

Keswick Neighbourhood Structure Plan

Office Consolidation January 2018

Prepared by:

City of Edmonton

Bylaw 15514 was adopted by Council in July 2010. In January 2018 this document was consolidated by virtue of the incorporation of the following bylaws, which were amendments to the original bylaw.

- | | |
|--------------------|--|
| <i>Bylaw 15514</i> | Approved July 19, 2010 (to adopt the Keswick NSP) |
| <i>Bylaw 16076</i> | Approved April 30, 2012 (to reconfigure land uses in the southeast portion of the neighbourhood to accommodate the realignment of 170 Street SW, and to update Land Use and Population Statistics, and related maps accordingly) |
| <i>Bylaw 17195</i> | Approved May 11, 2015 (adjusts the northern boundary of the plan area and redistributes land uses primarily in the east portion of the neighbourhood. |
| <i>Bylaw 17405</i> | Approved October 19, 2015 (to redesignate residential and commercial uses in the northeast portion of the Keswick neighbourhood) |
| <i>Bylaw 18281</i> | Approved January 22, 2018 (to provide a mix of residential and commercial uses on the southwest corner of 170 Street SW and Hiller Road, and to update Land Use and Population Statistics, and related maps accordingly.) |

Editor's Note:

This is an office consolidation edition for the Keswick NSP. This edition contains all amendments and additions to the original Bylaw 15514.

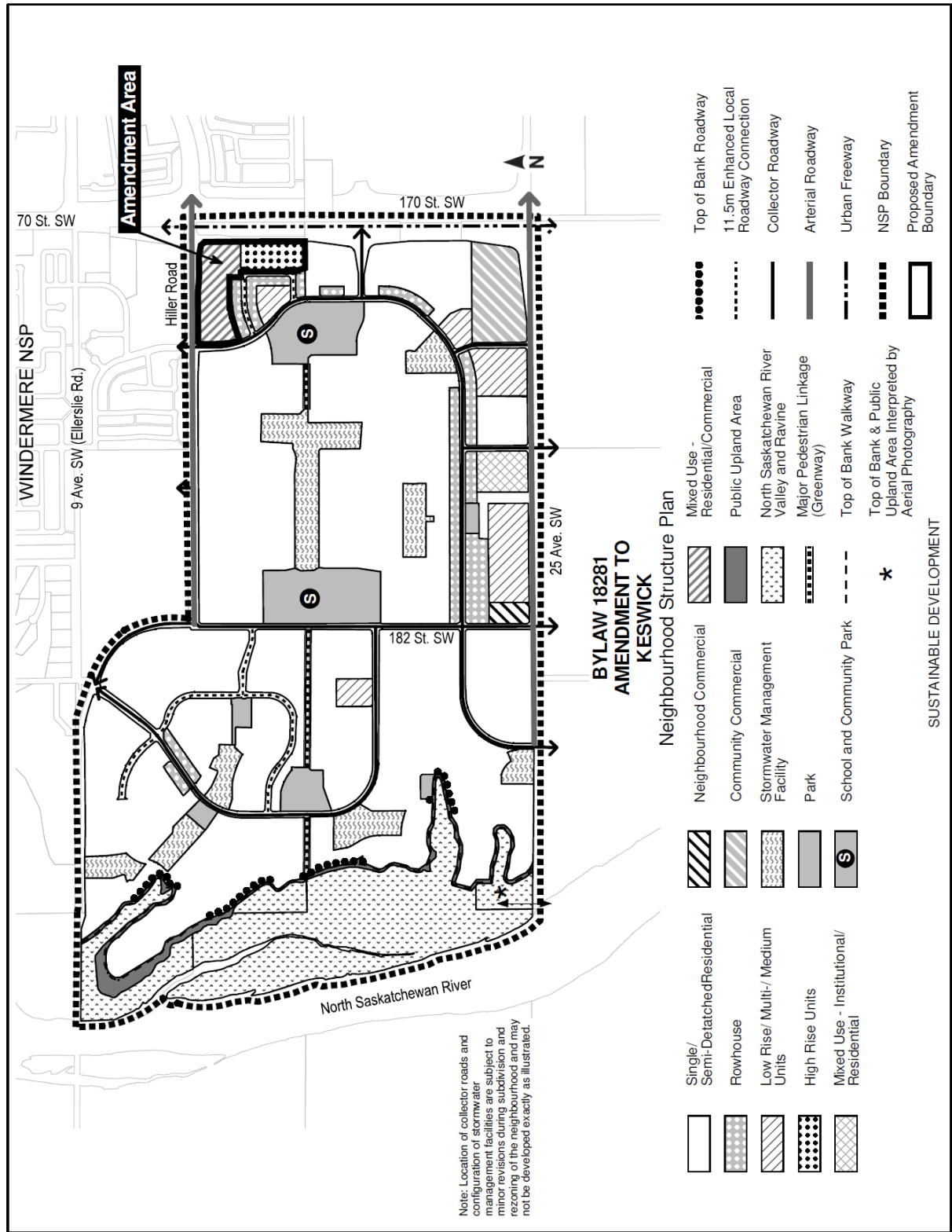
For the sake of clarity, new maps and a standardized format were utilized in this Plan. Where it provides clarity names of City departments have been standardized to reflect their present titles. All text changes are noted in the margin and are italicized where applicable. Furthermore, all reasonable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

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

City of Edmonton
Planning Coordination

Note: All references to "realigned Ellerslie Road" throughout the Plan to be replaced with "Hiller Road" as per Bylaw 16076.

Keswick NSP Plan Consolidation



**KESWICK NEIGHBOURHOOD STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 18281**

	Area (ha)	% of GA	% of GDA				
GROSS AREA							
North Saskatchewan River Valley and Ravine (Lands below Top of Bank)	43.7	11.7%					
Lands between Top of Bank and Urban Development Line	5.6	1.5%					
Lands between Urban Development Line and Top of Bank Roadway¹	0.35	0.1%					
Pipeline & Utility R/W	0.69	0.2%					
Arterial Road R/W	16.5	4.4%					
Total Non-Developable Area	66.84						
GROSS DEVELOPABLE AREA							
Parkland, Recreation, School (Municipal Reserve)²			100.0%				
School	14.02	4.6%	} 6.1%				
Park	4.61	1.5%					
Greenway	0.06	0.02%					
Transportation							
Circulation	60.59¹	19.8%					
Greenway	1.33	0.4%					
Infrastructure / Servicing							
Stormwater Management Facilities	19.85	6.5%					
Institutional							
Mixed Use - Institutional/Low-Rise/Multi-/Medium Units	2.63	0.9%					
Commercial							
Community Commercial	6.33	2.1%					
Neighbourhood Commercial	1.00	0.3%					
Mixed Use- Residential/ Commercial	3.48	1.1%					
TOTAL Non-Residential Area	113.90	37.2%					
Net Residential Area (NRA)	191.98	62.8%					
RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION							
	Area (ha)	Units/ha	Units	% of Total	People/Unit	Population	% of NRA
Single/Semi-Detached	165.71	25	4,143	65.6%	2.8	11,600	74.4%
Rowhousing	11.34	45	510	8.0%	2.2	1,122	7.2%
Mixed Use Residential Commercial	1.4	125	175	2.7%	1.5	263	1.7%
Low-Rise/Multi-/Medium Units	11.15	90	1,004	15.8%	1.8	1806	11.6%
High Rise Unit	2.39	225	538	8.4%	1.5	807	5.2%
Total Residential	191.99		6,369	100.0%		15,597	100.0%
SUSTAINABILITY MEASURES							
Population Density (ppnrha)				81			
Unit Density (upnrha)				33.2			
Single/Semi-Detached // Rowhousing, Low-Rise/Multi-/Medium Units and High Rise				65% // 35%			
Population (%) within 500 m of Parkland				97%			
Population (%) within 400 m of Transit Service				95%			
Population (%) within 600 m of Commercial Service				89%			
Presence/Loss of Natural Area Features			Land	Water			
Protected as Environmental Reserve (ha)			49.3	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							
Public School Board		1,228	Notes:				
Elementary	614		* As per TOB Policy C542, the area between the TOB roadway and the residual land between the roadway and the Urban Development Line shall be deducted from the gross area to reduce the MR entitlement. Exact areas to be confirmed at time of subdivision and by legal survey. This area is subject to ARA and PAC.				
Junior / Senior	614						
High Separate School Board		409	** Areas dedicated to Municipal Reserves to be confirmed by legal survey.				
Elementary	205		¹Circulation area calculations assume 20% of the single/semi-detached land area will be circulation area.				
Junior High	102						
Senior High	102						
Total Student Population		1,637					

Windermere Neighbourhood Three

Office Consolidation May 2012

Keswick. Neighbourhood Structure Plan.



June 2010
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1.0 Administration

1.1 PURPOSE

The purpose of the Keswick Neighbourhood Structure Plan (NSP) is to establish a development and servicing framework for a residential neighbourhood approximately 373 ha in size. The NSP specifies the following:

Bylaw 17195
May 11, 2015

- The location, configuration, and area of residential, commercial, parks and open spaces, and public utility land uses;
- The anticipated density of residential development;
- The manner in which the North Saskatchewan River Valley top of bank and other important natural features will be incorporated with the development concept;
- The pattern and alignment of the arterial and collector roadway and pedestrian walkway systems;
- To provide the required utility infrastructure concept, and
- The implementation and phasing of development.

1.2 AUTHORITY

The Keswick NSP was adopted by Edmonton City Council in July 2010 as Bylaw 15514 in accordance with Section 633 of the Municipal Government Act.

1.3 TIMEFRAME

Development within Keswick is expected to commence in 2011 and is estimated, at current absorption rates, to be complete within ten to fifteen 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 (e.g. Urban Design) and types (e.g. Residential) 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 the Keswick NSP document involving policies, text or mapping shall be completed in accordance with the Municipal Government Act, the Windermere Area Structure Plan (ASP), 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 Keswick NSP location and context, background information on the site such as land ownership, topography, and existing land uses.
- Section 3 describes the land use, transportation, and servicing concepts for the Keswick NSP.
- Appendix 1 contains information on the broader policy context with which the NSP complies.
- Appendix 2 contains a list of technical studies prepared to support and guide the preparation of the development and servicing concepts.

2.0 Keswick NSP Context

2.1 LOCATION

The Keswick NSP comprises the lands generally located within NW Section 21-51-25-W4 and a portion of NW20-51-25-W4. The total gross area for the NSP is approximately 373 hectares (922 ac) and is defined by the following boundaries (see **Figure 1.0 – Location**):

Bylaw 17195
May 11, 2015

- **Northern Boundary** – Generally the south boundary of the existing Ellerslie Road (9 Avenue SW) right-of-way from the North Saskatchewan River to 184 Street S.W.; portions of Lot 1, Plan 8223027 and the north property line of the S ½ N.E.¼ Sec. 21-51-25-4 (*Hiller Road* **NOTE: Road name amended by Bylaw 16076, April 30, 2012**);
- **Western Boundary** – The North Saskatchewan River Valley;
- **Eastern Boundary** – The western limit of the existing 170 Street S.W. right of way; and
- **Southern Boundary** – The alignment of the future 25 Avenue S.W. right of way.

Bylaw 17195
May 11, 2015

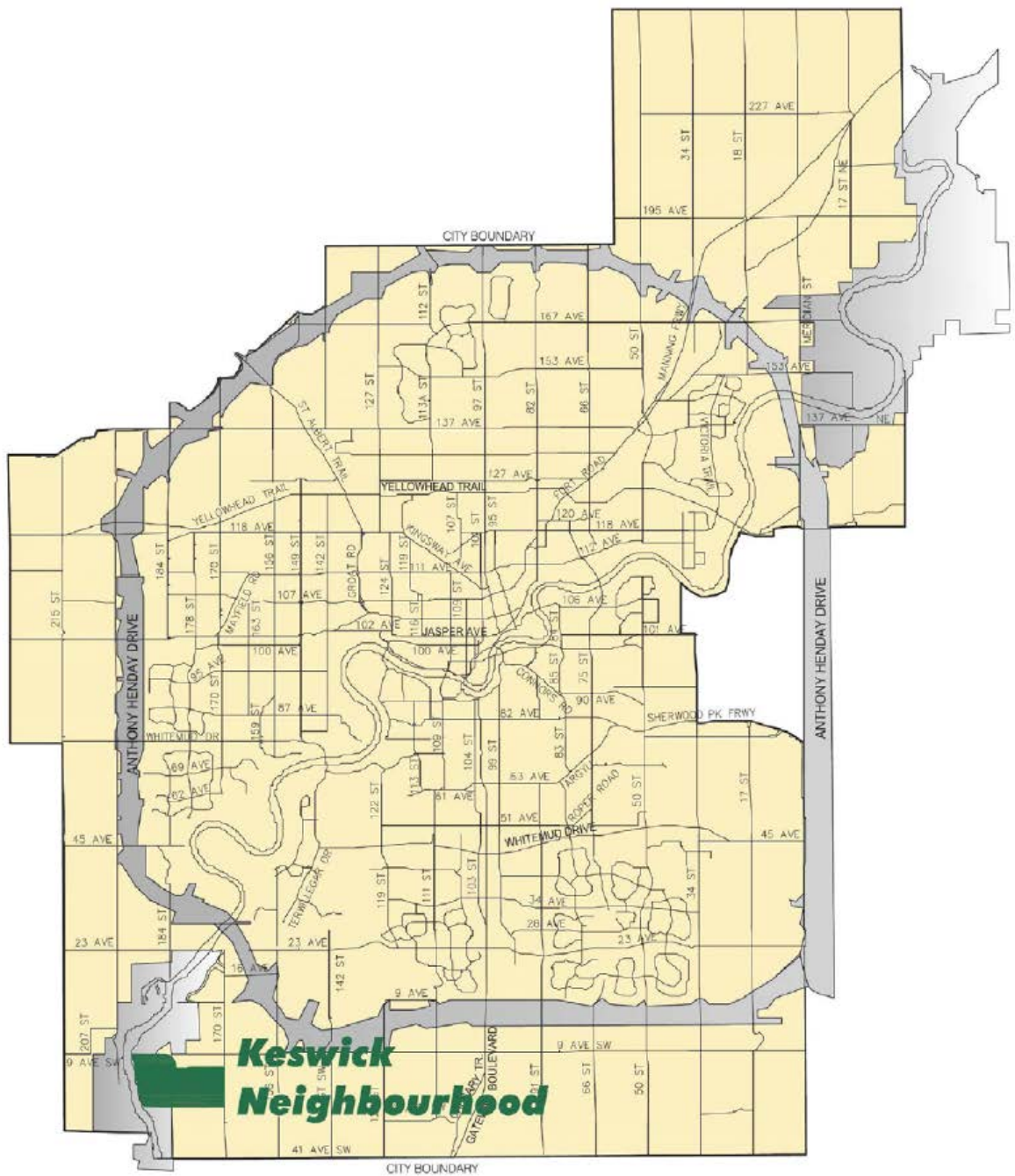
The Keswick NSP is identified as Neighbourhood Three in the Windermere ASP (see **Figure 2.0 – Context**).

The Windermere Neighbourhood (Windermere Neighbourhood 2) is located immediately north of Ellerslie Road (9 Avenue SW). Windermere Neighbourhood was adopted by City Council in September 2006, and is currently being developed. The lands east of 170 Street S.W. and south of 25 Avenue S.W. are currently utilized for agricultural purposes and occupied with farmsteads, but are designated for future suburban development. These areas are within the boundaries of the Windermere ASP and are referred to as Neighbourhoods 4 and 5 respectively.

2.2 BACKGROUND

The Keswick NSP was prepared in response to current and anticipated market demands in the Edmonton region. Further information regarding land ownership and site context is outlined in **Table 1 – Land Ownership**, **Figure 3.0 – Land Ownership**, **Figure 4.0 – Site Contours**, **Figure 5.0 – Site Features**, **Figure 6.0 – Environmental Site Assessment Overview**.

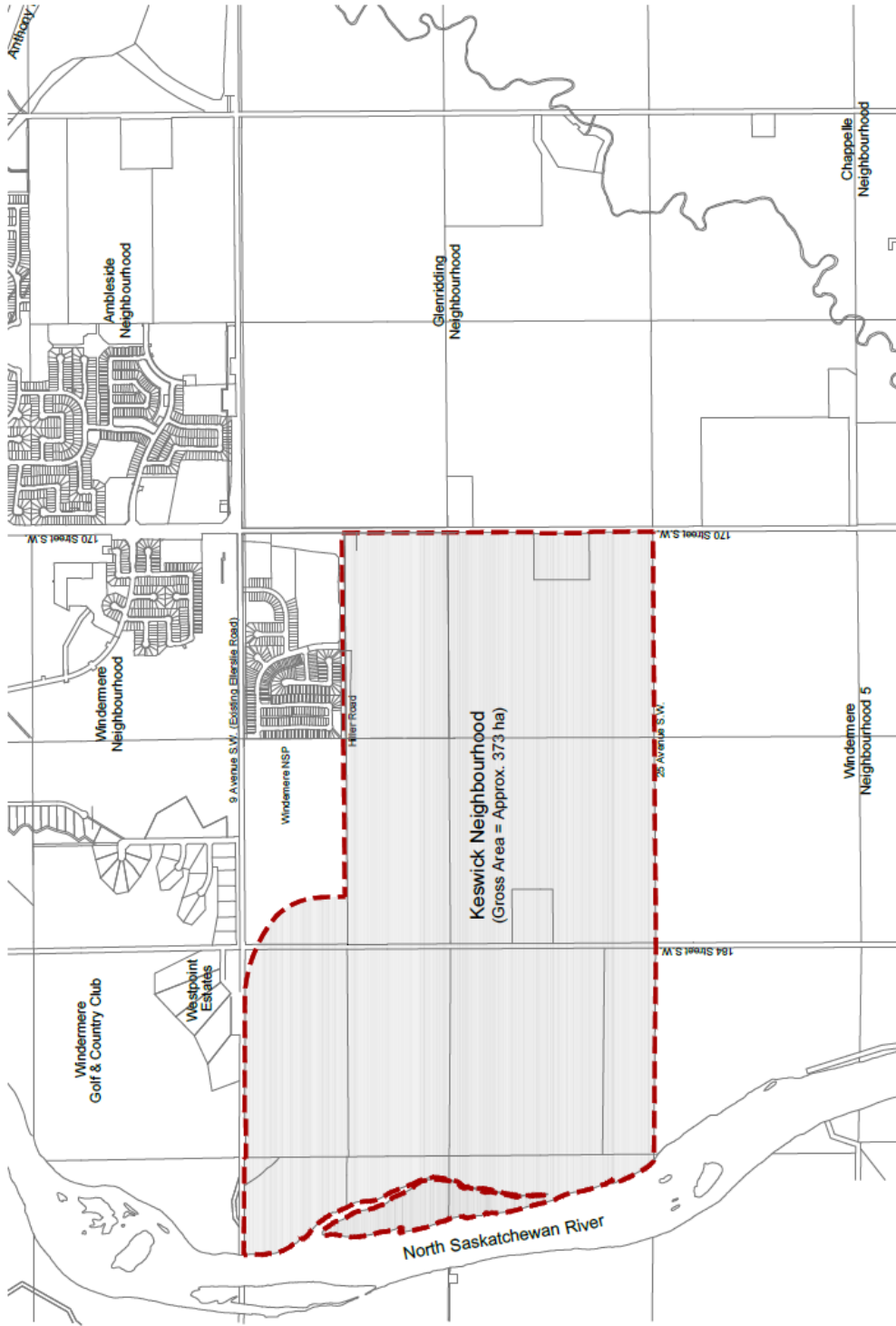
The preparation of the NSP has been guided by the existing City of Edmonton statutory plans and policies including The Way We Grow, The Way We Move, the Windermere Area Structure Plan (Bylaw 13717, as amended), the Suburban Neighbourhood Design Principles (SNDP), the Urban Parks Management Plan (UPMP), the North Saskatchewan River Valley and Ravine System Protection Overlay, the Capital Region Growth Plan and the City of Edmonton Housing Mix Guidelines. Conformance to these plans and policies is referenced in **Appendix 1**.



NTS
September 2014

Keswick Neighbourhood Structure Plan Figure 1 Location Plan





Keswick
Neighbourhood Structure Plan
Figure 2
Context Plan



Land Ownership

The Keswick NSP was prepared on behalf of several private developers who own approximately 315 hectares (84%) of the land within the Plan area. The remaining lands are held by a number of non-participating landowners. Current (2008) land ownership is described in *Table 1* below and shown in *Figure 3.0 – Land Ownership*.

