adjacent land uses. Within the Glenridding Heights NSP area, 170 Street, realigned Ellerslie Road (9 Avenue SW) and Rabbit Hill Road are designated as arterial roadways. Appropriate spacing of intersections and access-egress requirements 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.

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 are committed to providing 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, 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 Heights NSP.

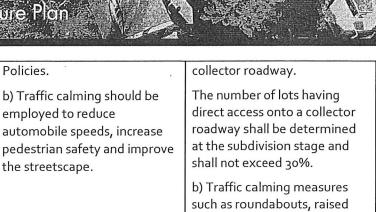
#### **Parking**

Parking for vehicles will generally be provided off-street in conjunction with residential development applications.

Objective (29)	NSP Policy	Implementation
Minimize traffic congestion and	a) The number of residential	a) The Subdivision Authority,
enhance safety on internal	lots fronting onto and having	in consultation with
collector roadways.	direct access to a collector	Transportation Services shall
	road should be in accordance	have regard for the number of
	with the applicable City	lots having direct access onto a



Policies.



intersections or curb extensions may be incorporated along roadways. Details will be confirmed with Transportation Services prior to development.

#### 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. Roundabouts, for instance, provide for the orderly and continuous movement of vehicles. Raised intersections reduce vehicle speeds, improve drivers' awareness of crossings and visually turn intersections into pedestrian-oriented zones. Curb extensions enhance pedestrian safety by reducing crossing distances, relieve sidewalk crowding and provide space for functional elements such as seating, plantings, and furniture.

Particular attention should be paid to the collector roadway which borders the north side of the District Activity Park. Traffic calming measures and pedestrian crossing enhancements will be required along this roadway.

Objective (30)	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.	a) A network of hard-surfaced sidewalks, walkways, greenways and multi-use trails shall be provided to promote walkability and access to open spaces, stormwater management facilities, amenities and transit facilities.	a) Figure 9 – Pedestrian Network shall guide the future application of walkways, sidewalks and multi-use trails. b) The Subdivision Authority should have regard for the dedication of walkways to promote walkability and

b) Minor walkways should be provided to promote walkability and access to future transit facilities and neighbourhood amenities. appropriate access to transit facilities and neighbourhood amenities. All local and collector roadways in Glenridding Heights should be developed with sidewalks.

#### 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 Heights 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 through Glenridding Ravine Neighbourhood to the Whitemud Creek Ravine. Details of the pedestrian connection through the Glenridding Ravine Neighbourhood shall be determined at the time of NSP preparation.

#### **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). As identified on **Figure 9 – Pedestrian Network**, two potential minor pedestrian linkages may be required should sidewalks be provided along the service road for 170 Street S.W. This will be determined at the time of subdivision in conjunction with Transportation Services.

#### <u>Greenways</u>

Glenridding Heights proposes three greenways, as identified on **Figure 9** – **Pedestrian Network**. The Greenways will function as multi-use (e.g., pedestrian, bicycle, other) trail (MUT) corridors and are intended to be approximately 10 m wide with a 3 m wide paved trail. In addition to the paved trail the Greenways will include grassed or naturalized planting, park furniture (e.g. benches, garbage receptacles), trees and shrub beds, and directional and interpretive signage. The overall Greenway network will connect the residential sub-areas of the neighbourhood with parks, and public spaces.



With the exception of the Greenway between the central SWMF and the District Activity Park site all other Greenways will be dedicated as road right-of-way. The Greenway dedication is as follows:

Greenway	Method of Dedication
Central Greenway south of Urban Village Park	Road Right-of-Way
East-West Greenway	Road Right-of-Way
Greenway between central SWMF and District Activity Park	Municipal Reserve

#### **Bicycle Circulation**

Bicycle circulation within the Glenridding Heights NSP is designed to follow collector and local roadways. Bicycle routes will be integrated with multi-use trail corridors 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. In addition, the collector roadway on the north side of the District Park site will be upgraded to include a shared use path on the south side to improve bicycle and pedestrian access to the District Activity Park site.

