

Rutherford Neighbourhood Area Structure Plan

Office Consolidation March 2011

Prepared by:

*Planning and Policy Services Branch
Planning and Development Department
City of Edmonton*

Bylaw 12550 (as amended) was adopted by Council in April 2001. In March 2011, this document was consolidated by virtue of the incorporation of the following bylaws, which were amendments to the original bylaw.

Bylaw 12550	Approved April 10, 2001	(Adopt the Rutherford NASP)
Bylaw 13042	Approved May 1, 2002	(Replace a portion of LDR with MDR along Rutherford Road)
Bylaw 13325	Approved April 9, 2003	(Remove small portion of MDR in centre area; realign collector and access to 127 Street; reconfigure stormwater management facility)
Bylaw 13405	Approved June 11, 2003	(Relocate MDR from the north and replace with LDR)
Bylaw 13715	Approved May 3, 2004	(To reconfigure a portion of MDR along Ellerslie Road)
Bylaw 13974	Approved May 11, 2005	(To reconfigure southern boundary of neighbourhood)
Bylaw 13975	Approved May 11, 2005	(To relocate collector access points on 111 Street and reconfigure adjacent land uses)
Bylaw 14052	Approved July 13, 2005	(To re-designate a portion of the commercial site to high and medium density residential)
Bylaw 15563	Approved November 8, 2010	(Amend the neighbourhood boundary between Rutherford and Heritage Valley Town Centre; update statistics)*

Editor's Note:

This is an office consolidation edition for the Rutherford NASP, as approved by City Council on April 10, 2001. This edition contains all amendments and additions to the original Bylaw 12550. For the sake of clarity, new maps and a standardized format were utilized in this Plan. All names of City departments have been standardized to reflect their present titles. Private owner's names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws. All text changes are noted in the right margin and are italicized where applicable.

* All references here within to "111 Street" have been deleted and replaced with "James Mowatt Trail" as per Bylaw 15563, November 8, 2010.

* All references here within to Heritage Valley "Neighbourhood 3" have been deleted and replaced with "MacEwan" as per Bylaw 15563, November 8, 2010.

* All references here within to "Heritage Valley Neighbourhood 4" have been deleted and replaced with "Rutherford" as per Bylaw 15563, November 8, 2010.

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 and Development Department

TABLE OF CONTENTS

SECTION 1	INTRODUCTION
1.1	Purpose
1.2	Definition of Plan Area
1.3	Land Ownership
SECTION 2	STATUTORY PLAN & POLICY CONTEXT
2.1	Edmonton Municipal Development Plan
2.1.1	Planned Growth – Land Development Philosophy
2.1.2	Planned Growth – Utilization of Existing Infrastructure
2.1.3	Planned Growth – Managing Suburban Growth
2.2	Heritage Valley SCDB
2.3	Airport Protection Overlay
2.4	Suburban Neighbourhood Design Principles
SECTION 3	SITE CONTEXT & DEVELOPMENT CONSIDERATIONS
3.1	Topography & Vegetation
3.2	Existing Land Uses
3.3	Surrounding and Uses
3.4	Environmental Resources
3.4.1	Virginia park Woodland (SW31
3.4.2	Southwest Mixedwood Natural Area (SW 6001)
3.5	Environmental Site Assessment
3.5.1	Non-Participating Land Owners
3.6	Historical Resources
3.7	Energy & Natural Resources
3.7.1	Oil & Gas Well Sites
3.7.2	Pipeline Rights-of-Way and Facilities
SECTION 4	DEVELOPMENT OBJECTIVES & PRINCIPLES
4.1	Development Objectives
4.2	Development Principles
4.2.1	Residential
4.2.2	Commercial
4.2.3	Municipal Reserves & Educational and Community Facilities
4.2.4	Existing Uses
4.2.5	Transportation
4.2.6	Ecological Stewardship
4.2.7	Resource Operations

SECTION 5	DEVELOPMENT CONCEPT
5.1	Neighbourhood Unit
5.2	Residential
5.2.1	Low Density Residential
5.2.2	Medium Density Residential
5.3	Commercial
5.3.1	Convenience Commercial
5.3.2	Community Commercial
5.4	Educational & Community Facilities
5.5	Open Space & Pedestrian Linkages
5.5.1	Virginia Park Woodland
5.5.2	Southwest Mixedwood Natural Area
5.6	Stormwater Management Facilities
5.7	Transportation
SECTION 6	ENGINEERING SERVICES
6.1	Stormwater Drainage
6.2	Sanitary Servicing
6.3	Water Servicing
6.4	Shallow Utilities
SECTION 7	TRANSPORTATION
7.1	Transportation
7.2	Roadway Network
7.3	Roadway Staging
7.4	Transit Servicing
7.5	Town Centre Access
7.6	Pedestrian & Bicycle Circulation
7.7	Parking
7.8	Truck Routes
SECTION 8	IMPLEMENTATION
8.1	Development Staging
8.2	Redistricting & Subdivision

LIST OF FIGURES

1	Location Plan
2	Context Plan
3	Land Ownership
4	Development Considerations
5	Site Features
6	Development Considerations
7	Storm Servicing
8	Sanitary Sewerage
9	Circulation System
10	Staging Concept

LIST OF MAPS

Map 1	Rutherford Neighbourhood Area Structure Plan
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LIST OF TABLES

Table 1	Land Ownership – Rutherford NASP
Table 2	Existing Pipeline Transmission – Rutherford NASP
Table 3	Rutherford NASP Land Use and Population Statistics

Section 1

INTRODUCTION

1.1 Purpose

The purpose of this Neighbourhood Area Structure Plan is to describe the land use framework and development objectives for Rutherford, consisting of 219.40 hectares and one of 13 neighbourhoods within the plan area governed by the Heritage Valley Servicing Concept Design Brief (see Figure 1.0 – Context Plan). Heritage Valley is a 2,118 hectare area of land immediately south of the Transportation and Utility Corridor (TUC) and west of Calgary Trail within south Edmonton.

*Bylaw 15563
November 8, 2010*

The Neighbourhood Area Structure Plan (NASP) will implement the general land use framework set out in the Heritage Valley Servicing Concept Design Brief (SCDB) by more specifically identifying the type, size and location of various land uses, density and pattern of development, location of roadways, conceptual servicing schemes and sequence of development.

The Rutherford¹ NASP has been prepared on behalf of *two private land* owners and/or beneficial owners of approximately 174.3 hectares of land within the NASP.

*Amended by
Editor*

1.2 Definition of Plan Area

The Rutherford Neighbourhood Area Structure Plan is comprised of a number of parcels within NE 19-51-24-W4, SE 19-51-24-W4, parts of NW 19-51-24-W4, SW 19-51-24-W4 plus a few other adjoining parcels. *The total area of the Rutherford NASP is 219.40 hectares. As shown on Figure 2.0 – Context Plan, the NASP is defined by the following boundaries:*

*Bylaw 15563
November 8, 2010*

- *North – Ellerslie Road (9 Avenue S.W.)*
- *West – 127 Street S.W.*
- *East – James Mowatt Trail²*
- *South – 22 Avenue S.W.*

¹ All references here within to “Heritage Valley Neighbourhood Four” have been deleted and replaced with “Rutherford” as per Bylaw 15563, November 8, 2010

² All references here within to “111 Street” have been deleted and replaced with “James Mowatt Trail” as per Bylaw 15563, November 8, 2010

The Rutherford NASP constitutes a logical planning unit with respect to identifiable plan boundaries and servicing considerations and is consistent with the area identified in the Heritage Valley SCDB for preparation of the NASP.

1.3 Land Ownership

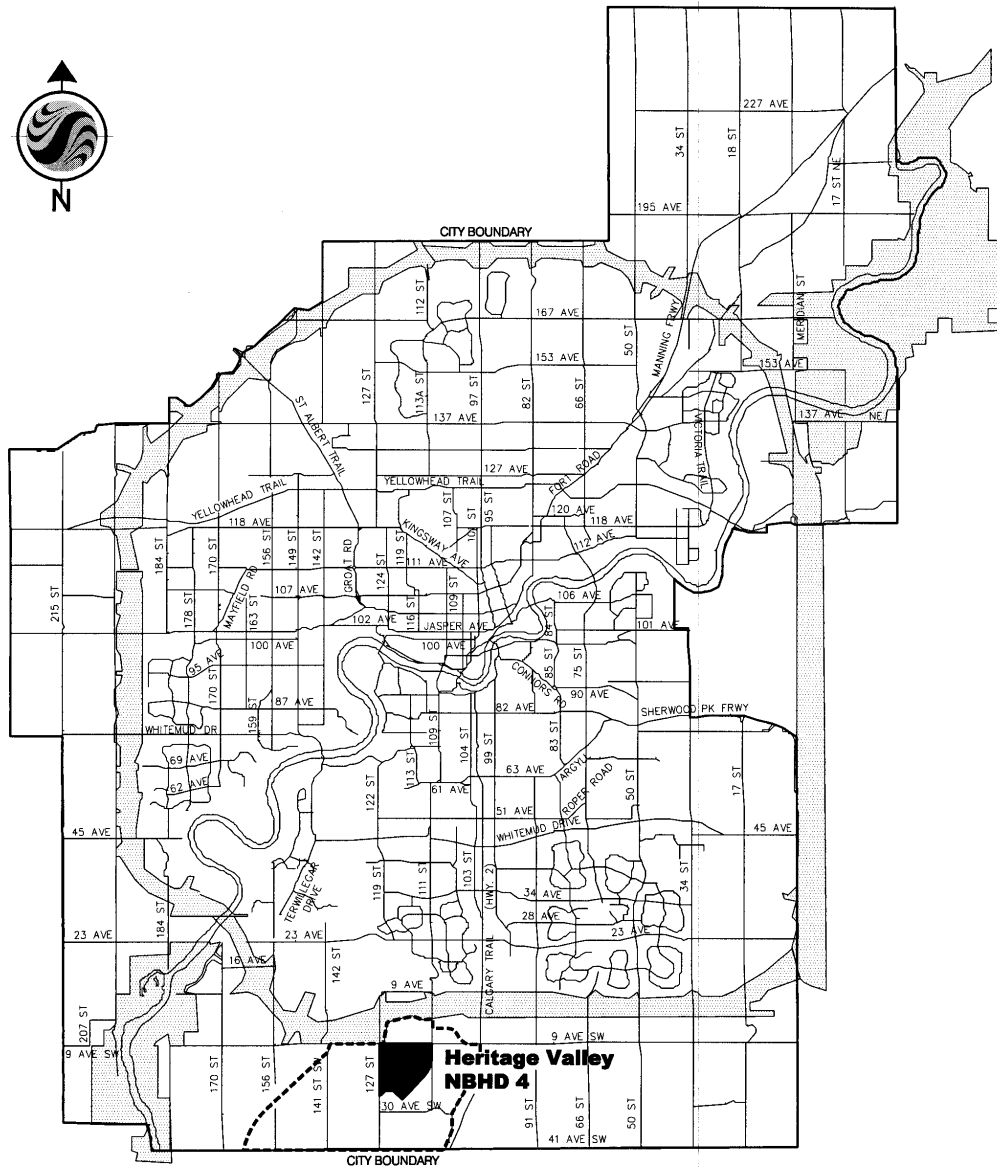
Approximately 75% of the land within the Rutherford NASP is either owned or under agreement for sale by *two private land owners*. The remaining land is held by number of other owners. Current land ownership is shown on Figure 3.0 - Land Ownership. *A listing of the legal parcels at the time of the April 2001 Rutherford NASP Approval, (Bylaw 12550) is provided on Table 1 - Land Ownership.*

*Amended by
Editor*

*Bylaw 15563
November 8, 2010*

TABLE 1 (As amended by Editor)			
LAND OWNERSHIP			
RUTHERFORD NASP			
	Titled Owner	Legal Description	Area (ha) in NASP
1	Private	Lot 5, Plan 952 3821	1.14
2	Private	Lot 6, Plan 962 0787	0.809
3	Private	Lot 7, Plan 962 0787	0.809
4	Private	Lot 8, Plan 962 0787	0.809
5	Private	Lot 4, Plan 942 4038	0.809
6	Private	Lot 1, Blk. A, plan 852 1816	0.607
7	Private	Lot2, Blk. A, Plan 852 1816	0.607
8	Private	Part of NW 19-51-24-W4	26.6
9	Private	NE 19-51-24-W4	58.28
10	Private	Lot A, Plan 3338 TR	3.28
11	Her Majesty the Queen	Ptn SE 24-51-25-W4	0.14
12	Private	Parcel A, Plan 822 2446	2.00
13	Private	NW/SW 19-51-24-W4	86.00
14	Private	Part of SE 19-51-24-W4	27.55
15	Private	Ptn. Lot 1, Plan 802 0014	1.85
16	Private	Ptn. Lot 2, Plan 852 2000	2.00
Total			213.29