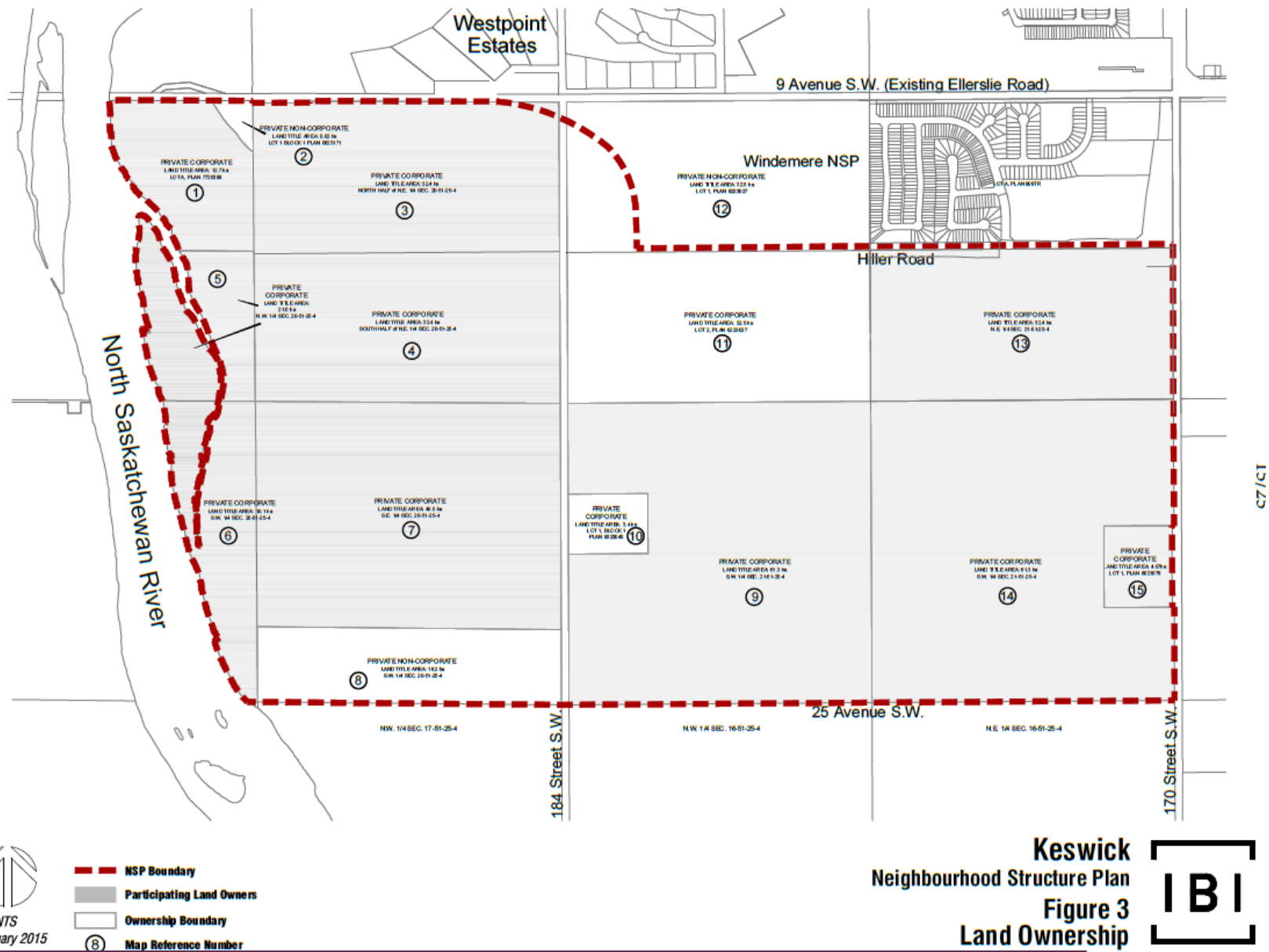
Table 1: Land Ownership

Table 1: Land Ownership

Map Reference	Titled Owner	Legal Description	Titled Area	Area in NSP
1	Private Corporate Owners	Lot A, Plan 7720388	12.7 ha	12.7 ha
2	Private Non-Corporate Owners	Lot1, Block 1, Plan 0623171	0.82 ha	0.82 ha ^{NP}
3	Private Corporate Owners	N ½ -NE ¼ 20-51-25-W4	32.4 ha	32.4 ha
4	Private Corporate Owners	S ½ - NE ¼ 20-51-25-W4	32.4 ha	32.4 ha
5	Private Corporate Owners	NW ¼ 20-51-25-W4	21.0 ha	21.0 ha
6	Private Corporate Owners	SW ¼ 20-51-25-W4	10.1 ha	10.1 ha
7	Private Corporate Owners	Ptn. SE ¼ 20-51-25-W4	48.5 ha	48.5 ha
8	Private Non-Corporate Owners	Ptn. SE ¼ 20-51-25-W4	16.2 ha	16.2 ha ^{NP}
9	Private Corporate Owners	SW ¼ 21-51-25-W4	61.3 ha	61.3 ha
10	Private Non-Corporate Owners	Lot1, Block 1, Plan 9323045	3.4 ha	3.4 ha ^{NP}
11	Private Non-Corporate Owners	Lot 2, Plan 8223027	32.5 ha	32.5 ha ^{NP}
12	Private Non-Corporate Owners	Lot 1, Plan 8223027	32.5 ha	4.83 ha ^{NP}
13	Private Corporate Owners	NE ¼ 21-51-25-W4	32.4 ha	32.4 ha
14	Private Corporate Owners	SE ¼ 21-51-25-W4	60.6 ha	60.6 ha
15	Private Corporate Owners	Lot 1, Plan 8021976	4.07 ha	4.07 ha
Total Area			400.89ha	373.8 ha

Bylaw 17195
May 11, 2015

^{NP} Indicates a non-participating landowner



2.3 SITE CONTEXT

Topography

The topography of the lands within the Plan area is generally flat with slight undulations (see **Figure 4.0 – Site Contours**). Elevations through the plan area vary from approximately 678 m in the northwest to approximately 696 m in the southeast of the plan boundary. Surface drainage generally flows west-northwest into the North Saskatchewan River Valley. **Figure 5.0 – Site Features**, illustrates the majority of the Plan area has been cleared of vegetation.

Natural Areas and Ecological Resources

The City of Edmonton's Inventory of Environmentally Sensitive and Significant Natural Areas (Geowest 1993) identifies no natural features within the plan area.

Adjacent to the plan area are two Environmentally Sensitive Areas. One is the North Saskatchewan River Valley and Ravine System, while the second is located south of the NSP area and is identified as SW2 or "Southwest Wetland" in the Geowest report.

Wetland Assessment Report (WAR)

The NSP area contains ten (10) wetlands and several depressional areas, observed through site reconnaissance in November 2008 and assessed based upon aerial photo review dating back to 1950. Eight (8) of these were classified as Class III Wetlands defined as seasonal ponds, providing low to moderate ecological value due to the potential for the presence of water and the low diversity of vegetation species, see **Figure 5.0 - Site Features**. The remaining two (2) wetlands were classified as Class II Wetlands, defined as temporary of ephemeral and contained minimal vegetation diversity. The depressional areas are intermittent, ephemeral features of the landscape that were not present at the time of the site reconnaissance. These features likely represent Class I features or lower.

Alberta Sustainable Resources Development (ASRD) has been consulted in order 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. (Stantec 2009).

(Deleted paragraph.)

Alberta Environment, which administers the Water Act, has a policy of no net loss in regards to wetlands in Alberta, and therefore requires compensation to be made if a wetland is to be disturbed. The eight (8) wetlands identified in the associated WAR report have been identified by the respective land owners as being subject to disturbance as development proceeds. Water Act applications seeking approval for the disturbance and compensation of each of these eight (8) wetlands have progressed/been approved with Alberta Environment by the respective land owners.

Phase I Ecological Network Report (ENR)

A reduced scope Phase I Ecological Network Report (ENR) was completed by Stantec Consulting Ltd. and submitted to the City in support of the Keswick NSP. Two Environmentally Sensitive Areas are adjacent to the plan area (North Saskatchewan River and SW2 Natural Area). In addition, other features within the plan area

Bylaw 17195
May 11, 2015

Bylaw 17195
May 11, 2015



- ★ Approximate Low Spot
- ★ Approximate High Spot
- NSP Boundary

Keswick
Neighbourhood Structure Plan
Figure 4
Site Contours





An aerial photograph of a farmstead with four yellow 3D models overlaid. The models are labeled: 'Barn' (a large rectangular structure), 'Septic Cistern' (a small cylindrical structure), 'Mobile Home' (a long rectangular structure), and 'Shed' (a small rectangular structure).

The North Saskatchewan River Valley ravine system acts as a core habitat, linked to other core habitats to the north and south along the river valley. The drainage courses have been historically cultivated since 1950, draining into the ravines leading into the North Saskatchewan River, and provide low quality movement corridors. Of the wetlands within the plan area, none appeared to be in a very healthy ecological condition; all were either currently under cultivation, dominated by the introduced reed canary grass, or otherwise disturbed.

Within Keswick, 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 (Stantec 2009).

The report concludes that the function and integrity of the ecological network is extremely limited, with no identifiable ecological network components (City of Edmonton (2008b) Ecological Network map). Aside from creating a new network, little can be done to restore connectivity within the plan area.

Recommendations in the ENR include naturalized linkages to most SWMFs and parks, using greenways and potential wildlife crossings for small mammals and amphibians (where possible); maintaining appropriate buffers zones around components of the North Saskatchewan River Valley and ravine system adjacent to the plan and maintaining, where possible, the existing grade of the landscape surrounding important ecological features from hydrologic change.

Existing Land Uses

A majority of the lands within the Plan area are currently used for agricultural purposes and are occupied by existing farmsteads (2008).

Environmental Assessment

The following information presented in *Table 2 - Environmental Site Assessment Overview* and illustrated on *Figure 6.0 - Environmental Site Assessment Overview* are based on Phase I Environmental Site Assessments conducted for the participating landowner of the properties contained within the plan area. The City of Edmonton's Planning and Development Department recommends that individual landowners provide ESAs or disclosure statements prior to the rezoning stage.

The Phase I ESA is meant to evaluate the types and location of surface and/or subsurface impacts that may be present on the subject site and adjacent areas. Specific incidences of contamination or potential contamination are listed along with how each will be addressed. No environmental concerns were noted with respect to adjacent properties based on visual examination.

Table 2 summarizes the status of completed Phase I ESA reports as of 2007.

Table 2: Phase I – Environmental Site Assessment Overview

Map Reference	Titled Owner	Legal Description	Comments
1	Private Corporate Owners	Lot A, Plan 7720388	Approved
2	Private Non-Corporate Owners	Lot 1, Block 1, Plan 0623171	To be provided at rezoning
3	Private Corporate Owners	N ½ -NE ¼ 20-51-25-W4	Approved
4	Private Corporate Owners	S ½ - NE ¼ 20-51-25-W4	Approved

Map Reference	Titled Owner	Legal Description	Comments
5	Private Corporate Owners	NW ¼ 20-51-25-W4	Approved
6	Private Corporate Owners	SW ¼ 20-51-25-W4	To be provided at rezoning
7	Private Corporate Owners	Ptn. SE ¼ 20-51-25-W4	Approved
8	Private Non-Corporate Owners	Ptn. SE ¼ 20-51-25-W4	To be provided at rezoning
9	Private Corporate Owners	SW ¼ 21-51-25-W4	Approved
10	Private Non-Corporate Owners	Lot1, Block 1, Plan 9323045	To be provided at rezoning
11	Private Non-Corporate Owners	Lot 2, Plan 8223027	To be provided at rezoning
12	Private Non-Corporate Owners	Lot 1, Plan 8223027	To be provided at rezoning
13	Private Corporate Owners	NE ¼ 21-51-25-W4	Approved
14	Private Corporate Owners	SE ¼ 21-51-25-W4	Approved
15	Private Corporate Owners	Lot 1, Plan 8021976	Approved

Note: The continued operation of farmsteads poses a potential environmental risk. The potential risk associated with these properties has been determined to be low, and therefore these uses do not pose any major constraints to future urban development of the adjacent lands.

Historical Resources

Several Historical Resource Overviews (HRO's) have been completed for participating lands and submitted to Alberta Culture and Community Spirit (ACCS) in support of the Keswick NSP. **Table 3: Historical Resources Overview** presents a summary of the lands which were included in the studies, and which lands have received clearance from ACCS.

Based on ACCS's review of the HRO's, Historical Resources Impact Assessments (HRIA's) were required for eight of the titled areas in the NSP. Of these, four have been completed and accepted by ACCS, while further investigation is required for the lands identified in the table below.

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. Preservation, conservation and integration of cultural, historical, and or archaeological resources within the Keswick NSP is important to retaining local history and character that may also be of regional or provincial significance.

Table 3: Historical Resources Overview

Map Reference	Titled Owner	Legal Description	HRO Completed	HRIA Required
1	Private Corporate Owners	Lot A, Plan 7720388	Approved	Approved
2	Private Non-Corporate Owners	Lot 1, Block 1, Plan 0623171	To be provided at rezoning	To be determined
3	Private Corporate Owners	N ½ -NE ¼ 20-51-25-W4	Approved	Approved
4	Private Corporate Owners	S ½ - NE ¼ 20-51-25-W4	Approved	Approved
5	Private Corporate Owners	NW ¼ 20-51-25-W4	Approved	Yes
6	Private Corporate Owners	SW ¼ 20-51-25-W4	Approved	Yes
7	Private Corporate Owners	Ptn. SE ¼ 20-51-25-W4	Approved	Yes
8	Private Non-Corporate Owners	Ptn. SE ¼ 20-51-25-W4	To be provided at rezoning	To be determined
9	Private Corporate Owners	SW ¼ 21-51-25-W4	Approved	No
10	Private Non-Corporate Owners	Lot 1, Block 1, Plan 9323045	Approved	Yes
11	Private Non-Corporate Owners	Lot 2, Plan 8223027	To be provided at rezoning	To be determined
12	Private Non-Corporate Owners	Lot 1, Plan 8223027	To be provided at rezoning	To be determined
13	Private Corporate Owners	NE ¼ 21-51-25-W4	Approved	No
14	Private Corporate Owners	SE ¼ 21-51-25-W4	Approved	No
15	Private Corporate Owners	Lot 1, Plan 8021976	Approved	Approved

Pipelines and Oil Well Sites

Table 4 is a summary of Energy Resources and Conservation Board (ERCB) pipeline and oil well information available through the Abadata website. Research indicates one active well site, owned by Arsenal Energy Inc., located within the NSP area, south of Ellerslie Road and west of 170 Street S.W., near the westerly boundary of NE-21 ¼ Section (see **Figure 5.0 – Site Features**). Any development in the vicinity of the well site shall comply with the City of Edmonton's applicable regulations and guidelines.

Table 4: Oil Well and Pipeline Information Summary

Well License #	Licensee	Status / Substance	Notes
135566	Fortune Energy Inc.	Reclaimed & Certified June 28, 1989	Located south of Ellerslie Road and west of 184 Street, approximate centre of NE -20 ¼ Section
138458	Arsenal Energy Inc.	Active, Drilled & Cased	Located south of Ellerslie Road and west of 170 Street, westerly boundary of NE -21 ¼ Section

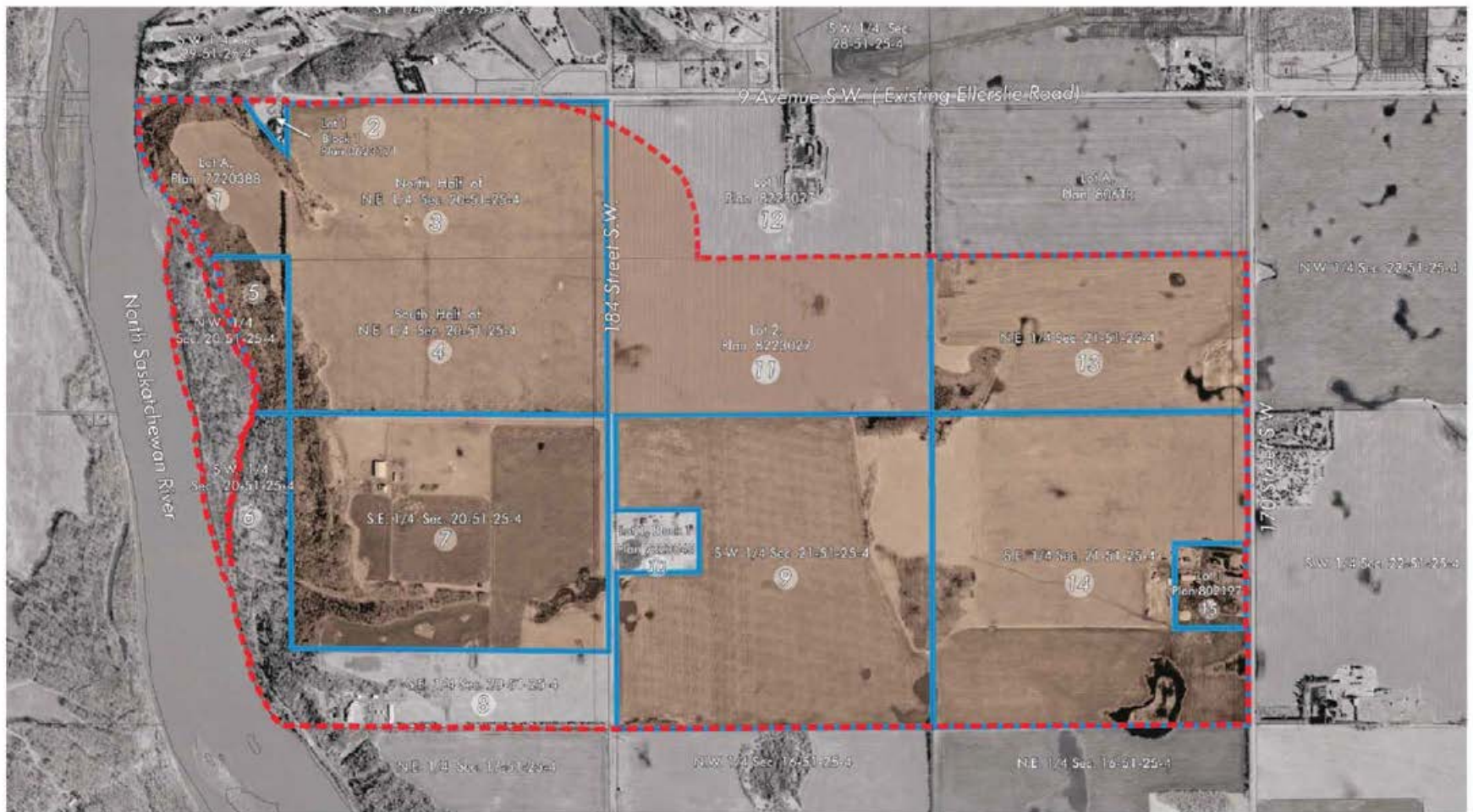
Well License #	Licensee	Status / Substance	Notes
2550	Talisman Energy Inc	Abandoned February 27, 1951	Located south of Ellerslie Road and west of 184 Street, NW corner of NE -21 ¼ Section
110233	Canetic Resources Ltd	Abandoned November 6, 1984	Located south of Ellerslie Road and west of 184 Street, NW corner of NE -21 ¼ Section
129786	Arsenal Energy Inc.	Abandoned June 20, 1997	Located south of Ellerslie Road and west of 184 Street, NE corner of NE -20 ¼ Section
105376	Goforth Oil & Gas Ltd	Reclaimed & Certified September 14, 1984	Located south of Ellerslie Road and west of 170 Street, approximate centre of NE -21 ¼ Section
132329	Pioneer Natural Resources Canada Inc	Abandoned March 9, 1988	Located south of Ellerslie Road and east of 184 Street, NE corner of NW -21 ¼ Section
0003867M	ConocoPhillips Canada Resources Corp	Abandoned November 29, 1951	Located north of Ellerslie Road at its intersection with 184 Street in the SE corner of SE-29 ¼
Pipeline License #	Licensee	Status / Substance	Notes
7231 - 9	ATCO Gas and Pipelines	Operating Natural Gas	Located adjacent to the eastern boundary (170 street) of the NSP
15440 - 12	ATCO Gas and Pipelines	Operating Natural Gas	Located adjacent to the northern boundary (9 Avenue SW) of the NSP
15440 - 14	ATCO Gas and Pipelines	Operating Natural Gas	Located adjacent to the northern boundary (9 Avenue SW) of the NSP
37844 - 2	ATCO Gas and Pipelines	Operating Natural Gas	Located adjacent to the northern boundary (9 Avenue SW) of the NSP
37844 - 10	ATCO Gas and Pipelines	To be constructed Natural Gas	Located adjacent to the northern boundary (9 Avenue SW) of the NSP

Public Involvement

Consistent with Policy C513 – City of Edmonton Public Involvement Policy, advance notification was sent to surrounding property owners on September 5, 2007 advising them of the application and encouraging them to contact either the Planning and Development Department or the applicant (Stantec Consulting Ltd.) to communicate any possible concerns.

As part of the planning process, a public meeting was held by the City of Edmonton's Planning and Development Department on May 6, 2010 at the Windermere Golf and Country Club. Mailed notification letters were sent to landowners in proximity to the NSP area advising of this meeting. Notice of the meeting was also advertised in the Edmonton Journal on April 29, 2010. At the meeting residents had an opportunity to review and comment on the NSP.

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



Environmental Site Assessment Completed
Map Reference Number

--- NSP Boundary

Keswick
Neighbourhood Structure Plan
Figure 6
Environmental Site Assessment Overview



3.0 Land Use, Transportation, and Servicing Concept

3.1 VISION

To establish a vibrant, attractive and sustainable community in southwest Edmonton where people choose to live, learn, work, and play throughout their life. Bordered by the North Saskatchewan River, the Keswick NSP will nurture a community which promotes liveability, connectivity, and walkability through the careful integration of the natural and built environment, centres of activity and services.