Objective (31)	NSP Policy	Implementation
Mitigate the impact of vehicular traffic associated with Commercial and Low-Rise/Medium Density Housing development on Single/Semi-Detached areas.	Commercial and Low-Rise/Medium Density Housing parcels should be located to facilitate access from arterial or collector roadways to the greatest extent possible.	The subdivision process shall involve the review of tentative plans to ensure Commercial and Low-Rise/Medium Density Housing development is accessed via collector and arterial roadways, and access via local roadways fronted by Single/Semi-Detached Residential development is minimized.

#### Rationale

Commercial developments and higher density residential developments are located adjacent to collector or arterial roadways (with the exception of 170 Street, which has no direct access). Locating nodes of higher intensity and increased vehicular traffic adjacent to roadways with higher vehicular capacity reduces potential conflicts between local residential traffic and traffic generated by these higher intensity uses.

Objective (32)	NSP Policy	Implementation
Ensure the maximum length of cul-de-sacs in residential settings do not compromise City emergency response plans, operations and maintenance.	Development of long cul-desacs should be avoided.	Cul-de-sac lengths in residential settings shall be determined prior to subdivision approval.  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, garbage collection and snow clearing). Where the length of cul-de-sac must exceed 120 m due to land characteristics, the provision of an emergency access to an adjacent cell of development will be required.

Objective (33)	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 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**, 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 (34)	NSP Policy	Implementation
Integrate land use and circulation patterns considering safety.	Pedestrian crossings shall be safe, convenient and developed at visible locations.	The location of pedestrian crossings shall be identified and detailed at the subdivision approval and/or development permit stages, while the design shall be confirmed by

Transportation Services at the roadway design stage.

#### Rationale

In order to provide safe pedestrian crossings, attention should be paid to signage, signals and road markings. Proper lighting and sightlines should also be maintained to ensure a high level of visibility. Major pedestrian crossings which are not necessarily located at signalized intersections (see **Figure 9 – Pedestrian Network**) should be reviewed from a safety perspective. Further details regarding pedestrian crossings to enhance pedestrian safety across the roadway will be determined at the subdivision approval stage and roadway design stage.

Objective (35)	NSP Policy	Implementation
Provide accessible public transit to residents and schools.	a) The location of all residential land uses should be within 400 m of a transit route. b) Transit service shall be initiated in the initial stages of development of the neighbourhood. c) Adequate school transit service shall be provided to the District Activity Park.	a) Edmonton Transit Systems will determine the routing for public transit along the arterial and collector roadways which have been identified as future transit routes. b) 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. c) The location of the District Activity Park provides roadway frontage along the abutting arterial and collector roadways.

#### Rationale

Future public transit services will be extended into the Glenridding Heights 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 within 400 m (approximately 5 minute walk) of transit service. The District Activity Park site within the NSP has been designed to ensure adequate school transit service by being located adjacent to arterial and collector roadway access.

Convenient and accessible transit areas are reinforced through a continuous network of pedestrian walkways and multi-use trails.

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 accommodated transit service and provide readily accessible service to all areas of the neighbourhood.

Objective (36)	NSP Policy	Implementation
Provide noise attenuation where residential uses back onto major transportation corridors (i.e. 170 Street S.W.) which have been designated or will be designated as truck routes.	Appropriate noise attenuation shall be provided for residential uses adjacent to 170 Street S.W.	Transportation Services shall determine if a noise attenuation assessment is required for residential development at the subdivision approval stage, in accordance with the City of Edmonton Urban Traffic Noise Policy C506.