Figure 1* Location Plan



Stantec

E2\SOUTH\DM\16109023\UR\MNCS\HYH-CITY-RED.DWG

Legend
 - - - - Heritage Valley SCDB

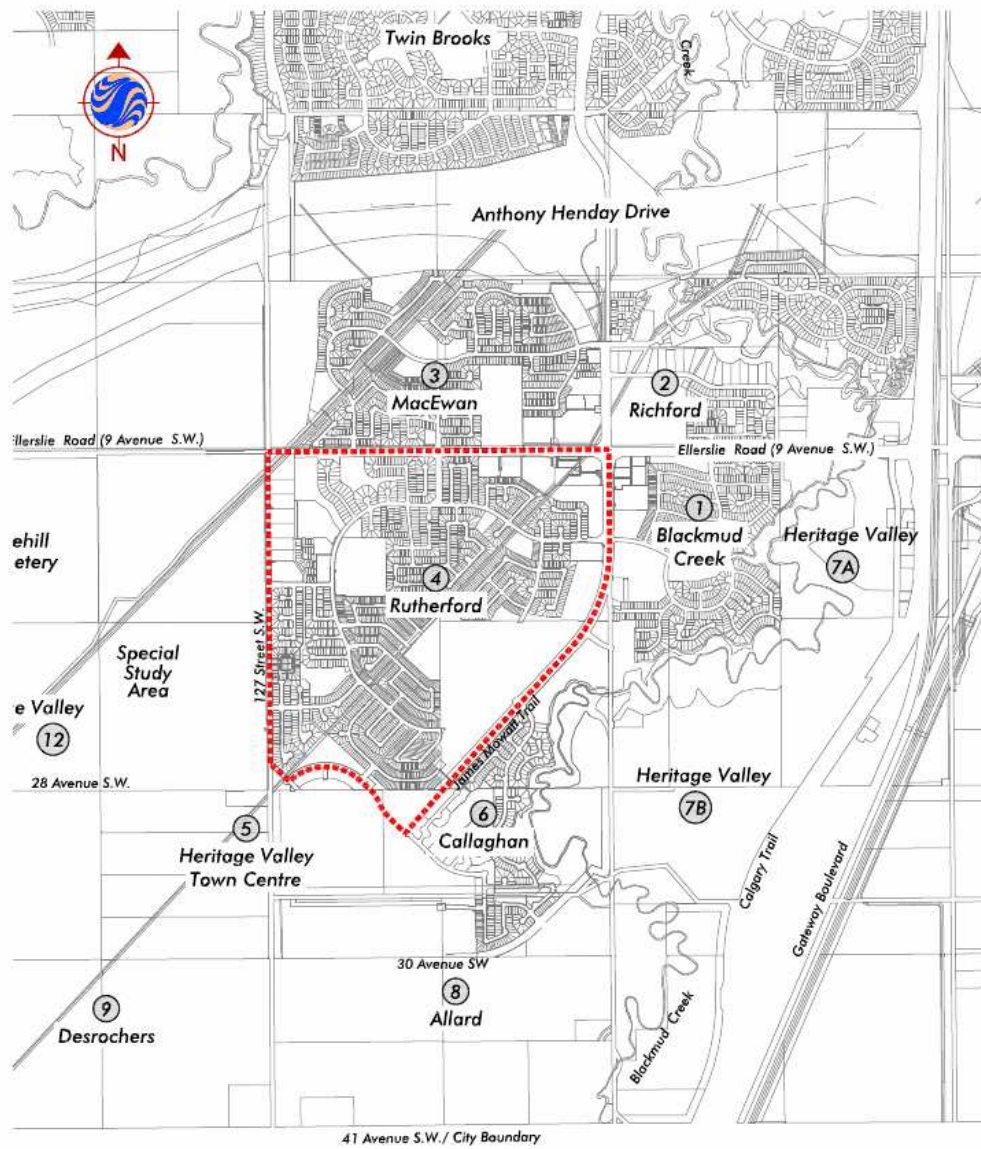
Client/Project
 HERITAGE VALLEY NBHD 4
 NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure No.
1.0

Title
Location Plan
 February, 2001
 161 09023

* Bylaw 12550 April 10, 2001

Figure 2* Context Plan



SEPTEMBER, 2010
1161_531.34

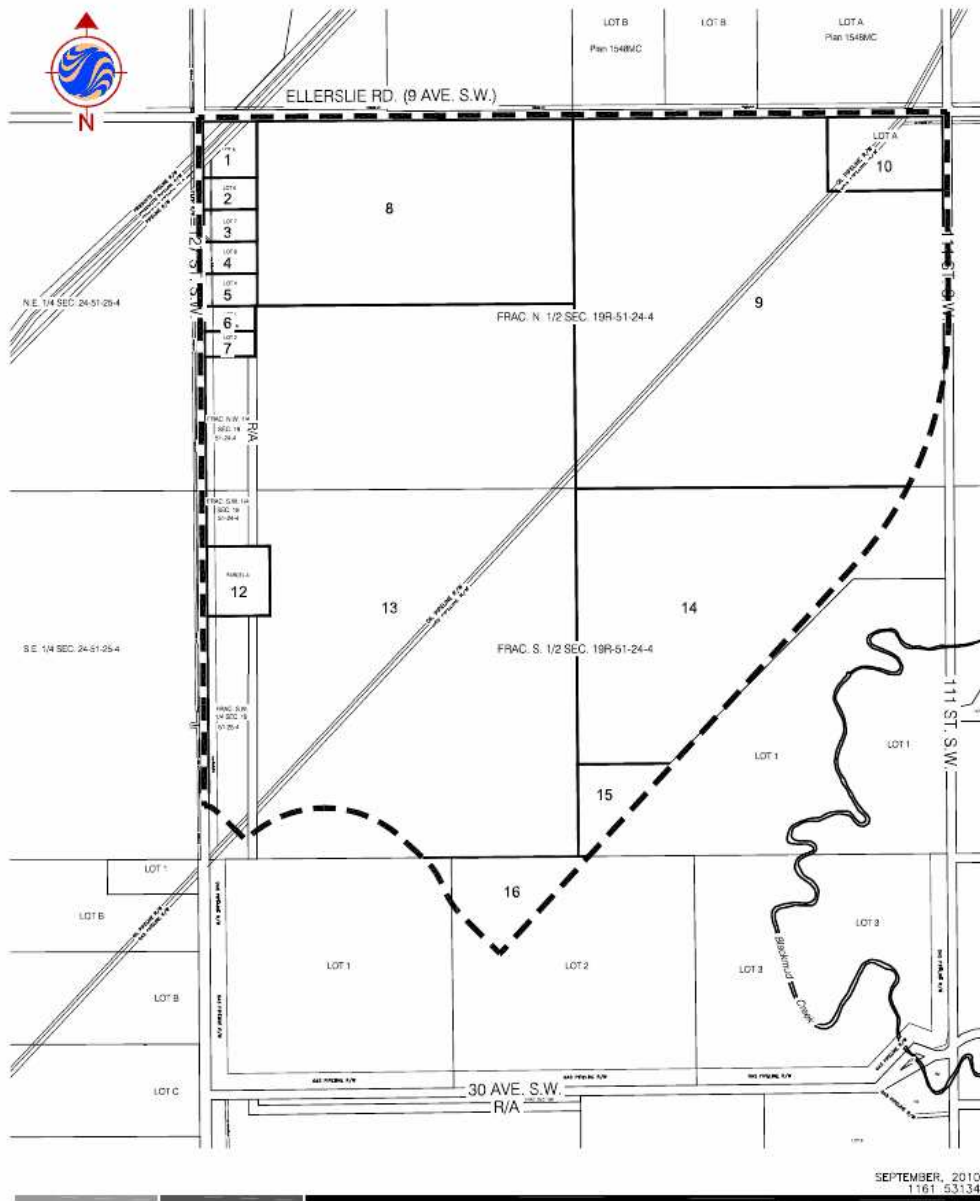


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Client/Project
RUTHERFORD
NEIGHBOURHOOD AREA
STRUCTURE PLAN
Figure No.
2.0
Title
Context Plan

* Bylaw 15563, November 8, 2010

Figure 3* Land Ownership



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Client/Project
 RUTHERFORD
 NEIGHBOURHOOD AREA
 STRUCTURE PLAN
 Figure No.
 3.0
 Title
 Land Ownership

* Bylaw 15563, November 8, 2010

Section 2

Statutory Plan & Policy Context

2.1 Edmonton Municipal Development Plan

2.1.A Plan Edmonton, Bylaw 11777

*Bylaw 15563
November 8, 2010*

Plan Edmonton, The City of Edmonton's Municipal Development Plan, (MDP) designates the land within the Rutherford NASP as a suburban area and as such permits the development of residential housing and ancillary uses. Numerous strategies are cited in the MDP regarding Planned Growth and other areas of responsibility. The following sections highlight those of particular relevance to the Rutherford NASP.

2.1.1 Planned Growth - Land Development Philosophy

“Develop and utilize a land development philosophy that meets the City's long-term development needs and achieves the optimal balance between residential, industrial, commercial, institutional and recreational land use.”

Strategy 1.1.1 - *Provide for choices regarding the types of developments in which people want to live and do business.*

The Rutherford NASP provides for low and medium density residential and commercial development opportunities within a growing sector of the City of Edmonton while accommodating existing uses within the plan.

Strategy 1.1.2 - *Address compatibility of land use in the development and review of land use plans and development proposals.*

The Rutherford NASP proposes the development of low and medium density housing adjacent to existing commercial development, developing residential communities, pipeline corridors, natural areas and major arterial roadways. Careful attention has been paid to addressing the interface and compatibility of land uses.

Strategy 1.1.3 – *Use and promote urban design principles and guidelines that enhance the quality of the urban environment.*

An extensive pedestrian network has been developed for the Rutherford area, which strives to link various nodes of the community. The commercial / transit node in the northeast portion of the plan is linked via the pipeline right-of-way to a central park area located on the highest portion of the plan area, thus providing a vista of the community along the route. Other pedestrian linkages provide convenient access to open space, storm water management facilities, multi family sites and the Town Centre.

The developers of the Rutherford NASP intend to incorporate architectural design guidelines in the form of restrictive covenants to ensure an attractive and quality residential environment.

Strategy 1.1.12 - *Place a high priority on the effective and efficient use of land.*

The Rutherford NASP plans for a mix of residential, commercial, institutional and existing land uses in an efficient land use pattern while respecting both ownership boundaries and other development constraints. Nodes such as school sites, commercial areas and transit stops have been located along collector and arterial roadways to ensure the efficient movement of traffic. These nodes are also linked via a network of greenways which provide for alternative forms of circulation (pedestrian/cycle) throughout the neighbourhood.

Strategy 1.1.13 – *Plan for urban development which is environmentally friendly and fiscally sustainable in the long term, based on the City's financing, infrastructure and environmental strategies.*

Rutherford will be developed in as environmentally responsible a fashion as possible. Natural areas will be preserved to the greatest extent possible. School sites and other open spaces have been planned adjacent to natural areas to enhance their ecological value. Residential densities will be relatively high to ensure efficient use of land. The extensive pedestrian network and future transit corridor will encourage alternatives to the automobile. Naturalized stormwater management facilities will enhance the quality of stormwater runoff and provide additional habitat for wildlife.

The Rutherford NASP provides for the efficient, cost effective and coordinated delivery of engineering services. Existing water services are to be extended and constructed at the cost of the developers. Stormwater is to be detained onsite and discharged at

predevelopment rates via a series of stormwater management facilities. These facilities are to be constructed at the developers' cost. The sanitary sewerage system is to be constructed on site at the developers' cost and ties into in to the SESS – SW1 trunk currently being constructed. The costs associated with the SESS system are recovered from new developments via a per hectare assessment on all benefiting areas. The developers will pay for the construction of the first two lanes of arterial roadways through the Arterial Roadway Assessments program, and will pay the full cost of collector and local roadways within the neighbourhood.

Strategy 1.1.14 - *Maintain the integrity of pipelines and utility corridors while planning for growth and development.*

The Rutherford NASP contains significant southwest-northeast utility corridor which has been integrated into the plan and, where appropriate, will be employed in the open space and walkway system.

2.1.2 Planned Growth - Utilization of Existing Infrastructure
“Encourage maximum development around City infrastructure.”

Strategy 1.3.3 - *Support contiguous development that is adjacent to existing development in order to accommodate growth in an orderly and economical fashion.*

The Rutherford NASP is situated immediately west across James Mowatt Trail from two residential neighbourhoods already under development. Development on the north side of the TUC within south Edmonton is, for the most part, complete. An NASP for Neighbourhood Three to the north of Ellerslie Road is being prepared concurrently with this document. The lands within the Rutherford NASP can be serviced from the same existing and planned infrastructure being installed along James Mowatt Trail and Ellerslie Road.

Strategy 1.3.4 – *Promote intensification of development around transportation corridors and employment areas.*

The Rutherford NASP has grouped a significant amount of medium density residential (MDR) housing along the Ellerslie Road and 111th Street corridors. Careful attention has been paid to locating MDR uses in close proximity to the commercial and transit node in the northeast corner. A second significant area of MDR has been placed next to the Town Centre locating higher densities next to employment, educational and commercial opportunities in the Town Centre.

2.1.3 Planned Growth - Managing Suburban Growth

“Manage suburban growth in a manner that ensures adequate infrastructure and services and maintains a balance of residential, commercial, industrial and recreational land uses.”

Strategy 1.7.1 - *Accommodate growth in an orderly, serviced and cost-effective manner.*

Given its contiguous nature (from both a land use and servicing perspective) with other developing and approved neighbourhood plans, the Rutherford NASP represents a logical location in south Edmonton for the development of residential land uses. Services can be extended into this area in a cost-effective manner.

Strategy 1.7.2 - *Provide for a range of housing types and densities in each residential neighbourhood.*

The Rutherford NASP allows for a range of low and medium density residential development to take place. The ratio of low to medium density residential development is consistent with current City Council guidelines.

Strategy 4.3.5 – *Support initiatives which encourage the reduction of transportation-induced impacts on Edmonton’s natural environment.*

The Rutherford NASP builds on the principles outlined in the Heritage Valley SCDB regarding the location of higher densities next to areas served by transit and the incorporation of “Greenways” which link major nodes within the plan area. These “Greenways” provide opportunities for alternative forms of movement throughout such as walking or cycling.

Strategy 4.4.4 – *Consider environmental impact as a factor in the decision making process for, land, transportation and infrastructure development.*

Careful consideration has been given the natural areas located in NASP area. Stage 1 and Stage 2 Natural Site assessments have been conducted to ensure areas of retention are logical and sustainable within an urban environment.