3.2 GOALS AND OBJECTIVES

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

1. Provides a unique neighbourhood identity with emphasis on public accessibility to the North Saskatchewan River Valley and Ravine System, connected park spaces, stormwater management facilities and commercial activities;
2. Establishes a variety of housing types and residential densities to meet consumer needs, encourage diversity and support public transit ridership;
3. Provides a built environment where recreation and natural area amenities are easily accessed;
4. Provides a walkable, attractive, safe and comfortable environment for residents;
5. Preserves natural features and integrates them into the neighbourhood;
6. Provides a balanced transportation system that connects major inter- and intra-neighbourhood focal points and maximizes transit access; and
7. Provides efficient, contiguous and staged urban and infrastructure 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. Encourage naturalized landscaping on public and private lands to maximize environmental benefits and minimize costs associated with maintenance; and
3. Ensure a compact urban form that uses the land resources responsibly and efficiently.

Urban Design

4. Design residential streets which are pedestrian friendly, safe and form an integral and attractive component of the public realm within the neighbourhood;
5. Develop low-rise/multi-/medium and high rise residential sites to a higher urban design standard;
6. Optimize view/vista potential of the North Saskatchewan River Valley;
7. Develop park spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing; and

8. Create identifiable focal points which will be directly linked and incorporated into the open space system.

Ecology

9. Establish an Urban Development Line, based upon geotechnical recommendations and current City Policy, to ensure enjoyment, preservation and protection of the North Saskatchewan River Valley and Ravine System; and
10. Strengthen Edmonton's ecological network.

Environment

11. Ensure the environmental status of lands in the Keswick NSP are suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning; and
12. Minimize Oil and Gas well sites' potential environmental hazards and disruption of future residential areas through careful neighbourhood design and adhering to all relevant requirements of the ERCB and the City of Edmonton and ensure urban development around abandoned well-sites adheres to the requirements of the ERCB, City of Edmonton Policy C515 –Oil and Gas Facilities, Abandoned Well Sites and "Policy Guidelines for the Integration of Resource Operations and Urban Development" (1985).

Historical Resources

13. Identify and protect items with historical significance, such as buildings and areas of cultural significance, in the Keswick NSP.

Residential

14. Plan for a variety of residential housing types in different built forms, for a range of household types, income levels and ages;
15. 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;
16. Establish affordable housing in the Keswick NSP;
17. Provide a transition between residential uses of significantly different densities; and
18. Locate low rise/multi-/medium unit and low rise/multi-/medium unit to high rise unit residential developments to facilitate access to arterial and/or collector roadways, commercial uses and public transit service.

Commercial

19. Provide community commercial and neighbourhood convenience commercial shopping nodes to meet the large and small scale needs of residents and provide local employment opportunities within the neighbourhood;
20. Locate and orient commercial sites along arterial or collector roadways to ensure high visibility and convenient access opportunities;
21. Provide convenient pedestrian access to all commercial development so that residents have opportunity to walk to commercial services; and
22. Minimize the impact of commercial development on adjacent land uses.

Mixed Use Institutional / Residential

23. Allow for the future development of institutional and related uses, including the opportunity for housing.

Mixed Use – Residential/Commercial

24. Promote mixed use development, with a mixture of residential and commercial uses, which supports compact development, higher densities and public transit use.

Parks and Open Space

25. Accommodate the requirements of the City for school / park sites within the neighbourhood;
26. Provide school / parks and open spaces along arterials, collector or local roadways and ensure accessibility via pedestrian linkages, automobiles and transit;
27. Design a connected and integrated open space system that encourages all modes of movement (e.g. pedestrians, bicycles, wheelchairs, rollerblades, etc); and
28. Ensure the North Saskatchewan River Valley is physically accessible to all people through best practices in universal design.

Transportation

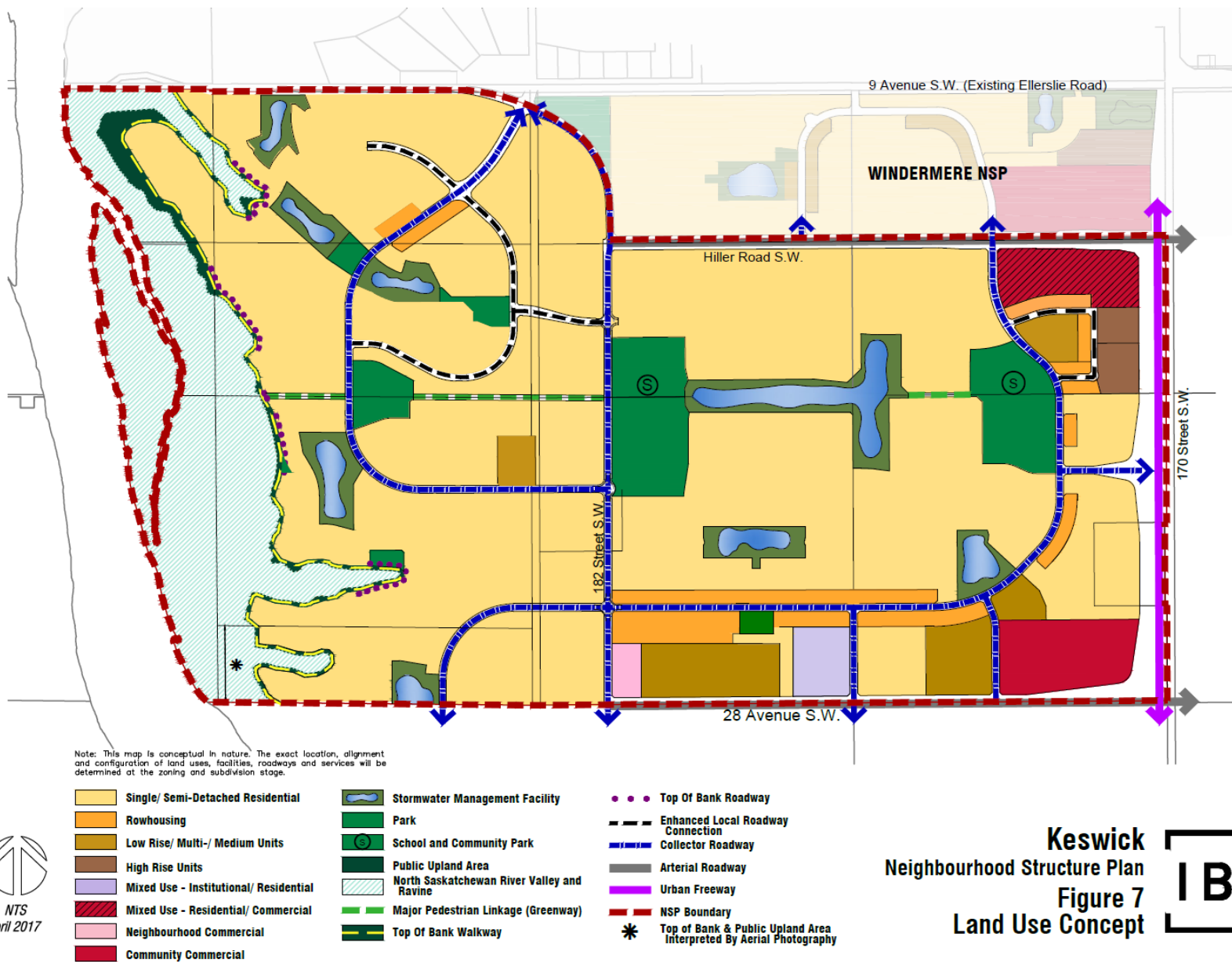
29. Recognize that 170 Street S.W. is a highway connector and is designated as an urban freeway connecting Anthony Henday Drive to the potential Outer Ring Road and the surrounding region;
30. Locate arterial and collector roadways to move vehicular traffic efficiently through the neighbourhood and minimize internal roadway congestion;
31. Provide strong connections with surrounding communities;
32. Integrate land use and circulation patterns considering safety of pedestrians and cyclists;
33. Maximize access to transit for the greatest number of residents, and in accordance with City of Edmonton Transit System Guidelines and demands;
34. Design a system of local streets which provides numerous safe, simple, direct and obvious connections throughout the neighbourhood;
35. Minimize traffic congestion and enhance safety on the internal collector roadways;
36. Promote accessibility to natural and recreational amenity areas such as the North Saskatchewan River Valley and Ravine System, parks, open spaces, commercial uses and transit services by providing a circulation system for a variety of modes such as walking, cycling, rollerblading and wheelchair accessibility;
37. Mitigate the impact of automobile traffic associated with commercial, low-rise/multi-medium rise and high rise residential areas on adjacent single/semi-detached residential areas; and
38. 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

39. Ensure the Keswick NSP is serviced to a full urban standard, in an efficient, contiguous and staged manner.

Table 5: Land Use & Population Statistics

Keswick Neighbourhood Structure Plan ◊ Land Use Concept and Population Statistics – Bylaw 18281, January 22, 2018							
	Area (ha)	% of GA	% of GDA				
GROSS AREA	372.72	100.0%					
North Saskatchewan River Valley and Ravine (Lands below Top of Bank)	43.70	11.7%					
Lands between Top of Bank and Urban Development Line	5.6	1.5%					
Lands between Urban Development Line and Top of Bank Roadway*	0.35	0.1%					
Pipeline & Utility R/W	0.69	0.2%					
Arterial Road R/W	16.5	4.4%					
Total Non-Developable Area	66.84						
GROSS DEVELOPABLE AREA	305.88		100.0%				
Parkland, Recreation, School (Municipal Reserve)**							
School	14.02	4.6%	}				
Park	4.61	1.5%					
Greenway	0.06	0.02%					
Transportation							
Circulation	60.59 ¹	19.8%					
Greenway	1.33	0.4%					
Infrastructure / Servicing							
Stormwater Management Facilities	19.85	6.5%					
Institutional							
Mixed Use - Institutional/Low-Rise/Multi-/Medium Units	2.63	0.9%					
Commercial							
Community Commercial	6.33	2.1%					
Neighbourhood Commercial	1	0.3%					
Mixed Uses (Non-residential) ¹	3.48	1.1%					
TOTAL Non-Residential Area	113.90		37.2%				
Net Residential Area (NRA)	191.98		62.8%				
RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION							
	Area (ha)	Units/ha	Units	% of Total	People/Unit	Population	% of NRA
Single/Semi-Detached	165.71	25	4,143	65.0%	2.8	11,600	74.4%
Rowhousing	11.34	45	510	8.0%	2.2	1,122	7.2%
Mixed Use-Residential/Commercial	1.4	125	175	2.7%	1.5	263	1.7%
Low-Rise/Multi-/Medium Units	11.15	90	1,004	15.8 %	1.8	1806	11.6%
High Rise Unit	2.39	225	538	8.4%	1.5	807	5.2%
Total Residential	191.99		6,369	100.0%		15,597	100.0%
SUSTAINABILITY MEASURES							
Population Density (ppnrha)					82		
Unit Density (upnrha)					33.2		
Single/Semi-Detached // Rowhousing, Low-Rise/Multi-/Medium Units and High Rise					65%	// 35%	
Population (%) within 500 m of Parkland					97%		
Population (%) within 400 m of Transit Service					95%		
Population (%) within 600 m of Commercial Service					89%		
Presence/Loss of Natural Area Features		Land	Water				
Protected as Environmental Reserve (ha)		49.3	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							
Public School Board		1,228	Notes: * As per TOB Policy C542, the area between the TOB roadway and the residual land between the roadway and the Urban Development Line shall be deducted from the gross area to reduce the MR entitlement. Exact areas to be confirmed at time of subdivision and by legal survey. This area is subject to ARA and PAC. **Areas dedicated to Municipal Reserves to be confirmed by legal survey.				
Elementary	613						
Junior / Senior High	613						
Separate School Board		409	1 Circulation area calculations assume 20% of the single/semi-detached land area will be circulation area.				
Elementary	245						
Junior High	123						
Senior High	123						
Total Student Population	1,637						



3.2.1 Green Development

One of the goals of this plan is the preservation of natural features and their integration into the neighbourhood. In doing so, consideration will be given to green initiatives and innovations.

Objective (1) Consider sustainable development principles in the planning and design of the neighbourhood.

NSP Policy	Implementation
Incorporate alternative development standards (e.g. energy efficient lighting), and where appropriate, alternative road construction standards, to the satisfaction of the City of Edmonton.	<p>Allow for flexibility between developers and the City in regulating the introduction and implementation of alternative designs, techniques and technologies that support ecological processes, cost effectiveness and environmental stewardship in the development of the neighbourhood.</p> <p>All alternative development standards shall be reviewed and potentially approved by the City of Edmonton.</p>

Rationale: Many aspects of sustainability can be addressed with 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 (e.g. consideration of servicing techniques or infrastructure provision that differs from current City standards) as one way of achieving sustainability.

Objective (2) Encourage naturalized landscaping on public and private lands to maximize environmental benefits and minimize costs associated with maintenance.

NSP Policy	Implementation
Landscaping within the plan area should incorporate the use of native plant species within all open spaces.	<p>Develop open space areas using native plant species.</p> <p>Specific species for landscaping will be determined between the developer and City Administration at the time of review of landscaping plans and as part of engineering drawing review.</p>

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

Objective (3) Ensure a compact urban form that uses the land resources responsibly and efficiently.

NSP Policy	Implementation
The neighbourhood shall support increased densities to make more efficient use of land.	<i>Figure 7 – Land Use Concept</i> and <i>Table 5 - Land Use Concept & Population Statistics</i> illustrate the increased densities in the NSP, which exceeds the Council-approved Suburban Housing Mix Guidelines.

Rationale: Compact development increases residential densities, promotes alternative forms of transportation (cycling, walking) and increases efficiency in provision of municipal services, public transit, schools and use of nearby commercial developments.

Technical Summary

No specific technical requirements were further identified.

3.2.2 Urban Design

The Keswick NSP incorporates principles of urban design that shall establish an attractive, pedestrian friendly community in support of the NSP vision.

Objective (4) Design residential streets which are pedestrian friendly, safe and form an integral and attractive component of the public realm within the neighbourhood

NSP Policy	Implementation
(a) Streetscape design should consider symmetry, variety, massing and opportunities for innovative building and site design.	(a) Details regarding the specific type and location of residential uses will be determined at the rezoning and subdivision application stage where consideration for these elements will be given. Symmetry can be achieved by creating a compatible housing form and zoning designation on either side of a street.
(b) 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 front drive access.	(b) The design of arterial and collector roadways and the provision of sidewalks shall be implemented at the detailed design stage in accordance with City design standards, including Complete Streets Principles and Design Guidelines, to the satisfaction of the Transportation Services.

Rationale: Designing attractive residential streetscapes by using similar or compatible housing forms and zoning designations in proximity to each other provides a comfortable physical environment and creates a consistent mass and scale. Orientation of buildings towards public areas (i.e. streets, parks and parking areas) plays an important part of creating interesting and varied streetscapes and increases a sense of resident awareness of neighbourhood activities and safety ("eyes on the street").

At the detailed design stage the function of the roadway will dictate the appropriate cross-sections to be implemented (i.e. arterial or collector). To ensure pedestrian connectivity and safety is maintained along all primary pedestrian linkages, sidewalks should be separated from the main vehicular route by a treed boulevard, and front drive access should be minimized to reduce vehicular and pedestrian conflict.

Objective (5) Develop low-rise/multi-/medium and high rise residential sites to a higher urban design standard.

NSP Policy	Implementation
Low-rise/multi-/medium and high rise residential uses shall be designed to have a strong street presence, with parking areas	The Development Officer should have regard for site design, parking areas and building

Bylaw
17195
May 11,
2015

Bylaw
17405,
October
19,
2015

located underground or away from the street.

articulation.

Rationale: While parcels of low-rise/multi-/medium and high rise residential sites (i.e. stacked rowhousing, low/medium rise or high rise apartments) are likely to be developed on a self-contained basis, opportunity exists to develop street-oriented rowhousing alongside single/semi-detached housing through sensitive urban streetscape design, attention to transitioning and landscaping.

(Deleted paragraph.)

High rise residential uses are located in a prominent and accessible location at the north-eastern edge of the neighbourhood, within proximity to arterial and collector road access and commercial activities. The NSP proposes that the multi-unit residential use site will not exceed approximately 1.4, ha and will be designed with careful attention to land use transitioning, landscaping; and building setbacks: from adjacent uses. The use of a standard residential zoning (i.e. RA8 or RA9) of the 'Edmonton Zoning Bylaw will be applied for the development of these higher density uses.

Objective (6) Optimize view/vista potential of the North Saskatchewan River Valley.

NSP Policy	Implementation
Maximize views, vistas and visual connections to the North Saskatchewan River Valley and Ravine System.	<p>Figure 7.0 – Land Use Concept illustrates the location of top-of-bank roadway and parks, and Figure 9.0 – Pedestrian Network illustrates the major visual connections to the River Valley.</p> <p>The Subdivision Officer shall ensure visual connections are achieved through appropriate land use and roadway configuration.</p>

Rationale: The plan affords the community with significant visual connections and vista opportunities through the provision of appropriate development setback including 100% of top of bank walkway and as well as top of bank roadway and park along the North Saskatchewan River Valley. These locations provide un-interrupted public access and view potential, ensuring visibility and passive surveillance of the River Valley and Ravine System.

Objective (7) Develop park spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.

NSP Policy	Implementation
<p>(a) Parks and stormwater management facilities (SWMFs) shall be designed using Crime Prevention Through Environmental Design (CPTED) principles, accessible through public lands and not land-locked by private development.</p> <p>(b) Street frontage for SWMFs and parks along abutting roadways should consider opportunities for maximizing public access and providing clear sightlines and views.</p>	<p>(a) The location and configuration of SWMFs and parks are conceptually illustrated in Figure 7.0 – Land Use Concept and may be refined prior to rezoning.</p> <p>(b) The Subdivision Authority shall have regard for the provision of adequate street frontage abutting parks and SWMFs to maintain and enhance view opportunities.</p> <p>(c) SWMF landscaping will be determined</p>

(c) SWMFs should include naturalized shoreline plantings intended to provide habitat opportunities for wildlife and improve water quality.

(d) Emergency access to SWMFs shall be provided from abutting roadways.

between the developer and City Administration at the time of review of landscaping plans and as part of engineering drawing review.

(d) The location of boat launches or other emergency access requirements within SWMFs for emergency response purposes shall be determined at the detailed design stage of development.

Rationale: The location and configuration of SWMFs and parks integrates these uses into the pedestrian network and provides vistas from abutting roadways, thereby heightening resident awareness of these facilities. This in turn will promote them as walking destinations, and enhance their surveillance to prevent crime and will serve as a destination for pedestrians and cyclists and to provide passive recreation opportunities.

Objective (8) Create identifiable focal points which will be directly linked and incorporated into the open space system.

NSP Policy	Implementation
<p>A) Focal points in the Keswick neighbourhood include the North Saskatchewan River Valley and Ravine System, school/park spaces, commercial uses and stormwater management facilities.</p> <p>(b) 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.</p> <p>(c) Convenient, safe and efficient pedestrian connections from the neighbourhood into and through open spaces / focal points shall be provided.</p>	<p>(a) Figure 9 – Pedestrian Network illustrates the distribution and connectivity of key neighbourhood focal points.</p> <p>(b) Details regarding the provision and placement of architectural elements within focal points shall be determined at the detailed design stage of development.</p> <p>(c) Details regarding the placement of pedestrian connections/crossings will be determined at the subdivision approval stage.</p>

Rationale: Neighbourhood focal points 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 Keswick are the North Saskatchewan River Valley and Ravine System, top-of-bank roadway, school/park site and stormwater management facilities. These provide key amenity spaces for local residents and add to the neighbourhood's attractiveness, character and image as a pedestrian-oriented community.

Distribution and location of SWMFs have been based upon topography (e.g. low areas) and with regards to ensuring each landowner provides adequate land area for stormwater and utility functions. Park spaces have been located abutting roadways, adjacent to the North Saskatchewan River Valley or to create vistas and entrance gateway features. SWMFs and parks are generally connected to each other through shared-use paths (linear greenway), sidewalks or other pedestrian linkages.

Technical Summary

No specific technical requirements were further identified.

Bylaw 17195
May 11, 2015

3.2.3 Ecology

The Keswick NSP ensures the North Saskatchewan River Valley and Ravine System is preserved and protected to the greatest extent possible through the establishment of an Urban Development Line (UDL) demarcating the boundary between developable upland area (urban development) and non-developable area (Environmental Reserve). Public access to the River Valley and Ravine System shall be provided via a combination of top-of-bank (TOB) roadway and park, totalling a minimum of 30% of the length of the UDL, and a TOB walkway along the entire length of the Public Upland Area.

Objective (9) Establish an Urban Development Line, based upon geotechnical recommendations and current City Policy, to ensure enjoyment, preservation and protection of the North Saskatchewan River Valley and Ravine System.