#### Rationale

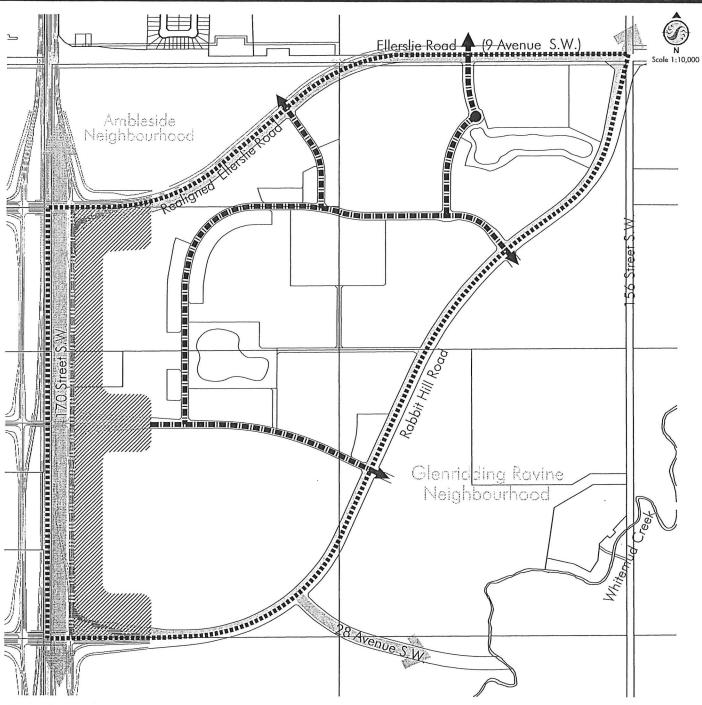
The NSP identifies 170 Street S.W. as an urban freeway and a potential truck route. Where residential development will be constructed adjacent to 170 Street S.W. the City of Edmonton requires the developers to address noise concerns. Therefore, a noise attenuation needs assessment will be carried out in accordance with City of Edmonton's Urban Traffic Noise Policy at the time of subdivision. If required by Transportation Services, noise level evaluations will be carried out by the developers prior to subdivision application at the design phase of the project. 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.

#### **Technical Summary**

The transportation network for the NSP will be provided in accordance with the requirements of the City of Edmonton's Transportation Services. A Transportation Impact Assessment (TIA) has been submitted under separate cover for review and approval by Transportation Services. The Glenridding Heights TIA addresses the internal roadway function of the Glenridding Heights Neighbourhood. Other access and roadway requirements will be determined at the rezoning and subdivision stages to the satisfaction of Transportation Services.

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.

tigure 8 ransportation Network



Legend

**Collector Roadway** 

Arterial Roadway

170 Street S.W. Urban Freeway

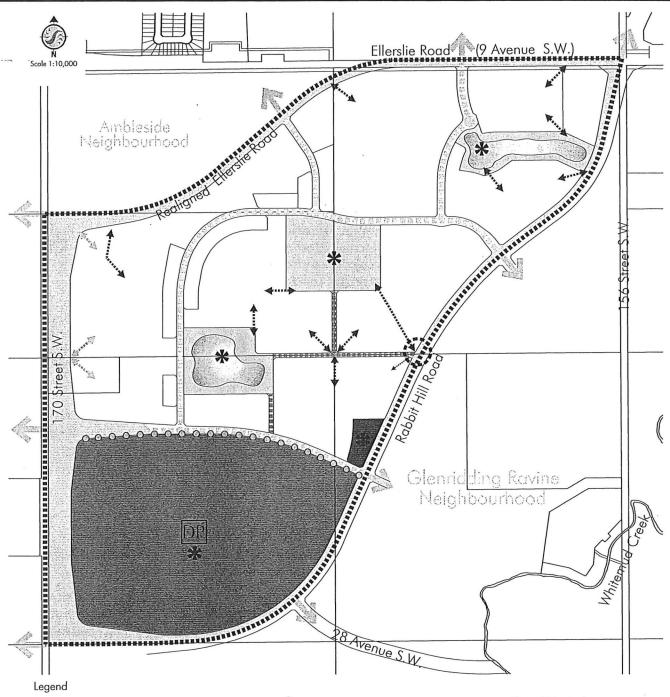
**EIIEII** 170 Street S.W. Frontage Road