*Bylaw 15563
November 8, 2010*

2.1.B The Way We Grow, Bylaw 15100

In May 2010, City Council approved a new Municipal Development Plan (MDP) titled The Way We Grow. The Rutherford NASP complies with the following MDP policies:

<p>MDP Policy 3.1.1.1 – Integrate higher density development with Light Rail Transit (LRT) stations and transit centres.</p>	<p>The Rutherford NASP designates lands in the southern portion of the neighbourhood as Medium Density Residential due to the proximity to the Heritage Valley Town Centre LRT station.</p>
<p>MDP Policy 3.1.1.3 – Focus land development activity and the provision of civic infrastructure to ensure developing neighbourhoods are completed from the perspective of the number of homes built, an established population threshold reached, and the civic facilities and services provided.</p>	<p>The Rutherford NASP is a complete neighbourhood in terms of number of homes built, an established population threshold reached, and the civic facilities and services provided.</p>
<p>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.</p>	<p>The Rutherford NASP establishes a variety of development opportunities through the provision of several types of land components (LDR, MDR, HDR, and Commercial).</p>
<p>MDP Policy 3.6.1.2 – Promote the completion of developing neighbourhoods by providing public infrastructure and services for livability.</p> <p>MDP Policy 3.6.1.6 – Support contiguous development and infrastructure in order to accommodate growth in an orderly and economical fashion.</p>	<p>The Rutherford NASP provides public infrastructure and services to the residents of the neighbourhood.</p> <p>The Rutherford NASP represents contiguous growth in southwest Edmonton, as the surrounding neighbourhoods develop concurrently.</p>
<p>MDP Policy 4.4.1.1 – Provide a broad and varied housing choice, incorporating housing for various demographic and income groups in all neighbourhoods.</p>	<p>The Rutherford NASP will expand the range of housing types within the Rutherford neighbourhood by providing opportunity for development of medium and high rise apartments, stacked row, row, semi- and single detached housing.</p>
<p>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.</p>	<p>MDR locations within the Rutherford NASP are adjacent to either arterial and/or collector roadways which provide for a high quality urban environment and promotes walkability and transit usage.</p>

2.2 Heritage Valley SCDB

The Heritage Valley SCDB provides general guidelines to facilitate the orderly development of the plan area in terms of proposed land uses, density of development, location of major roads and facilities and sequence of development. The SCDB promotes the creation of sustainable communities through the development of compact, integrated neighbourhoods providing future residents with an attractive, sustainable community.

The Heritage Valley SCDB has been designed on the basis of a community structure that groups a number of neighbourhoods to form a community cluster that provides community and neighbourhood service to more than one or two neighbourhoods and allows for the sharing of facilities such as transit.

The Rutherford NASP is a more detailed extension of the land use framework described in the SCDB and reflects the development objectives in the SCDB. The Rutherford design is complemented with extensive pedestrian linkages that will connect with adjacent neighbourhoods and school sites that are intended to service neighbourhoods outside of the neighbourhood boundaries including the adjacent MacEwan.¹ The commercial area in the northeast corner of the plan area with its associated transit station is intended to also service several adjacent neighbourhoods. Concentrations of medium density residential uses have been clustered around transportation corridors to ensure ease of access to residents.

2.3 Airport Protection Overlay

The Edmonton International Airport Vicinity Protection Area Regulation regulates land use that may affect the use of the Edmonton International Airport, and establishes Noise Exposure Factor (NEF) contours within which residential development may be controlled or precluded. The Rutherford NASP lies entirely outside the designated area. Therefore, there is no restriction on residential development within the plan area arising from this regulation.

2.4 Suburban Neighbourhood Design Principles

The City of Edmonton's Suburban Neighbourhood Design Principles report describes a variety of design principles intended to encourage flexibility and innovation in the design and servicing of new neighbourhoods.

* All references here within to Heritage Valley "Neighbourhood 3" have been deleted and replaced with "MacEwan" as per Bylaw 15563, November 8, 2010.

Design Principle 1 - *Design neighbourhoods with the intent of sharing common infrastructure facilities among neighbourhoods.*

Infrastructure to service the Rutherford NASP is part of a larger system to service lands in the vicinity such as the Blackmud Creek and Richford neighbourhoods and undeveloped neighbourhoods such as MacEwan to the north. Existing roadways such as James Mowatt Trail and Ellerslie Road will be upgraded and widened with the overall pace of development and intersections will be aligned to share future signalized traffic movements.

The proposed school/park sites in Rutherford plus the commercial sites in each corner of the intersection of Ellerslie Road and 111th Street will provide services to residents in the four neighbourhoods of the community cluster. The Catholic school site in Rutherford is intended to serve students from the four neighbourhoods 1, 2, 3, and 4 while the public school site will serve students from Rutherford and MacEwan.

Design Principle 2 - *Design and locate school and community facilities to provide inter-neighbourhood focal points.*

Given the large area of Rutherford, two school/park sites have been designated within the west and east portions of the community to facilitate easy access for all students and residents. Extensive pedestrian linkages will allow ease of access to the school site by residents of Neighbourhoods 1, 2, 3, and 4.

Design Principle 3 - *Design the arterial and collector roads along a grid pattern, peripheral to the neighbourhoods.*

The boundaries of Rutherford are defined by the future major arterial roadways of James Mowatt Trail and Ellerslie Road which are aligned in a grid pattern peripheral to the plan area. The looping collector roadway throughout the neighbourhood provides ease of access to all areas without dominating the area or providing shortcutting routes.

Design 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.*

Roadways within the neighbourhood will be developed as a mixture of collector and local roadways. Adjacent land uses will assist in the determination of appropriate road right-of-way widths and cross sections. All roadways will be constructed to City of Edmonton standards.

Design Principle 5 - *Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.*

Bicycle and pedestrian movement throughout Rutherford and the larger Heritage Valley SCDB area is intended to follow the local, collector and arterial roadway network in addition to walkways and other open space corridors. The pipeline corridor which traverses the neighbourhood provides excellent linkages between the school/park sites, Town Centre, natural areas and adjacent neighbourhoods.

*Amended by
Editor*

Design Principle 6 - *Provide Transit Services to the edges of new neighbourhoods using the arterial and collector roadways in conjunction with appropriately designed, strategically located and conveniently accessed transit waiting zones.*

Future transit service is appropriate along the collector roadway network as well as along Ellerslie Road, James Mowatt Trail and 127 Street, the northern, eastern and western boundaries of the neighbourhood. Given the shape of Rutherford and the alignment of the collector roadway, access to transit is generally within 400m walking distance of virtually all parts of the neighbourhood. The Heritage Valley SCDB designates a future LRT/Transit station in the commercial area in the northeast of the plan area which will provide direct linkages to the University of Alberta, Downtown, Commonwealth Stadium, Skyreach Centre and the Northlands area. In the interim, the Heritage Valley SCDB contemplates the location of a transit centre on the commercial site with the adjacent 111th Street designated as a busway. This will ensure convenient express transit service until the ultimate configuration.

Design 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 school/park sites within Rutherford have been located such that the westerly site is located entirely within lands owned by a private developer. The easterly site is split between lands owned by two private developers. Other municipal reserve parcels within the neighbourhood have been proposed to retain portions of existing natural areas. These sites are within single ownership property boundaries and do not require consolidation to assemble and may be pre-dedicated early in development.

Design Principle 8 - *Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of education over time.*

The proposed school/park sites are of sufficient size to accommodate the intended educational and community facilities. The potential for shared public use and adaptive re-use of sites and buildings should be considered when schools are being planned. If a school board declares a site surplus alternative land uses can be explored according to established procedures.

Design 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.*

Dispersed parks are proposed within the NASP to provide localized play and open space areas for residents. Other dispersed areas of park are to be created from municipal reserves throughout the plan area at the subdivision stage in an effort to retain portions of the existing natural areas within the neighbourhood. Careful consideration has been given to their location to ensure that they are linked via the extensive pedestrian circulation system.

Design Principle 10 - *Optimize the use of land and capital requirements for facilities such as churches schools, community leagues and stormwater management.*

There are opportunities within the neighbourhood to accommodate dual use facilities given the location of the proposed stormwater management facilities and portions of the retained natural areas.

Design 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 pipeline corridors within and extending beyond Rutherford provide excellent opportunities to provide linkages throughout and beyond the plan area to connect residents with amenities, transit and commercial uses. These corridors are augmented by greenways to further connect key areas of the Rutherford area. The stormwater management facilities provide opportunities both for visual amenity and as additional open space for residents.

A portion of the Virginia Park Woodland and the Southwest Mixedwood Natural Area will be retained through municipal reserve dedication to provide additional amenity space to residents.

The area and configuration of the sites have been subject to Stage 1 and Stage 2 Natural Site Assessments to ensure sustainability in the context of urban development.

Design Principle 12 - *Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points.*

Medium density residential parcels of varying sizes have been designated throughout the plan area alongside collector and arterial roads, SWM facilities, pipeline corridors, park sites and commercial areas. Some parcels are located at the periphery of the neighbourhood while others are more internalized but still easily accessed by pedestrian, bicycle, transit and vehicle traffic. Multi family uses have been concentrated in the northeast portion of the plan area, next to commercial and transit facilities and in the south west corner of the plan area next to the future Town Centre.

Design Principle 13 - *Use stormwater management techniques which provide an alternative (s) to the man made lakes and dry ponds typical to Edmonton.*

Alternative SWM techniques may be considered. Techniques as discussed in Table 1 of the Suburban Neighbourhood Design Principles Report may, where appropriate, be pursued at the subdivision and building stage if the Drainage Branch determines them to be suitable alternatives.

Design Principle 14 - *Minimize the use of public utility lots and maximize the use of easements for underground services not located in road rights-of-way.*

This principle is recommended for use in the Rutherford NASP and can be best implemented at the subdivision and engineering design stage.

Design 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.*

A range of low and medium density residential housing forms will be developed within the Rutherford NASP with concentrations of higher densities in the northeast and southwest portions of the plan area. In accordance with market demands, opportunities for innovative site design and building siting can be pursued through the redistricting and subdivision processes.

Design Principle 16 - *Use current population and student*

generation formulas when planning facilities for a neighbourhood. Take into account the life cycle of the neighbourhood.

The population and student generation ratios provided in the Suburban Neighbourhood Design Principles report were used to develop demographic projections in the NASP. Both public and separate school facilities are proposed within the NASP.

2.5 Capital Region Growth Plan

*Bylaw 15563
November 8, 2010*

The Capital Region Growth Plan: Growing Forward was approved by the Government of Alberta on March 11, 2010. The Rutherford NASP supports the goals of the CRGP as follows:

<p>II. Minimize Regional Footprint B. Concentrate New Growth Within Priority Growth Areas</p> <p>CRGP Policy (i) Most new growth shall occur within priority growth areas.</p> <p>CRGP 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:</p> <ul style="list-style-type: none"> a. Existing and proposed multi-mode movement corridors, including transit nodes; b. Adjacent to existing and proposed major employment areas; c. Redevelopment and intensification opportunities within existing urban areas; and d. Locations that utilize existing infrastructure and servicing capacity or logically and efficiently extend that infrastructure. 	<p><i>The Rutherford NASP is intended to promote growth within Priority Growth Area Cw.</i></p>
<p>II. Minimize Regional Footprint D. Support Expansion of Medium and Higher Density Residential Housing Forms</p> <p>CRGP Policy (i) New residential developments shall provide a greater proportion of higher density residential units.</p> <p>CRGP 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><i>The Rutherford NASP will expand the range of housing types within the Rutherford neighbourhood by providing opportunity for development of medium and high rise apartments, stacked row, row, semi- and single detached housing.</i></p>

<p>III. Strengthen Communities A. Create Inclusive Communities</p> <p>CRGP Policy (ii) Integrate uses with adjacent developments to improve connectivity and accessibility to local parks, open space, commercial, and community services.</p> <p>CRGP Policy (iii) Encourage co-location and/or shared use of compatible public service infrastructure, such as education facilities, parks and civic uses.</p>	<p><i>The Rutherford NASP provides a high quality urban environment and promotes walkability and transit usage through the integration of a range of housing types, parks, open space and community services.</i></p> <p><i>The Rutherford NASP ensures that the provision of civic infrastructure is provided in a developing neighbourhood.</i></p>
<p>III. Strengthen Communities C. Support Public Transit</p> <p>CRGP Policy (iii) New developments shall be designed for connectivity and accessibility to transit facilities.</p>	<p><i>The Rutherford NASP is designed to promote connectivity and accessibility to transit facilities where feasible by providing locations within 400 metre walking distance.</i></p>

Section 3

Site Context & Development Considerations

3.1 Topography and Vegetation

As shown on figure 4.0 – Site Contours, the topography of the lands within the Rutherford NASP is generally flat throughout, rising in the south central portion and dropping to the east and west in the north with overall elevations ranging from 697m to 684m.

With the exception of the Virginia Park Woodland and Southwest Mixedwood Natural Area, there is limited vegetation scattered throughout the plan area mostly associated with existing dwellings and uses.

Soils in the area are a blend of moderately to well drained Orthic Black and Gleyed Black Chernozems on glaciolacustrine material. The soil conditions do not present any impediment to urban development.

3.2 Existing Land Uses

As shown on Figure 5.0 – Site Features, the Virginia Park Greenhouses are located along Ellerslie Road in the northeast portion of the plan. There are a number of farmhouses and estate residential properties located further west along Ellerslie Road and on 127th Street, as well as a church.

The remainder of the lands, with the exception of the natural areas, are cleared and under cultivation. None of these uses pose any particular constraints to future urban development. However, future development of any and all properties within the neighbourhood is the option of the respective landowners.

3.3 Surrounding Land Uses

The plan area is bound on the north, east and west by future major arterial roadways, Ellerslie Road (9 Avenue SW), James Mowatt Trail and 127 Street. Eastward across James Mowatt Trail lie the recently approved and developing residential neighbourhoods of Richford and Blackmud Creek. To the north of Ellerslie Road lies the future Heritage Valley Neighbourhood Three and the existing

Victory Christian Center.

To the west are provincially owned lands currently leased by the University of Alberta. Existing land uses are primarily animal-based research and crop/soil experimentation. The Heritage Valley SCDB designates these lands as a special study area.

3.4 Environmental Resources

The City of Edmonton's Inventory of Environmentally Sensitive and Significant Natural Areas (1993) identifies one Significant Natural Area and one Local Environmentally Sensitive Area within the Rutherford NASP.

3.4.1 Virginia Park Woodland (SW31)

The Inventory identifies the 5.37 hectare Virginia Park Woodland along the easterly boundary of Rutherford (see Figure 5.0) as a Significant Natural Area. The Inventory notes that the site is a "healthy, relatively undisturbed mixed wood stand of balsam poplar - white spruce." The Woodland provides a corridor for white-tailed deer movement though it does not support year-round populations. The Inventory notes that "because of the relative small size of this stand, any additional disruption will result in a further reduction of the stand's ecological integrity and its ability to support wildlife."

In order to further document the characteristics of the Virginia Park Woodland, a Stage One Preliminary Natural Site Assessment was undertaken by Bruce Thompson & Associates in June 1999 and submitted under separate cover. The land containing the Virginia Park Woodland is controlled by *a private developer*.

