Blackmud Creek Neighbourhood Area Structure Plan

Office Consolidation October 2008

Prepared by:

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

Bylaw 11705, was adopted by Council in May 1998. In October 2008, this document was consolidated by virtue of the incorporation of the following bylaws:

Bylaw 11705	Approved May 19, 1998 (to adopt the Heritage Valley Neighbourhood Area Structure
	Plan)
Bylaw 12021	Approved April 26, 1999 (to incorporate a commercial shopping centre into the
	northwest portion of the Neighbourhood Structure Plan and changing the location and
	size of the land uses surrounding the shopping centre; and to change the name of the
	NASP to Blackmud Creek NASP)
Bylaw 12548	Approved April 2, 2001 (to redesignate a portion of the LDR area located in the
	northwest portion of the plan area to MDR; to redesignate a portions of the MDR located
	in the central portion of the plan area to LDR; and, to redesignate a portion of the LDR
	south of the Dry Pond site to LDR Direct Control)
Bylaw 12497	Approved May 30, 2001 (to allow the areas shown as Park on the existing NASP to be
	combined with the property owned by the Church and have the entire area designated as
	Urban Services)
Bylaw 12830	Approved July 4, 2001 (to redesignate a 1.36 ha MDR area located in the east central
-	portion of the plan area to LDR)
Bylaw 13199	November 6, 2002 (to replace an area of MDR with LDR in the southern portion of the
•	neighbourhood)
Bylaw 14545	May 14, 2007 (to adjust the southern boundary of the neighbourhood, with the
-	realignment of the collector roadway)
	• • • • • • • • • • • • • • • • • • • •

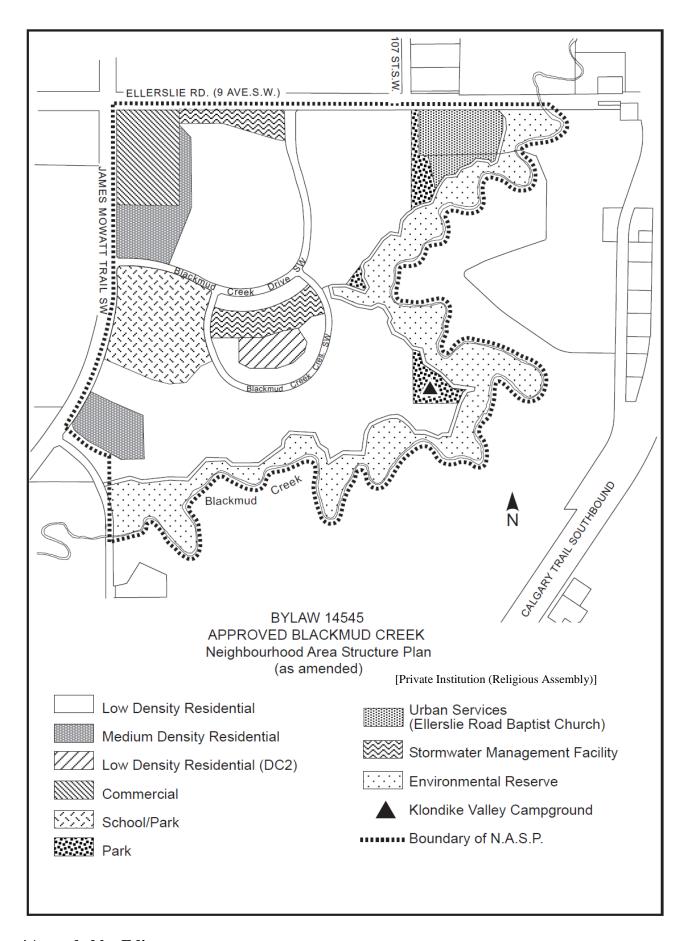
Editor's Note:

This is an office consolidation edition of the Blackmud Creek Neighbourhood Area Structure Plan, Bylaw, as approved by City Council on May 19, 1998. This edition contains all amendments and additions to Bylaw 11750.

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 owners' 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.

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 Blackmud Creek NASP *Office Consolidation October 2008*



*Amended by Editor

SCHEDULE "B"

BLACKMUD CREEK NEIGHBOURHOOD AREA STRUCTURE PLAN LAND USE AND POPULATION STATISTICS **BYLAW 13199**

(Amended by Editor)

			Area (ha)	% of GDA
Gross Area			100.8	
Environmental Reserve – B	lackmud Cree	k	17.82	
Arterial Road Widening – I	Ellerslie Road		3.18	
Gross Developable Area			79.8	100.00
Parks and Schools			6.61	8.3
Klondike Valley Campgrou	ınd		10.76	13.5
Private Institution (Religion	us Assembly)		5.98	7.5
Arterial and Collector Road	ls		11.69	14.6
Local Roads			4.35	5.5
Walkway Rights-of-way			1.92	2.4
Stormwater Management F	acilities		2.96	3.7
Commercial			4.25	5.3
Net Residential Area			31.28	39.2
			% of	
	T T •4	Area	Total	D 14
	Units	(ha)	Units	Population
Low Density Residential	635	27.6	80	2,198
Medium Density	154	3.7	20	458
Total Residential	789	31.3	100	2,656

Density: 33.0 persons per gross hectare

Prepared for: Two Private Corporations (Amended by Editor)

Blackmud Creek Neighbourhood Area Structure Plan

Table of Contents

(Amended by Editor)

		Page
1.0 I	NTRODUCTION	1
1.1	Purpose Of Document	2
1.2	Definition Of Plan Area	2
1.3	Background	3
1.4	Terms Of Reference	3
1.5	Land Ownership	3
2.0 P	PLANNING CONTEXT &	
DEV	VELOPMENT FACTORS	7
2.1	Location And Setting	8
2.2	Subregional Context	8
	2.2.1 Land Use Context	8
	2.2.2 Transportation Context	10
2.3	Public Services	13
2.4	Existing Land Uses	13
2.5	Physical Features	15
	2.5.1 Topography	15
	2.5.2 Environmental Features	16
2.6	Planned Transportation Facilities	16
2.7	Statutory Plan & Policy Context	17
	2.7.1 Edmonton Municipal Development Plan	17
	2.7.2 Edmonton International Airport Vicinity	
	Protection Area Regulation	19
3.0 I	DEVELOPMENT OBJECTIVES	20
3.1	Development Objectives	21
4.0 I	DEVELOPMENT CONCEPT	22
4.1	Description Of Development Concept	23
4.2	Residential Land Uses	24
4.3	Top-Of-Bank Access & Setbacks	27
	4.3.1 Top-of-Bank Access	27
	4 3 2 Top-of-Bank Setbacks	27

4.4	Circulation System	30
	4.4.1 Roadways Network	30
	4.4.2 Pedestrian and Bicycle Circulation	30
4.5	Social And Demographic Profile	32
4.6	School & Park Facilities	32
4.7	Integration Of Existing Land Uses	32
	4.7.1 Private Institution (Religious Assembly)	33
	4.7.2 Klondike Valley Campground & Sewage	
	Lagoon	33
5.0 P	PLAN IMPLEMENTATION	35
5.1	Provision Of Municipal Utility Services	36
	5.1.1 Water Supply and Distribution	36
	5.1.2 Sanitary Drainage System	36
	5.1.3 Stormwater Drainage	38
	5.1.4 Shallow Utilities	38
5.2	Transportation	38
5.3	Development Staging	42
APP	ENDIX	44
A.1	Land Use & Demographic Profile	45

List of Figures

	Page
1.0 LOCATION PLAN	4
2.0 LAND OWNERSHIP	5
3.0 SUBREGIONAL LAND USE CONTEXT	9
4.0 SUBREGIONAL TRANSPORTATION FACILITIES	13
5.0 DEVELOPMENT FACTORS	14
6.0 DEVELOPMENT CONCEPT	25
7.0 TOP-OF-BANK SETBACKS	28/29
8.0 CIRCULATION SYSTEM	31
9.0 WATER SUPPLY & DISTRIBUTION	37
10.0 PROPOSED SANITARY SEWER DRAINAGE PATTERN	39
11.0 PROPOSED STORM WATER DRAINAGE PATTERN	40
12.0 STAGING CONCEPT	43

1.0 Introduction

		Page
1.0 INTR	ODUCTION	1
1.1	Purpose Of Document	2
1.2	2 Definition Of Plan Area	2
1.3	Background	3
1.4	Terms Of Reference	3
1.5	5 Land Ownership	3

1.0 Introduction

1.1 PURPOSE OF DOCUMENT

The purpose of this Neighbourhood Area Structure Plan (NASP) document is to define the land use framework for the future development of an area of land that is located in an urbanizing district on the southern edge of the City of Edmonton. The land, comprising an area of approximately 100.80 hectares, is defined in Section 1.2 of this report as the plan area.