Area Of Influence - Road Right Of Way

To Be Determined By 170 Street Concept Planning Study

NSP Boundary

Figure 9 - Pedestrian New



Stormwater Management Facility

Urban Village Park

District Park

Neighbourhood Commercial

IEEE Greenway

Linkage To Adjacent Community

**←…→** Minor Pedestrian Linkages

Potential Minor Pedestrian Linkages

❷❷ Shared Use Path

K Focal Point

Key Pedestrian Crossing

■■■ NSP Boundary

#### 3.2.10 Infrastructure, Servicing and Staging

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

Objective (37)	NSP Policy	Implementation
Ensure that Glenridding Heights is serviced to a full urban standard, in an efficient, contiguous and staged manner.	a) Sanitary and stormwater servicing shall be provided in accordance with the approved Neighbourhood Design Report for the Glenridding Heights NSP.	a) b) Approval of engineering drawings and servicing agreements shall be required for installation of water, sanitary, and stormwater servicing.
	b) Water servicing to the NSP area shall be provided in accordance with the approved Water Network Analysis.	c) Installation of shallow utilities shall be executed through servicing agreements.
	c) Shallow utilities shall be extended into the plan area as required.	

#### Rationale

#### Sanitary Servicing

The flow of the sanitary system designed for Glenridding Heights 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**. Further details regarding the sanitary drainage schemes for Glenridding Heights are provided in the associated Neighbourhood Design Report to be submitted under separate cover.

#### Stormwater Servicing

As shown on **Figure 11 - Stormwater Servicing**, two 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.

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 Heights are provided in the associated Neighbourhood Design Report that has been submitted under separate cover.

#### Water Servicing

The conceptual design for the water distribution network for Glenridding Heights is shown in Figure 12 - Water Servicing. Water services for the neighbourhood will be extended from Rabbit Hill Road and Ellerslie Road (9 Avenue SW) and from 170 Street and re-aligned Ellerslie Road (9 Avenue SW). 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.

#### **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** shows the anticipated direction of development for Glenridding Heights.

The anticipated sequence of development for Glenridding Heights is expected to proceed from the north and the east 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 Heights 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 Heights NSP are provided in the associated Neighbourhood Design Report to be submitted under separate cover 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' - Sann