*Amended by
Editor*

The basic objective of a Stage One Preliminary Natural Site Assessment is to screen the natural site to identify important environmental elements on a site and determine the site's natural sustainability in its own right. Step One also seeks to determine whether any changes have taken place since the 1993 Inventory, which would alter the site's significance.

The Stage One, Step One Assessment confirmed that no significant changes were apparent on the Site in terms of human developments or successional changes in habitat, as compared to the description given in the Inventory.

The Assessment noted that the site may be considered to have high habitat diversity, consisting predominantly of spruce dominated forest, with some deciduous patches and a cleared, grassy area, creating a reasonable amount of "edge" habitat. No rare or threatened species of plant or animal were actually observed during

the site reconnaissance, which took place early in the growing season.

While it does not represent a particularly unusual type of ecosystem, it is typical of a woodland assemblage that has been in decline as the City expands and additional land is cleared for housing, transportation and commercial purposes. The diversity of wildlife and plants is reasonably high due to the relative structural diversity of the stand. A key value may be its use as a dispersion corridor for ungulate (white-tailed deer and possibly occasional moose) and other wildlife, as it provides both cover and browsing opportunities.

In terms of the natural sustainability of ecosystems on the Site, if it were to be left as it is with no further development, the spruce dominated portions would maintain the natural progress of succession until some event such as fire. Natural succession would entail further growth of the forest, with some increase in diversity as older trees give way to newer growth from the lower canopies. This gradual increase would maintain diversity in animal species, e.g. woodpeckers utilizing dead trees. Apart from this, the bird community would remain largely as it presently exists.

The future makeup of the mammalian (e.g. deer) populations would depend to a large extent on the disposition of lands bordering the Area, as this will affect their migration among “islands” of forest cover and browsing habitat.

In the Preliminary Assessment, several valued environmental components were identified which are potentially sustainable in their own right but potentially affected by human activities and development. Since portions of the site were planned for retention, it was recommended that a Stage Two (Detailed) Natural Assessment be conducted prior to approval of the NASP.

A Stage Two Assessment on the Virginia Park Woodland carried out by Bruce Thompson and Associates in December 2000. The purpose of the Stage Two Assessment was to identify and assess the potential effects of development and related activities on the Woodland. The study was carried out in the context of a defined development scenario which resulted in the clearing and development of the west one third of the mixed wood stand. The planned Transit extension and 111th Street corridor will result in the removal of a strip of the mixed wood stand on the east side, leaving approximately 2.50 hectares of natural area.

The loss of about half of the stand, as proposed in the development

plan, may reduce the sustainability of the remaining stand. However, taking into account the currently healthy condition of trees, the presence of regenerating spruce, and provided that surface drainage is managed in a fashion that sustains optimal soil moisture, it is anticipated that the remaining portion can remain intact and vigorous, although perhaps supporting a less diverse wildlife and plant community.

Opportunities that will be realized in retaining a 2.50-ha portion as a Municipal Reserve are: (1) retaining some of the existing habitat and biodiversity in the area, which will add a positive feature to the adjacent residential areas; (2) providing a positive aesthetic feature, both in a site and area context; (3) serving as a noise barrier (e.g., the Transit and 111 St. to the east); and (4) preserving some of the existing ecological linkages for various bird and mammal species, among the wooded areas in the vicinity.

The report concludes that there does not appear to be a clearly better alternative for locating a 2.50 ha Municipal Reserve within the Natural Area, given the City's long-term plans for locating the Transit extension on the east side of the Area and the likely need to upgrade 111 St. SW.

3.4.2 Southwest Mixedwood Natural Area (SW 6001)

The City of Edmonton's Inventory of Environmentally Sensitive Areas Inventory (O'Leary et al., 1993) identifies the Southeast Mixedwood Natural Area, located in the northwest corner of the plan area, as a mixed wood community composed of white spruce and balsam poplar and to a lesser extent, paper birch and aspen. However, since the Inventory was completed in 1993 significant removal of vegetation has occurred thus reducing the natural area. A portion of the natural area is planned to be retained via the dedication of 3.6 ha of Municipal Reserve.

In order to further document the characteristics of the remaining Southwest Mixedwood Natural Area, Stage One and Stage Two Natural Site Assessments were carried out for the remaining portion of Southwest Mixedwood lot.

In terms of the mixed wood forest stand itself, the Natural Area has experienced significant change since the 1993 O'Leary et al. survey of the area. A substantial portion of the woodland has recently been cleared of its coniferous and deciduous trees. The clearing took place during the winter of 1999/2000, and affects approximately 12.7 ha of the 24.5 ha of woodland formerly comprising the Natural Area.

No significant changes were apparent on the site in terms of human developments such as burning or building. Little change in the successional state of the forest stands and associated vegetation communities were noted, as compared with the description given in the previous Inventory (O'Leary et al., 1993) with the exception of the new suckering of aspen and balsam.

The natural area supports a forest stand dominated in most parts by white spruce and balsam poplar. All ages of white spruce were observed on the site, however the dominant trees were estimated to be about 80 years old, with the oldest estimated to be 180 – 200 years old. These trees measured up to approximately 25 m in height, with DBH (diameter at breast height) in most sections of the woodland up to about 40 cm. The upper canopy of the existing Natural Area consisted of 50-75% white spruce, with the remaining components being balsam poplar, trembling aspen, and a few senescent specimens of white birch.

The Southwest Mixedwood Natural Area may be considered to have a relatively high habitat diversity, consisting predominantly of mature to over-mature spruce-dominated forest, with some more deciduous patches, and a reasonable amount of important “edge” habitat. This creates a relatively high degree of habitat diversity, both vertically and horizontally.

No rare or threatened species of plant or animal were actually observed during the site reconnaissance, which took place early in the growing season. Being largely a mature spruce stand, birds that are associated with mature coniferous forest can be expected to occur in the Southwest Mixedwood Natural Area (e.g., Golden-crowned Kinglet). Although no signs were seen, the Pileated Woodpecker would be anticipated to utilize the area, and is listed on the Alberta Status of Alberta Wildlife list as Yellow B, i.e., species that are naturally rare but not in decline, or which occur in habitats that are in decline. The large poplar trees in the Natural Area provide excellent nesting habitat for Red-tailed Hawk.

The predominantly coniferous forest of the site appears to provide good hiding and thermal cover for deer, with a good supply of browse material in the understory. Abundant signs of deer activity were observed (trails and browsing), and it is possible that deer once used the Natural Area as part of a movement/dispersion corridor that included the Whitemud Creek Ravine to the west, and Virginia Park and North Virginia Park Woodlots to the east, and thence to the Blackmud Creek Ravine further to the east. Such movement, however, has been affected by the historical agricultural

clearing of forest land surrounding these areas and incipient urban development.

While the Southwest Mixedwood Natural Area does not represent a particularly unique type of ecosystem, it is typical of a woodland assemblage that has been in decline as the City of Edmonton expands and additional land is cleared for housing, transportation and commercial purposes. The diversity of wildlife and plants is reasonably high, due to the relative structural diversity of the stand. A key value may be its use as a dispersion corridor for ungulates (deer and possibly occasional moose) and other wildlife, as it provides both cover and browsing opportunities. Abundant old snags and deadfalls provide habitat for woodpeckers, invertebrates and other fauna.

The proposed development plan would entail the clearing of trees in the eastern portion of the natural area. The remaining stand would be dedicated as Municipal Reserve in two parts of 3.25 and 0.55 ha respectively. The currently cleared portion of the 0.55 ha site will see indigenous vegetation re introduced to further enhance the corridor. This area has been configured in an effort to strike a balance between the existing natural environment, public access and development.

The area of mixed wood stand retained in the development scenario would be approximately 4 ha in area. This remaining Municipal Reserve will be contiguous with a stand of mixed wood forest immediately to the south on the school park site. In effect, the remaining treed area will extend from what was originally the northwest corner of the Natural Area, and extend in a south-southeasterly direction to what was originally the southeast corner of the Area.

The following measures have been considered in order to minimize adverse impacts on vegetation, specifically the mature spruce dominated forest.

1. Minimize the loss of mature spruce dominated forest from the east side of the Southwest Mixedwood Lot where possible and economically feasible.

Efforts will be made to retain as much of the eastern portion as possible and where allowed by site drainage. These areas will be considered, to the extent possible, where economically viable and sustainable for integration opportunities with urban development. The areas with greater value will be considered first.

2. Leave the area along the south side of Ellerslie Road intact, for as long as possible, to provide a visual and noise shield.

The area along the south side of Ellerslie Road will be left intact until such a time as traffic volumes warrant the ultimate 4-lane configuration of Ellerslie Road. Construction activities such as service installation along the south side of Ellerslie Road will avoid disturbance of the treed area to the greatest extent possible.

3. In the Southwest Mixedwood Lot avoid leaving too narrow a belt of treed area at the intersection with the collector roadway. Not only will this belt serve as an effective visual and noise barrier, but it will be important in facilitating wildlife movement along the remaining corridor. Wildlife such as white-tailed deer would require a belt of at least approximately 40 m width in order to provide the necessary visual cover.

This area has been configured with a minimum width of 40 m which will be confirmed during the subdivision and rezoning stage.

4. Practices to avoid root damage of the retained trees will be employed during construction.
5. Ensure that pedestrian access in and around the area is controlled to ensure the sustainability of the area.

It is proposed to develop a formal trail system in the area consisting of an appropriate route and surface material to control public access and activities. This control will ensure that a minimal amount of disturbance to the natural area occurs.

6. A sound plan for surface water management (stormwater management) will be incorporated into the development plan, in order to maintain soil drainage. Poor surface drainage could result in a lowering of the water table, or soils that are too wet, with resultant changes in tree vigor and stability.

During the detailed engineering stage careful attention will be paid to ensure that positive drainage occurs around the area and current soil moisture conditions are maintained.

7. Avoid clearing or culling of vegetation between May 1 and July 31 to ensure nesting habitat is not disturbed.

3.5 Environmental Site Assessment

Phase I Environmental Site Assessments (ESA) have been undertaken on the *land of two private land owners* as part of the preparation of the Rutherford NASP. These reports have been submitted under separate cover. Given the largely agricultural history of the land holdings, there are no outstanding concerns and no further investigation is required.

*Amended by
Editor*

3.5.1 Non-Participating Land Owners

No other Phase I Environmental Site Assessments have been undertaken on the remaining lands within the Rutherford NASP. In light of this, the Environmental Planning Group of the Planning & Development Department typically recommended that ESAs or disclosure statements be provided by the minority land owners at the redistricting stage.

3.6 Historical Resources

Historical Resources Overviews (HRO) for lands within the Rutherford NASP owned by *three private land owners* were undertaken by archaeologists within Stantec Consulting Ltd. in February 2000 and November 2000 and submitted to Alberta Community Development, Cultural Facilities and Historical Resources Division for review.

*Amended by
Editor*

The assessments involved the evaluation and reporting of existing information. This information was collected through reviews of historical records, regulatory information and site visits.

No previously recorded historical resources are located in the lands owned by *a private land owner*. These lands are considered low potential for discovery of historical resources. No further historical resources study is recommended due to overall low historic resources potential and current cultivation impact on relatively thin soil horizons.

*Amended by
Editor*

No previously recorded historical resources are located in the lands owned by *a private land owner*. However, portions of the SE ¼ Section 30-51-24-4 are considered moderate to high potential for discovery of historical resources. Specific locations of concern include parts of the lands closer in proximity to Blackmud Creek, that has associated previously recorded sites.

*Amended by
Editor*

The completion of a permitted Historical Resources Inventory and Assessment (HRIA) field study recommended that the proposed development be given historical clearance as no significant resources were identified in the shovel testing or detailed

inspections of fresh ground disturbance in the tree harvest area.

3.7 Energy and Natural Resources

3.7.1 Oil & Gas Well Sites

A review of information provided by the Alberta Energy & Utilities Board (AEUB) has indicated that there are no active or suspended oil or gas wells within the boundaries of the Rutherford NASP.

3.7.2 Pipeline Rights-of-Way and Facilities

As shown on Figure 4.0, there are a number of pipeline transmission facilities within the Rutherford NASP. These facilities are clustered within two rights-of-way, one major corridor cutting diagonally through the neighbourhood, and another corridor cutting just through the northwest corner of the neighbourhood.

The Alberta Energy and Utilities Board Pipeline License Register identifies these pipeline transmission licenses within the Rutherford Neighbourhood Area Structure Plan (summarized on Table 2 - Existing Pipeline Transmission Facilities.)

The pipeline corridor in the northwest portion of the neighbourhood will have only a limited impact on the land use plan for Rutherford since it does not bisect the neighbourhood to any large extent. The other major utility right-of-way bisecting the Neighbourhood will have to be accommodated within any future development.

The City of Edmonton's **Policy Guidelines for the Integration of Transmission Pipelines and Urban Development (1985)** and subsequently adopted policy and other relevant Provincial legislation will be employed when considering redistricting and subdivision applications near or adjacent to the above noted pipelines.