This document, the Proposed *Blackmud Creek* Neighbourhood Area Structure Plan, has been prepared as an Area Structure Plan as contemplated by Section 633 of the Municipal Government Act. Its general purpose, as stated in the Act, is to describe the proposed land uses, density of development, location of major roads and utilities, and the anticipated sequence of development within the plan area.

Bylaw 12021 April 26, 1999

This document has also been prepared in general accordance with the Terms of Reference for Neighbourhood Area Structure Plans as prescribed by the City of Edmonton Planning and Development Department. It is intended to provide a framework for the subsequent preparation of plans of subdivision, and the redistricting of specific areas under the Land Use Bylaw, as contemplated by the Municipal Government Act.

1.2 DEFINITION OF PLAN AREA

The future development area to which this document applies, hereinafter referred to as the "plan area" consists of portions of Section 19-and 20-51-24-W4. The future alignment of the 111 Street arterial roadway has been conceptually indicated. When development warrants, the detailed alignment of 111 Street will be determined and will result in corresponding minor adjustments to the neighbourhood boundary. General neighbourhood boundaries are described as follows:

- Ellerslie Road (9 Avenue SW) on the north;
- Future alignment of 111 Street on the west; and,
- The valley of Blackmud Creek on the south and east.

These distinct physical features form, in combination, a well-defined area which comprises a logical planning and development unit. The plan area thus defined is outlined on Figure 1.0 - Location Plan.

1.3 BACKGROUND

The plan area lies within the City of Edmonton. In order to permit the City of Edmonton Planning and Development Department to receive and review this document, City Council authorized the preparation of an Area Structure Plan for the plan area at its meeting of 12 May 1992.

1.4 TERMS OF REFERENCE

A previous NASP document had been prepared on behalf of *a private corporation*, originally by Mackenzie Associates Consulting Group, starting in 1992 with revisions provided by Stanley Urban Land in 1996. Municipal engineering advice and servicing information originally provided by UMA has been reviewed and augmented by Stanley Urban Land.

Amended by Editor

1.5 LAND OWNERSHIP

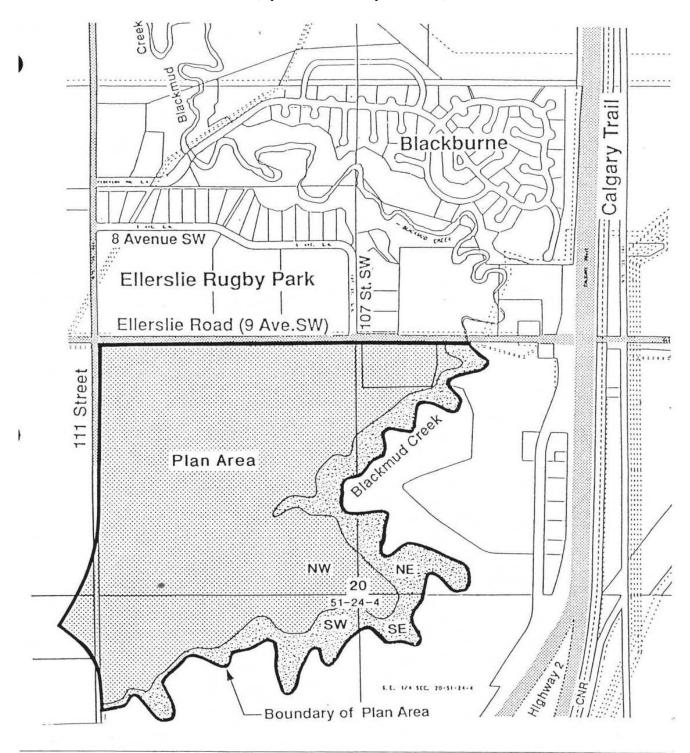
The *Blackmud Creek* NASP has been prepared on behalf of *two private corporations*, owners of the NW ¹/4 Section 20-51-24-W4, which comprises the dominant portion (approximately 2/3) of the plan area. The NASP also encompasses several adjoining parcels of land in order to include all potentially developable lands adjacent to the NW of Section 20 within a logical planning and development unit.

Bylaw 12021 April 26, 1999 Amended by Editor

There are a number of minority land owners within the plan area. Copies of the draft plan were circulated to these owners for comment concurrently with the submission of the report to the Planning and Development Department. Only one response was received and the landowner's comments (regarding land use issues) were incorporated into the revised plan. At the 28 January 1998 Public Meeting to discuss the proposed NASP, none of the minority owners in attendance raised any concerns.

The pattern of land ownership within the plan area is illustrated on Figure 2.0 - Land Ownership and Table 1.0 - Land Ownership.

FIGURE 1.0 – Location Plan (Bylaw 11705, May 11, 1998)



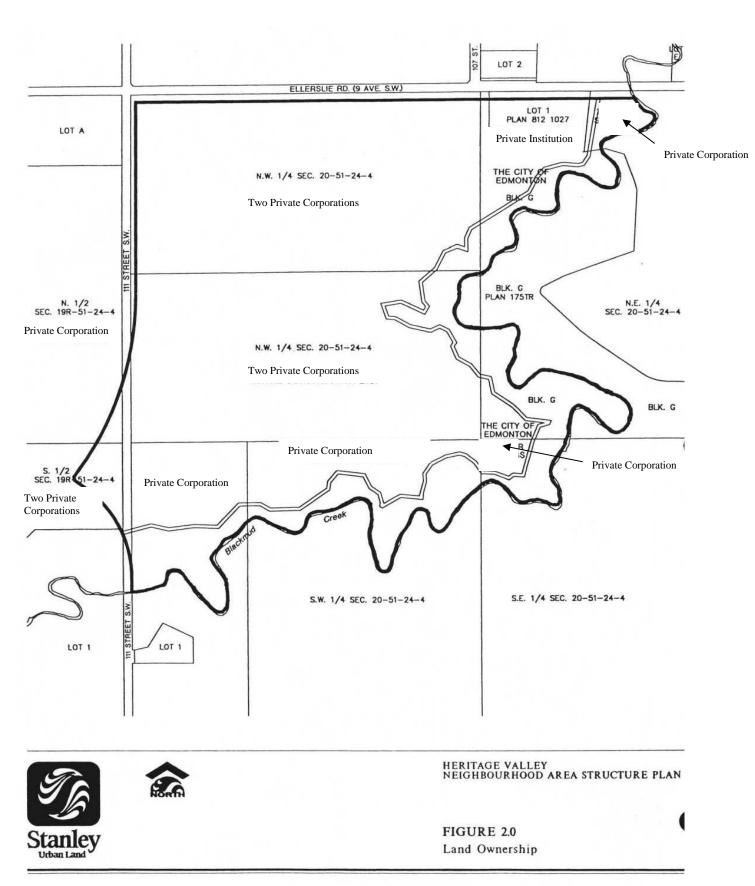




HERITAGE VALLEY
NEIGHBOURHOOD AREA STRUCTURE PLAN

FIGURE 1.0 Location Plan

FIGURE 2.0 – Land Ownership* (Bylaw 11705, May 11, 1998)