NSP Policy	Implementation
<p>(a) The Urban Development Line (UDL) shall separate developable from non-developable areas to preserve and protect the North Saskatchewan River Valley and Ravine System, ensuring that urban development is reasonably safe from environmental hazard risk and that public access, visual amenities and recreational opportunities are maximized.</p> <p>(b) Lands below the Urban Development Line shall be protected from urban development.</p> <p>(c) A minimum setback of 10 m, or the setback recommendations of the geotechnical and slope stability analysis - whichever is greater - shall be provided between the top-of-bank and the Urban Development Line. This area shall provide for public access circulation, and civic purposes including geotechnical monitoring and repair, fire fighting, emergency and public safety, drainage control, and dealing with private property encroachment issues.</p> <p>(d) A restrictive covenant shall be registered on all properties abutting the Urban Development Line.</p>	<p>(a) Geotechnical reports and slope stability analysis have been submitted for the NSP plan area demarcating the Urban Development Line.</p> <p>Additional study may be required at the subdivision stage of development. The recommendations and requirements of these reports as well as current City of Edmonton policy shall be considered prior to rezoning and subdivision approval.</p> <p>(b) Lands that meet the criteria for Environmental Reserve (ER) under Section 664(1) of the MGA shall be dedicated to the City of Edmonton at the time of subdivision.</p> <p>(c) The Urban Development Line shall be demarcated at time of subdivision.</p> <p>(d) The Subdivision Authority shall ensure all subdivisions abutting the Urban Development Line provide restrictive covenants.</p>

Rationale:

The North Saskatchewan River Valley comprises an important ecological system within the Keswick NSP and the Windermere ASP. The River Valley shall be protected and preserved as per the MGA, MDP, Top of Bank Policy C542, other strategic policies and guidelines.

The top of bank (TOB) and Urban Development Line (UDL) have been established through site visits with participating landowners and city staff, pursuant to geo-technical and slope-stability analysis, and the requirements of Policy C542. A determination of TOB and UDL for non-participating landowners will be required prior to rezoning and subdivision.

A minimum 10 m Public Upland Area has been provided in all instances along the entire length of the TOB, between the TOB and UDL, except where a greater setback is warranted based upon geotechnical considerations. Lands deemed to be designated as Environmental Reserve shall be determined at the time of subdivision.

A TOB Walkway along the entire length of the UDL, within the Public Upland Area, will maximize access for local residents and the general public to a continuous circulation system abutting the River Valley and Ravine System. This access is provided for circulation and amenity purposes, connection to the park system within the River Valley and Ravine System, slope repair and geotechnical monitoring, fire fighting, emergency and public safety, drainage control and for dealing with encroachment issues.

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

Objective (10) Strengthen Edmonton's ecological network.

NSP Policy	Implementation
(a) The Keswick NSP is designed to integrate and link land use components (e.g. North Saskatchewan River Valley, SWMF, parks) to provide habitat and encourage ecological connectivity.	(a) Figure 7.0 - Land Use Concept guides the development of the NSP.
(b) Plantings of native species should be utilized to add to the habitat value of the green network within the neighbourhood.	(b) Relevant City of Edmonton conservation planning and policy shall be adhered to (e.g. Policy C531).
(c) Development of land abutting the North Saskatchewan River Valley shall be done in such a manner as to maintain ecological integrity.	(c) 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 Keswick NSP area is 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 and include the North Saskatchewan River Valley to the west and the SW2 Natural Area to the south. Aside from developing a new network, little can be done to restore connectivity. For this reason, a detailed Ecological Network Report has not been prepared for the NSP area.

Developing a new network is a preferable approach to create connectivity 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, numerous stormwater management facilities, parks and open spaces, and potential wildlife crossings. Due to the limited wildlife usage of the area, these crossings should be designed to facilitate the movement of small mammals and amphibians.

Technical Summary

A reduced scope Phase I Ecological Network Report (ENR) was submitted to identify and provide an assessment of the existing regional ecological network and to provide recommendations on how to conserve or protect any remaining integral natural areas.

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 has been evaluated. The City requires that Phase I Environmental Site Assessments (ESA) be submitted, reviewed, and endorsed prior to the rezoning stage of development. The following objectives are established to contribute to the plan goal of providing a safe environment for residents and to achieve the goals of higher order city policies.

Objective (11) Ensure the environmental status of lands in the Keswick NSP are suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.

NSP Policy	Implementation
<p>(a) Determine the likelihood, types, and location of environmental concerns which may be present on the lands prior to rezoning.</p> <p>(b) Phase I ESA reports older than 1 year from the date of rezoning application shall be updated, and any Phase I report older than 5 years from the date of rezoning application shall be redone.</p> <p>(c) Where necessary, contaminated material shall be removed and disposed of in an environmentally sensitive manner, in accordance with Federal, Provincial, and Municipal regulations.</p>	<p>(a)(b) Environmental Site Assessments will be submitted and any follow-up will receive sign-off by the City administration prior to the rezoning stage of development.</p> <p>(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 the City administration prior to the rezoning of the subject lands.</p>

Rationale: Lands within the Keswick 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) Minimize Oil and Gas well sites' potential environmental hazards and disruption of future residential areas through careful neighbourhood design and adhering to all relevant requirements of the ERCB and the City of Edmonton and ensure urban development around abandoned well-sites adheres to the requirements of the ERCB, City of Edmonton Policy C515 –Oil and Gas Facilities, Abandoned Well Sites and "Policy Guidelines for the Integration of Resource Operations and Urban Development" (1985).

NSP Policy	Implementation
Urban Development and Existing Facilities	
<p>(a) Urban development will maintain the minimum ERCB setback from active and suspended wells. This setback will be applied from the property line of the proposed development to the well-head.</p> <p>(b) Where development occurs in proximity to operating oil and gas facilities, subdivision design will accommodate the continued transport and maintenance needs of the oil and gas company while minimizing the impact on adjacent development. This will include the provision for temporary emergency access, while oil and gas wells are still operating within the neighbourhood.</p>	<p>Figure 5.0 - Site Features illustrates the approximate locations of existing facilities, which will be confirmed prior to subdivision and rezoning approval.</p>

(c) A more detailed risk assessment or an Environmental Impact Assessment (EIA) shall be required where urban development activities are proposed within twice the setback distance from an existing facility. This assessment will be used by the City of Edmonton to determine whether or not the development should submit to a greater setback distance, and if additional mitigation measures should be integrated in the development.

(d) Notwithstanding the results of an EIA or risk assessment, berming and landscaping of the active well site shall be required as a condition of subdivision.

Abandoned Well Sites

(a) Where development is proposed around an abandoned well site, a 10m x 15m work area shall be provided around the well, and an 8m access corridor shall be provided for service vehicles. A minimum 5m setback is required from the abandoned well head to the edge of the work area.

(b) Abandoned well areas should only assume land uses that will allow for immediate maintenance should the well ever require servicing. Parks or roadways (i.e. more open areas) are preferred designations that allow for the maximum movement of repair equipment on the abandoned well site.

(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.

(a) Setback requirements will be confirmed at time of subdivision approval.

(b) **Figure 5.0 – Site Features** illustrates the location of abandoned well sites. **Figure 7.0 – Land Use Concept** illustrates land designations. Consideration for appropriate land uses will be determined at time of rezoning.

(c) Appropriate temporary identification markers shall be placed on site prior to rezoning approval.

Pipeline Right-of-Ways

Integrate existing and future transportation, utility and pipeline corridors into the NSP to make use of potential multi-use corridors and pedestrian linkages while having regard for the safe, ongoing operation of these facilities.

Figure 5.0 - Site Features illustrates the location of existing right-of-ways. A shared-use path shall be provided along the existing pipeline right-of-way in the northwest of the plan area as illustrated in **Figure 7.0 – Land Use Concept**.

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 document entitled "Policy Guidelines for the Integration of Resource Operations and Urban Development" (1985) and Policy C515 "Oil and Gas Facilities" (2007) and other relevant 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 prior to any rezoning of the parcel where the facility is located.

Technical Summary

Phase I ESAs have been approved by the City of Edmonton confirming the majority of the Plan area is free of contamination and therefore suitable for residential and other development (see **Table 2: Phase I – Environmental Site Assessment Overview** and **Figure 6.0 – Environmental Site Assessment Overview**). Follow-up items identified within the respective ESA shall be addressed prior to the rezoning of the subject areas, as per the implementation strategy. The NSP contains eight well sites, one of which is listed as active. The appropriate reclamation and remediation procedures shall be strictly adhered to when these locations are developed.

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 (13) Identify and protect items with historical significance, such as buildings and areas of cultural significance, in the Keswick NSP.

NSP Policy	Implementation
Past and current activities within the Keswick NSP shall be reviewed to identify items of historical significance.	<p>Table 3 – Historical Resources Overview, confirms that Historical Resource Overview (HRO) studies for eleven (11) of the fifteen (15) parcels within the plan area have been approved by Alberta Culture and Community Spirit (ACCS).</p> <p>Historical Resources Impact Assessments (HRIA) have been approved for four (4) parcels, while another four (4) parcels have been identified as requiring report submission to ACCS prior to rezoning and development.</p> <p>Those lands which have not received clearance on HRO studies will be required to submit and receive sign off prior to rezoning.</p>

Rationale: According to ACCS, there is high archaeological potential for encountering historical resources or structures within the lands located in the western portion of the Keswick neighbourhood, as outlined on **Table 3 – Historical Resources Overview**. Prior to the initiation of any land surface disturbance activities, HRIA reports must be submitted and approved by ACCS for the four parcels identified.

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

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Historical Resource Overviews have been approved by ACCS for eleven (11) of the fifteen (15) parcels within the plan area, while Historical Resources Impact Assessments have been approved for four (4) of eight (8) parcels identified as requiring additional investigation.

3.2.6 Residential

Approximately 193 hectares (ha) of the plan area is designated for residential land uses.

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Approximately 165.7 ha of the plan area is designated as single detached or semi-detached housing at densities of up to 25 units per hectare. Residential uses anticipated would be consistent with the RSL, RPL, RF4, or RMD zoning designation under the Zoning Bylaw. The NSP shall allow for more innovative forms of single detached residential housing through the use of a Direct Development Control Provision under the Zoning Bylaw.

Approximately 11.4 ha of the plan area is designated as Rowhousing, which will be developed with alley access, at a maximum height of 2 ½ storeys and densities of up to 45 units per hectare. Residential uses anticipated would be consistent with the RF5 zoning designation under the Zoning Bylaw.

Approximately 13.9 ha of the plan area is designed for low-rise/multi-/medium rise residential sites, which will typically be developed between 2 1/2 storeys to 4 storeys in height and densities ranging from 45 units per ha to 125 units per ha. Residential uses anticipated would be stacked rowhouse or low rise apartments consistent with the RF6 or RA7 zoning designation under the Zoning Bylaw. The NSP shall allow for more innovative forms of stacked row housing through the use of a Direct Development Control Provision designation under the Zoning Bylaw.

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Approximately 1.4 ha of the plan area is designed for High Rise Unit Residential, which is intended to allow for the development of higher density uses to a maximum of 15 storeys, at densities typically ranging from 224 units per ha to 325 units per ha. Residential uses anticipated would be consistent with the RA8 or RA9 zoning designations under the Zoning Bylaw.

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Objective (14) Plan for a variety of residential housing types in different built forms, for a range of household types, income levels and ages.

NSP Policy	Implementation
<i>A mixture of dwelling types shall be provided including: single or semi-detached, rowhouse, stacked rowhouse, and low rise and medium/high rise multi-unit residential.</i>	<p>Figure 7.0 – Land Use Concept illustrates the general location of residential land use designations.</p> <p>The City of Edmonton Zoning Bylaw provides for a range of densities and housing forms that will be applied at the rezoning stage (e.g. RSL, RPL, RF4, RF5, RF6, RA7, RA8 or RA9).</p> <p><i>Innovative forms of single detached residential and stacked rowhousing development shall be implemented through the creation of Direct Development Control Provisions under the</i></p>

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	<i>Zoning Bylaw (ie. regulations accommodating shallow and wide lots).</i>
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Rationale: Providing a variety of housing types promotes the creation of a well-balanced neighbourhood, one which can accommodate a range of income groups and market segments, various types and sizes of families and also allows families to remain within the same community throughout their life-cycle. *Designated residential areas include single/semi-detached housing, rowhousing, stacked rowhouse, and low rise and medium/high rise unit residential developments.*

Rowhousing will be developed primarily along collector roadways to provide active and inviting streetscapes with buildings typically featuring doorways, porches and windows at ground level and smaller front yard setbacks to engage the pedestrian and support natural surveillance of the street. Standard zones within the Zoning Bylaw will be applied to facilitate the developments. Providing a range of housing forms discourages monotonous streetscapes by allowing mixing of compatible housing forms to create interest, variety and market appeal. Vehicular access to all street-oriented uses shall be from an alley which will minimize vehicular conflicts along busier roadways. Densities will vary dependant on the housing form, but should generally not exceed 45 units per hectare.

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Objective (15) 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.

NSP Policy	Implementation
(a) The Keswick NSP shall meet or exceed the approved Suburban Housing Mix Ratio for new neighbourhoods.	(a) <i>Figure 7.0 – Land Use Concept</i> and <i>Table 5 – Land Use Concept and Population Statistics</i> - will guide intensified suburban development which shall be implemented through Sections 100 and 200 of the Edmonton Zoning Bylaw.
(b) The Keswick NSP shall meet or exceed the approved density target as set out by the Capital Region Growth Plan.	(b) <i>The Keswick NSP neighbourhood density is approximately 32 units per net residential hectare.</i>

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Rationale:

The Keswick NSP exceeds this ratio in support of suburban intensification strategies by proposing a mix of 66% low density residential and 34% medium density residential.

The Keswick NSP exceeds this ratio in support of suburban intensification strategies by proposing a Mix of 67% low density residential and 33% medium/high density residential. In keeping with more recent policy, this plan seeks to provide a choice of housing forms within the neighbourhood, and to generally make more efficient use of new suburban land. These densities will support public transit, use infrastructure more effectively, provide a user base for community facilities, and encourage greater social mix.

The Keswick 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 Keswick NSP exceeds this target.

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Objective (16) Establish affordable housing in the Keswick NSP.

NSP Policy	Implementation
(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.	(b) <i>Figure 7.0 – Land Use Concept</i> indicates the location of various residential land uses.
(c) Opportunities such as secondary suites, garage suites or garden suites should be encouraged among builders;	(c) Secondary suites, garage suites or garden suites shall be implemented through Section 100 and 200 of the Edmonton Zoning Bylaw.

Rationale: Secondary suites can 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 (17) Provide a transition between residential uses of significantly different densities.

NSP Policy	Implementation
Encourage appropriate transitions between low rise or medium/high rise unit developments and single or semi-detached housing.	<i>Figure 7.0 – Land Use Concept</i> illustrates the general location of land uses.
Rationale: Provision of semi-detached housing or rowhousing as a transitional land use will serve to moderate the use differences between single detached and higher density developments such as low rise or medium/high rise multi-unit apartments or commercial development.	

Objective (18) *Locate high rise unit residential development to facilitate access to arterial and/or collector roadways, commercial uses and public transit service.*

NSP Policy	Implementation
<p>(a) Low rise/multi-/medium unit and low rise/multi-/medium unit to high rise unit residential developments shall be located in proximity to or abutting collector or arterial roadways, and within walking distance of transit routes.</p> <p>(b) <i>High rise residential development shall be located in proximity to the community commercial site, shall not exceed a total area of 1.4 ha and shall be designed with careful attention to land use transitioning, landscaping, and building setbacks.</i></p> <p>(c) High rise apartments shall not be sited adjacent to the North Saskatchewan River Valley.</p>	<p>a) <i>Figure 7.0 - Land Use Concept conceptually illustrates the location of residential low rise/multi-/medium unit and high rise unit uses abutting arterial or collector roadways (to maximize access to transit), near commercial uses and school/park sites.</i></p> <p>(b) <i>The Subdivision Authority shall ensure that residential high rise unit uses do not exceed a total site area of 1.4 ha and are located generally within the area illustrated on Figure 7.0 - Land Use Concept.</i></p> <p><i>The Development Officer should have regard for the placement of residential high rise unit uses relative to community commercial uses, building setbacks to boundary streets and adjacent low and medium density residential land uses, land use transitioning, massing and landscaping.</i></p> <p><i>Innovative solutions to the provision of parking, such as shared parking areas, shall be explored at the time of subdivision of the high rise units site and/or community commercial site, in the north east corner of the neighbourhood.</i></p> <p>(c) Section 5.6.2 of the Windermere ASP prohibits high rise apartments adjacent to the North Saskatchewan River Valley.</p>

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Rationale: *Location of residential high rise unit development along transit routes and within walking distance of commercial uses, near community focal points and open spaces, creates a more compact, walkable, attractive and liveable neighbourhood.*

Technical Summary

No specific technical requirements were further identified.

3.2.7 Commercial

The Keswick NSP, includes two community commercial sites and one neighbourhood convenience commercial site which are envisioned to be destination points within the NSP, with an approximate total area of 10.44 ha.

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Objective (19) Provide community commercial and neighbourhood convenience commercial shopping nodes to meet the large and small scale needs of residents and provide local employment opportunities within the neighbourhood.

NSP Policy	Implementation
Community and Neighbourhood Convenience Commercial development opportunities shall be provided to serve the large and small scale needs of residents located within the Keswick NSP area and beyond.	Figure 7.0 – Land Use Concept illustrates the location and general configuration of commercial areas, which will be confirmed prior to rezoning approval.

Rationale: *The Keswick NSP identifies two community commercial sites and 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

The first community commercial site, approximately 6.32 ha in area, is adjacent to 25 Avenue S.W. and 170 Street S.W., within the south-eastern portion of the neighbourhood. The parcel size and configuration can accommodate a range of commercial uses under the (CSC) Shopping Centre Zone of the Zoning Bylaw.

The second community commercial site, approximately 3.13 ha in area, is adjacent to Hiller Road S.W. and west of 170 Street S.W., providing a destination point for the adjacent low rise multi-unit and high rise multi-unit residential uses and the overall neighbourhood. The site location provides all-directional access opportunity from the collector road on the western frontage and limited access (right-in/right-out) opportunity from Hiller Road, subject to the design of 170 Street S.W. and the review and approval of Transportation Services. The parcel size and configuration can accommodate a range of commercial uses under the (CSC) Shopping Centre Zone of the Zoning Bylaw.

Neighbourhood Commercial

The neighbourhood convenience commercial site is adjacent to 25 Avenue S.W. and 182 Street S.W., providing a destination point for the adjacent low rise multi-unit residential uses and southern and western areas of the neighbourhood."

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Objective (20) Locate and orient commercial sites along arterial or collector roadways to ensure high visibility and convenient access opportunities.

NSP Policy	Implementation
Commercial sites shall be placed along arterial and/or collector roadways, transit routes and along pedestrian corridors to ensure high visibility and accessibility.	Figure 7.0 – Land Use Concept illustrates the location and conceptual configuration of commercial areas, which will be confirmed prior to rezoning approval.

Rationale: Prominent frontage from the collector and arterial roadways are important components influencing the location of commercial sites.

Objective (21) Provide convenient pedestrian access to all commercial development so that residents have opportunity to walk to commercial services.

NSP Policy	Implementation
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 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 shall minimize potential conflicts with vehicles.

Objective (22) Minimize the impact of commercial development on adjacent land uses.

NSP Policy	Implementation
(a) Activity areas associated with commercial development should be oriented towards the abutting arterial/collector roadways.	(a) The Development Officer should have regard for building placement and activity areas in assessing and conditioning development applications for commercial development under the applicable zone.
(b) Consideration should be given for the separation distance between residential development and abutting commercial development.	(b) The Subdivision Authority should ensure that appropriate transitional elements (i.e. landscaping, setbacks, lot orientation etc) are implemented so that residential uses are separated from commercial development.

Rationale: Impacts associated with commercial development should be minimized and carefully integrated with surrounding residential development through attention to site design (building placement, access locations), pedestrian connectivity, and appropriate transitioning.

Technical Summary

No specific technical requirements were further identified.

3.2.8 Mixed Use Institutional / Residential

The NSP designates approximately 2.63 ha for Institutional / Residential uses, located along the southern boundary, adjacent to 28 Avenue N.W., in the south central portion of the plan. The designation will guide development of Institutional (i.e. religious assembly) uses along with Low Rise Multi-Unit residential uses associated with this type of facility. The designation will help promote a vibrant, healthy, and life-long residence within the neighbourhood and will also allow for the development of other ancillary facilities and services that support the primary Institutional land use. The potential uses include:

- Assisted Living Facility
- Hospice Facility
- Child / Adult Day Care Facility
- Private Education
- Religious Assembly
- Stacked Rowhouses
- Low Rise apartment
- Cluster Rowhouses

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Objective (23) Allow for the future development of institutional and related uses, including the opportunity for housing.

NSP Policy	Implementation
Allow for institutional uses, ancillary facility and service use and residential uses.	<p>Figure 7.0 – Land Use Concept illustrates the location of Mixed-Use Institutional / Residential in the plan area.</p> <p>Specific uses will be confirmed prior to rezoning approval. Implementation of development objectives may require the provision of a Direct Control district.</p>

Rationale: The location adjacent to 28 Avenue N.W. and two collector roadways encourages appropriate traffic dispersion and land use transition. In addition, consideration for residential uses such as cluster rowhouse, stacked rowhouse or low rise apartment would further provide the flexibility to pursue numerous development opportunities. The development of this use may require implementation of specific development objectives through the creation of a Direct Control Provision to determine guidelines such as building height and density, site planning and design, built form, vehicular and pedestrian circulation and landscaping.