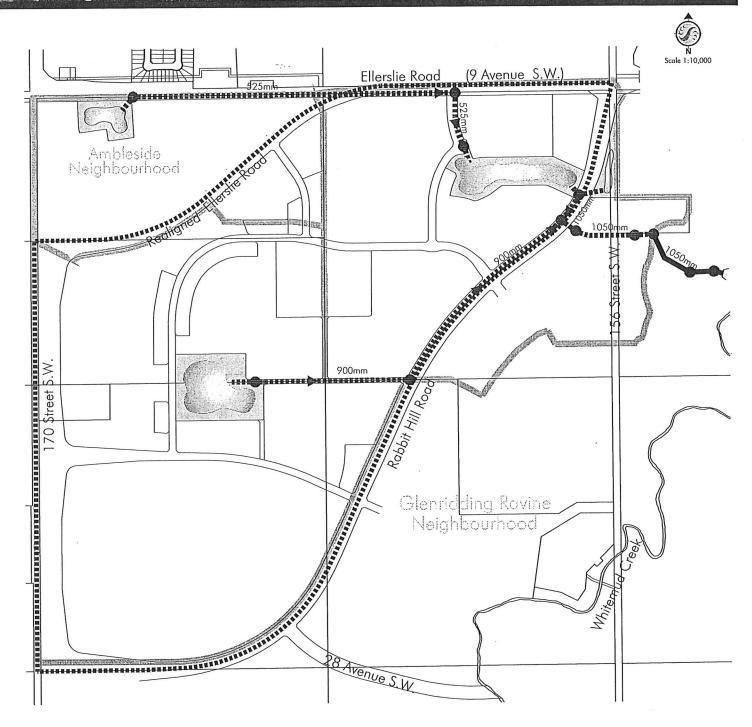
Legend

Sanitary Trunk

NSP Boundary

## 

Stormwaler Servicing



Legend

Stormwater Management Facility

Storm Trunks

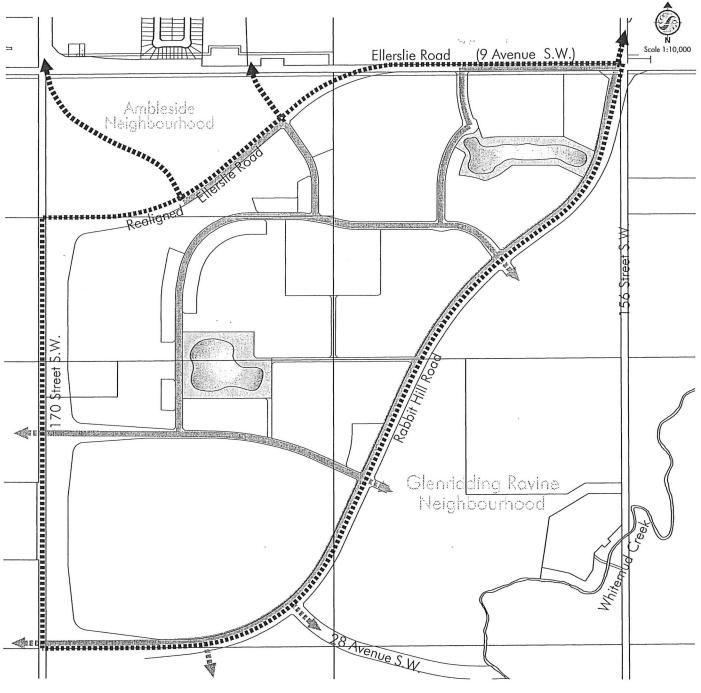
Outfall

Storm Basin Boundary

**NSP Boundary** 

## 

igure 12 - Water Servicing



Legend

Stormwater Management Facility

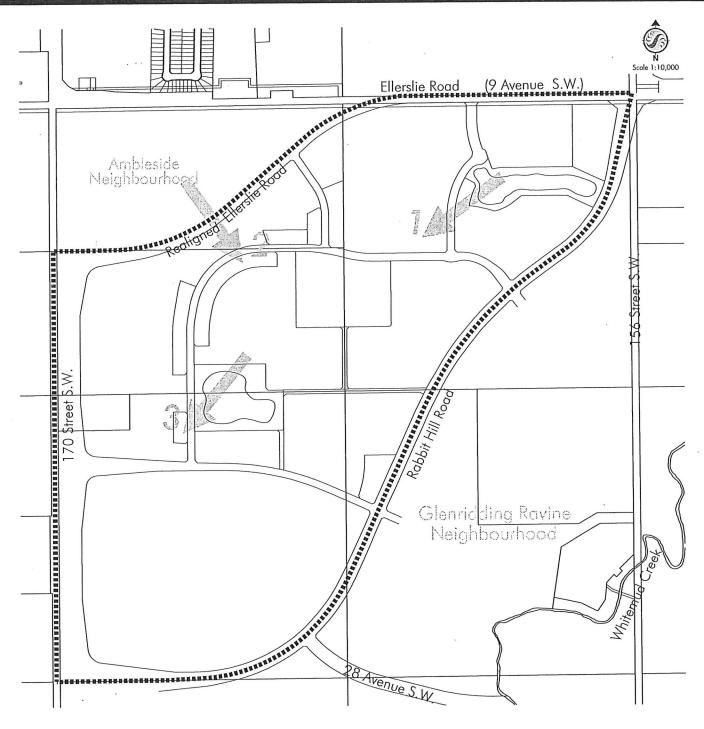
Water Main

■■■ Future Waterline Connection

◆■■■ Connection to Existing Waterline

■■■ NSP Boundary





#### Legend

General Direction & Sequence Of Development

■■■ NSP Boundary

#### Appendix 1: Planning Policy Context

The Glenridding Heights 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 CRGPwas 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.
- 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 Heights NSP, and demonstrates how each has been incorporated in to the NSP.