^{*}Amended by Editor

TABLE 1.0 HERITAGE VALLEY NEIGHBOURHOOD AREA STRUCTURE PLAN LAND OWNERSHIP

(Amended by Editor)

Legal Description	Owners	C . of T. #	Area in
			NASP (ha)
NW 1/4 Sec 20-51-24-4	Two Private Corporation	962148 967	62.25
Lot 1, Plan 8121027	Private Institution (Religious Assembly)	812264 262	3.22
NE 1/4 Sec 20-51-24-4 (portion)	Four Private Owners	922 153 395	1.39
Block G, Plan 175TR	The City of Edmonton	852146 186	10.76
SE 1/4 Sec 20-51-24-4 (portion)	Private Corporation	922050 873	2.30
SW 1/4 Sec 20-51-24-4 (portion)	Private Corporation	862 273 025	9.92
SW 1/4 Sec 20-51-24-4 (portion)	Two Private Owner	177U246A	8.45
SE 1/4 Sec 19-51-24-4 (portion)	Four Private Owners	812064 977	1.29
NE 1/4 Sec 19-51-24-4 (portion)	Private Corporation	902360 362	0.37
Government Road Allowance (111 Street)	City of Edmonton		0.85
TOTAL			100.80

2.0 Planning Context & Development Factors

		Page
	ING CONTEXT &	_
DEVEL	OPMENT FACTORS	7
2.1	Location And Setting	8
2.2	Subregional Context	8
	2.2.1 Land Use Context	8
	2.2.2 Transportation Context	10
2.3	Public Services	13
2.4	Existing Land Uses	13
2.5	Physical Features	15
	2.5.1 Topography	15
	2.5.2 Environmental Features	16
2.6	Planned Transportation Facilities	16
2.7	Statutory Plan & Policy Context	17
	2.7.1 Edmonton Municipal Development Plan	17
	2.7.2 Edmonton International Airport Vicinity	
	Protection Area Regulation	19

2.0 Planning Context & Development Factors

2.1 LOCATION AND SETTING

The *Blackmud Creek* Neighbourhood plan area lies south of Ellerslie Road and east of Calgary Trail. Its location is immediately south of an urbanizing portion of South Edmonton which includes:

Bylaw 12021 April 26, 1999

- The residential neighbourhood of Blackburne to the north;
- An established community of acreage residences developed beside Blackmud Creek, along 8 Avenue SW and 107 Street SW; and,
- The Ellerslie Rugby Park complex, situated at the northeast corner of Ellerslie Road and 111 Street.

The general setting of the plan area may be characterized as one which is experiencing incremental urbanization and development. More detailed information regarding the nature of that development pattern is described in the following section which considers the subregional context of the plan area.

2.2 SUBREGIONAL CONTEXT

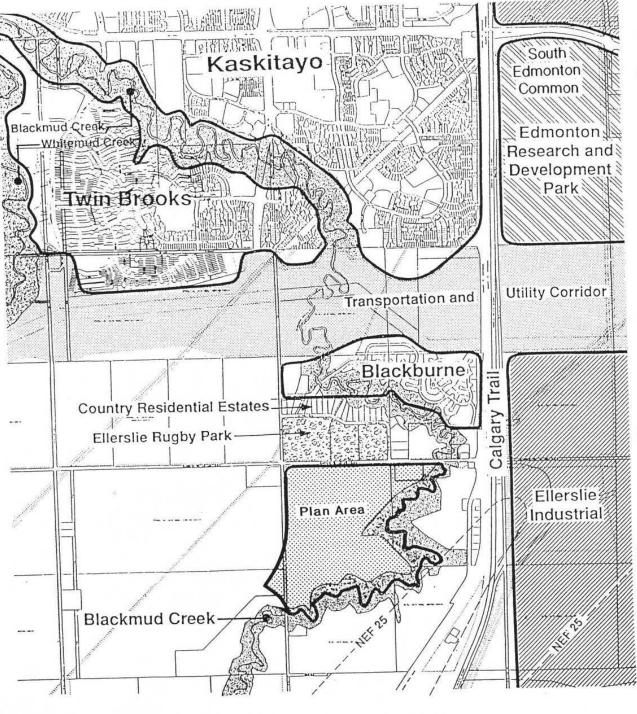
2.2.1 Land Use Context

The subregional land use and development context of the plan area is illustrated on Figure 3.0 - Subregional Land Use Context.

The plan area forms a southern extension to the planned and urbanizing residential development pattern which has taken place on the west side of Calgary Trail over the past twenty years. Major elements in the emerging pattern of residential development include:

- The **Kaskitayo** area, north of Blackmud Creek Ravine;
- The **Twin Brooks** Neighbourhood Area Structure Plan area, situated between the ravines of Blackmud Creek and Whitemud Creek, north of the planned Transportation and Utility Corridor (TUC);

FIGURE 3.0 – Subregional Land Use Context (Bylaw 11705, May 11, 1998)







HERITAGE VALLEY NEIGHBOURHOOD AREA STRUCTURE PLAN

FIGURE 3.0

Subregional Land Use Context

The **Blackburne Neighbourhood**, immediately south of the TUC; and,

The established country residential estate community of Running Creek south of Blackmud Creek which borders, on the north and east sides, the Ellerslie Rugby Park.

To the east of Calgary Trail a pattern of industrial and commercial land use and development is defined by:

- The Edmonton Research and Development Park, and the newly developing commercial centre, South Edmonton Common, located north of the TUC; and,
- The Ellerslie Industrial area, south of the TUC, for which an Area Structure Plan was approved in 1984.

These areas form a southward extension of planned industrial, business and commercial uses already developed to the north. They will provide proximate locations for the future development of employment generating land uses that will allow the City to expand southward in a balanced manner, with residential uses on the west side of Calgary Trail and employment and commercial uses on the east.

2.2.2 Transportation Context

The context of the plan area with respect to regional transportation and utility facilities is illustrated on Figure 4.0 - Subregional Transportation Facilities.

The Transportation context of the plan area is defined by several major roadways, existing and planned, which will create a functional grid of major roadways in the subregion. These major roadways are:

North-to-south facilities which include:

- Calgary Trail, the most significant existing roadway in the area, which connects Highway 2 to the south with the City of Edmonton arterial roadway system, and which provides substantial capacity in six lanes which is available to serve the plan area.
- 111 Street, which is developed to major arterial standards as far

south as 9th Avenue and planned for future southward extension to the plan area, and beyond. South of 9th Avenue, 111 Street is presently developed to only 2 lanes and, in part, to a rural standard, but right-of-way is being reserved for future expansion and upgrading when required.

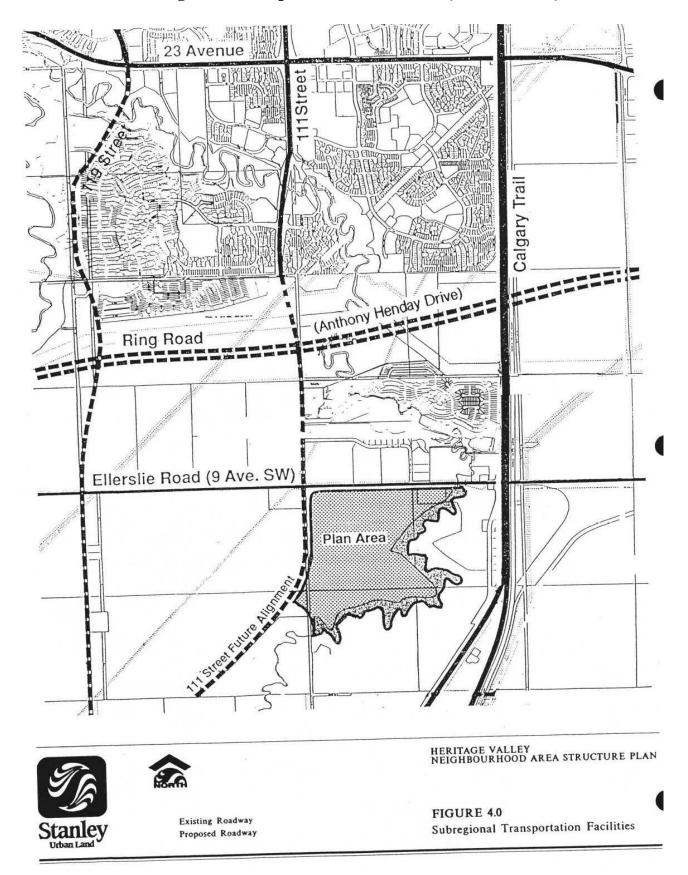
• 119 Street, which is developed to major arterial standards as far south as 23 Avenue, and for which right-of-way is being reserved for future southward extension when required by development in its immediate vicinity.