The location adjacent to 184 Street S.W. and two collector roadways encourages appropriate traffic dispersion and land use transition. During the subdivision or development permit stage, the lands should be developed with full urban services.

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Technical Summary

No specific technical requirements were further identified.

(Deleted Section).

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3.2.9 Parks and Open Spaces

Approximately 18.7 ha of the plan area are designated for school, parks and open space, and greenways. The NSP provides for two School/Park sites and a network of well distributed Pocket Parks. The open spaces are linked together through a significant Greenway network which ultimately connects to the North Saskatchewan River Valley.

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Objective (25) Accommodate the requirements of the City for school / park sites within the neighbourhood .

NSP Policy	Implementation
(a) The NSP shall follow the guidelines for the hierarchy and distribution of park spaces as prescribed within the Urban Parks Management Plan (UPMP).	(a) The parks and open spaces identified in Figure 7.0 – Land Use Concept will be dedicated to the City of Edmonton through Municipal Reserve (MR) at the time of subdivision.
(b) A linear greenway system shall be provided through the central area of the plan.	(b) The east-west linear greenway shall be dedicated as circulation at time of subdivision. The northwest greenway connecting the pocket park and stormwater management facility shall not accommodate utility functions and shall be credited as Municipal Reserve, up to a maximum of 0.5% of the gross developable area of the Keswick NSP, at the time of subdivision.
(c) The Keswick NSP shall provide Municipal Reserve as a combination of land, cash-in-lieu of land or a combination thereof of up to 10% of the gross developable area.	(c) The Subdivision Authority will determine the Municipal Reserve owing for the Keswick NSP, which shall be dedicated in full as land, money-in-lieu, or an acceptable combination thereof, at the time of subdivision.

Rationale: The Keswick NSP provides a range of parks and open spaces for residents in order to meet their passive and active recreational needs. *A total of six (6) pocket parks are located throughout the NSP area, ranging in size from 0.05 ha to 2.28 ha in size and comprising a total of approximately 4.61 ha.* All parks have been configured to provide resident's opportunities for active and passive recreation and have been located such that the majority of residential areas are within the plan are within 500 m of a park space.

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Pocket Parks

Pocket parks provide opportunities for passive recreation space for residential uses at the local level. A total of six (6) pocket parks are located throughout the NSP area, ranging in size from 0.05 ha to 2.28 ha in size and comprising a total of approximately 4.3 ha. All parks are located with frontage along either local or collector roadways and serve various residential sub-areas to provide everyday opportunities for recreation. Two (2) pocket parks are located directly abutting the SWMFs in the north-western part of the plan and serve to enhance the aesthetic and pedestrian experience of these facilities. Design considerations at time of development will ensure that underground utilities which serve public utility functions (e.g. drainage to SWMFs) are not located within the park area.

A third park, approximately 2.28 ha in size, is located west of 182 Street S.W. in the west-central portion of the plan area. This park is large enough to accommodate either passive or active recreation uses and is directly connected to the central linear east-west greenway corridor, facilitating access to the River Valley to the west and the School/park to the east. A fourth park space, approximately 0.5 ha in size, is located south-centrally and is adjacent to a collector road and in proximity to 28 Avenue N.W. This park serves the higher density residential areas and mixed residential/institutional uses and is large enough to accommodate either passive or recreation uses.

The remaining 2 park sites are located abutting the Urban Development Line along the North Saskatchewan River Valley and Ravine System and form part of the overall 30% dedication of top-of-bank roadway/park as per Policy C542. The fifth park site, approximately 0.38 ha in size, is located abutting the top-of-bank in the south-west corner of the plan area and is intended to act as an entry point or a "staging area" for residents to access the River Valley directly from the neighbourhood. Provisions for parking on or adjacent to this park will be determined at time of development by Asset Management and Public Works – Parks. The sixth park site, 0.05 ha in size and abutting the Urban Development Line, is located west-centrally to act as an additional entry point to the top-of-bank walkway system and provides for a continuous pedestrian connection from the adjacent SWMF to the east. These 2 parks are directly accessible by vehicular or pedestrian traffic and afford vistas and visual connections to the river valley.

(Deleted Paragraph.)

School/Park

Two school sites are provided within the neighbourhood. The first school site, approximately 8.0 ha in size, is located in the central portion of the neighbourhood and is adjacent to the proposed 182 Street S.W. collector. This location is intended to accommodate a future Elementary/Junior High School and is designated within the Windermere ASP as a Community Knowledge Campus (CKC) site. The second school site, approximately 6.02 ha in size, is located towards the eastern boundary of the neighbourhood and is adjacent to a collector roadway and has direct access to 170 Street S.W. This location is intended to accommodate a future Elementary/Junior High School. The development (timing) of these schools is dependent upon available funding and need (i.e. a threshold of school aged population being present in the neighbourhood). The school sites are accessible to vehicular, transit or pedestrian traffic from most parts of the neighbourhood.

Greenway

The greenway corridor system provides a linear, multi-modal connection from the (east) Urban Village Park to the (west) top-of-bank. Further discussion on the greenway is provided in Section 3.2.11 Transportation.

Municipal Reserve

Overall, land provided for municipal reserve dedication for the Keswick NSP is approximately 6.1%. The remaining Municipal Reserve needed to achieve the 10% requirement will be provided as cash-in-lieu of reserves during subsequent subdivisions, to the satisfaction of the Subdivision Authority and the City of Edmonton.

Objective (26) Provide school / parks and open spaces along arterials, collector or local roadways and ensure accessibility via pedestrian linkages, automobiles and transit.

NSP Policy	Implementation
(a) Park spaces shall 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 Urban Parks	(a) The Subdivision Authority shall have regard for the subdivision design to ensure adequate public roadway frontage on all parks illustrated in Figure 7.0 – Land Use Concept . (b) Design and development of future parks and

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Management Plan (UPMP).

(b) Park space shall be designed to accommodate active and passive recreation activities for different age groups.

(c) *Traffic patterns along collectors through the plan area shall be monitored as development occurs.*

With the exception of park areas adjacent to the Urban Development Line where grade changes and topography may pose design difficulties, all park space within the neighbourhood should be universally accessible.

open spaces will consider programming needs of the community and be implemented based on requirements of the Parks Branch of the Department of Asset Management and Public Works.

(c) The Transportation Impact Assessment (TIA) approved for the area accounts for a unique design along 182 Street, including the stretch of roadway frontage along the public school site. The applicant(s) will work with the City and School Boards to determine pre-design of any traffic calming measures and off-site drop off areas to resolve any transportation safety concerns, prior to subdivision. The safety measures will be further explored and implemented during the subdivision stage.

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Rationale: All parks are located adjacent to roadways, and are connected through a network of shared-use paths, walkways and sidewalks to ensure that they are accessible and dispersed with the residential uses in the plan area. *The original school site has been relocated and reconfigured to integrate with the revised transportation and circulation network and has been located along proposed 182 Street collector roadway to allow for ease of access. The size of this school site has also been reduced to allow for a redistribution of municipal reserve to create the additional school site. The Public elementary/junior high has a requirement of 6.48 hectares according to the UPMP. The size of the reconfigured site is approximately 8 hectares and is regular in form (as opposed to the approved site), allowing for more efficient development of the site. The proposed site will therefore comfortably allow for accommodation of the school whilst providing an additional 1.52 hectares for community park uses. The two school sites will act as neighbourhood destination points for recreational use and community activities. Both sites are located on collector roads and are connected by a dedicated greenway for pedestrian and bicycle travel through the centre of the neighbourhood and extending to the river valley. Student drop-off shall be reviewed at time of subdivision of the school and considered during site design. Where possible, the number of local street intersections shall be minimized across from the school sites.*

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Objective (27) Design a connected and integrated open space system that encourages all modes of movement (e.g. pedestrians, bicycles, wheelchairs, rollerblades, etc).

NSP Policy	Implementation
The NSP shall incorporate an array of pedestrian linkages along sidewalks, walkways and shared-use path corridors that connect all park spaces, stormwater management facilities, the North Saskatchewan River Valley and Ravine System and various other focal points.	Figure 7.0 – Land Use Concept and Figure 9.0 – Pedestrian Network conceptually guide the location of neighbourhood parks, open spaces, pedestrian connections and stormwater management facilities which will connect residents to the focal points.

Rationale: The plan provides a well-connected and integrated network which accommodates multiple modes of transportation, with a focus on pedestrians and bicycles. **Figure 9.0 - Pedestrian Network** highlights this network of shared-use paths, walkways and minor pedestrian linkages, which are intended to provide a high degree of

connectivity within the plan.

The two arterial roadways (Hiller Road and 28 Avenue S.W.) and a collector road (182 Street S.W.) in Keswick will include shared use path on one side with a sidewalk on the opposite side. Opportunities for cyclists will be provided along these streets to provide inter-neighbourhood connectivity. The linear greenway corridors within the plan area will also provide connection opportunities to the two schools/parks, central stormwater management facilities, a number 6/25 of the pocket parks and ultimately the Public Upland Area along the North Saskatchewan River Valley. Designated bicycle routes may be identified using appropriate signage and markings in order to minimize potential conflicts between vehicles, cyclists and pedestrians.

Having a connected and integrated open space system allows residents the opportunity to choose alternative modes of transportation than the single occupancy vehicle.

Objective (28) Ensure the North Saskatchewan River Valley is physically accessible to all people through best practices in universal design.

NSP Policy	Implementation
(a) Pedestrian trails will connect from Keswick to the river valley.	(a) Figure 9.0 – Pedestrian Network conceptually illustrates the location of a future trailhead connection from the park located in the southwest corner of the NSP.
(b) Pedestrian access to a potential North Saskatchewan River pedestrian crossing bridge should be provided along Ellerslie Road in the northwest portion of the plan.	(b) Figure 9.0 – Pedestrian Network conceptually illustrates the location of a potential pedestrian river crossing bridge at the westerly termination of the Ellerslie Road right-of-way.

Rationale: The plan follows the recommendations of the “A Plan of Action for the Capital Region River Valley Park” report (CRRVP) which identifies a secondary trail access point in the southwestern portion of the plan area. The Keswick NSP designates a park space at the head of the ravine, which would provide for perimeter parking and a staging area. The intent of the CRRVP is to retain and manage existing trails in their natural state to allow for nature appreciation and low-impact outdoor trail activities, provide recreational opportunities (e.g. walking, hiking, low-impact cycling, etc) while preserving the natural setting of the area.

The adventure trail would provide a challenging hiking opportunity in natural surroundings, with end points at Devon and Terwillegar Park, the trail would connect important sites including the West Ridge Flats, Edmonton West Natural Area and the Big Island River campsite.

The CRRVP also identifies a potential pedestrian bridge crossing location at the westerly termination of the existing Ellerslie Road right-of-way, northwest of the NSP area. This bridge would provide a linkage to the west side of the North Saskatchewan River, into the West Natural Area.

The City of Edmonton and the Capital Region River Valley Alliance shall continue working towards their vision of linking the entire river valley into a single regional metropolitan park, from Devon to Fort Saskatchewan.

Technical Summary

A Parkland Impact Assessment (PIA) has been completed outlining the Keswick NSP's compliance to the Urban Parks Management Plan (UPMP) vision and guidelines.

3.2.10 Transportation

The transportation goal of the Keswick Plan is to establish a neighbourhood that provides a transportation system that is well connected within and outside the plan area and maximizes access for a variety of travel modes to the greatest number of residents. This goal is conceptually illustrated in **Figure 8.0 – Transportation Network** and **Figure 9.0 – Pedestrian Network** which identify the roadway network and alternative system that accommodates the movement of automobiles, transit, bicycles and pedestrians within the neighbourhood and the connections to adjacent communities.

Objective (29) 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.

NSP Policy	Implementation
<p>NOTE: Sections (a) and (b) were amended by Bylaw 16076, April 30, 2012</p> <p>(a) 170 Street S.W. is a highway connector and will be designed as a urban freeway with direct access from Keswick at interchanges identified at Hiller Road S.W., 19 Avenue S.W. and 28 Avenue S.W.</p> <p>(b) A frontage road parallel to 170 Street S.W. will provide for access into the south-eastern part of the plan.</p> <p>(c) The 170 Street Conceptual Planning Study shall guide development of land within the “Area of Influence”.</p>	<p>NOTE: Section (a) was amended by Bylaw 16076, April 30, 2012</p> <p>(a) Figure 8.0 – Transportation Network conceptually illustrates the interchange locations and access from the frontage road to 170 Street S.W.</p> <p>(b) Final location and access to the frontage road will be determined prior to subdivision approval and development.</p> <p>NOTE: Section (c) was amended by Bylaw 16076, April 30, 2012</p> <p>(c) The “Area of Influence” is identified on Figure 8.0 – Transportation Network. Subdivision of lands within this area shall conform to the 170 Street Conceptual Planning Study.</p>

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NOTE: The following section was amended by Bylaw 16076, April 30, 2012

Rationale: 170 Street S.W. is a highway connector and has been designated as an urban freeway, with grade-separated interchanges at Hiller Road and 25 Avenue S.W. A frontage road along the west side of 170 Street S.W. will provide a direct connection between Hiller Road to 25 Avenue S.W. and will provide access to the collector roadway in the south-eastern part of the plan area.

The 170 Street S.W. Conceptual Planning Study was approved in May 2011, and ensures that the appropriate right of way is protected for the long term to facilitate continued and coordinated development in the Windermere area. The “Area of Influence” identifies the lands adjacent to the 170 Street S.W. corridor and future interchanges where the Concept Plan will guide development.

Objective (30) Locate arterial and collector roadways to move vehicular traffic efficiently through the neighbourhood and minimize internal roadway congestion.

NSP Policy	Implementation
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NOTE: Section (a) was amended by Bylaw 16076, April 30, 2012

(a) No front drive access will be permitted to lower density residential uses along 170 Street S.W., Hiller Road, 25 Avenue S.W. or directly across from the school/park site.

Access for higher density residential uses will be reviewed on a site by site basis.

(b) Provide a Traffic Monitoring Plan to assist in the timely delivery of interchanges along 170 Street SW as they are required.

NOTE: Section (a) was amended by Bylaw 16076, April 30, 2012

(a) Zoning and subdivision approval will ensure lower density residential uses do not access directly to 170 Street S.W., Hiller Road, 25 Avenue S.W. or directly across from the school, and will consider access locations for higher density uses.

(b) Traffic growth and development patterns in the Windermere ASP area will be monitored on a yearly basis by the Windermere Area Landowners in conjunction with the City of Edmonton.

(c) Final location and design for the shared right-in/right-out site access for the Community Commercial and High Rise Units along Hiller Road S.W. will be determined prior to subdivision approval and development. Cross-lot access easements for a second access for the high rise unit site, through the Community Commercial site will be required to provide access to collector road to the west.

Bylaw
17405
October
19,
2015

Rationale: The arterial and collector transportation network has been designed to meet the internal and external traffic flow requirements generated by the neighbourhood in accordance with City of Edmonton's guidelines and standards. A hierarchy of arterial, collector and local roadways are intended to facilitate the efficient movement of vehicular traffic (see **Figure 8.0 - Transportation Network**).

Arterial Roadways

NOTE: The following paragraph was amended by Bylaw 16076, April 30, 2012

Arterial roadways in the neighbourhood include 170 S.W., Hiller Road and 25 Avenue S.W. The Keswick NSP will benefit from a high level accessibility to the greater Edmonton area, the City of Edmonton, and the County of Leduc. The 41 Avenue S.W. corridor (1.6 Km south of 25 Avenue S.W.) 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 required for access to a catchment area. The configuration (number of lanes) and other specific criteria (e.g. channelization) required for access to the NSP are defined in detail by the associated Transportation Impact Assessment. A roadway staging plan will be prepared as part of the review and approval process to service lands in this area of southwest Edmonton.

Collector Roadways

Collector roadways are intended to accommodate traffic and parking, provide internal and external accesses and are spaced to facilitate traffic progression from the neighbourhood to the arterial roads. The collector roadway network provides efficient and convenient access to residential areas, prevents cut-through traffic in the

neighbourhood, and enhances overall safety. This serves to further reinforce a local 'sense of place' among residential sub-areas and reduce traffic volume and speeds.

Traffic Monitoring

The Windermere Area Landowners 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 Windermere Area Landowners 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 construction to be included in the City's Capital Priority Plan for Council's consideration.

Traffic flow information generated from the completion of this assignment could also be used by the City in calibrating the City's traffic model.

Objective (31) Provide strong connections with surrounding communities.

NSP Policy	Implementation
<p>(a) The NSP shall establish strong connections with the adjacent neighbourhoods through the use of arterial and collector roadways and sidewalks and shared-use paths.</p> <p><i>(b) Shared-use paths shall be provided along the arterial roadways. A shared-use path will also be provided along 182 Street S.W</i></p>	<p>(a) Figure 7.0 - Land Use Concept, Figure 8.0 – Transportation Concept and Figure 9.0 - Pedestrian Network illustrate the street pattern and connections with surrounding neighbourhoods.</p> <p><i>(b) The location and design of shared-use paths along arterial roadways and 182 Street S.W. shall be reviewed by the Transportation Services at the subdivision design stage.</i></p>

Bylaw
17195
May
11,
2015

Bylaw
16076,
April
30,
2012

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 for movement that links destinations within and outside of the neighbourhood, provides accesses and is integrated with the environment.

Objective (32) Integrate land use and circulation patterns considering safety of pedestrians and cyclists.

NSP Policy	Implementation
Ensure pedestrian crossings are safe, convenient and developed at visible locations.	<i>Figure 9.0 - Pedestrian Network illustrates the location of a mid-block crossing across the proposed 182 Street S.W. The location and design of this pedestrian crossing at proposed 182 Street S.W. shall be identified at the subdivision approval and/or development permit stages and confirmed by Transportation Services at the roadway design stage.</i>
Rationale: <i>(Deleted paragraph.)</i> <i>A single key pedestrian crossing location has been identified along proposed 182 Street S.W. at the central east-west greenway. Further details regarding pedestrian crossings to enhance pedestrian safety across the roadway will be determined at the subdivision approval stage and roadway design stage.</i>	

Bylaw
17195
May 11,
2015

Bylaw
16076,
April 30,
2012

Bylaw
17195
May 11,
2015

Objective (33) Maximize access to transit for the greatest number of residents in accordance with City of Edmonton Transit System Guidelines and demands.	
NSP Policy	Implementation
<p>(a) The design of the arterial and collector roadway system should maximize access to transit for the greatest number of residents.</p> <p>(b) Subdivision design shall maximize access to transit for the greatest number of residents.</p> <p>(c) Higher density residential uses should be located within 400m of transit service.</p> <p>(d) Provide transit at an early stage of the neighbourhood development.</p>	<p>(a) Figure 8.0 – Transportation Network outlines the road network. Edmonton Transit System will determine the routing for public transit along the arterial and collector roadways which have been identified as future transit routes.</p> <p>(b) The Subdivision Authority shall have regard for sidewalk, shared-use path, and walkway placement to minimize walking distances to transit (within 400 m) for the greatest number of residents. Figure 8.0 – Transportation Network illustrates portions of the plan area which are located greater than 400 m away from the nearest transit route. Although these areas may be greater depending on subdivision design, local roadways and walkways will be designed to minimize the walking distance to transit as much as possible.</p> <p>(c) Figure 7.0 – Land Use Concept identifies higher density residential uses along, or in proximity to, arterial or collector roadways.</p> <p>(d) Participating landowners will cooperatively fund transit service for the first two years of service.</p>

Rationale: Public transit service will be provided along the arterial and collector roadways, which will be designed to accommodate future public transit service and are located within the plan area to maximize resident access to the system.

Public Transit services will be extended into the NSP area in accordance with City of Edmonton Transit System Guidelines and demands and should provide convenient service between neighbourhoods, transit centres and regional commercial and employment areas. Identified in Windermere Neighbourhood Four to the east is a Bus Oriented Transit Centre which will serve both Keswick and Neighbourhood Four as well as the balance of the Windermere ASP.

In an effort to provide transit service earlier in the development of the Keswick neighbourhood, the participating landowners will cooperatively fund transit service for the first two years of service. Following this two year period, Edmonton Transit shall undertake the full responsibility of transit service.

Objective (34) Design a system of local streets which provides numerous safe, simple, direct and obvious connections throughout the neighbourhood.

NSP Policy	Implementation
(a) Local road linkages and walkways should be incorporated at appropriate locations between residential uses to improve neighbourhood connectivity.	(a) The Subdivision Authority shall have regard for subdivision design in residential settings to maximize vehicular and pedestrian connections.
(b) Ensure that the maximum length of cul-de-sacs in residential settings does not compromise City emergency response plans or operation of maintenance equipment.	(b) Residential uses in the northwest and southwest corner of the plan area, as identified on Figure 8.0 – Transportation Network , shall require additional consideration for emergency response access. Details shall be confirmed with the Transportation and Emergency Response Departments prior to rezoning and subdivision.

Rationale: All roadways in Keswick shall be developed with sidewalks in order to facilitate safe and efficient movement of pedestrians. These sidewalks will encourage residents to walk to open spaces, commercial developments and transit, overall reducing the number of vehicle trips and promoting health and social interaction. Where the pattern of roadways does not facilitate a direct route to an amenity or transit, minor walkways will be provided to ensure walkability and accessibility to transit.