TABLE 2 (As amended by Editor)
EXISTING PIPELINE TRANSMISSION FACILITIES
RUTHERFORD NASP

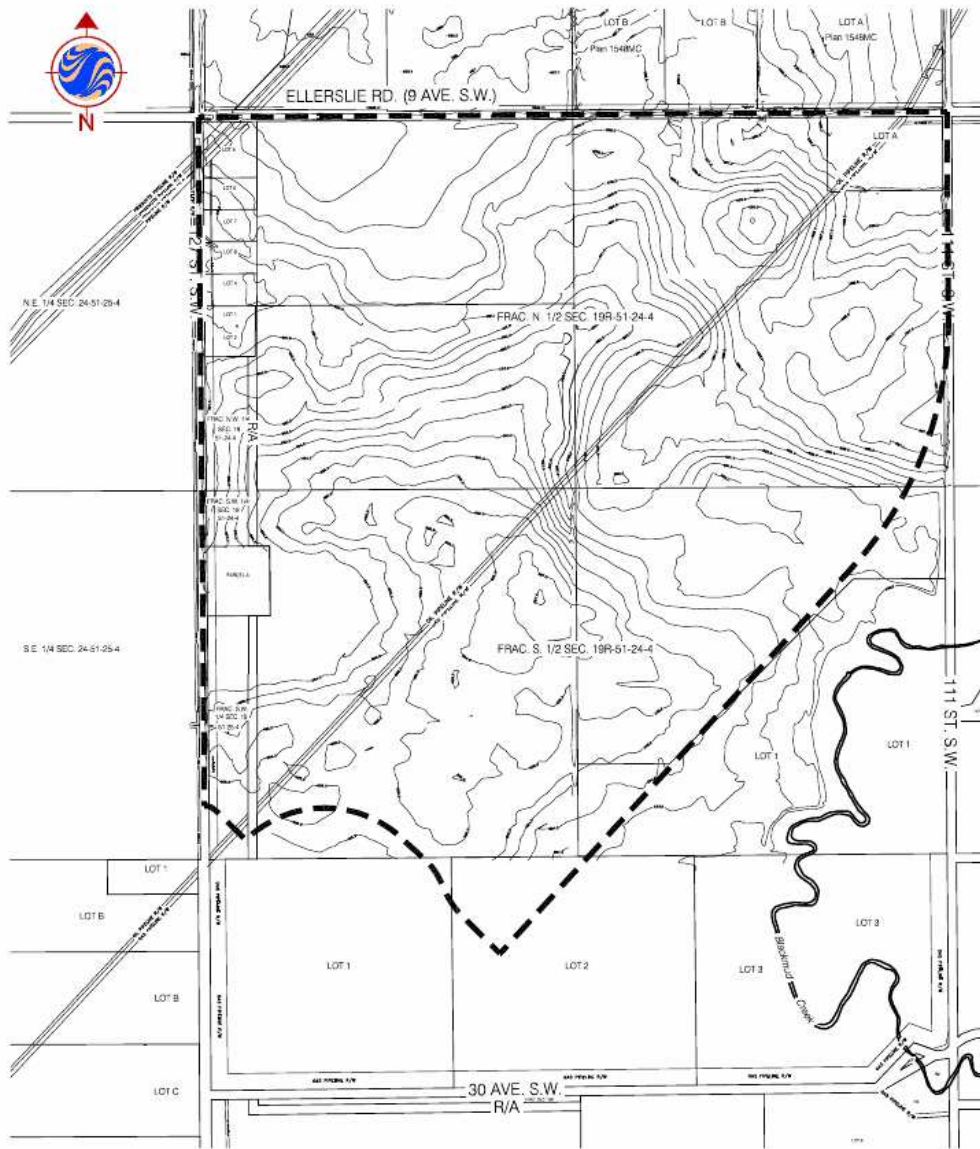
Company	Substance	H ₂ S Content (mol/kmol) ¹	Max. Operating Pressure (kPa) ²	Max. Outside Diameter (mm) ³
Private	HVP Hydrocarbon	0	3,450	60.3
Private	Crude Oil	0	5,170	219.1
Private	Natural Gas	0	6,890	609.6
Private	Natural Gas	0	N/A	N/A
Private	HVP Hydrocarbon	0	4,140	114.3
Private	LVP Hydrocarbon	0	N/A	88.9
Private	HVP Hydrocarbon	0	9,930	219.1
Private	HVP Hydrocarbon	0	7,000	273.1
Private	HVP Hydrocarbon	0	9,930	323.9
Private	Natural Gas	0	6,205	610
Private	Natural Gas	0.02	6,070	323.9
Private	Natural Gas	0	6,200	609.6

¹ sour natural gas occurs when the H₂S content is greater than 10.0 mol/kmol

² a high pressure line has a maximum operating pressure greater than or equal to 3,475 kPa

³ a high pressure line has an outside diameter greater than or equal to 323.9 mm

Figure 4* Site Contours



JULY, 2010
1161-53134

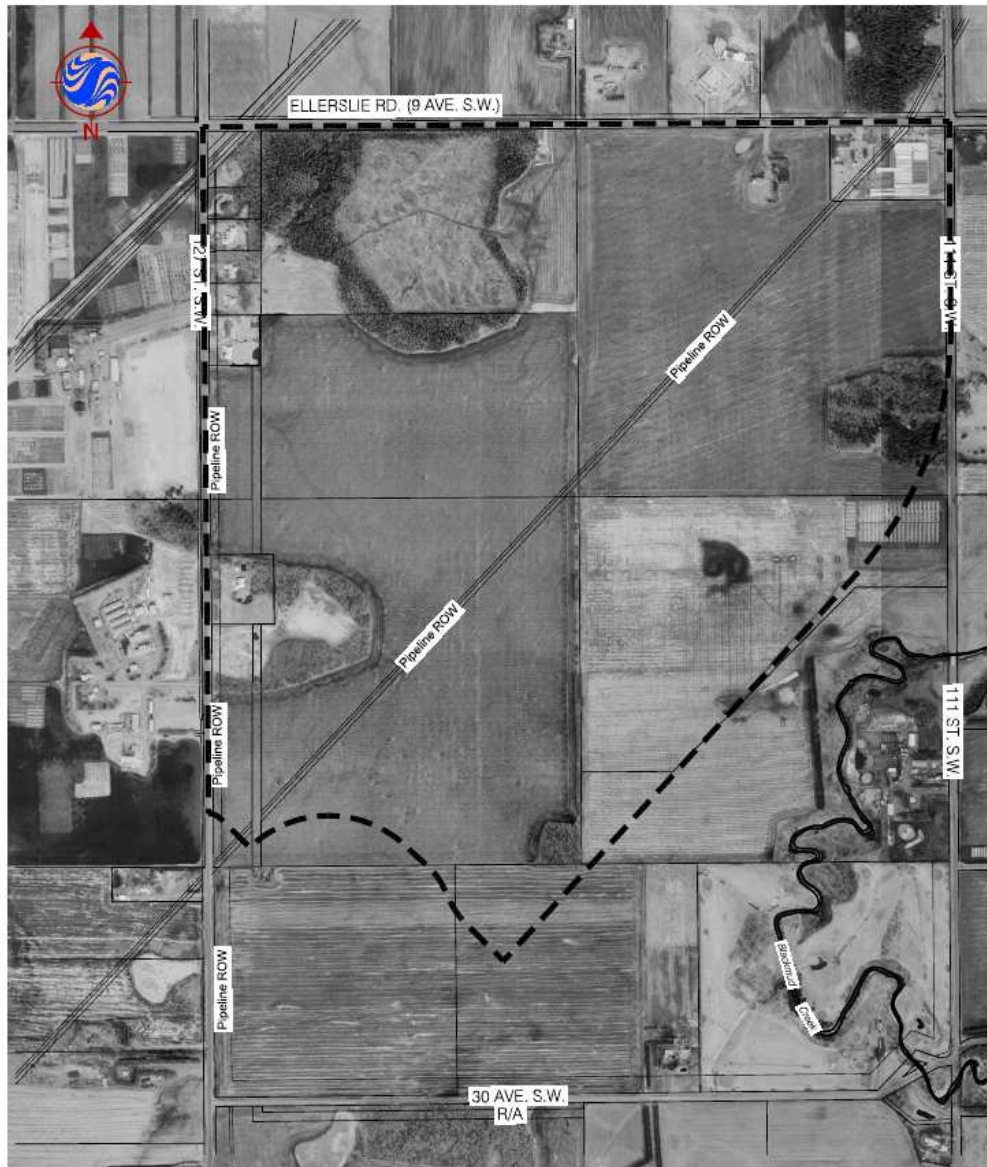


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Client/Project
RUTHERFORD
NEIGHBOURHOOD AREA
STRUCTURE PLAN
Figure No.
4.0
Title
Site Contours

* Bylaw 15563, November 8, 2010

Figure 5* Site Features



Note: 2000 Aerial Photograph of Rutherford Area. Neighbourhood boundary may differ.

SEPTEMBER, 2010
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Client/Project
RUTHERFORD
NEIGHBOURHOOD AREA
STRUCTURE PLAN
Figure No.
5.0
Title
Site Features

* Bylaw 15563, November 8, 2010

Section 4

Development Objectives & Principles

4.1 Development Objectives

The Rutherford NASP has been prepared as a comprehensively planned residential neighbourhood taking advantage of both the natural topography, pipeline corridors and locational attributes of the area. The main objectives of the Rutherford NASP are:

- to develop a plan consistent with the general intent and purpose of the City of Edmonton Municipal Development Plan and the Heritage Valley Servicing Concept Design Brief;
- to provide a framework to deliver a high quality, comprehensively planned residential area by defining the general pattern and composition of land uses, linkages, servicing designs and development staging;
- to address and accommodate existing uses (i.e. the Virginia Park Greenhouse and existing residential development) within the plan;
- to ensure implementation of the plan on an orderly, staged basis.

4.2 Development Principles

Development of the various land uses within the Rutherford NASP is defined through the following general principles:

4.2.1 Residential

- Encourage a variety of housing types; including single and semi-detached housing, row housing, apartments and opportunities for home office uses. All housing forms and options will recognize consumer preferences and be in conformance with municipal standards and policies.
- Encourage pedestrian friendly streetscapes and building siting.
- Establish sufficient overall residential densities within the Rutherford NASP to help support the efficient provision of

neighbouring educational facilities, recreational facilities and municipal services such as public transit in a timely fashion.

- Provide direct and safe pedestrian linkages to the community nodes such as commercial, open space and transit areas.
- Locate residential development so as to take advantage of natural and man-made features such as SWM facilities, park/open space, retained natural areas and pipeline corridors.
- Orient larger parcels of medium density residential development toward the collector and/or arterial road system to provide easy access and, where appropriate, to provide a transitional land use between adjacent single family development and major roads and commercial uses.
- Integrate smaller parcels of medium density residential development within the neighbourhoods adjacent to low density residential development to provide alternative housing options within the community.
- Locate concentrations of medium density residential housing next to commercial, Town Centre and transit nodes.

4.2.2 Commercial

- Build upon the commercial node at James Mowatt Trail and Ellerslie Road identified in the SCDB by providing for commercial development within Rutherford at that location.
- Provide for neighbourhood convenience development opportunities within Rutherford to serve area residents.
- Locate and orient commercial sites along arterial and/or collector roadways to ensure high visibility and to provide convenient access opportunities.
- Integrate commercial developments into the fabric of the neighbourhood to the extent possible without causing negative impacts on surrounding land uses.
- Provide convenient pedestrian linkages to commercial areas and Transit station.

4.2.3 Municipal Reserves & Educational and Community Facilities

- Provide school/park sites for educational and community league facilities within the neighbourhood through the

dedication of municipal reserves.

- Locate and size these sites to address the student and overall populations generated within designated catchment areas using accepted methods established by the Public and Separate School Boards, Edmonton Federation of Community Leagues and the City of Edmonton.
- Allow for the provision of dispersed park space within the neighbourhood to provide open space and opportunities for recreation for residents through the dedication of Municipal Reserves.
- Where possible and economically viable and sustainable, retain portions, via Municipal Reserve, of the Virginia Park Woodland and Southwest Mixedwood Natural Area for environmental, aesthetic and educational benefits.
- Consider the potential for shared public use of school sites and buildings.

4.2.4 Existing Uses

- Accommodate the continuing use of the Virginia Park Greenhouses and any existing residential development while allowing for future re-development of these lands if and when the owners choose to pursue that opportunity.

4.2.5 Transportation

- Provide a logical, safe and efficient transportation system within the plan area to address the pedestrian, bicycle, transit and vehicular transportation needs of residents moving to, from and within the Rutherford NASP as well as the adjacent Town Centre.
- Protect a corridor for future extension of Transit to the Heritage Valley Town Centre
- Provide non vehicular circulation options through the Rutherford area with special attention to linkages to the future Town Centre and commercial / Transit area in the north east.
- Minimize walking distances by creating an interconnected street network and providing walkways where roadway connection is not feasible.

4.2.6 Ecological Stewardship

- Preserve and enhance natural areas by integrating them into the built form of Rutherford and linking them to other open

spaces where possible.

- Develop land in an efficient manner and encourage intensive development.
- Incorporate natural areas into compatible land uses such as naturalized storm ponds, school/park sites or housing adjacent to them where possible.
- Encourage naturalized landscaping on public and private lands to minimize environmental and economic costs associated with their maintenance.
- Encourage energy efficient construction and other innovative building and infrastructure techniques.

4.2.7 Resource Operations

- Accommodate the safe and nuisance-free operation of existing utility rights-of-way and integrate pipeline corridors into the development concept as walkways and open space linkages where feasible.

Section 5

Development Concept

5.1 Neighbourhood Unit

The development concept for the Rutherford NASP has been prepared in response to current and anticipated residential market trends in the Edmonton region. An analysis of these trends and an assessment of their implications help shape the plan with respect to the type, size and location of various land uses.

The Rutherford NASP is comprised of 219.40 hectares and is bound on all sides by arterial and collector roadways to create a logical planning unit as shown on Figure 6.0 – Development Concept.

*Bylaw 15563
November 8, 2010*

5.2 Residential

The majority of land within Rutherford is intended for residential development as shown on Figure 6.0. A mix of low and medium density residential dwelling units is described and will be implemented based on market conditions and consumer preferences at the time of development. *Residential densities of 25 units per net residential hectare (uph) for low density residential, also referred to as single/semi-detached, 45 uph for medium density residential, also referred to as row housing, and 90 uph for medium density residential, also referred to as low-rise/ medium density housing, 225 uph for high density residential, also referred to as medium to high rise units, resulting in approximately 89 people per net residential hectare.*

*Bylaw 15563
November 8, 2010*

5.2.1 Low Density Residential

As shown on Figure 6.0, consideration has been given to the location of low density residential development, also referred to as single/semi-detached, in proximity to the amenity offered by the stormwater management facilities, walkways, park sites and retained natural areas. Within the low density residential area identified in the plan, housing forms will be predominantly single and semi-detached housing catering to a variety of lot and house sizes.

*Bylaw 15563
November 8, 2010*

Low density residential development will be planned in clusters/cells to provide a greater sense of identity to the various sub-areas and to help create a safe pedestrian environment. The area, number of dwelling units and population attributed to low density residential development is shown in *Table 3 (See the*

*Amended by
Editor*

Appendix in the original Bylaw 12550 April 10, 2001 for original statistics.)