East-to west facilities which include:

- 23 Avenue, an established major arterial roadway linking residential areas west of Calgary Trail and to employment and residential areas, east of Calgary Trail.
- Anthony Henday Drive, which is planned for a location in the TUC, to become a major peripheral linkage through south Edmonton that will eventually encircle developed areas of the City.
- Ellerslie Road (9 Avenue SW), an existing road developed to a 2 lane rural standard, which will be upgraded to arterial standards and become a component in the arterial roadway grid.

The plan area is well situated with respect to the existing and planned arterial roadway system. Residential development within the area can be accommodated through the upgrading of existing roads which, in future, will become part of the planned arterial system. Development within the plan area will be planned to accommodate future upgrading of that system along its north and west boundaries in accordance with current plans of the Transportation & Streets Department.

FIGURE 4.0 - Subregional Transportation Facilities (Bylaw 11705, May 11, 1998)



2.3 PUBLIC SERVICES

Residential development within the plan area will be served, initially, by the existing range of public services which are provided to the residential areas immediately to the north (Blackburne and the existing residential acreages on the south side of Blackmud Creek). As residential development takes place within the plan area, the addition of residents to the general area will have the effect of gradually improving the base for public services, particularly public education, as the resident population increases.

Public school services to residents of the Blackburne and residential acreages south of *Blackmud Creek* presently require the busing of school children, at the elementary, junior, and senior high school levels, considerable distances to established facilities. For example, public elementary and junior high school students are transported to Ellerslie School, located east of Calgary Trail. When the plan area is developed for residential use, the development will create the opportunity to improve public school service to the area as a whole. Development of the plan area will:

Bylaw 12021 April 26, 1999

- Allow a school site to be created from municipal reserves within the plan area; and,
- Provide an expanded population base that would support the development of new school facilities within the area, subject to budgeting priorities, that would serve existing public school students of the general area, in addition to residents of the plan area itself.

2.4 EXISTING LAND USES

The predominant existing land use in the plan area is agricultural, which characterizes all parcels of land lying within the west half of Section 20-51-24-W4. The only buildings situated on those lands used for agricultural purposes are those which comprise the farmstead in the north-central portion of the plan area. These are identified on Figure 5.0 - Development Factors. None of these structures are regarded as a constraint to future development. Other existing uses within the plan area include:

FIGURE 5.0 - Development Factors* (Bylaw 11705, May 11, 1998) Ellerslie Road Top of Bank Roadway or Walkway Setback -7.5 m Selback Private Institution (Religious Assembly) Virginia Park Woodland Natural Low Area Future Arterial Roadways Natural Higher Ground

Holding Pond

Portion of Klondike Valley Campground





HERITAGE VALLEY NEIGHBOURHOOD AREA STRUCTURE PLAN

General Direction of Flow

Existing Vegetation

FIGURE 5.0 Development Factors

^{*}Amended by Editor

A Private Institution, a Religious Assembly south of Ellerslie Road, immediately west of the Blackmud Creek Ravine. This facility is regarded as a permanent institutional use within the plan area, and its location is identified on Figure 5.0.

Amended by Editor

The Klondike Valley Campground, which straddles Blackmud Creek Ravine (owned by the City of Edmonton), and its associated sewage lagoon (was reclaimed to a park by the City and under the current ownership of the Private Institution to the North) occupy two triangular fragments of land on the eastern edge of the plan area.

Bylaw 12497 May 30, 2001

The southern parcel is used for campground purposes and the northern triangular parcel contains the sewage lagoon for the treatment of seasonal sewage effluent from the campground. The ultimate use and disposal of the properties will require an evaluation by the City of their holdings and long term intentions.

Integration of new residential development adjacent to the existing Campground and sewage lagoon facilities is discussed in Section 4.0.

2.5 PHYSICAL FEATURES

2.5.1 Topography

The plan area consists largely of relatively flat or gently rolling agricultural land. The most significant physical feature of the area is Blackmud Creek Ravine which borders the plan area on the east and south.

The topography of the plan area is illustrated by the contour pattern that is outlined on Figure 5.0. Natural high and low areas as well as the direction of natural drainage flows are also highlighted.

The terrain is relatively level throughout the plan area with the exception of Blackmud Creek Ravine, and a shallow low area to the west of the ravine in the centre of the plan area.

The Blackmud Creek Ravine top-of-bank and associated setbacks have been reviewed through geotechnical investigation and are described in more detail in Section 4.0. Detailed geotechnical reports have been submitted under separate cover. Environmental reserve

land will be dedicated or preserved in accordance with the North Saskatchewan River Valley Area Redevelopment Plan (NSRVARP) and the provisions of the Municipal Government Act.

2.5.2 Environmental Features

The City of Edmonton's *Inventory of Environmentally Sensitive* and Significant Natural Areas does not identify any sites within the Blackmud Creek NASP boundaries. However, the report does identify a 5.37 ha Significant Natural Area abutting the west side of 111 Street referred to as the Virginia Park Woodland as shown on Figure 5.0. The site is comprised of mature mixed wood tree species and provides a habitat for local wildlife.

Bylaw 12021 April 26, 1999

Given that the natural area is not part of the *Blackmud Creek* NASP, no additional environmental review has been undertaken. Roadway and watermain improvements along 111 Street and future residential development will impact the site and perhaps require a natural site assessment.

Bylaw 12021 April 26, 1999

2.6 PLANNED TRANSPORTATION FACILITIES

The City of Edmonton Transportation Department has provided functional plans which specify the location and extent of the major arterial roadways that are planned in the immediate vicinity of the plan area. These include:

- The future right-of-way that will be required to accommodate a future east-west arterial along Ellerslie Road, which forms the north boundary of the plan area; and,
- The future right-of-way that will be required for a future north-south arterial extending 111 Street southward, and westward to the west of the plan area.

The areas required for these rights-of-way are illustrated on Figure 5.0, and will be reserved for future arterial roadway development. For the most part, the arterial alignments will be centered on the existing Government Road Allowances.

The planned westward shift in the future right-of-way for 111 Street creates a triangular area between the existing 111 Street right-of-way

and the future right-of-way, which is identified on Figure 5.0. Because the timing of development of the future 111 Street arterial is considered to be long term, development within the plan area should be designed to extend, on an orderly basis, into the triangular area in order that the area may be available for development.

2.7 STATUTORY PLAN & POLICY CONTEXT

There are a number of documents which provide the statutory planning and policy framework for the *Blackmud Creek* NASP - the Edmonton Municipal Development Plan, the Suburban Investment Strategy, and the Edmonton International Airport Vicinity Protection Area Regulation.

Bylaw 12021 April 26, 1999

2.7.1 Edmonton Municipal Development Plan

Land within the *Blackmud Creek* NASP was designated in the City of Edmonton Municipal Development Plan (MDP) as intended for Suburban Development through Bylaw No. 10208 in September 1993. The *Blackmud Creek* NASP is consistent with the relevant Suburban Areas policies and objectives of the MDP specifically:

Bylaw 12021 April 26, 1999

<u>Managing Suburban Growth</u> - To accommodate growth, serviced in an orderly and economic fashion, in all suburban areas of the city.