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 Heights 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 Heights NSP complies with the following Growth Plan strategies:

Capital Region Land Use Policy	NSP Compliance with Policy
II. Minimize Regional Footprint:	

B. Concentrate New Growth Within Priority Growth Areas

Policy (i) Most new growth shall occur within The Glenric

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 Heights 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 Heights 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.

#### 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 (iv)** Transit accessibility must be included in the design of all new developments.

The Glenridding Heights NSP provides a greater proportion of residential units as medium density housing.

The NSP is bounded on all 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 careful 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 Heights 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.

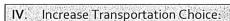
**Policy (iii)** New developments shall be designed for connectivity and accessibility to transit facilities.

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 Heights 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.



#### 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 multi-use trails 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 Heights NSP has been designed to support public transportation ridership.

A network of roadways, along with sidewalks, walkways and multi-use trails 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 Heights NSP complies with the following policies:

MDP Policy	NSP Compliance with Policy
3.2.1.1 - Ensure a combination of single family	The NSP will provide single family and
and multi-family housing development	multi-family housing for approximately 10
potential is available for the next 30 years.	years at current absorption and
	development rates in south-west
	Edmonton.

MDP Policy	NSP Compliance with Policy
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, neighbourhood 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.
4.4.1.1 - Provide a broad and varied housing choice, incorporating housing for various demographic and income groups in all neighbourhoods.	The Glenridding Heights 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 multi-use trails 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.
5.6.1.4 – 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.

MDP Policy	NSP Compliance with Policy
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.
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 Heights neighbourhood is located in the Capital Region Growth Plans Priority Growth Area "CW" 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 Heights 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.	
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 demographic, 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 multi-use trails.  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 Heights has been designed to support direct, safe, convenient and accessible routes for all residents and provides a well-integrated network between sidewalks, walkways and multi-use corridors connecting people to transit, schools/parks, and shopping areas.	

TMP Strategic Goal	NSP Compliance with Strategic Goal
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 multi-use trails provide residents with the ability to walk, or cycle through the neighbourhood, improving health and wellness.

#### 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 Heights NSP are listed below:

Windermere ASP Principle	Glenridding Heights NSP Compliance
4.2.1 Community Design and Enhance	ment
<ul> <li>Establish a unique character and ser place for each neighbourhood. Provunique entrances or gateways, landscaped transportation corridors identifiable streetscapes, distinctive neighbourhood boundaries and dist innovative natural and open spaces, landmarks and / or focal points with community.</li> <li>Ensure each neighbourhood is desig with a focal point. A neighbourhood centre, park or school which offers a range of convenience commercial uservices and / or amenities can funct a gathering place for neighbourhood</li> </ul>	continue to evolve over time as the community creates its' own authentic image, character and sense of place. The District Activity Park is a unique area.  The Glenridding Heights 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 District Activity Park site, Urban Village Park, SWMFs and open space system.

* *		
Wi	ndermere ASP Principle	Glenridding Heights NSP Compliance
	residents. The focal point should be activity oriented and combine uses and services which draw people to the area.	The Glenridding Heights NSP will incorporate the CPTED principles and guidelines.
•	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, way finding features, viewpoints, and universal design devices).	
	2 Sustainable Local Employment ea(s)	The Classidding Heights NSD supports future
•	Designate business areas in location with well linked transportation connections and good visibility to strengthen their viability	The Glenridding Heights NSP supports future adjacent transit facilities and internal transit routes by clustering higher densities around amenities, near commercial sites, along arterial roadways, and on the periphery of the
•	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.	neighbourhood.  Commercial development is strategically located at high visibility and accessible intersections.
•	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.	
4.2	4 Balanced Transportation Network	
•	Provide a transportation network that reflects the character of intended developments and meets the unique demands of each neighbourhood, as well	The NSP design reflects an Integrated Community Circulation System composed of Parks, Greenways, and MUTs which support pedestrian connectivity, options, and



#### Windermere ASP Principle

as 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 moving to, from and within the Windermere area.
- Provide opportunity to initiate transit service 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, major pipeline utility rights of way.

#### Glenridding Heights NSP Compliance

movement throughout the community.