In accordance to the unique housing opportunities offered in the Heritage Valley SCDB and market preferences, the integration of the street orientated townhousing is contemplated. The location and amount of this housing type would be determined at the subdivision and districting stage to ensure proper interface and transportation considerations are taken into account.

5.2.2 Medium and *High* Density Residential

Opportunities exist within the Rutherford NASP for a variety of medium density housing forms, also referred to as row housing or low-rise/medium density housing, and densities including townhouses, stacked townhouses and low rise apartment buildings. Future market demands will determine the type of medium density residential pursued in each particular circumstance.

*Editor's Note
Bylaw 14052
July 13, 2005*

*Bylaw 15563
November 8, 2010*

Consistent with the Heritage Valley SCDB a large area of medium density residential housing is proposed along the northeast portion of the neighbourhood. This allows for the location of medium density uses within 500m of the commercial area and associated Transit area. A second concentration of medium density housing is located in the southwest portion of the plan. This location provides a logical interface with the Town Centre. This location will bring greater population in proximity to the Town Centre and services such as the Transit.

Market trends in medium density residential development points to a growing interest in more lifestyle oriented housing and, thus, a shift of medium density sites off arterial and collector roadways. Rutherford also proposes that MDR sites are integrated into the community with access off local roadways. These sites adjacent to park sites, pipeline corridors, stormwater management facilities, commercial sites and natural areas help ensure exposure of these features to many residents. It should be noted, however, that the location of these sites still respects the fact that through traffic within low density residential areas should be limited where possible. These areas are also well served by pedestrian linkages allowing convenient access to commercial, open space areas and transit connections.

Other medium density residential sites have been located with more direct access to the major roadways. In cases like this, medium density development also serves as a transitional land use in portions of the plan between low density residential development

and commercial parcels and arterial roadways.

The medium density parcels are likely to be developed on a self contained basis, but opportunities exist to develop street-oriented townhousing designs. These developments will be integrated alongside low density residential housing through sensitive streetscape design and attention to transitioning.

Medium Density residential uses are contemplated as transitional land uses between the primarily low density portion of the Rutherford and the future Towne Centre area. Current MDR uses are being shifted to the south occupying a majority of the area being added to the NASP. These uses will provide opportunities for the development of row housing, stacked row housing and low rise apartments. The Medium Density Residential – Towne Centre Transition area will achieve the following:

*Amended by
Editor*

*Bylaw 13974
May 11, 2005*

- *Provide a transition between LDR and Towne Centre Uses.*
- *Develop in a compact street oriented manner.*

To ensure that appropriate treatments and site design occur areas next to the future Towne Centre, the MDR areas next to or within the Towne Centre will be developed using architectural controls to establish a consistent theme and style. Similarly, project or site developments (such as bareland condominium sites) will be encouraged to be designed in a manner that incorporates public street frontage, enhanced landscaping and urban spaces to create a liveable environment. This may include the fronting on of row housing or stacked row housing or the orientation of apartment sites towards public streets.

The area, number of dwelling units and population attributed to medium density residential development is shown in *Table 3*.

*Editor's Note
Bylaw 14052
July 13, 2005*

A 0.57 ha site of higher density residential, also referred to as medium to high rise units, in the form of an eight storey apartment is added to the southern portion of the Ellerslie Commercial site. This amendment results in an increase of approximately 160 units and 479 persons to the neighbourhood. The proposed higher density development will be built as a medium-storey apartment to a maximum of eight storeys and will be developed at a later stage under a Direct Control Provision.

*Bylaw 15563
November 8, 2010*

5.3 Commercial

5.3.1 Convenience Commercial

One convenience commercial site is proposed within Rutherford to augment the services provided by the larger commercial areas along James Mowatt Trail and Ellerslie Road and nearby regional facilities. The site is located along the extension of James Mowatt Trail at the intersection of a collector road in the south end of the neighbourhood providing excellent exposure for tenants and access/egress opportunities for patrons.

5.3.2 Community Commercial

Consistent with the Heritage Valley SCDB, a Community Commercial site has been designated on the southwest corner of Ellerslie Road and James Mowatt Trail as part of a larger agglomeration of commercial development at this intersection of arterial roadways. Given its exposure and access to James Mowatt Trail and Ellerslie Road and location at the northeast end of the greenway system, the site is well suited to commercial development. The site is currently the home of the Virginia Park Greenhouse.

The site is of sufficient size to support a wide range of retail, business, medical and professional office uses to serve residents of Rutherford and surrounding neighbourhoods.

The area of the commercial site in the northeast portion of the Plan is reduced and medium and higher density housing added to the southern portion of the site. In effect, the amount of commercial area is reduced by 1.88 ha and replaced with 1.31 ha of medium density residential and 0.57 ha of higher density residential in the form of an eight storey apartment.

*Editor's Note
Bylaw 14052
July 13, 2005*

5.4 Educational and Community Facilities

As shown on Figure 6.0, two school/park sites has been designated within Rutherford along the looping collector roadway. The school site in the northwest portion of the plan accommodates a Public, Grades K-8 School while the site located on the east side of the plan area accommodates a Separate, Grades K-9, School. In new areas, Edmonton Public Schools plans for its facilities using a two-tier school system, Grades K-8 & 9-12, in order to economize on school facilities and field space. Edmonton Catholic Schools generally accommodates elementary/junior high school facilities on each of its sites.

The schools sites have been located with access to the pedestrian network as well as the collector roadway network. Where practical,

an owner agreement may be pursued to facilitate the timely pre-assembly and earlier development of the school/park site. The school sites have also been located near preserved natural areas in recognition of the value of environmental education.

In order to provide suitable building sites for school buildings there may be a requirement for slight adjustments to the location of the school/park sites and associated collector road frontage to accommodate variations in soil conditions. The sites are accessible from collector roads and access to the sites is intended to be safe and convenient by pedestrian, bicycle, automobile and public transit. No overland drainage flows will be permitted across the school/park sites. When schools are being planned, the potential for shared public use and adaptive reuse of sites and buildings should be considered.

The Catholic school is intended to serve students from Rutherford, Blackmud Creek, Richford and MacEwan while the public school site will serve students from Neighbourhoods 3 and Rutherford. The areas of the school/park sites are shown in *Table 3*.

*Amended by
Editor*

5.5 Open Space and Pedestrian Linkages

Greenways, or linear open space corridors, are an important element of the Heritage Valley SCDB. Three primary greenways have been planned for Rutherford. The first occupying the main pipeline corridor will provide an excellent diagonal linkage through the neighbourhood and into future development to the south. The second will run generally perpendicular to the first and link the Southwest Mixedwood Natural Area, the two school sites, and a central park. The third will run parallel to 127 Street at the western edge of the neighbourhood. Adjacent residential development will be connected to the greenways with pedestrian walkways to facilitate their recreational use and convenience as alternative routes through the neighbourhood.

Open space will be provided around the stormwater management facilities as part of the public utility lot (PUL). The extent of public open space (and private land) around the facilities will conform to City policies at the time of development.

Consistent with the SCDB, a variety of green spaces will be provided in the neighbourhood. Naturalized landscaping will be used wherever feasible to minimize the environmental and economic costs associated with their maintenance.

Portions of the Virginia Park Woodland and Southwest Mixedwood Natural Area have been designated for retention through the

dedication of municipal reserves. Natural site assessments have been completed for the areas and provide suggestions for management plans to further ensure the long term viability of the areas. Steps to ensure the sustainability include:

1. Practices to avoid root damage of the retained trees will be employed during construction.
2. Ensuring that pedestrian access in and around the area is controlled to ensure the sustainability of the area.
3. The development of a sound plan for surface water management (stormwater management) will be incorporated into the development plan, in order to maintain soil drainage. Poor surface drainage could result in a lowering of the water table, or soils that are too wet, with resultant changes in tree vigor and stability.

These measures are described in greater detail in Section 3 of this document.

5.5.1 Virginia Park Woodland

The development concept for Rutherford designates an approximately 2.5 hectare portion of the Virginia Park Woodland along James Mowatt Trail as being retained through the dedication of municipal reserves. The size and shape of the site being retained is of sufficient dimensions to remain relatively stable and viable in the long term. Residential land uses have been planned around the site in addition to convenient public roadway access via the schools site so that the area may be enjoyed by many.

Existing vegetation within the James Mowatt Trail/transit corridor should be retained until this infrastructure is developed. Functional plans for the James Mowatt Trail/transit corridor should give consideration to means of facilitating animal passage between the Virginia Park Woodland and open spaces to the east.

5.5.2 Southwest Mixedwood Natural Area

The development concept for Rutherford designates an approximately 3.8 hectare portion of the Southwest Mixedwood Natural Area along Ellerslie Road as being retained through the dedication of municipal reserves. The size and shape of the site being retained is of sufficient dimensions to remain relatively stable and viable in the long term. Residential land uses have been planned around the site in addition to public roadway access so that the site may be enjoyed by many. The location of the site also provides a buffer for some of the existing country residential

development to the new development.

5.6 Stormwater Management Facilities

Stormwater management facilities have been located to conform with the natural contours of the land and low lying areas. The facilities also present amenity opportunities and have been shaped to provide views from both residential enclaves as well as from the open space and collector/arterial roadway networks.

5.7 Transportation

The Rutherford NASP is well served by arterial roadways as shown on Figure 6.0. There are several access points into the neighbourhood off James Mowatt Trail, Ellerslie Road and 127 Street. These access points have been planned based on existing and future anticipated intersections on the opposite side of the respective roadways. Access into the commercial site is expected to be available off Ellerslie Road and James Mowatt Trail as a right in as is current situation.

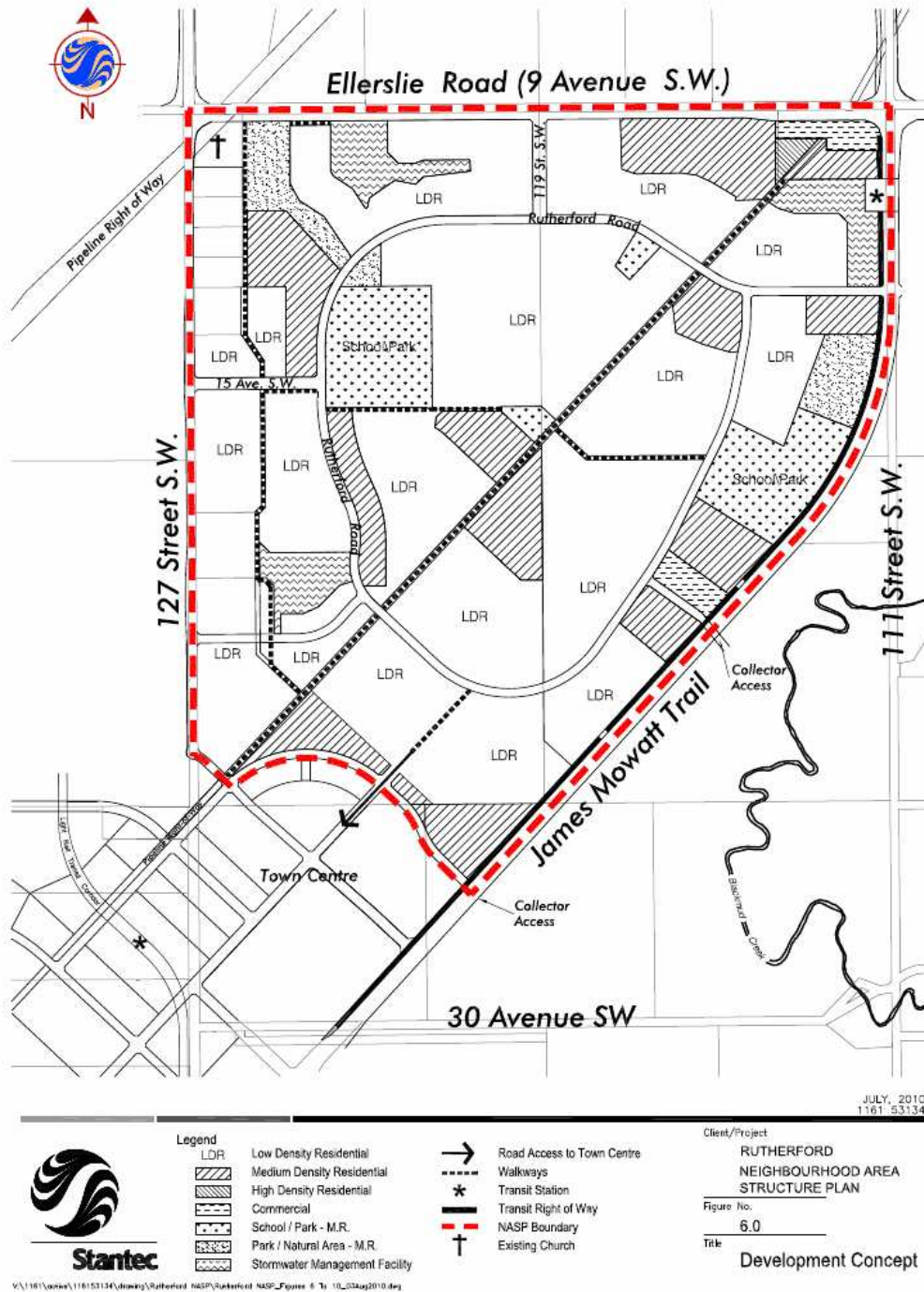
Two direct accesses from the MDR and commercial areas along Ellerslie are proposed. These all directional accesses will be located such that they are opposite existing or planned accesses in Neighbourhood Three to the north.

A looping collector roadway provides east-west and north-south access through the Neighbourhood and connects with the local roadway network.

Walkways will be provided throughout the plan area to connect points within and outside the neighbourhood. Any physical improvements to the utility corridors will be done in consultation with the City of Edmonton and the respective utility companies.

The Transit right-of-way will be protected for future extension of transit service to the Heritage Valley Town Centre. The size and configuration of the transit site shown on Figure 6.0 are conceptual.