Policy 2.A.1 Encourage new development to be contiguous with existing development.

The *Blackmud Creek* NASP lies immediately south of the developing neighbourhood of Blackburne and some existing country residential development and can be logically and efficiently serviced to accommodate residential development. The neighbourhoods of Twin Brooks and Kaskitayo on the inside of the Transportation and Utilities Corridor are nearly fully developed leaving Blackburne and *Blackmud Creek* as the next logical steps south of the TUC.

Bylaw 12021 April 26, 1999

- Policy 2.A.2 Allow the location of new suburban residential development to be guided by the demands of the housing market for choices in housing types and location and the availability of services.
- **Policy 2.A.4** Allow market forces to determine the timing, location and extent of servicing in newly developing

areas, but require a developer to pay for all on-site services, and where appropriate, specific off-site services.

Given that the neighbourhoods in south Edmonton (including Blackburne) are approaching full development, neighbourhoods to the south such as *Blackmud Creek* represent the growth areas for future residential development. Services can be extended into *Blackmud Creek* neighbourhood in a cost effective manner.

Bylaw 12021 April 26, 1999

Policy 2.A.6 Ensure the use and protection of natural topography and unique elements of the natural environment in the design and servicing of new suburban development.

The *Blackmud Creek* NASP is bound on the south and east by Blackmud Creek which will be dedicated as environmental reserve and made accessible to residents of the neighbourhood through open space and roadway/walkway linkages.

Bylaw 12021 April 26, 1999

Ensuring Adequate Neighbourhood Services - Encourage flexibility in creating attractive and functional neighbourhoods.

Policy 2.B.4 Promote linkages between communities through the design and location of open spaces, community facilities and activity centres.

The *Blackmud Creek* NASP incorporates linkages throughout the plan via the stormwater management system, planned walkways and parks sites.

Bylaw 12021 April 26, 1999

Maintaining a Balanced Mix and Density of Dwellings

Policy 2.C.1 Encourage heterogeneous communities by planning for a variety of housing types, including multi family, in each residential neighbourhood.

The *Blackmud Creek* NASP provides for a mix of low and medium density residential housing forms consistent with City policies.

Bylaw 12021 April 26, 1999

2.7.2 Edmonton International Airport Vicinity Protection Area Regulation

The Edmonton International Airport Vicinity Protection Area Regulation, which 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 plan area lies entirely outside the designated area. Therefore, there is no restriction on residential development within the subject area arising from this regulation.

3.0 Development Objectives

		Page
3.0 DEVEL	OPMENT OBJECTIVES	20
3.1	Development Objectives	21

3.0 Development Objectives

3.1 DEVELOPMENT OBJECTIVES

The primary objective of the Development Concept proposed for the *Blackmud Creek* Neighbourhood NASP is to provide a framework for the subsequent redistricting, subdivision and development of the plan area. Specific objectives of the Development Concept are:

Bylaw 12021 April 26, 1999

- To define a comprehensive development concept that will permit implementation on a rational staging basis to ensure the plan area will be developed in an orderly and economical manner;
- To ensure that the planned development pattern respects and takes advantage of the existing natural features of the plan area, such as Blackmud Creek and related topographic features; and,
- To create an attractive and affordable residential community.

These objectives form the basic design philosophy according to which the Development Concept for *Blackmud Creek* Neighbourhood was formulated. The Development Concept is described in the following Section.

Bylaw 12021 April 26, 1999

4.0 Development Concept (Amended by Editor)

		Page
4.0 DEVEL	OPMENT CONCEPT	22
4.1	Description Of Development Concept	23
4.2	Residential Land Uses	24
4.3	Top-Of-Bank Access & Setbacks	29
	4.3.1 Top-of-Bank Access	29
	4.3.2 Top-of-Bank Setbacks	29
4.4	Circulation System	30
	4.4.1 Roadways Network	30
	4.4.2 Pedestrian and Bicycle Circulation	31
4.5	Social And Demographic Profile	31
4.6	School & Park Facilities	31
4.7	Integration Of Existing Land Uses	33
	4.7.1 Private Institution (Religious Assembly)	33
	4.7.2 Klondike Valley Campground & Sewage	
	Lagoon	34

4.0 Development Concept

4.1 DESCRIPTION OF DEVELOPMENT CONCEPT

The Development Concept proposed for *Blackmud Creek* Neighbourhood is illustrated on Figure 6.0 - Development Concept. It consists of a proposed land use pattern and circulation pattern which, in combination, are intended to define the basic structure of future subdivision and development within the plan area.

Amended by Editor

The general urban design concept is intended:

- To integrate the natural amenities of the plan area into the residential community; and,
- To create a continuity of major open spaces linked by walkways / roadways and located in visible, natural areas of the neighbourhood.

The topography of the area exerts a significant influence on visibility and accessibility to open space which is reflected in the Development Concept through the following features:

- The location of a major dry stormwater detention pond in a relatively low lying location near the centre of the plan area; and.
- The winding character of the Blackmud Creek Ravine.

Residential land uses, predominantly low density residential development, are proposed throughout the plan area. A number of medium density residential parcels are proposed for a number of locations in Neighbourhood, as identified on Figure 6.0.

Other uses that are incorporated into the Development Concept within the plan area include:

- An existing Church site adjacent (designated Urban Services) to Ellerslie Road and Blackmud Creek in the northeast corner of the plan area;
- A portion of the existing Klondike Valley Campground in the southeast corner of the plan area and the existing sewage lagoon

Bylaw 12497 May 30, 2001 Bylaw 12021 April 26, 2001 Amended by Editor south of the Church;

 A 6.54 hectare public K-8 school and neighbourhood park site located adjacent to 111 Street and the east-west collector road;

• A 4.25 hectare commercial shopping centre site on the southeast corner of 111 Street and Ellerslie Road.

Bylaw 12021 April 26, 1999

A quantitative summary of the land uses proposed within the *Blackmud Creek* Neighbourhood plan area is presented in Appendix 1 - Land Use & Demographic Profile.

4.2 RESIDENTIAL LAND USES

The proposed pattern of residential land uses within the plan area is:

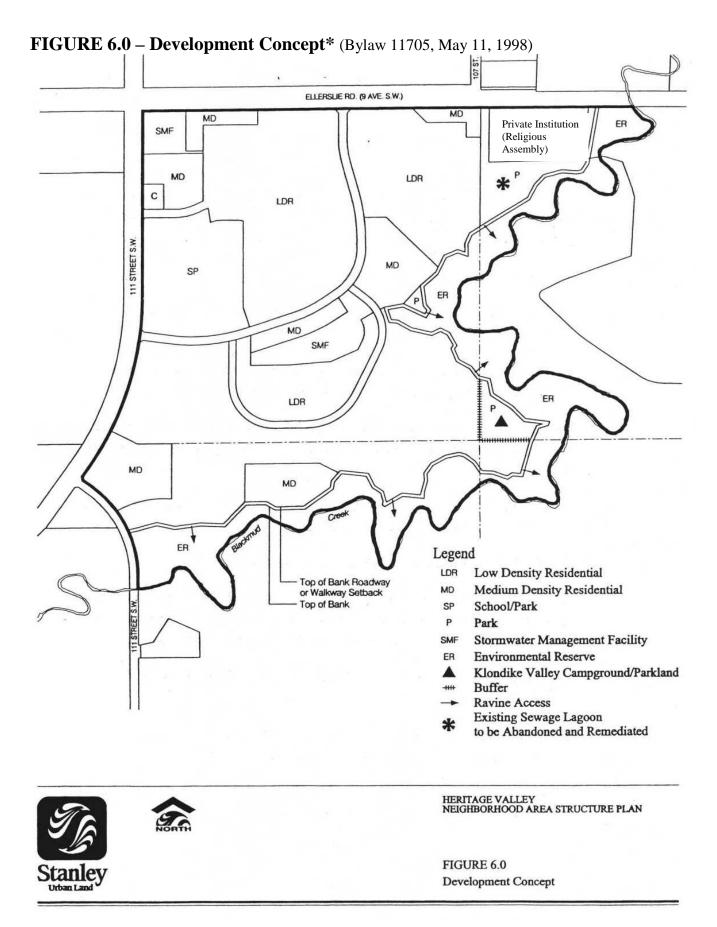
- Primarily oriented toward the provision of low density housing opportunities; and,
- Intended to provide a degree of variety of housing types and lot sizes.