Subdivision design should ensure, where practical, that cul-de-sac length does not exceed 120 m. 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. *The promontory lands located in the NW and SW corner of the plan area, west of 182 Street S.W., are to be developed for low density residential purposes.* However, the length of the road required to service these lands will exceed the 120 m requirement. To ensure that appropriate secondary access is provided, an emergency access shall be required along the top-of-bank walkway. Details regarding alignment, width and surface material will be confirmed in consultation with the Transportation Services and the Emergency Response Department prior to rezoning and subdivision.

Bylaw
17195
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2015

Objective (35) Minimize traffic congestion and enhance safety on the internal collector roadways.

NSP Policy	Implementation
<p>(a) The number of residential lots fronting onto and having direct access to a collector road should be in accordance with applicable City policy. <i>The number of lots having direct access onto a collector roadway shall be determined at the subdivision stage and shall not exceed 30%.</i></p> <p>(b) Single/semi-detached or rowhousing fronting onto a collector projected to have greater than 5,000 vehicle trips per day (vpd) shall not have direct automobile access onto the collector.</p> <p>(c) Traffic calming should be employed to reduce automobile speeds, increase pedestrian safety and improve the streetscape.</p>	<p>(a) The Subdivision Authority shall have regard for the number of lots having direct access onto a collector roadway.</p> <p>(b) The Transportation Impact Assessment will identify collector roadways where volumes are projected to exceed 5,000 vpd for the plan area. The Subdivision Authority shall have regard for the provision of alleys to provide automobile access to residential units.</p> <p>(c) Traffic calming measures such as roundabouts, raised intersections or curb extensions may be incorporated along roadways. Details will be confirmed with the Transportation Services prior to development.</p>

Rationale: Where possible along collector roadways with traffic volumes greater than 5,000 vpd, front drive access will not be permitted in order to promote a safe and pedestrian-oriented streetscape (i.e. walkable environment) 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, raised intersections or curb extensions at significant roadway locations (i.e. collector to collector or local to collector intersections) are beneficial as they reduce vehicular speeds and enhance pedestrian safety. Roundabouts for instance provide for the continuous movement of vehicles and can beautify the streetscape with trees and plantings or include public art and become neighbourhood focal points. Raised intersections reduce vehicle speeds, improve driver's 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.

Objective (36) Promote accessibility to natural and recreational amenity areas such as the North Saskatchewan River Valley and Ravine System, parks, open spaces, commercial uses and transit services by providing a circulation system for a variety of modes such as walking, cycling, rollerblading and wheelchair accessibility.

NSP Policy	Implementation
<p>(a) A network of hard-surfaced sidewalks, walkways, and shared-use paths shall be provided to promote walkability and access to the North Saskatchewan River Valley and Ravine System, parks, stormwater management facilities, commercial amenities and transit service.</p> <p>(b) A minimum 10 m wide greenway through the central area of the plan shall provide a hard surfaced shared-use path and should be landscaped with grass, trees and shrub beds, and provide park furniture (e.g. benches, garbage receptacles), and</p>	<p>(a) Figure 9.0 – Pedestrian Network outlines the pedestrian circulation system, which includes hard surface shared-use paths, walkways, improved trails and minor pedestrian connections.</p> <p>Minor pedestrian connections will tie shared-use paths and walkways to internal local roadways and regular intervals. Details regarding the location of minor pedestrian connections will be determined at the</p>

directional and interpretive signage, as directed by the City.

(c) Public access to the North Saskatchewan River Valley shall be provided through a combination of top-of-bank roadway and park along a minimum of 30% of the length of the Urban Development Line. A continuous Top of Bank walkway shall be provided along the length of the Urban Development Line.

The design of the neighbourhood shall comply with the approved City Policy C542 Development Setbacks from River Valley/Ravine Crests.

subdivision approval stage.

The width and surface of the minor pedestrian connections shall be consistent with the adjoining shared-use path or improved trail. Where connecting to shared-use paths, the minor pedestrian connection should be a shared-use path. The shared-use path, landscaping, furniture and signage within the greenway shall be required through a Servicing Agreement.

(b) Shared-use paths will be wide hard-surfaced walkways developed to City standards to be suitable for all alternative transportation modes, including pedestrians and cyclists. Shared-use paths are proposed along, but not limited to, arterial roadways, along the top-of bank and along all top-of-bank roadways, and extend through and beyond the central greenway.

(c) **Figure 7.0 – Land Use Concept** illustrates the location of TOB roadway and park. A combination of TOB roadway and park shall be provided for a minimum of 30% of the entire length of the Urban Development Line and shall be implemented through the subdivision process.

Geotechnical/slope stability assessment and City Policy shall determine the final alignment of the TOB roadway and parks and TOB walkway.

TOB roadway, park and walkway shall be dedicated to the City of Edmonton at time of subdivision. Compensation for the development of TOB roadway shall adhere to City Policy C542.

Rationale:

Pedestrian Network

Neighbourhoods designed with connectivity in mind supports the residents' ability to walk to destinations, reducing the number of vehicle trips, promoting health, supporting neighbourhood interaction, and reducing greenhouse gas emissions. In Keswick, alternative forms of circulation (walking, bicycling, etc.) are promoted via an array of linkages among roadway sidewalks, walkways, and shared-use paths providing an internal alternative pedestrian circulation system that is highly connected, direct and convenient. These linkages facilitate easy access for pedestrians and cyclists as outlined in **Figure 9.0 – Pedestrian Network**.

Shared-use paths

Shared-use paths shall be clearly marked using appropriate signage and markings in order to minimize potential conflicts between vehicles, cyclists, and pedestrians in the neighbourhood. Shared-use path connections extend beyond the boundaries of the Keswick NSP to link with existing and future neighbourhoods within the Windermere

ASP, allowing connectivity to outside destinations such as commercial and open space opportunities in other neighbourhoods, and the future district park and transit centre in Windermere Neighbourhood 4.

Greenways

The key focal points and linear greenway are utilized as a central spine that supports alternative transportation modes, tying the community together from end to end and connecting residents to the North Saskatchewan River Valley. Greenways establish part of the larger pedestrian network in the neighbourhood, provide for a range of modes / users, and are included in support of a more walkable community. *The entire NSP area is connected to the central Greenway corridor, which in turn, ties into the North Saskatchewan River Valley to the west and the school/park site to the east (see Figure 9.0 - Pedestrian Network).* The Greenway will function as shared-use path corridor (e.g. pedestrian and bicycle), shall be a minimum of 10 m wide, shall accommodate a hard surfaced paved trail and should include grassed or naturalized planting, park furniture (e.g. benches, garbage receptacles), trees and shrub beds, and directional and interpretive signage. Land uses within the neighbourhood are designed around this greenway corridor to maximize its utilization and benefit.

The east-west linear greenway shall be dedicated as circulation at time of subdivision. The northwest greenway connecting the pocket park and stormwater management facility shall not accommodate utility functions and shall be credited as Municipal Reserve, up to a maximum of 0.5% of the gross developable area of the Keswick NSP, at the time of subdivision.

Top of Bank Roadway/Park and Top of Bank Walkway

A combination of top-of-bank (TOB) roadway and park, totalling a minimum of 30% of the length of the Urban Development Line, shall be provided as illustrated on **Figure 7.0 - Land Use Concept** and **Figure 9.0 - Pedestrian Network**. The City and two participating landowners abutting the River Valley have agreed to the plan providing a combination of TOB roadway and park along 30% of the length of the Urban Development Line (UDL) and providing a continuous TOB walkway along the entire length of the UDL. The combined approach fulfills the purpose of the TOB Roadway Policy to provide public access and helps protect the stability of the River Valley. The intention is to prevent encroachment by urban development into the River Valley, facilitate environmental protection, provide access for servicing/maintenance purposes, and to provide an area of public lands for public access along and into the River Valley consistent with the geo-technical slope stability recommendations and the City TOB Policy C542. Final location and alignment of TOB roadway and parks will be established once the Urban Development Line is surveyed and prior to the subdivision of applicable lands.

The Keswick NSP identifies a continuous top of bank walkway as the primary means of public access along the bank of the North Saskatchewan River Valley. Public access to the river valley will be provided principally through a shared-use path but will also include a combination of top-of-bank roadway and park and pedestrian connections. The design of this comprehensive and linked public amenity will reflect the geotechnical requirements of the Keswick NSP area as well as ensuring public sector access to the river valley. The top of bank walkway component will be designed primarily as a hard surfaced shared-use path, unless otherwise dictated by geotechnical constraints or other considerations, and will be constructed to accommodate pedestrians, bicycles and other wheeled users at the subdivision stage of development on the lands adjacent to the North Saskatchewan River Valley.

As illustrated on **Figure 7.0 - Land Use Concept**, the top of bank and Urban Development Line along a portion of the SE ¼ Sec. 20-51-25-W4 was interpreted based upon review of aerial photos, as the landowner is a non-participant to the preparation of this plan and the top of bank was not walked. At the time of rezoning, a top of bank walk will be required and the landowner will be required to provide the appropriate geo-technical and slope stability studies. As per Policy C542, a top of bank roadway along a minimum 30% of the length of the Urban Development Line abutting the North Saskatchewan River Valley and Ravine System shall be required.

Objective (37) Mitigate the impact of automobile traffic associated with commercial, low-rise/multi-/medium rise

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and high rise residential areas on adjacent single/semi-detached residential areas.

NSP Policy	Implementation
Locate commercial, low rise and medium/high rise multi-unit residential development to facilitate vehicular access from arterial or collector roadways to the greatest extent possible.	The Subdivision Authority shall ensure commercial, low rise and medium/high rise multi-unit residential development is accessed via abutting collector and arterial roadways and minimize access via local roadway fronted by single/semi-detached residential to the greatest extent possible.

Rationale: Commercial developments or higher density residential developments are located adjacent to either a collector or arterial roadway within the plan area, with no direct access to 170 Street S.W. Locating nodes of activity which generate higher vehicular traffic adjacent to roadways with higher capacities reduces potential conflicts between local residential traffic and traffic generated by these higher intensity uses.

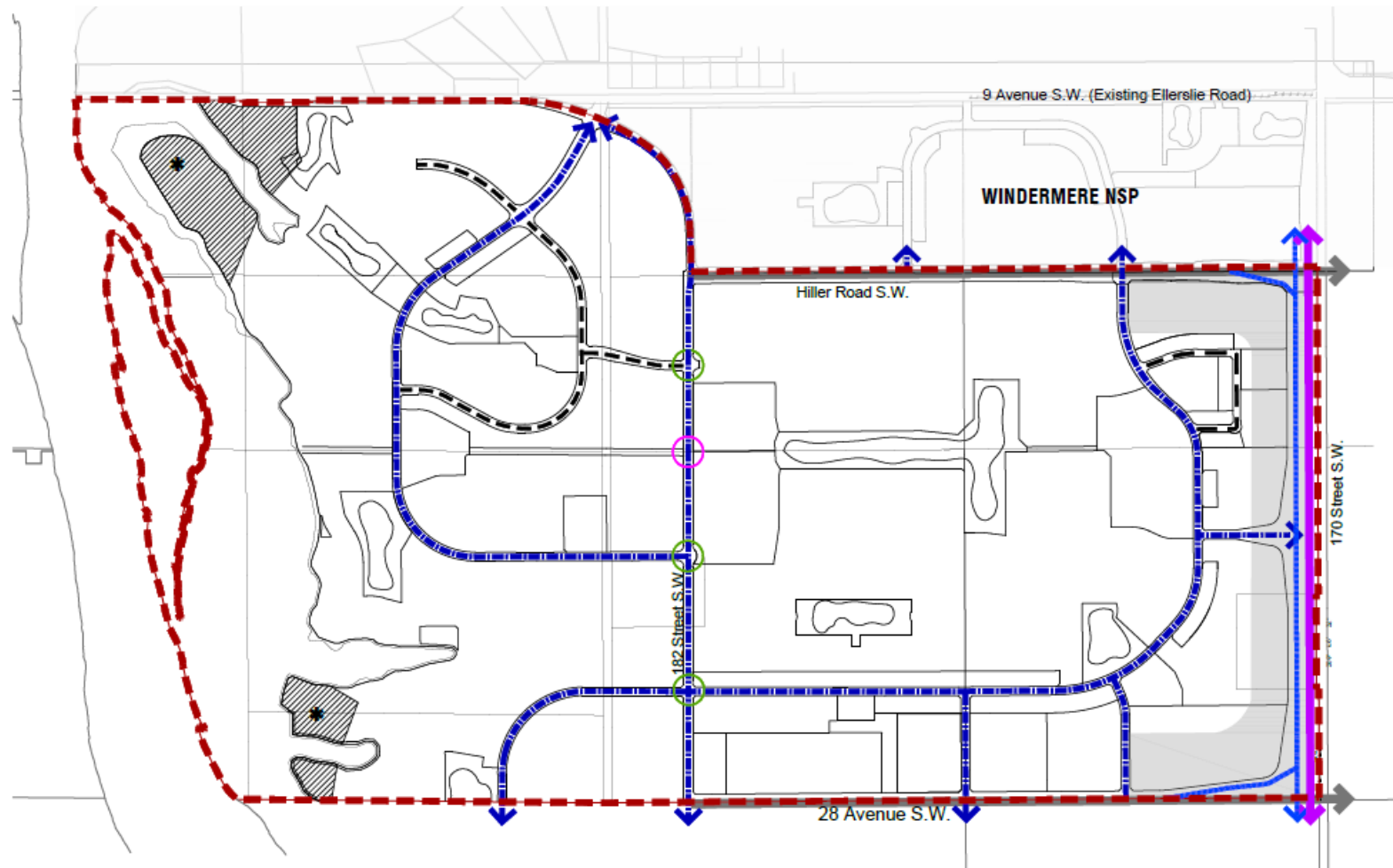
Objective (38) Provide noise attenuation where residential uses back onto major transportation corridors (i.e. 170 Street S.W.) which have been designated or will be designated as truck routes.

NSP Policy	Implementation
<p>NOTE: The following section was amended by Bylaw 16076, April 30, 2012</p> <p><i>Appropriate noise attenuation shall be provided for residential uses adjacent to 170 Street S.W., 25 Avenue S.W. and Hiller Road.</i></p>	Prior to subdivision approval determine the extent of noise attenuation required, in accordance with the City of Edmonton Urban Traffic Noise Policy C506.

Rationale: The NSP identifies 170 Street S.W. as a 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. This policy requires that noise levels in the outdoor amenity areas do not exceed 60 dBA. If required by the 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 has been provided in accordance with the requirements of the City of Edmonton's Transportation Services. A Transportation Impact Assessment was reviewed and approved by the Transportation Services.



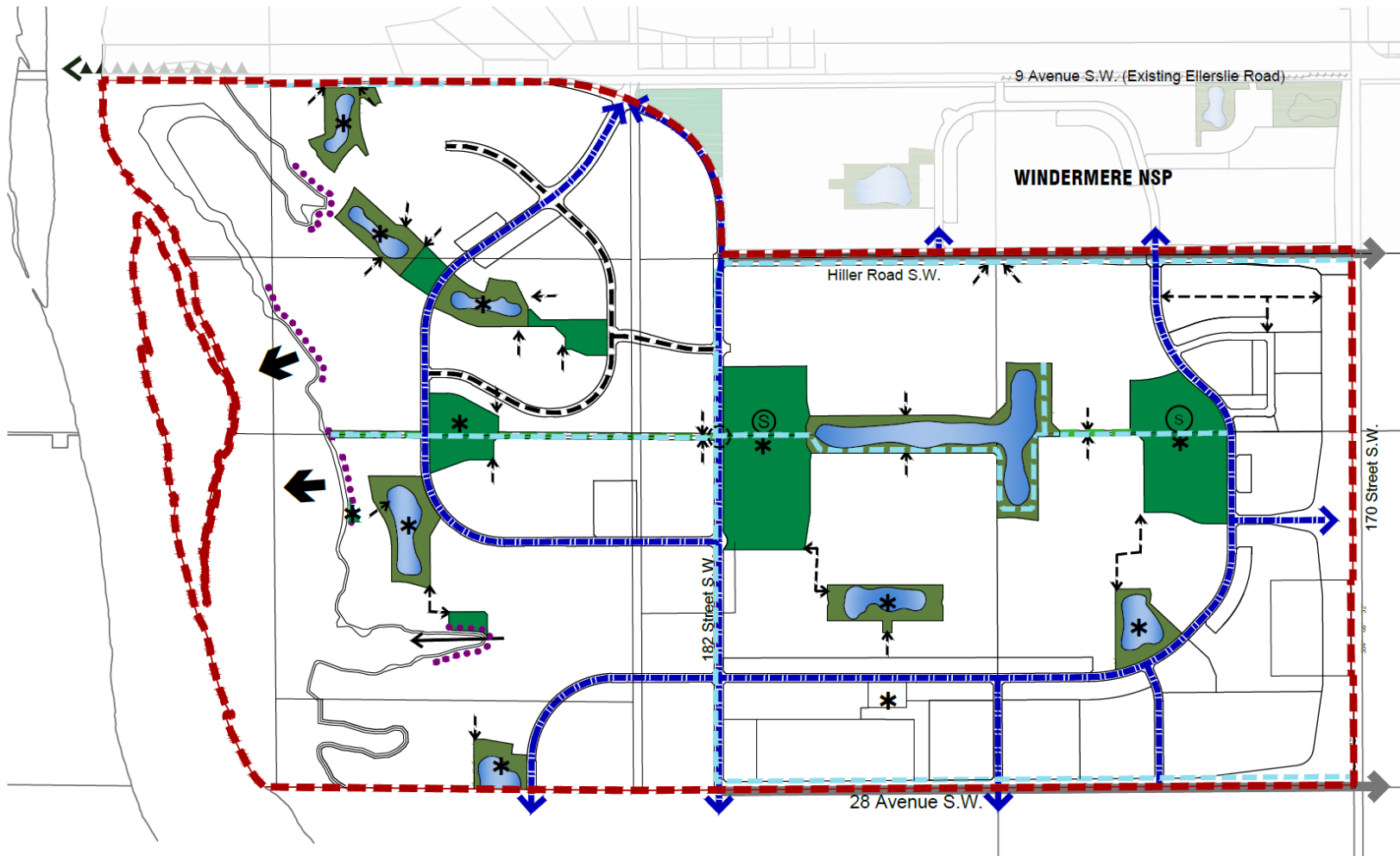
- Enhanced Local Roadway Connection
- Collector Roadway
- Arterial Roadway
- 170 Street S.W. Urban Freeway
- 170 Street S.W. Frontage Road
- NSP Boundary

- Area Of Plan Located Greater Than 400m From Future Transit Routing
- Area Of Influence - Road Right Of Way To Be Determined By 170 Street Concept Planning Study
- Promontory Lands Which May Require Emergency Access
- Roundabout

- Traffic Calming (Key Pedestrian Crossing)

Keswick
Neighbourhood Structure Plan
Figure 8
Transportation Network





- | | | |
|--|---|--------------------------------------|
| Stormwater Management Facility | Top Of Bank Walkway | Trailhead Connection to River Valley |
| Park | Top Of Bank Roadway | Collector Roadway |
| School and Community Park | Shared Use Path Corridor (No MR Credit) | Arterial Roadway |
| North Saskatchewan River Valley and Ravine | Possible Pedestrian Linkage to North Saskatchewan River | Linkage to Adjacent Community |
| Public Upland Area | Key Pedestrian Crossing | Focal Point |
| NSP Boundary | Major Visual Connection to River Valley | |
| Major Pedestrian Linkage (Greenway) | Minor Pedestrian Linkages | |

Keswick
Neighbourhood Structure Plan
Figure 9
Pedestrian and Shared Use Path Network



3.2.11 Infrastructure Servicing and Staging

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

Objective (39) Ensure the Keswick NSP is serviced to a full urban standard, in an efficient, contiguous and staged manner.

NSP Policy	Implementation
(a) Sanitary and stormwater servicing shall be provided in accordance with the associated Neighbourhood Design Report (NDR) for the Keswick NSP. (b) Water servicing to the NSP area shall be provided in accordance with the associated Hydraulic Network Analysis (HNA). (c) Shallow utilities shall be extended into the plan area as required.	(a)(b) Approval of engineering drawings and servicing agreements shall be required for installation of water, sanitary, and stormwater servicing. (c) Installation of shallow utilities shall be executed through servicing agreements.

Rationale:

Sanitary Servicing

Sanitary services for the Keswick NSP will connect into the South Edmonton Sanitary Sewer system through the Windermere Neighbourhood (to the north) - see **Figure 10.0 – Sanitary Servicing**. The on-site sanitary network will follow the internal roadway alignment along with associated public utility lots where required.

Stormwater Servicing

Overall, nine (9) stormwater management facilities are located in the plan area as conceptually shown in **Figure 11.0 – Stormwater Servicing**. These facilities have been located on the basis of natural drainage patterns and pre-development sub-basin drainage boundaries in the Windermere ASP.