Figure 6* Development Concept



* Bylaw 15563, November 8, 2010

Section 6

Engineering Services

6.1 Stormwater Drainage

As shown on Figure 7.0 - Stormwater Drainage, three stormwater management facilities are designated within Rutherford. These facilities have been located based on the natural drainage patterns of the area. The easterly facility, which will be a naturalized wetland, will have an outfall to an existing outfall constructed for Neighbourhood 1, which ultimately drains into Blackmud Creek. The facility in the southwestern portion of the plan area is planned as a wet pond and will accommodate runoff from the southwestern portion of the neighbourhood. The facility in the northwestern portion of the plan is proposed as a naturalized wetland and will accommodate runoff from the northwestern portion of the plan. These two facilities will share an outfall to be constructed along 119th Street, which ultimately drains into Whitemud Creek.

Further details regarding the stormwater drainage schemes for Rutherford are provided in the associated Neighbourhood Designs Report submitted under separate cover. Other reports such as Environmental Impact Assessments of the two stormwater outfalls will have to be undertaken at the time of development.

6.2 Sanitary Servicing

As shown on Figure 8.0 - Sanitary Drainage, sanitary services for Rutherford will connect into the South Edmonton Sanitary Sewer (SESS) at a future connection point at Ellerslie Road and James Mowatt Trail. The on-site sanitary network will follow the internal roadway network and associated public utility lots.

Further details regarding the sanitary drainage schemes for Rutherford are provided in the associated Neighbourhood Designs Report submitted under separate cover.

6.3 Water Servicing

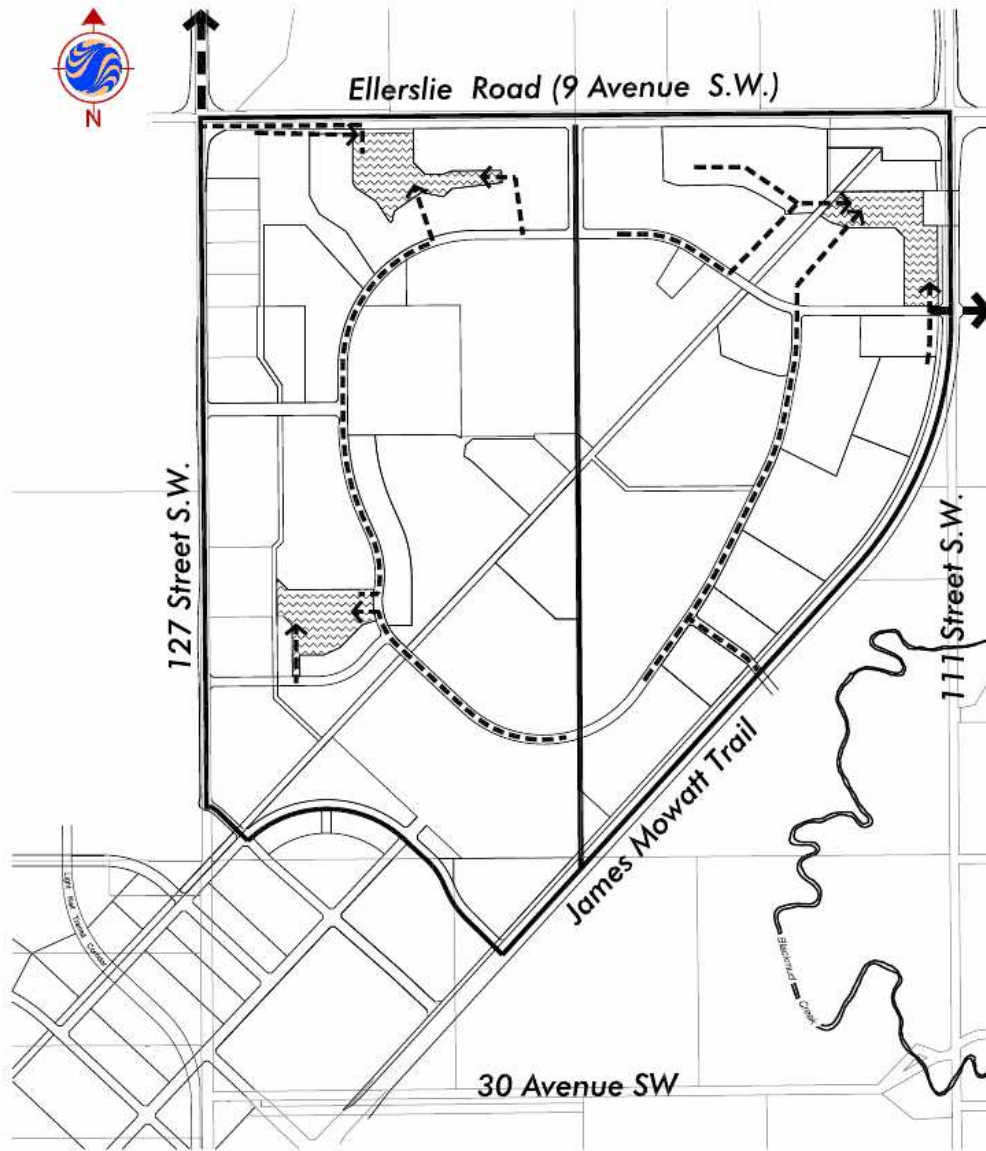
A 450mm watermain is proposed to be constructed along Ellerslie Road from Highway 2 to James Mowatt Trail to service future development in this general area. This watermain is expected to be in place prior to initiation of new development in Rutherford. Water servicing within the neighbourhood will be designed to provide peak hour flows and fire flows for low density and medium density uses. Water looping will be provided in accordance with the

requirements of EPCOR. Prior to detailed design, a Water Network Analysis will be submitted to EPCOR for review and approval.

6.4 Shallow Utilities

Power, gas and telecommunication services are all located within close proximity to the Rutherford NASP and will be extended as required.

Figure 7* Storm Servicing






SEPTEMBER, 2010
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Stantec

Legend

-  Basin Boundary
-  Storm Sewers
-  Outfall Trunks

Client/Project

RUTHERFORD
NEIGHBOURHOOD AREA
STRUCTURE PLAN

Figure No.

7.0

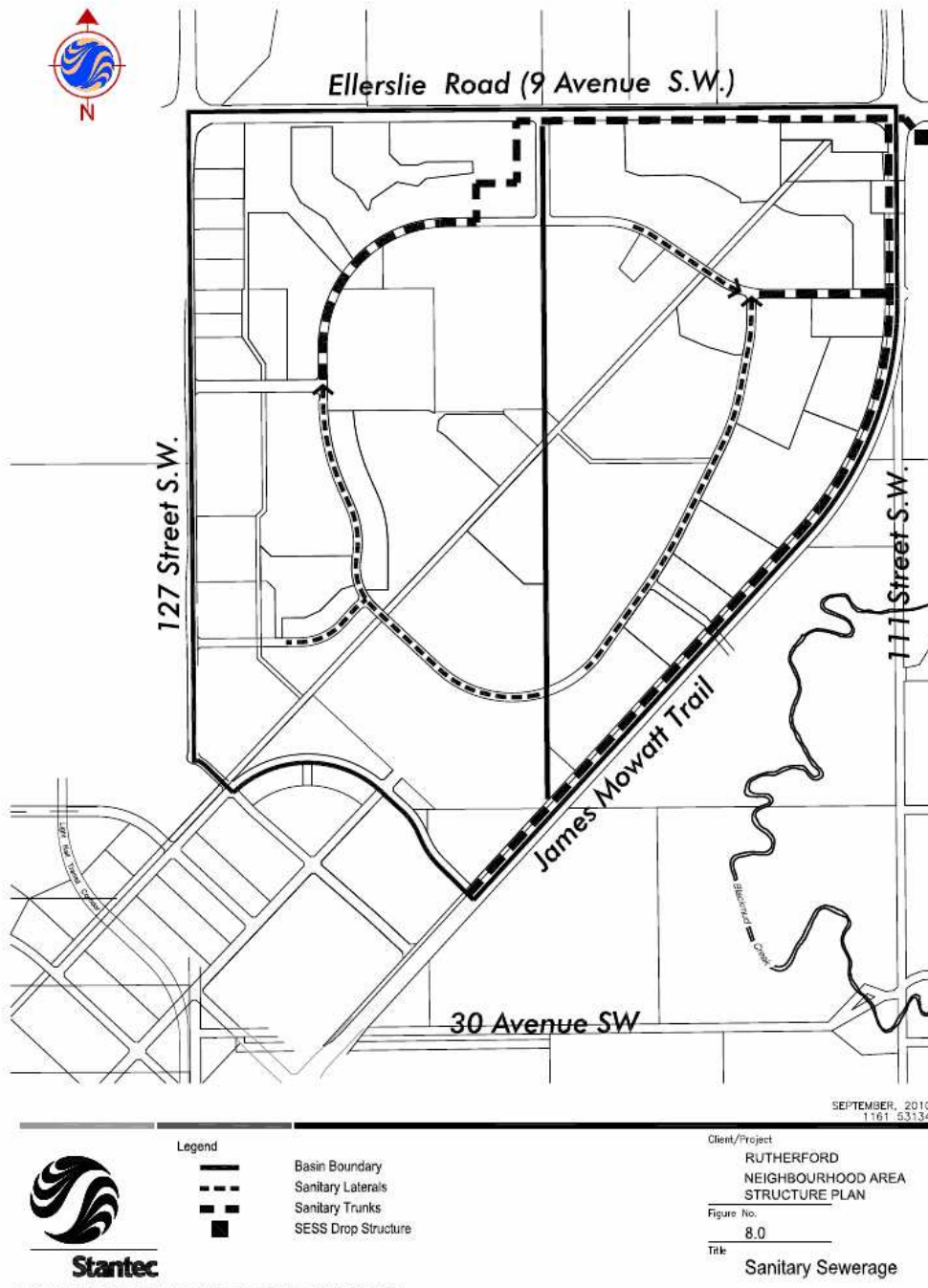
Title

Storm Servicing

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* Bylaw 15563, November 8, 2010

Figure 8* Sanitary Sewerage



* Bylaw 15563, November 8, 2010

Section 7

Transportation

7.1 Transportation

The transportation network bordering and within the Rutherford NASP consists of a system of arterial, collector and local roadways and walkways to accommodate the movement of automobiles, transit vehicles, pedestrians and bicycles.

This hierarchy of roads will provide the necessary interconnections appropriate to efficiently and effectively accommodate traffic flows at the arterial, collector and local roadway levels.

Alternative opportunities for circulation throughout the neighbourhood are provided via an extensive greenway network connecting key nodes in Rutherford. Convenient linkages between recreational / open space, higher density residential, commercial, transit and Town Centre areas are provided. These linkages provide easy access for pedestrians and cyclists. Local streets should be interconnected where possible.

7.2 Roadway Network

As shown on Figure 9.0 - Circulation, the proposed development will enjoy a high level of accessibility by virtue of its close proximity to the following major arterial roadways:

- Ellerslie Road (9 Avenue S.W.)
- James Mowatt Trail S.W.
- 119th / 127th Street

A looping collector roadway will provide access off the arterial roadway network into the neighbourhood and onto the local roadway network. There are several access points into the neighbourhood off James Mowatt Trail, Ellerslie Road and 127 Street. These access points have been planned based on existing and future anticipated intersections on the opposite side of the respective roadways. Access into the shopping centre commercial site is expected to be available off Ellerslie Road and James Mowatt Trail as a right in only as it is currently.

Two direct access from the MDR and commercial areas along Ellerslie is proposed. These all directional access will be located such that they are opposite existing or planned access in neighbourhood three to the north. All other sites will be accessed

from the internal roadway network.

The exact locations of these accesses will be determined at the redistricting and subdivision stages and will be to the satisfaction of the Transportation & Streets Department.

7.3 Roadway Staging

A roadway staging plan was prepared as part of the review and approval process for the Blackmud Creek and Richford NASP's to service lands in this area. Upgrades have been undertaken to James Mowatt Trail and Ellerslie Road and further improvements will be necessary as development proceeds in Rutherford. Ellerslie Road will require extension west of James Mowatt Trail. Initially, this extension will consist of the construction of 2 lanes representing the north half of the ultimate roadway configuration.

7.4 Transit Service

Future transit service is appropriate along the collector roadway network as well as along Ellerslie Road, James Mowatt Trail and 127 Street; the northern, eastern and western boundaries of the neighbourhood. Given the shape of Rutherford and the alignment of the collector roadway, access to transit is generally within 400m walking distance of virtually all parts of the neighbourhood.

A future L.R.T. station is designated in the commercial area in the northeast of the plan area and will provide direct linkages to the University of Alberta, Downtown, Commonwealth Stadium, Skyreach Centre and the Northlands area. In the interim the Heritage Valley SCDB contemplates the location of a transit centre on the commercial site with the adjacent 111th Street designated as a busway. This will ensure convenient express transit service until the ultimate L.R.T. configuration.

Existing and future transit routes will follow Ellerslie Road, James Mowatt Trail and 127 Street and along the looping collector roadway and have been / will be established on the basis of the proportion of trips which are expected to be generated from within the neighbourhood and adjacent areas.

7.5 Town Centre Access

A roadway access to the Town Centre is considered in the Rutherford NASP. It is intended to further explore this option in connection with the development of plans for the Town Centre. An evaluation of the traffic impacts of this possible access, as it relates to the development concept for the Town Centre, would be required with the results being to the satisfaction of the Transportation and

Streets Department.

7.6 Pedestrian and Bicycle Circulation

Sidewalks will be provided along all adjacent arterial roadways, collector and internal local roadways in accordance with City policies and practices. Walkways will be provided to connect sidewalks along the internal roadway network with the stormwater management areas and pipeline corridors. These corridors will be clearly marked and separated from vehicular traffic to ensure pedestrian and cyclist safety. Walkways will also be provided to minimize walking distances where street interconnections are not feasible.

The bicycle circulation system for Rutherford and adjacent neighbourhoods will be developed with wide curb lanes along the arterial roadway network on Ellerslie Road and James Mowatt Trail and where appropriate and logical within the residential area.