Low density residential land use areas will be developed under the RF1, RSL, RPL and RF4 land use districts of the Land Use Bylaw. Lot sizes may vary within the plan area depending on location and market conditions. Low density residential has been oriented internal to the neighbourhood and generally buffered from the arterial roadways by medium density, commercial and school/park land uses.

Proposed low density residential (Site Specific) development includes the following:

Bylaw 12548 April 2, 2001

Located south of the central Dry Pond. The proposed DC2 district for the area contemplates Semi Detached Housing development as a primary use with alternative uses of Single Family Housing based on the RSL district.



^{*}Amended by Editor

Proposed medium density residential development includes the following:

Two multi-family sites in the northwest portion of the plan area. The latter parcel is intended for street-oriented townhouse development which would blend in with adjacent low density development. Bylaw 12021 April 26, 1999

• *One* site in the southwest portion of the neighbourhood, along the western edge (1.23 ha).

Bylaw 13199 November 6, 2002

In order to achieve effective transitioning between street-oriented townhouse development and lower density residential development, the principles of gradient density and comprehensive streetscape design will be applied to ensure the compatibility of a diverse mix of housing units in a single streetscape.

Bylaw 12021 April 26, 1999 Bylaw 12548 April 2, 2001 Bylaw 12830 July 4, 2001 (Deleted points)

The larger medium density residential sites were generally selected for their location adjacent to collector or arterial roadways to limit the impact of additional traffic on the adjacent single family development. As noted earlier, some of the sites are intended to be developed to lower overall densities to address different housing market preferences (empty nester "lifestyle condominiums, up-scale townhouse units, etc.). The nature of these developments allows them to be nestled into single family development rather than strictly on major roadways without causing excessive traffic on the local roadway system.

The resulting mix of single family to multiple family dwellings is approximately 80% / 20% and is within the established City Council housing mix guidelines.

Bylaw 13199 November 6, 2002

Both low and medium density residential development adjacent to the arterial roadways will be designed to incorporate screen fencing and landscaping as required in accordance with City of Edmonton Standards to achieve a functional and visual separation between the roadways and adjacent residential uses.

4.3 TOP-OF-BANK ACCESS & SETBACKS

Any residential land uses, roadways and walkways adjacent to the ravine will be subject to relevant development setbacks as determined by a geotechnical evaluation at redistricting and subdivision. Details of the proposed top-of-bank access and setbacks are discussed below.

4.3.1 Top-of-Bank Access

A top-of-bank roadway or top of bank walkway containing pedestrian access will be provided at the subdivision stage in accordance with the policies of the Top-of-Bank policy and based on the geotechnical analysis of the top-of-bank area.

4.3.2 Top-of-Bank Setbacks

A Slope Stability Assessment was undertaken by J.R. Paine & Associates Ltd. (consulting and testing engineers) to assess the bank stability and provide recommendations to aid in the future residential design and construction adjacent to the Blackmud Creek Ravine.

Their findings are summarized below:

- A detailed topographical survey to establish the top-of-bank has not been undertaken. Hence, the setbacks are generalized and adjustments may be necessary once the top-of-bank is located by survey. The survey will establish both the top-of-bank and more accurate cross-sections to the Blackmud Creek.
- Figures 7.0 (a) & 7.0 (b) Top-of-Bank Setbacks indicate suggested setbacks from the approximate top-of-bank. These setbacks are to buildings while roads, sewers and walkways may be built within this zone. Sewers are to be water tight.
- All houses within 100 m of the top-of-bank must have weeping tiles and roof leaders connected to the storm sewers. Lot grading should direct water away from the ravine where practical.
- Swimming pools within 100 m of the top-of-bank should have an underdrain system

FIGURE 7.0 (a) – Top of Bank Setbacks (Bylaw 11705, May 11, 1998)

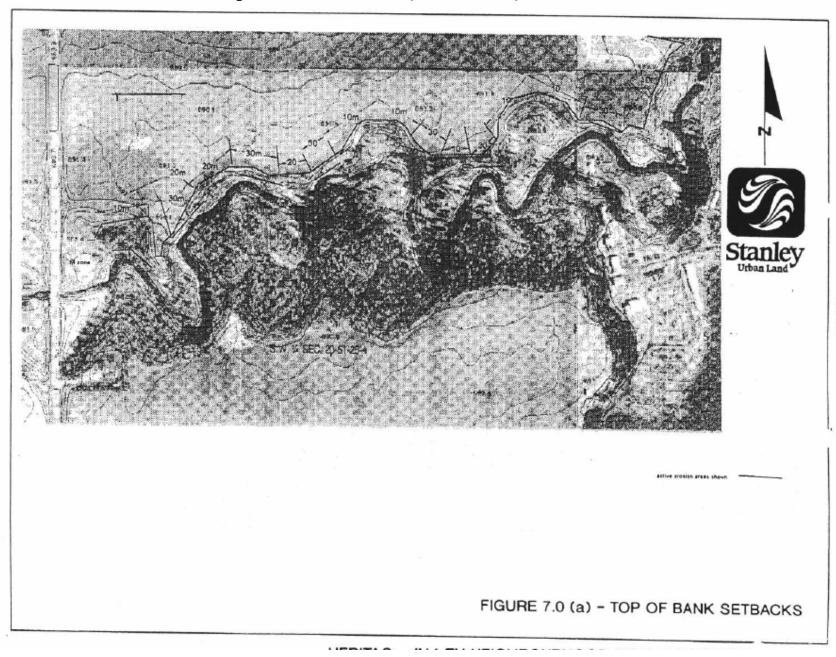


FIGURE 7.0 (b) – **Top of Bank Setbacks** (Bylaw 11705, May 11, 1998)



 Due care is to be taken to minimize surface water spilling over the banks.

The above suggested setbacks and other recommendations will be reviewed as additional field information is gathered. Prior to redistricting and subdivision of the first stage of this neighbourhood, a geo-technical and slope stability report will be undertaken to refine recommendations as to the appropriate setbacks from the top-of-bank.

4.4 CIRCULATION SYSTEM

4.4.1 Roadways Network

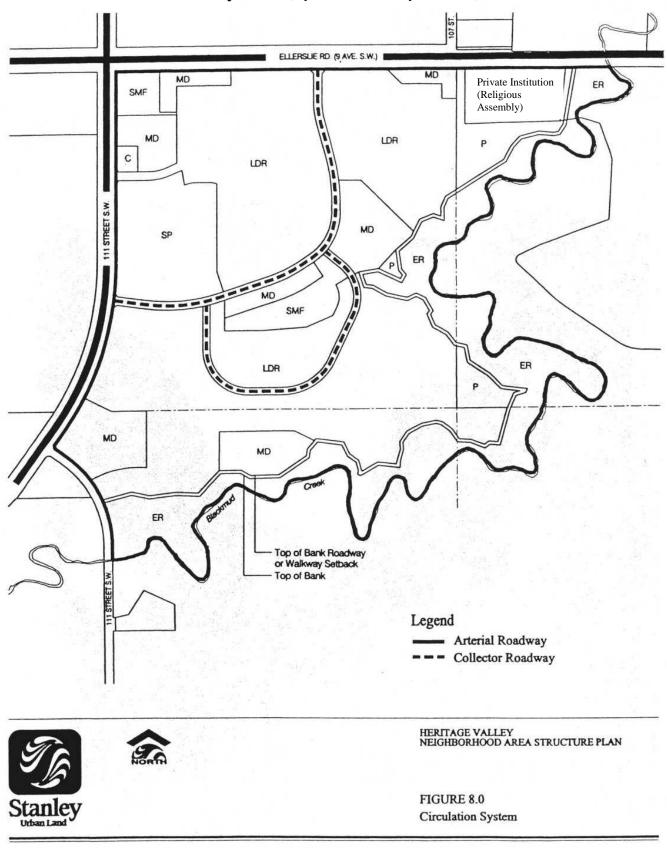
The circulation system proposed to serve the land use pattern of the plan area is shown on Figure 8.0 - Circulation System. It consists of:

- The peripheral arterial roadways including 111 Street to the west, and Ellerslie Road (9 Avenue SW) to the north;
- A central collector roadway accessing Ellerslie Road (9 Avenue SW) from the north, and 111 Street from the wet, to provide a well defined internal connection with local roadways in the Neighbourhood;
- A second collector loop off the main collector roadway around the central stormwater management facility to enhance access for both private vehicles and public transit;
- Local residential roads, consisting of loops, cul-de-sacs, or local roads which create relatively small enclaves of residential development which will not be exposed to through traffic.