170 Street SW 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 responsibility of providing transit service.

Transit service will be provided in accordance with City standards.

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#### Windermere ASP Principle

#### 4.2.5 Life Long Learning and Education

- Allow for early servicing in the development of neighbourhoods and maximal coverage within the broader community catchment area.
- Provide flexible site and facility design to accommodate a full range of life-long learning and recreational needs within the community.
- Encourage sharing of common infrastructure. Opportunities to enhance the place-making role of freestanding school / park sites and facilities as community focal points within the ASP will be additionally explored.
- Allow for localised / disbursed park sites at the sub neighbourhood level (e.g. tot lot, parkette, common green / garden, view point) that add to available recreation and open space opportunities.
- Provide opportunity for public services via Public Private Partnerships (P3s) or municipal lease option (e.g. Emergency Medical Services; Fire and or Police Station, Public Library).

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

#### Glenridding Heights NSP Compliance

The District Activity Park site reflects the ASP and current input from the Edmonton Public School Board and Edmonton Catholic School Board. It is sized to accommodate sports fields, senior high school (s) and recreation facilities.

Residential uses are located in close proximity, allowing residents excellent access to the open space opportunities.

Transit access is optimized as the school site is adjacent to two arterial roadways and a transit facility.

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

Windermere ASP Principle	Glenridding Heights NSP Compliance
within the plan and, where appropriate, integrate corridors with pedestrian linkages, Greenways, multi-use trails / corridors, and open space areas.	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 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.

#### 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	The District Activity Park site, Urban Village Park and the Neighbourhood Commercial site act as common infrastructure for adjacent neighbourhoods. Through site orientation and location, proximity to future transit system and connectivity these development will provide options for service delivery for adjacent neighbourhoods.
Principle 2: Design and locate school and community facilities to provide interneighbourhood focal points	The District Activity Park site within the Glenridding Heights NSP is central to the perceived school catchment area and will be used by residents within the Windermere ASP area.
<b>Principle 3:</b> Design the arterial and collector roads along a grid pattern, peripheral to the neighbourhoods	The arterial roads along the periphery of the Glenridding Heights 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 pathyways 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	Pathways, walkways, sidewalks and MUT

SND Principle	Compliance with SND Principle
and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood	corridors connect pedestrians and cyclists to community focal points and destinations such as the district park site, SWMFs, the nearby Whitemud Creek Ravine, Windermere Neighbourhoods (Ambleside and Glenridding Ravine) and the future transit system.
Principle 6: Provide Transit Services to the edges of new neighbourhoods using the arterial and collector roadways in conjunction with appropriately designed, strategically located and conveniently accessed transit waiting zones	Future transit service is appropriate along the arterial and collector roadway network. 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 400m 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	The district park site is designed to accommodate a variety of uses including school(s), sports fields and a recreation centre allowing the site to be adaptable to the needs of area residents.
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 Heights NSP.
Principle 10: Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and storm water management	Opportunities exist to share parking between the different uses proposed in the district park site. This reduces capital development costs for these uses.
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	The Glenridding Heights NSP provides excellent opportunities for linkages throughout and beyond the plan area to connect residents with amenities and potential commercial service areas. An

SND Principle	Compliance with SND Principle
courses, and school and park open spaces	integrated open space system and greenway/multi use trail corridor network provide linkages between stormwater management facilities, District Activity Park, Urban Village Park 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 man made 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 the City of Edmonton.

#### **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 greenways 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 Heights NSP ensures visual and physical access to parks, and public safety through applications of CPTED principles
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 Heights 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

UPMP Principle	Compliance with UPMP Principle
	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 Heights 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 Heights NSP provides a central Urban Village Park and District Activity Park to facilitate educational and community needs.
	Front drive access directly across from school drop-off zones will not be permitted, to increase safety and reduce operational problems for school boards and the City.
	The District Activity Park site is fully accessible by public transit.

As a requirement of the UPMP, a Parks Impact Assessment (PIA) for the Glenridding Heights 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 Heights 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 Heights 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 faculties.

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 Heights 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)