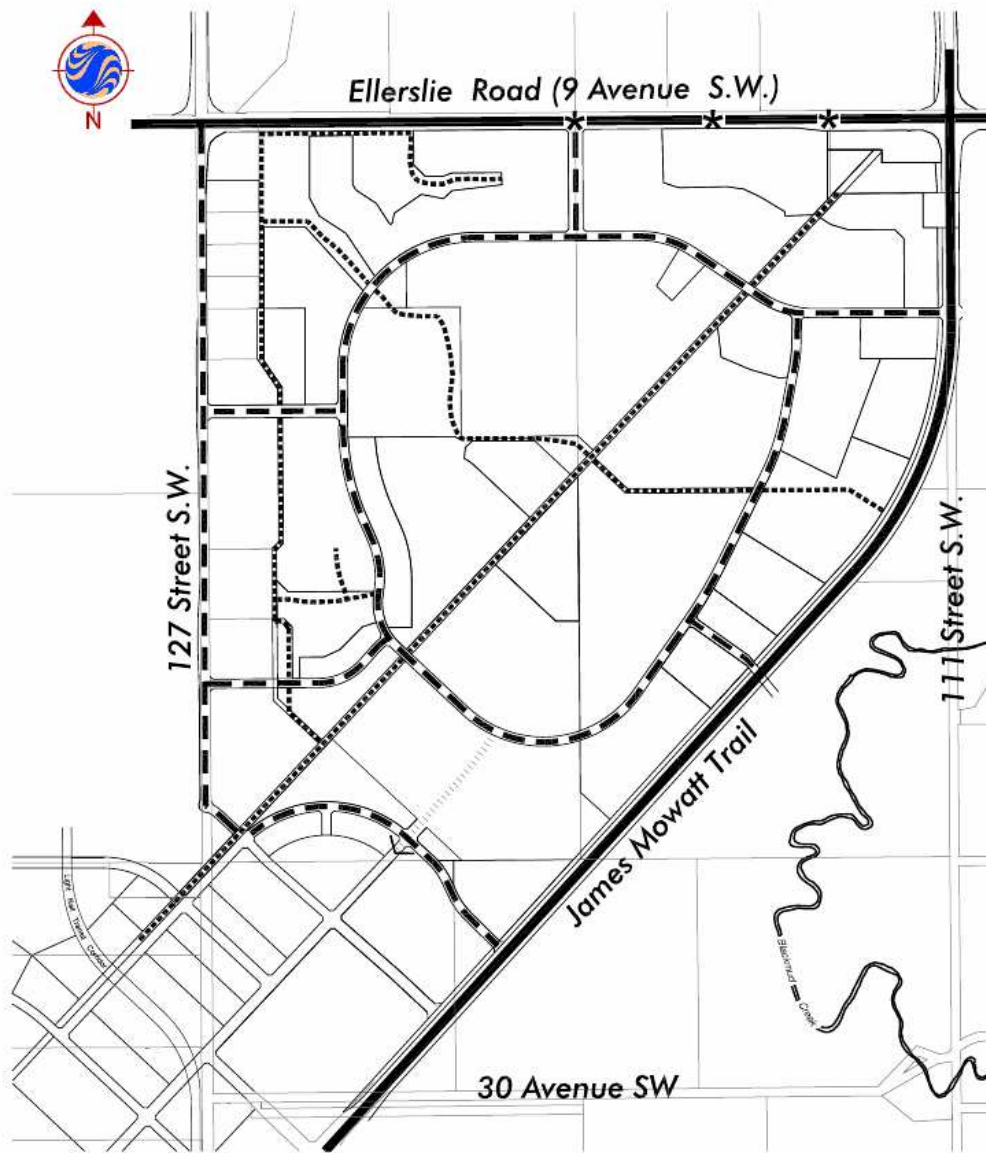
7.7 Parking

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

7.8 Truck routes

Currently James Mowatt Trail is designated as a truck route. It is anticipated that James Mowatt Trail will retain its Truck Route status as the Rutherford and greater Heritage Valley area develops.

Figure 9* Circulation System








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Stantec

Legend

-  Arterial Roadway
-  Collector Roadway
-  All-Directional Access
-  Road Access to Town Centre
-  Pedestrian Circulation

Client/Project

RUTHERFORD
NEIGHBOURHOOD AREA
STRUCTURE PLAN

Figure No.

9.0

Title

Circulation System

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* Bylaw 15563, November 8, 2010

Section 8

Implementation

8.1 Development Staging

Infrastructure to service the initial stages of the Rutherford will be extended into the neighbourhood from Ellerslie Road and James Mowatt Trail.

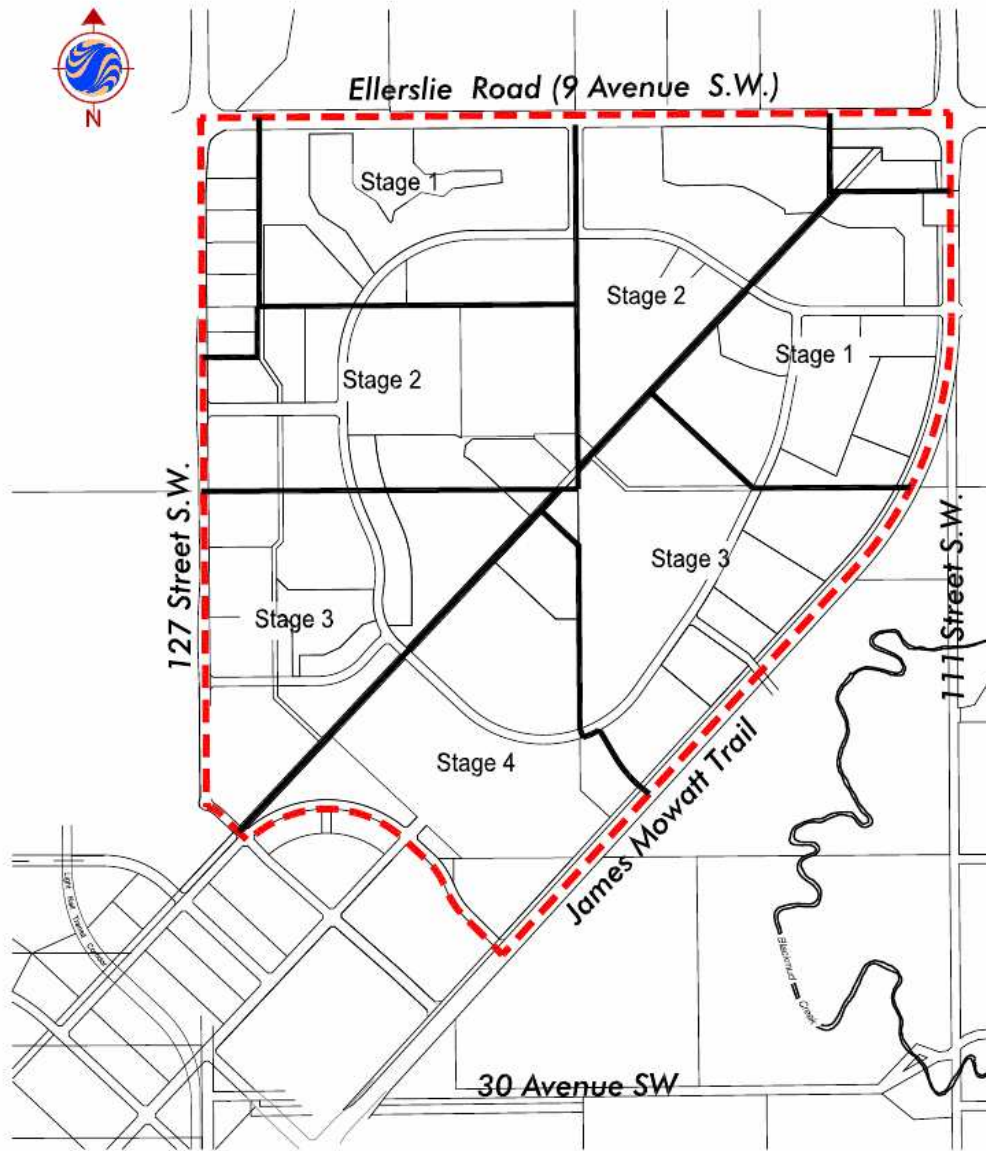
As shown on Figure 10.0 - Staging Concept, initial stages of residential development are intended to begin south of Ellerslie Road in *a private land owner's property* and on the westerly portion of the neighbourhood within *another private land owner's property*.

*Amended by
Editor*

8.2 Redistricting and Subdivision

Redistricting and subdivision of the land to conform with the land uses designated in the NASP will be undertaken when necessary.

Figure 10* Staging Concept



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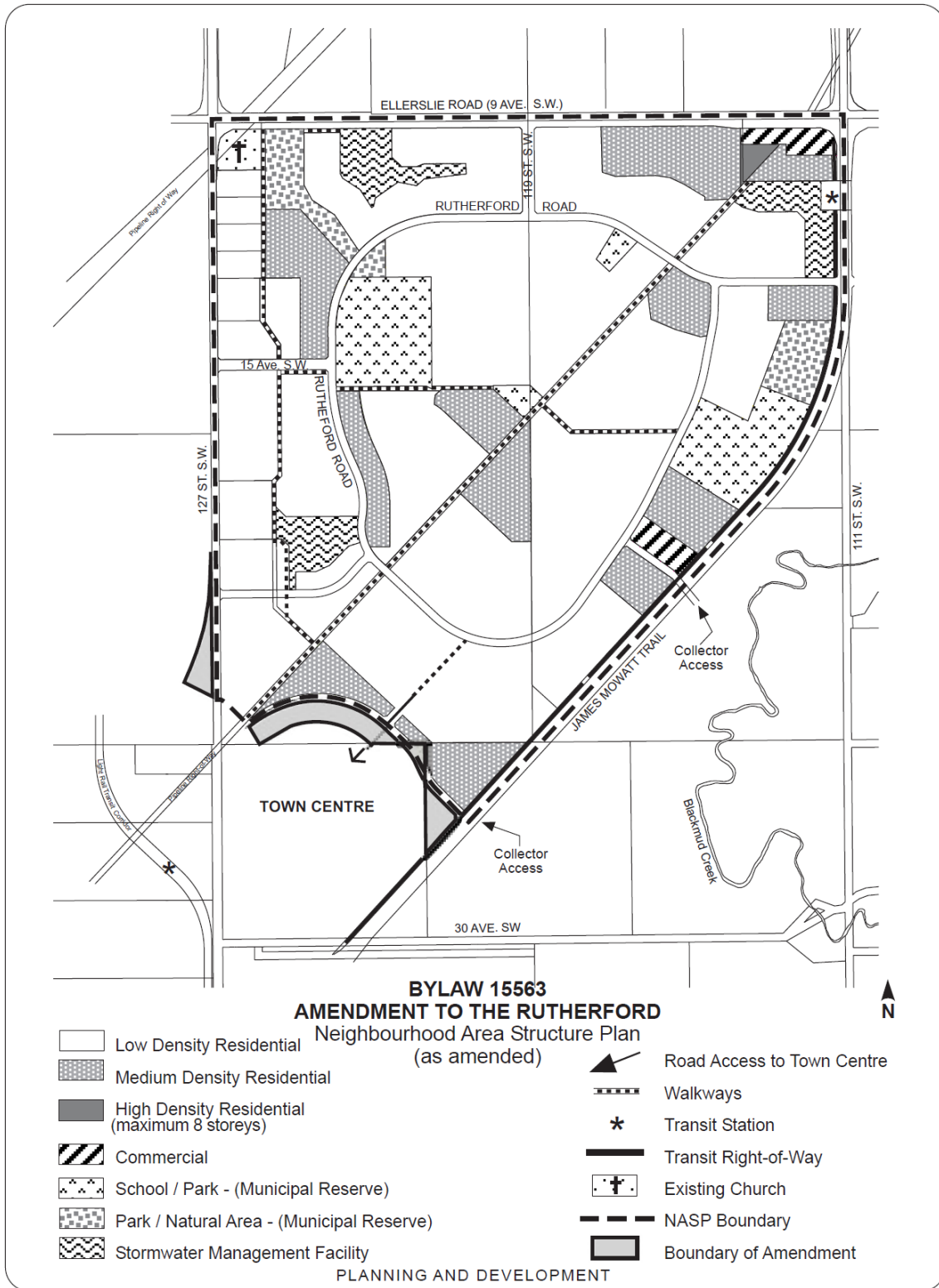


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Client/Project
RUTHERFORD
NEIGHBOURHOOD AREA
STRUCTURE PLAN
Figure No.
10.0
Title
Staging Concept

* Bylaw 15563, November 8, 2010

Map 1* Rutherford Neighbourhood Area Structure Plan



* As Amended by Bylaw 15563, November 8, 2010

**Table 3* Rutherford Neighbourhood Area Structure Plan
Land Use and Population Statistics**

LAND USE	Area (ha)	% of GDA
Gross Area	219.40	
Pipeline Right-of-Way	3.56	
Transit Right-of-Way	2.20	
Gross Developable Area	213.64	100.0%
Commercial	2.37	1.1%
Parkland, Recreation, School, Municipal Reserve		
Dispersed Parks	1.20	0.6%
Public K-8 School / Park Site	6.90	3.2%
Separate K-9 School / Park Site	5.60	2.6%
Virginia Park Woodland	2.50	1.2%
Southwest Mixedwood Natural Area	3.80	1.8%
Transportation		
Circulation	38.69	18.1%
Infrastructure / Servicing		
Stormwater Management	8.29	3.9%
Total Non-Residential Area	69.35	32.5%
Net Residential Area	144.29	67.5%

RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units/ha	Units	People/Unit	Population	% of NRA
Low Density Residential						
<i>Single/Semi-Detached</i>	112.58	25	2,815	2.80	7,881	78.0%
Medium Density Residential						
<i>Row Housing</i>	7.68	45	346	2.80	968	5.3%
<i>Low-Rise/Medium Density Housing</i>	23.46	90	2,111	1.80	3,801	16.3%
High Density Residential						
<i>Medium to High Rise Units</i>	0.57	225	128	1.50	192	0.4%
Total	144.29		5,400		12,841	100%
Gross Population Density:	60.11	persons per gross developable hectare				
Net Population Density:	89.00	persons per net residential hectare				
Unit Density:	37.42	units per net residential hectare				
LDR/MDR/HDR RATIO	42.64% / 54.76% / 2.60%					

STUDENT GENERATION STATISTICS

Public School Board	855
Elementary	427
Junior High	214
Senior High	214
Separate School Board	342
Elementary	171
Junior High	85
Senior High	85
Total Student Population	1,196

* As Amended by Bylaw 15563, November 8, 2010