4.4.2 Pedestrian and Bicycle Circulation

Pedestrian circulation in the *Blackmud Creek* Neighbourhood will be accommodated primarily on a sidewalk system developed in conjunction with the internal roadway network. Connecting walkways will be provided in various locations to facilitate access to public transit and pedestrian movement within the Neighbourhood, and adjacent to the Blackmud Creek Ravine.

FIGURE 8.0 – Circulation System* (Bylaw 11705, May 11, 1998)



^{*}Amended by Editor

4.5 SOCIAL AND DEMOGRAPHIC PROFILE

The estimated number of housing units, future population and school generation population within the Neighbourhood is summarized in Appendix 1. The estimated future population of the Neighbourhood is 2,656 persons, and the overall density of planned development is 33.0 persons/gross hectare.

Bylaw 13199 November 6, 2002

4.6 SCHOOL & PARK FACILITIES

A 4.45 hectare public K-8 school site has been created in the western area of the Neighbourhood adjacent to the east-west collector road. The school site is designed to incorporate an adjacent 2.63 hectare neighbourhood park and community league building envelope. These facilities would primarily serve residents who reside in the neighbourhood, in addition to some neighbouring residents.

A student drop-off zone will be developed as part of the school/park site on road right-of-way. A tentative design of the school/park/community league site will be developed by the Community Services Department in consultation with Edmonton Public Schools and the developer.

The school location on 111 Street is more central to a larger catchment area beyond the neighbourhood boundaries, making convenient access for students from several neighbourhoods over the long term.

The Public and Separate school student generation numbers from within the plan area are summarized in Appendix 1.

A small viewpoint park site is identified in the Development Concept plan and will be provided through municipal reserves. The viewpoint parks will be linked with the top-of-bank roadway or walkway to provide a series of vistas along the path.

4.7 INTEGRATION OF EXISTING LAND USES

The preparation of a NASP for *Blackmud Creek* required consideration of the integration of existing land uses into the plan.

As noted, these two existing uses are the *Private Institution* (*Religious Assembly*) and the City of Edmonton Klondike Valley Campground and associated sewage lagoon.

4.7.1 Private Institution (Religious Assembly)

Amended by Editor

Future residential land uses can be developed in the vicinity of the Church site without creating any conflicts with respect to through traffic, noise or visual intrusion. No direct internal access is envisioned between the Church and residential development to the west since all access will be off of Ellerslie Road. Residential lots are planned to back onto the Church site and will be further buffered by fencing and various forms of landscaping as determined at the subdivision stage. Furthermore, since the Church already exists, residents purchasing homes in *Blackmud Creek* will aware of what they are building next to.

Amended by Editor

The Church obtained the park property directly south of the church site (formerly the Klondike Valley Sewage Lagoon). The construction of the Ellerslie Road/Calgary Trail Interchange necessitated a land expropriation of a 0.56 ha site frontage from the Church site. The City also required a 7.5 metre top-of—bank public walkway along the eastern property line boundary. The church was compensated for the expropriated land by obtaining the 0.63 ha parcel of land south of their original site. The land use designation for the entire site is Urban Services. An urban service designation typically includes uses such as churches, daycares, community recreation services and cultural exhibits.

Bylaw 12497 May 30, 2001

4.7.2 Klondike Valley Campground & Sewage Lagoon

The existence of a Campground (at least in the near term) will require special attention to be given to creating a mutually compatible environment with future residential development. Appropriate setbacks and landscaping/buffering will be required to integrate the campground use in a compatible manner with the future adjacent residential uses.

Bylaw 12497 May 30, 2001

All buffering requirements, including matters of separation distance, screening, landscaping, and other requirements to maintain an

Bylaw 12497 May 30, 2001 effective transition between the campground and adjacent development, will be designed to the satisfaction of both the Community Services and Planning and Development Departments.

The sewage lagoon was abandoned and remediated to an urban services site (Religious Assembly) and park by the City of Edmonton at the time that the adjacent residential area was developed. At the time that the sewage lagoon was abandoned, and de-commissioned the site was remediated in accordance with applicable legislation and policies.

Bylaw 12497 May 30, 2001

The design of sanitary and water services to the plan area will ensure the capacity and opportunity to connect the Campground to municipal services. The Campground site will be serviced with sanitary sewer and water services at the time the services are constructed for the adjacent residential development. Any future reclamation of the sewage lagoon and Campground servicing will be the responsibility of the City of Edmonton.

When residential development is proposed adjacent to the Campground, suitable setbacks and buffering will be required. A buffer will be provided adjacent to the Campground comprised of a berm, fence and landscaping. Vehicular access will be prohibited from the west area to the Campground site. Pedestrian multi use access will be provided in the future to access the ravine system. These issues and buffering mechanisms will be addressed at the time of redistricting and subdivision of the adjacent lands.

5.0 Plan Implementation

		Page
5.0 PLAN I	MPLEMENTATION	35
5.1	Provision Of Municipal Utility Services	36
	5.1.1 Water Supply and Distribution	36
	5.1.2 Sanitary Drainage System	36
	5.1.3 Stormwater Drainage	38
	5.1.4 Shallow Utilities	38
5.2	Transportation	38
5.3	Development Staging	42

5.0 Plan Implementation

5.1 PROVISION OF MUNICIPAL UTILITY SERVICES

A preliminary Water Network Analysis and preliminary Neighbourhood Designs Report for storm and sanitary sewer systems were submitted in support of the *Blackmud Creek* Neighbourhood Area Structure Plan in September 1993. The City of Edmonton responded to those documents in October 1993 with no further action taken on either the reports or the comments.

Amended by Editor

The following is intended to outline the design concepts that will be retained from those original documents and the new design concepts for the storm and sanitary sewer systems.

5.1.1 Water Supply and Distribution

In September 1993, a draft Water Network Analysis was submitted to the City of Edmonton. The report recommended a connection to the existing 200 mm watermain on Ellerslie Road which would be reinforced with a new 450 mm watermain at a future date.

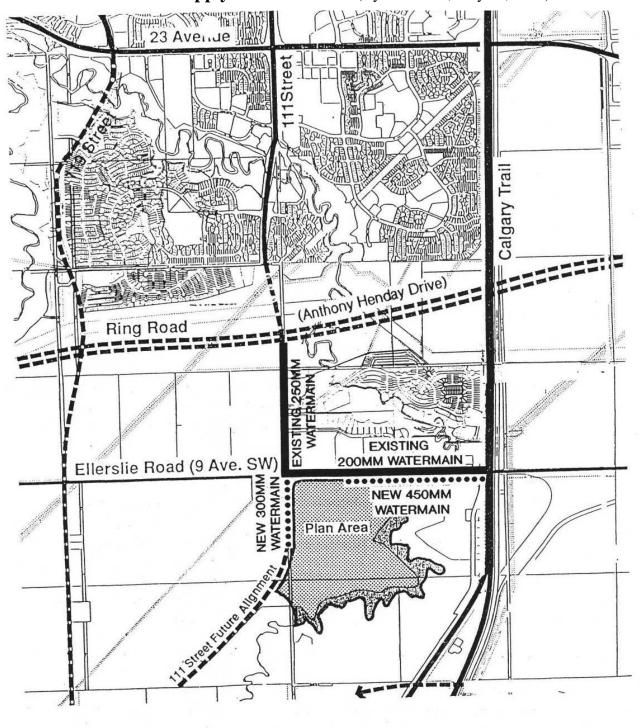
After having discussed the information with Aqualta Engineering, it was agreed that the new 450 mm watermain on Ellerslie Road will be constructed with the first stage of development in the neighbourhood. The new main will connect to the City's existing transmission main at Highway 2 as shown on Figure 9.0 - Water Supply & Distribution.