Water Servicing

The conceptual design for the water distribution network for the Keswick neighbourhood is shown in **Figure 12.0 – Water Servicing**. Water servicing for the NSP area will be extended from the Windermere Neighbourhood (to the north) via a 600 mm watermain along 170 Street S.W. and a series of either 450 mm or 300 mm water mains on the internal collector roadways. Water servicing within the neighbourhood will be designed to provide peak hour flows and fire flows for all residential and commercial uses. Final sizing and alignment of water mains will be determined by EPCOR Water.

Shallow Utilities

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

Development Staging

The anticipated sequence of development for the Keswick NSP is shown in **Figure 13.0 – Staging Concept**. Initial development is expected to proceed from the northeast or northwest with the general direction of the development to the south.

Infrastructure to service the initial stages of the NSP will be extended south-easterly into the plan area from Windermere Neighbourhood (to the north). Urban expansion will be contiguous, logical, and economical with respect to municipal servicing. Development of individual phases may vary from the actual zoning and subdivision

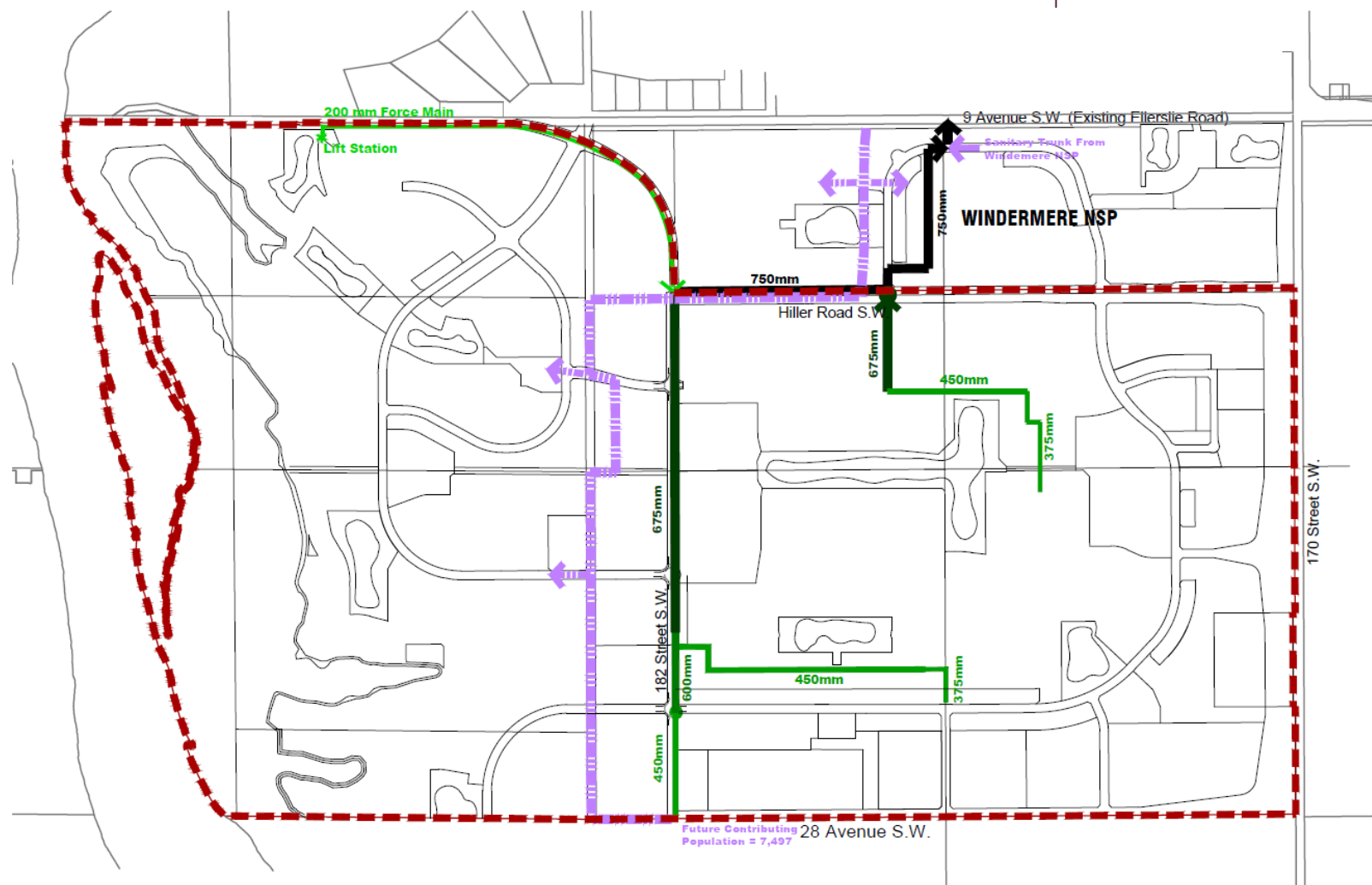
applications depending on contemporary market demands and aspirations of the respective landowners. Should sufficient demand warrant or engineering design be made more efficient, portions of separate phases may be developed concurrently.

Technical Summary

The Keswick 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 Keswick NSP are provided in the associated Neighborhood Design Reports (NDR) submitted under separate cover by Stantec Consulting Ltd. and IBI Group Ltd. Water looping will be provided in accordance with the requirements of EPCOR Water Services Inc. A Hydraulic Network Analysis was review and approved by EPCOR Water Services.

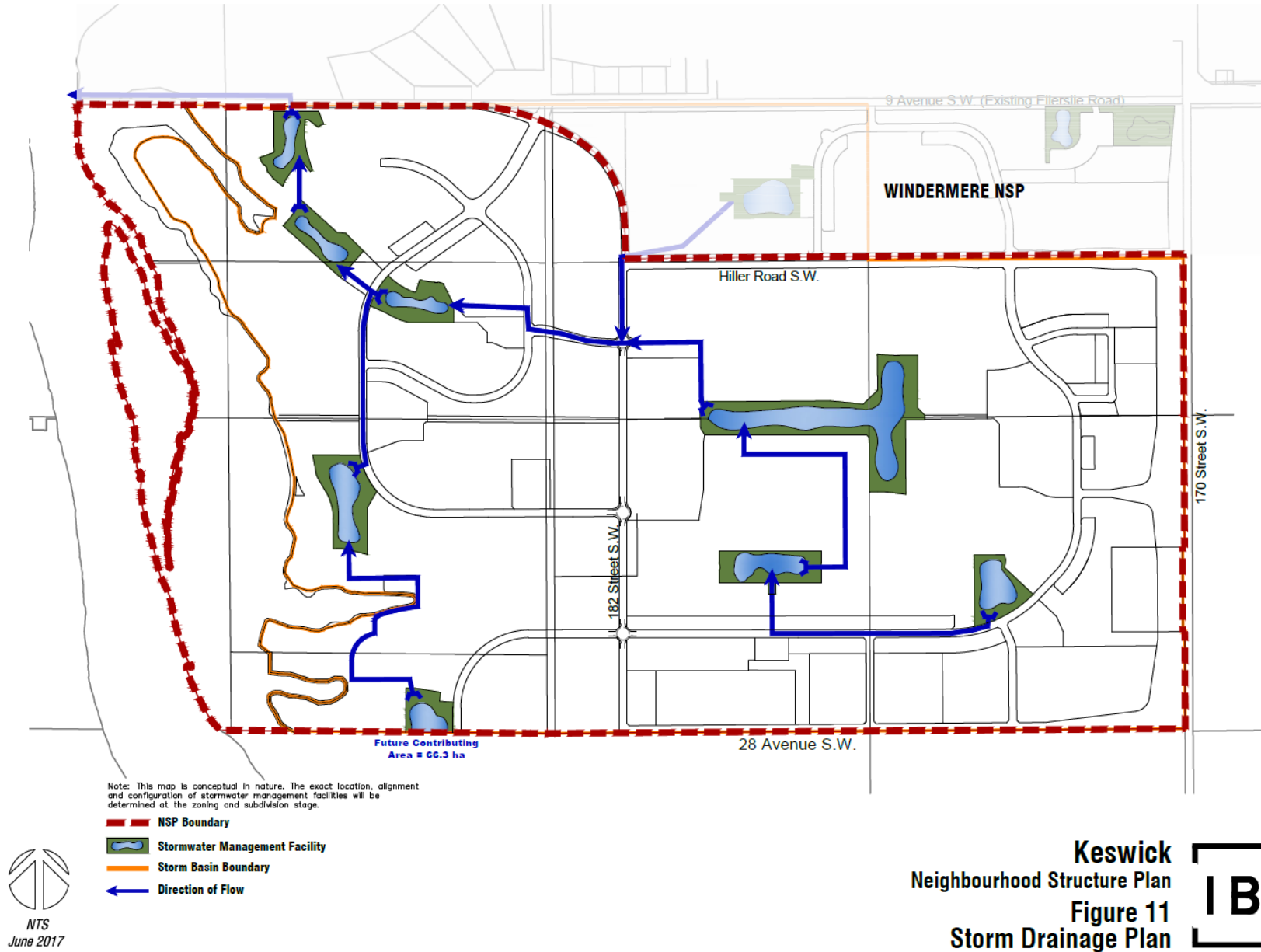
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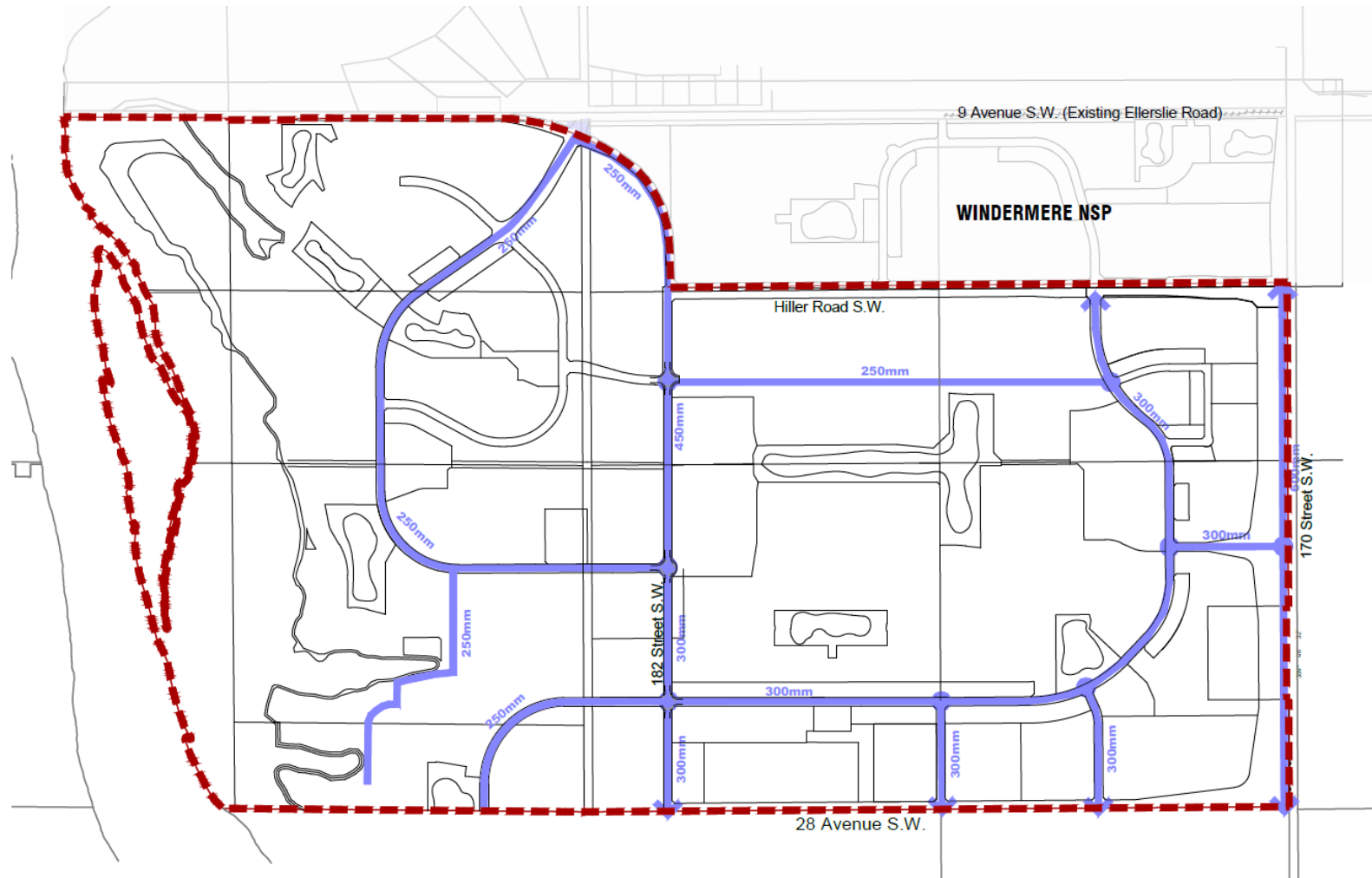


- | | | | |
|--|-------------------------|--|--------------|
| | Sanitary Basin Boundary | | NSP Boundary |
| | Sanitary Trunk 750mm | | |
| | Sanitary Trunk 675mm | | |
| | Sanitary Trunk 600mm | | |
| | Sanitary Trunk 450mm | | |
| | Sanitary Trunk 375mm | | |
| | Sanitary Trunk 200mm | | |

Keswick
Neighbourhood Structure Plan
Figure 10
Sanitary Servicing Plan



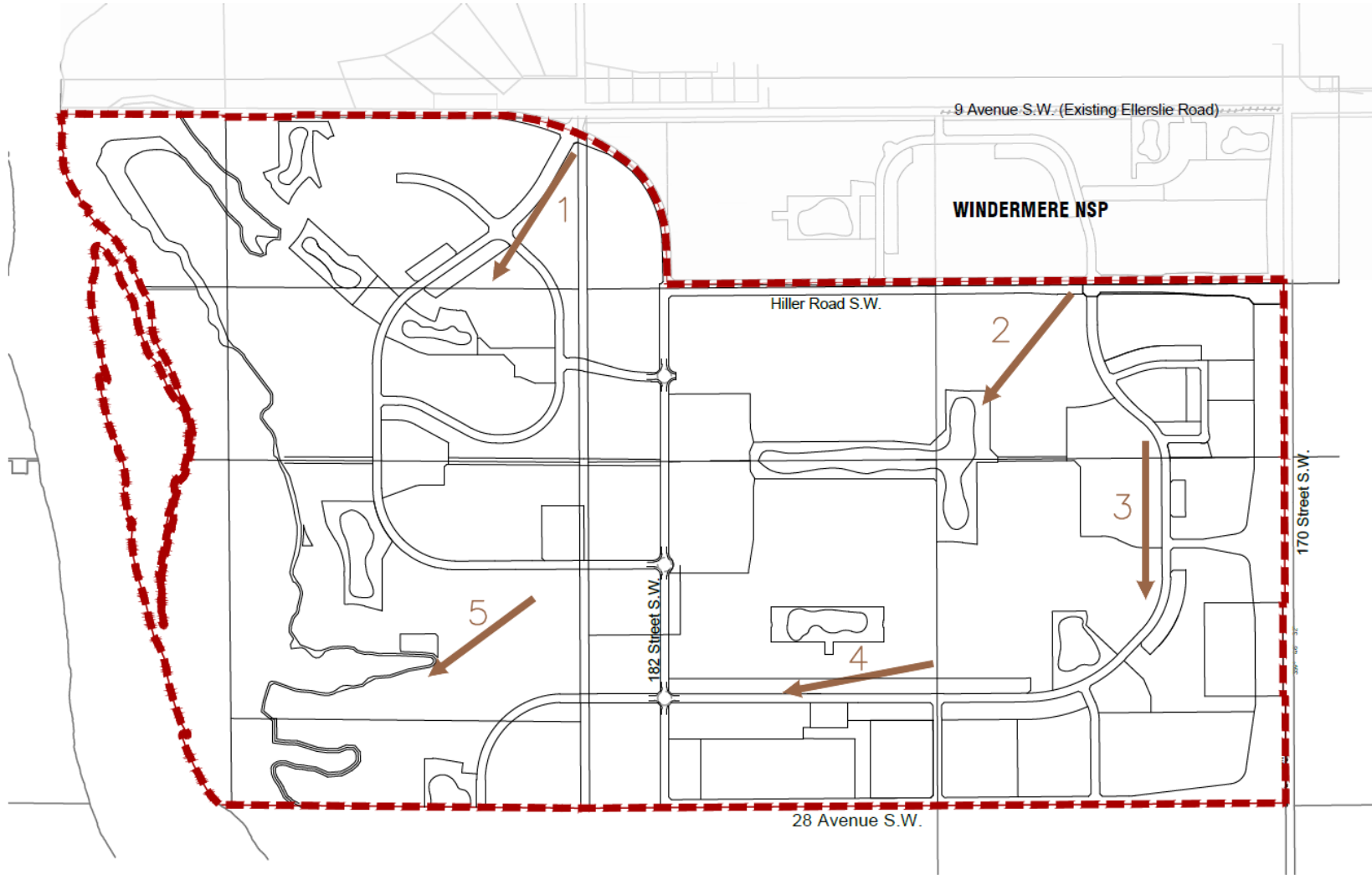




--- NSP Boundary
 --- Water Main
 Note:
 Preliminary only
 Sizing to be finalized with EPCOR

Keswick
 Neighbourhood Structure Plan
Figure 12
 Water Servicing Plan





NTS
April 2017

--- NSP Boundary
1A General Direction & Sequence of Development

Keswick
Neighbourhood Structure Plan
Figure 13
Staging Plan



Appendix 1: Planning Policy Context

This section outlines the various statutory plans, policies, and design principles which are applicable to the Keswick NSP including *"The Capital Region Land Use Plan"*, *"The Way We Grow"*, *"The Way We Move"*, the *"City of Edmonton's Suburban Neighbourhood Design Principles"* (SNDP), *"Windermere Area Structure Plan"*, and other relevant policies. 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 LAND USE PLAN

The Capital Region Land Use Plan's primary purpose 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 Plan 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 Keswick NSP complies with the following Capital Region Land Use Plan principles and policies:

Capital Region Land Use Policy	Keswick NSP Compliance with Capital Region Land Use Policy
I. Protect the Environment and Resources:	
A. Preserve and Protect the Environment	
Policy (i) Any development which may cause detrimental effects such as erosion or pollution to lakes, rivers, water bodies and shorelines shall be prohibited unless appropriate mitigative measures are implemented.	Development of lands in proximity to the North Saskatchewan River Valley and Ravine System shall conform to applicable legislation.
II. Minimize Regional Footprint:	
A. Identify, Protect and Prioritize Lands for Regional Infrastructure	
Policy (i) Ensure that lands identified for regional infrastructure such as energy transmission, highways, municipal infrastructure, transit and related facilities are protected from incompatible development.	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.
Policy (ii) The Province and the municipalities shall continue to identify lands that will be used for regional infrastructure. Once identified, these lands shall be protected for the designated use in applicable plans.	
B. Concentrate New Growth Within Priority Growth Areas	
Policy (i) Most new growth shall occur within priority growth areas. Policy (ii) Priority shall be given to accommodating growth in major employment areas and in locations that meet at least three of the following four criteria: a) Existing and proposed multi-movement corridors, including transit nodes; b) Adjacent to existing and proposed major employment areas; c) Redevelopment and intensification opportunities within existing urban areas; and d) Locations that utilize existing infrastructure and servicing capacity or logical and efficiently extend that infrastructure. Policy (v) Priority growth areas shall incorporate intensive forms of development that significantly exceed existing development patterns.	The Keswick neighbourhood is located in Priority Growth Area "Cw" which sets a minimum density target of 30 units per net residential hectare in order to facilitate development which existing development patterns. The Keswick NSP exceeds the density target by providing approximately 33 units per net residential hectare..

Capital Region Land Use Policy	Keswick NSP Compliance with Capital Region Land Use Policy
D. Support Expansion of Medium and Higher Density Residential Housing Forms	
<p>Policy (i) New residential development shall provide a greater proportion of higher density residential units.</p> <p>Policy (iii) Greenfield developments shall make provision for a mixture of uses including a diversity of housing forms, community services, local retail and employment opportunities.</p> <p>Policy (iv) Transit accessibility must be included in the design of all new developments.</p>	The Keswick NSP provides approximately 37% of the overall number of residential units as low-rise/multi-/medium units or high rise units, in highly accessible locations adjacent to transit service and in proximity to commercial land uses.
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.	The Keswick NSP 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.
C. Support Public Transit	
<p>Policy (i) Provide a mix of higher intensity land uses along transit corridors, at nodes, and employment centres.</p> <p>Policy (iii) New developments shall be designed for connectivity and accessibility to transit facilities.</p>	Higher residential densities and commercial uses have been located adjacent to collector or arterial 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 Keswick NSP allows for the development of a range of residential housing types based on single/semi-detached, rowhousing, low-rise/multi-/medium units and high rise units.
IV. Increase Transportation Choice:	
A. Integrate Transportation Systems with Land Use	
<p>Policy (iii) Design transportation infrastructure to support multiple modes of transport.</p> <p>Policy (iv) Support development of inclusive communities to reduce the need for travel.</p>	A network of arterial, collector and local roadways along with sidewalks, walkways and shared-use paths will provide residents with the ability to drive, walk, cycle, rollerblade or other through the neighbourhood or into the surrounding region.
B. Support the Expansion of Transit Service in Various Forms	
<p>Policy (i) Expand and extend the level, quality and range of public transportation options available to serve the Region.</p> <p>Policy (iv) Support multi-modal transportation options by providing multi-uses streets sufficient to accommodate bicyclists, motorists and pedestrians.</p>	A network of arterial, collector and local roadways along with sidewalks, walkways and shared-use paths will provide residents with the ability to drive, walk, cycle, rollerblade or other through the neighbourhood or into the surrounding region.
V. Ensure Efficient Provision of Services:	
A. Design Integrated Physical Infrastructure within the Region	
Policy (ii) Identify and protect corridors for transportation, transit and infrastructure requirements.	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.

MUNICIPAL DEVELOPMENT PLAN – THE WAY WE GROW

The Way We Grow – the City of Edmonton's Municipal Development Plan (MDP), is a comprehensive plan which provides direction for development and implementation of more specific and detailed plans by the industry / private landowners and the City. The Way We Grow's "*Land Development Concept*" map designates this community as "Developing, Planned and Future Neighbourhoods" suitable for urban development. The growth coordination strategy emphasizes completion of developing neighbourhoods and a focus of land development activity and infrastructure provision and expansion to approved neighbourhood plans to fulfill the City's commitment to residents and make efficient use of infrastructure investments.

The Keswick NSP complies with the following The Way We Grow policies:

MDP Policy	Keswick NSP Compliance with MDP Policy
MDP Policy 3.2.1.1 - Ensure a combination of single family and multi-family housing development potential is available for the next 30 years.	The NSP will provide single family and multi-family housing for approximately 10 to 15 years at current absorption and development rates in southwest Edmonton.
MDP 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.	Keswick NSP establishes a variety of development opportunities through the provision of several types of land components (single/semi-detached residential, rowhousing, low rise/multi-/medium units, high rise units, Commercial, Mixed Use Institutional and Mixed Use Commercial).
MDP Policy 3.2.2.3 - Ensure City departments and agencies collaborate to identify all municipal land needs within an Area Structure Plan, Neighbourhood Structure Plan or Area Redevelopment Plan boundary prior to plan approval.	The City has identified the need for school and park spaces within the NSP boundary for municipal purposes.
MDP Policy 3.6.1.6 - Support contiguous development and infrastructure in order to accommodate growth in an orderly and economical fashion.	The Keswick NSP represents contiguous growth in southwest Edmonton, as the surrounding neighbourhoods develop concurrently.
MDP Policy 4.3.1.1 - The City of Edmonton will take municipal reserve, school reserve or municipal and school reserve in accordance with the Municipal Government Act and will use the land or money for the purposes as defined by the Municipal Government Act.	The Keswick NSP provides municipal reserve as a combination of land and cash in lieu.
MDP Policy 4.3.1.11 - Use the Community Knowledge Campus program in new neighbourhoods as a means of creating a focal point, improving educational related partnership opportunities at school sites and encouraging life long learning facilities.	The central location of the school/park site within the Keswick NSP endows the residents with excellent access to the open space and educational opportunities and has been designed with input from the Edmonton Public School Board.
MDP Policy 4.4.1.1 - Provide a broad and varied housing choice, incorporating housing for various demographic and income groups in all neighbourhoods.	The Keswick NSP allows for the development of a range of residential housing types based on single/semi-detached, rowhousing, low-rise/multi-/medium units and high rise units.
MDP Policy 4.6.1.1 - Support Corporate initiatives to improve walkability and other active transportation modes.	The Keswick NSP 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.
MDP Policy 4.6.1.3 - Support the design of accessible and safe active transportation networks in accordance with best practises in universal design..	The network of sidewalks, walkways and shared-use paths will be designed according to best practises in universal design and will provide residents with the ability to walk, cycle, rollerblade or other through the neighbourhood.
MDP Policy 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 residential densities and amenity areas have been located adjacent to collector or arterial roadways to promote walkability and transit usage.
MDP Policy 5.6.1.7 - Identify and preserve public views and vistas of the North Saskatchewan River Valley and Ravine System as new development occurs and require public access in accordance with the Top of Bank Policy.	The NSP provides approximately 860m of Top of Bank Roadway/Park in accordance with the Top of Bank policy which will preserve public vistas of the North Saskatchewan River Valley.
MDP 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 such as roundabouts as a means of providing pedestrian safety and attractive street designs.
MDP Policy 6.2.1.4 - Plan for retail centres that meet the daily needs of residents in area and Neighbourhood Structure Plans.	A variety of commercial opportunities are available in the NSP, including community commercial, neighbourhood commercial and mixed use commercial to satisfy the daily needs of residents.
MDP Policy 7.1.1.4 - Determine appropriate buffer areas around the periphery of natural areas identified for protection. MDP Policy 7.3.2.1 - Ensure that the North Saskatchewan River Valley and Ravine System remains primarily an area of unstructured, low-intensity and passive recreation, while accommodating appropriate balance of recreation activity within park nodes as described in the Urban	The top of bank (TOB) and Urban Development Line (UDL) have been established through site visits with participating landowners and city staff, pursuant to geo-technical and slope-stability analysis, and the requirements

MDP Policy	Keswick NSP Compliance with MDP Policy
<p>Parks Management Plan and the Ribbon of Green.</p> <p>MDP Policy 7.3.2.3 – Ensure that the lands within the North Saskatchewan River Valley and Ravine System Area Redevelopment Plan boundary will be acquired for parks purposes and natural areas protection,</p> <p>MDP Policy 7.3.2.4 – Make selected areas of the North Saskatchewan River Valley and Ravine System accessible to all citizens regardless of age or mobility, where feasible.</p> <p>MDP Policy 7.3.2.5 – Provide pedestrian and bicycle connections to increase movement and accessibility.</p> <p>MDP Policy 7.3.3.2 – Maintain adequate separation between new urban developments and the North Saskatchewan River Valley and Ravine System through the City's Top of Bank Policy, with viewsapes and public access to the River Valley preserved.</p>	<p>of the Top of Bank Policy.</p> <p>A minimum 10m Public Upland Area has been provided in all instances along the entire length of the TOB, between the TOB and UDL, except where a greater setback is warranted based upon geotechnical considerations.</p> <p>A TOB Walkway along the entire length of the UDL, within the Public Upland Area, will maximize access for local residents and the general public to a continuous circulation system abutting the River Valley and Ravine System. This access is provided for circulation and amenity purposes, connection to the park system within the River Valley and Ravine System, slope repair and geotechnical monitoring, fire fighting, emergency and public safety, drainage control and for dealing with encroachment issues.</p>
<p>MDP Policy 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.</p>	<p>Parks and SWMFs have been located and inter-connected to promote them as walking destinations. These have been designed to serve as destination for pedestrians and cyclists and to provide passive recreation opportunities.</p> <p>Where feasible, facilities will be constructed as naturalized ponds to provide possible wildlife habitat and improve water quality via their natural filtration systems.</p>
<p>MDP Policy 8.1.3.1 – Plan for residential and economic development within the City which supports the Capital Region Growth Plan.</p> <p>MDP Policy 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.</p>	<p>The Keswick 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 Keswick NSP exceeds this target.</p>
<p>MDP Policy 9.2.1.1 – Apply City of Edmonton Policy C515 Oil and Gas Facilities regarding setbacks, risk management and urban development.</p> <p>MDP Policy 9.2.1.4 – Collaborate with the ERCB, Government of Alberta, industry operators and the development industry to plan for compatibility with adjacent land uses so that negative impacts from oil and gas activities are minimized.</p> <p>MDP Policy 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.</p>	<p>Urban development in the vicinity of all resource well sites will be planned in accordance with the City policy document entitled "Policy Guidelines for the Integration of Resource Operations and Urban Development" (1985) and Policy C515 "Oil and Gas Facilities" (2007) and other relevant City procedures.</p> <p>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 suspended oil and gas wells, 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.</p>

TRANSPORTATION MASTER PLAN – THE WAY WE MOVE

The Way We Move – the City of Edmonton's Transportation Master Plan (TMP), establishes a framework for how the City will address its future transportation needs. The TMP identifies seven strategic transportation goals related to Transportation and Land Use Integration, Access and Mobility, Transportation Mode Shift, Sustainability, Health and Safety, Well-Maintained Infrastructure, and Economic Vitality. The TMP in conjunction with the MDP will guide and shape the transportation system and land use patterns to achieve a sustainable and livable city. The TMP Concept – 2040 designates the 170 Street S.W. corridor as a Highway Connector which will facilitate regional traffic and accommodate the movement of people and goods.

The Keswick NSP complies with the following Transportation Master Plan strategic goals:

TMP Strategic Goal	Keswick NSP Compliance with TMP Strategic Goal
<p>TMP 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</p>	<p>The Keswick NSP provides a range of land uses which allows opportunities for residents to live, work and play within the neighbourhood.</p>

TMP Strategic Goal	Keswick NSP Compliance with TMP Strategic Goal
optimized and supports best practises for land use.	
TMP Strategic Goal: Access and Mobility – The transportation system is interconnected and integrated to allow people and goods to move efficiently throughout the city and 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 sidewalks, walkways and shared-use paths. Areas of higher density residential have been located adjacent to transit routes to promote shorter walking distances and higher usage.
TMP Strategic Goal: 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.	The Keswick NSP 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.
TMP Strategic Goal: Sustainability – Transportation decisions reflect an integrated approach to environmental, financial and social impacts thereby creating sustainable, livable communities that minimize the need for new infrastructure and increase residents' quality of life.	The NSP creates a sustainable community by providing increased residential densities in support of neighbourhood intensification, public transit and alternative methods of transportation.
TMP Strategic Goal: 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 livability.	The network of sidewalks, walkways and shared-use paths provide residents with the ability to walk, cycle, rollerblade or other through the neighbourhood, improving health and wellness.

WINDERMERE AREA STRUCTURE PLAN

The Windermere Area Structure Plan (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 Development Principles applicable to the Keswick NSP are listed below:

Windermere ASP Principle	Keswick NSP Compliance
4.2.1 Community Design and Enhancement <ul style="list-style-type: none"> Establish a unique character and sense of place for each neighbourhood. Provide unique entrances or gateways, landscaped transportation corridors, identifiable streetscapes, distinctive neighbourhood boundaries and districts, innovative natural and open spaces, landmarks and / or focal points within a community. Ensure each neighbourhood is designed with a focal point. A neighbourhood centre, park or school which offers a range of convenience commercial uses, services and / or amenities can function as a gathering place for neighbourhood residents. The focal point should be activity oriented and combine uses and services which draw people to the area. Design for an attractive environment. High quality building design and streetscaping enhance local urban design. A variety of urban spaces, landscaped areas and architecturally designed features contributes to a rich human scale living environment. Urban design / Crime Prevention Through Environmental Design (CPTED) features (e.g. consideration of enhanced shelters, strategic lighting, wayfinding features, viewpoints, universal design devices). 	<p>These elements, patterns and connections will continue to evolve over time as the community (re)creates its' own authentic image, character and sense of place.</p> <p>The Keswick 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.</p> <p>The main focal point for the NSP is the extensive Greenway which stretches from 170 Street S.W. to the North Saskatchewan River Valley. This Greenway will be incorporated into the adjacent land uses and the building design and streetscape will be complimentary.</p> <p>The Keswick NSP will incorporate the CPTED principles and guidelines.</p>
4.2.2 Sustainable Local Employment Area(s)	

Windermere ASP Principle	Keswick NSP Compliance
<ul style="list-style-type: none"> • Designate business areas in location with well linked transportation connections and good visibility to strengthen their viability • Place employment centres along major transportation corridors, and integrate complementary uses in the vicinity such as housing options, entertainment and transit facilities which help link the community together. • Locate a transit centre in the principal commercial area(s) to provide linkages throughout the community. • Develop commercial and mixed-use areas which are safe, comfortable and attractive to pedestrians. 	<p>The Keswick NSP supports the future, adjacent transit systems and interior transit routes by clustering higher densities around amenities, commercial sites, arterial roadways, and on the periphery of the Neighbourhood.</p> <p>Commercial development is strategically located at high visibility and accessible intersections.</p>
<p>4.2.4 Balanced Transportation Network</p> <ul style="list-style-type: none"> • Provide a transportation network that reflects the character of intended developments and meets the unique demands of each neighbourhood, as well 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, greenways, shared-use path Corridor and or connections that encourages pedestrian connectivity, activity and social contact. • Provide shared-use paths Corridors and connections that include the North Saskatchewan River Valley and Whitemud Creek Ravine systems, Transportation / Utility Corridor, major pipeline utility rights of way. 	<p>The NSP design reflects an Integrated Community Circulation System composed of Parks, Greenways, and MUTs which support pedestrian connectivity, options, and movement throughout the community.</p> <p>Proximity to transit service will be provided for the greatest number of residents.</p>
<p>4.2.5 Life Long Learning and Education</p> <ul style="list-style-type: none"> • 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 / dispersed 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). 	<p>The school / park site reflects the ASP and current input from the Edmonton Public School Board. It is sized to accommodate K-9 as well as a Community League.</p> <p>The central location of the school/park site within the Keswick NSP endows the residents with excellent access to the open space and educational opportunities.</p> <p>Local level park spaces have been provided throughout the plan area.</p>

Windermere ASP Principle	Keswick NSP Compliance
4.2.6 Sustainable Infrastructure <ul style="list-style-type: none"> Encourage extension of services into the Windermere area in a co-ordinated, efficient and cost-effective manner. Encourage compact land use patterns and shared infrastructure that optimise land use and building efficiency. Incorporate necessary stormwater management facility design elements to enhance stormwater runoff quality, mitigate potential environmental impacts and reduce water treatment costs. Integrate pipeline and utility corridors within the plan and, where appropriate, integrate corridors with pedestrian linkages, Greenways, shared-use paths / corridors, and open space areas. 	<p>Higher density residential land uses are designed to compliment each other and the NSP through servicing, land use transitioning, transportation and proximity to parkland.</p> <p>The SWMFs are incorporated into the existing contours of the land to maximize their respective efficiency.</p> <p>The location and design of the SWMFs provides vistas into the site from the abutting roadways, and thereby heightens resident awareness of these facilities. This will promote them as walking destinations, and enhance their surveillance to prevent crime. SWMFs will be designed to serve as a destination for pedestrians and cyclists and to 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.</p>

EDMONTON SUBURBAN NEIGHBOURHOOD DESIGN PRINCIPLES (SNDP)

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	Keswick NSP Compliance to SND Principle
Principle 1: Design neighbourhoods with the intent of sharing common infrastructure facilities among neighbourhoods	The school / park site and the commercial sites act as common infrastructure for adjacent neighbourhoods. Through site orientation and location, provision of mixed-uses, proximity to the future transit system and connectivity these developments will provide options for service delivery for adjacent residents.
Principle 2: Design and locate school and community facilities to provide inter-neighbourhood focal points	The school / park site within Keswick NSP is central to the perceived school catchment area and will be used by neighbourhood residents.
Principle 3: Design the arterial and collector roads along a grid pattern, peripheral to the neighbourhoods. Use local roadways to distribute neighbourhood traffic from/to these arterial and collector roadways.	The arterial roads along the periphery of the Keswick NSP are generally 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 streets are designed to accommodate pedestrians, cyclists and vehicles. Streets, sidewalks and pathways have standardized widths and materials depending on their function.
Principle 5: Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood	Pathways, walkways, sidewalks and MUT corridors connect pedestrians and cyclists to community focal points and destinations such as the school / park site, SWMFs, the North Saskatchewan River Valley, future Windermere Neighbourhoods (Four and Five) and the future adjacent 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	Higher density residential uses are located adjacent to arterial roadways, transit system, and Windermere Neighbourhoods Four and Five. Transit service is also provided along portions of the internal collector loop in the Keswick NSP.
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	The Staging Concept for the Keswick NSP indicates development will proceed generally from the northeast/northwest to the southwest. The school / park site will develop in a timely fashion as a result of this staging concept.
Principle 8: Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of education over time	In time, the buildings developed on the school / park site which accommodates the school and the community league may be redeveloped to address the changing needs and uses of the community.

SND Principle	Keswick NSP Compliance to SND Principle
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 park sites located throughout the Keswick 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 school / park site and the Community League in the Keswick NSP. 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 courses, and school and park open spaces	The dispersed park sites, the SWMFs, the Urban Village Park site and the school / park site are all connected by Greenways and multi-use corridors.
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 located on arterial and collector roadways and in proximity to parks/open space within the Keswick NSP.
Principle 13: Use stormwater management techniques which provide an alternative(s) to the man made lakes and dry ponds typical to Edmonton	The Keswick NSP has been designed to incorporate the existing lay of the land to take advantage of the existing contours and depressions for the SWMFs.
Principle 15: Provide opportunity through the residential districts of the Land Use Bylaw for the intensification of housing forms and for alternative site design and building siting	The Keswick NSP strategically places higher density residential uses throughout the plan area.
Principle 16: Use current population projections and student generation formulas when planning facilities for a neighbourhood. Take into account the life cycle of the neighbourhood.	The school / park site has been situated and sized in accordance with the Edmonton Public School Board.

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.

The following principles are relevant in the context of the Keswick:

UPMP Principle	Keswick NSP Compliance to 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, schools 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 Keswick NSP ensures visual and physical access to parks, and public safety through application of CPTED principles.
Principle 3 – Natural Capital: City and partner actions demonstrate a strong commitment to preservation of natural capital through ecological decision making.	The combination of top of bank roadway/park and walkway along the Urban Development Line and the restriction of development below the Urban Development Line ensure preservation of the North Saskatchewan River Valley.
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 the Keswick NSP promotes opportunities to enhance the community's quality of life through placemaking, creative urban design, and provision of diverse landscape opportunities. The NSP ensures land uses adjacent to public parks are complementary. Examples of desirable adjacent land uses include multifamily residential, stormwater lakes, trail corridors, and so on.
Principle 5 – Safe Parks: City and partner actions demonstrate a strong commitment to user safety through the creation and management of safe park environments.	The Keswick NSP ensures visual and physical access to parks, and public safety through application of CPTED principles.

UPMP Principle	Keswick NSP Compliance to UPMP Principle
Principle 7 – Integrated Parks: City and partner actions demonstrate a strong commitment to the integration of City, school and community facilities into the park system to meet community need.	<p><i>The Keswick NSP provides two school/park sites to facilitate future educational and community needs.</i></p> <p>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.</p> <p>The central school/park site is fully accessible by public transit.</p>

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May 11, 2015

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

NORTH SASKATCHEWAN RIVER VALLEY AND RAVINE SYSTEM PROTECTION OVERLAY

The purpose of this Protection Overlay is to provide a development setback from the North Saskatchewan River Valley and Ravine System. The Keswick NSP complies with the policies and directives established under the North Saskatchewan River Valley and Ravine System Protection Overlay. A geotechnical report detailing the required setbacks and other recommendations to ensure bank stability for development planned within the overlay has been submitted and approved by the City of Edmonton.

EDMONTON-DEVON RESTRICTED DEVELOPMENT AREA REGULATIONS

The Edmonton-Devon Restricted Development Area (RDA) extends from the Windermere and rural southwest portions of the city to Devon. The purpose of the RDA was to retain, protect and regulate the development and use of a corridor of land within and adjacent to the North Saskatchewan River Valley, that were of an environmentally sensitive nature for the benefit of the public.

To ensure these lands are protected in their natural state, the Province established a formal consent process, and placed a caveat against the entire parcels within the areas affected by the RDA designation. This process requires that for any contemplated development or disturbance of these lands, as well as any use authorized pursuant to the Municipal Government Act and associated Subdivision and Development Regulation, Ministerial Consent from Alberta Environment is required by the affected landowner(s).

In the Windermere portion of the city, private individuals own the remnant RDA areas and until such time as these lands are rezoned and subdivided, they are not available for development or use by the City.

The Province does not have any current plans to remove the RDA designation, given the prospect of development in the area. Nevertheless, if it were found necessary to remove the designation, it would require an Order in Council by the Provincial Legislature.

CITY OF EDMONTON SUBURBAN 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% LDR units and 15% to 35% MDR units. These guidelines encourage a mix of housing types, a range of choice in housing, and a measure of intensification.

The Keswick NSP exceeds this ratio in support of suburban intensification strategies by proposing a mix of 63% low density residential and 37% medium density residential. In keeping with more recent policy, this plan seeks to provide a choice of housing forms within the neighbourhood, and to generally make more efficient use of

new suburban land. These densities will support public transit, use infrastructure more effectively, provide a user base for community facilities, and encourage greater social mix.

RESOURCE WELL SITES AND PIPELINES

Development of lands within Keswick 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
- operating guidelines.

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

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

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

Abandoned wells will be planned in roadways, open space/park areas, walkways, public utility lots or other easily accessible public areas. These guidelines are followed throughout the Province and will be followed in Keswick.

Appendix 2: Technical Studies

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

- Neighbourhood Design Report (NDR)
- Water Network Analysis (WNA)
- Transportation Impact Assessment (TIA)
- Parkland Impact Assessment (PIA)
- Environmental Site Assessment (ESA) Phase I
- Ecological Network Report (ENR) – Phase I
- Historical Resources Overview (HRO)
- Historical Resources Impact Assessment (HRIA)
- Geotechnical and Slope Stability Reports