In addition, a new 300 mm line will be constructed on 111 Street south of Ellerslie Road with an internal network of 150 mm to 250 mm watermains.

5.1.2 Sanitary Drainage System

The *Blackmud Creek* NASP is within the S.E.S.S. basin. Sewage collected within the neighbourhood will be discharged as outlined in S.E.S.S. to the South East Regional Trunk sanitary system. The connection point located at S.E.R.T. is proposed to be about the

FIGURE 9.0 – Water Supply & Distribution (Bylaw 11705, May 11, 1998)







HERITAGE VALLEY NEIGHBOURHOOD AREA STRUCTURE PLAN

FIGURE 9.0 Water Supply & Distribution south boundary of the RDA at 97 Street. The specific methodology of the connection is being examined and will be detailed in the Neighbourhood Designs Report for *Blackmud Creek*. The Neighbourhood Designs Report will be submitted upon completion of the analysis with the intention that approval will be in place before districting of the first stage of subdivision.

Amended by Editor

Figure 10.0 - Proposed Sanitary Sewer Drainage Pattern, shows the drainage pattern within the neighbourhood. Underground piping will follow the street pattern once it is established.

5.1.3 Stormwater Drainage

As shown on Figure 11.0 - Proposed Storm Water Drainage Pattern, the stormwater servicing concept in the plan area is based on the creation of two dry ponds, one in the northwest corner of the neighbourhood and one larger facility in the central part of the neighbourhood. The northwest pond will outfall to the central storm water management facility which will outfall to Blackmud Creek at a controlled rate. The necessary environmental studies will be submitted under separate cover.

All of the above information will be described in more detail in the NDR which will be submitted as outlined under sanitary drainage. Again, the intent is that the storm drainage system will be approved prior to districting of the first stage of development.

5.1.4 Shallow Utilities

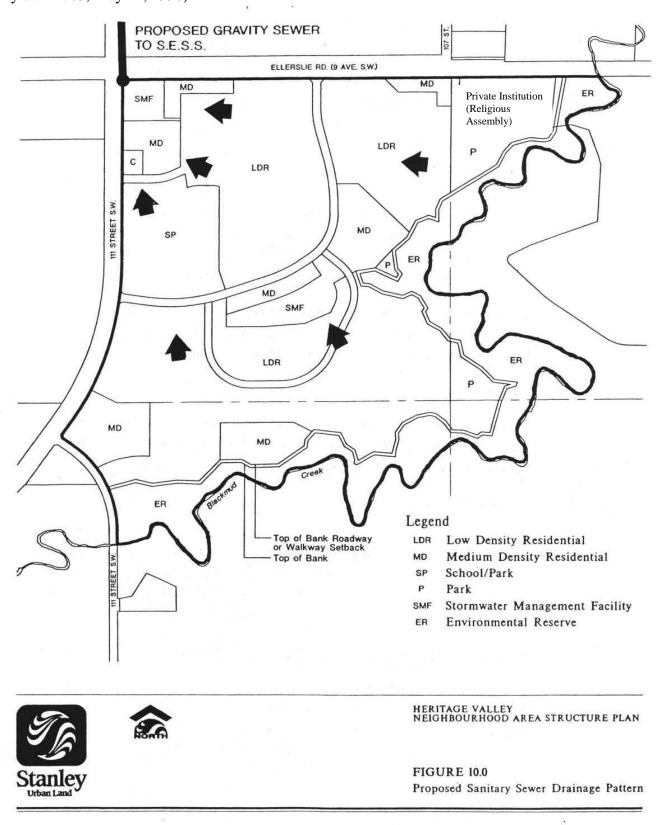
Natural gas, telephone, electric power and cable television systems are within reasonable proximity of the plan area to the north so that existing facilities can be extended to serve development within the neighbourhood.

5.2 TRANSPORTATION

The requirements of arterial access staging associated with the development of *Blackmud Creek* will be approached on the basis of a public / private partnership between the City of Edmonton and the developers of the NASP area. An acceptable construction standard and staging for adjacent arterial roads has been determined as follows:

FIGURE 10.0 – Proposed Sanitary Sewer Drainage Pattern*

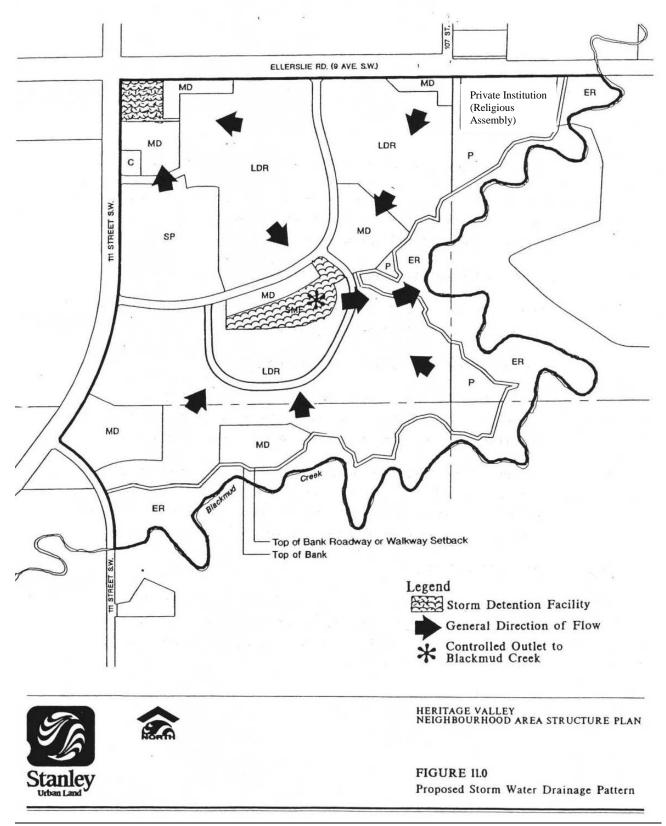
(Bylaw 11705, May 11, 1998)



^{*}Amended by Editor

FIGURE 11.0 – Proposed Storm Water Drainage Pattern*

(Bylaw 11705, May 11, 1998)



^{*}Amended by Editor

Stage 1A - 111 Street (Blackburne Drive - Ellerslie Road)

Two lane rural cross section with a ten year design life, similar to the upgrading of 111 Street north of Blackburne Drive. This road would remain on its current alignment because property has not yet been dedicated or acquired for construction of a permanent alignment. This section of road is to be built with the first stage of development.

Stage 1B - Ellerslie Road (111 Street - 107 Street)

First two lanes to be constructed with the first stage of development on the permanent alignment. This will likely be the south two lanes, as right-of-way for same has been identified as part of the *Blackmud Creek* plan.

Amended by Editor

<u>Stage 2 - 111 Street (Ellerslie Road - Main Heritage Valley Entrance)</u>

First two lanes to be constructed with the second stage of development on the permanent alignment. This will likely be the east two lanes, as right-of-way for same has been identified as part of the *Blackmud Creek* plan.

Amended by Editor

Stage 3 - 111 Street (Main Entrance to South Entrance)

Two lanes on the permanent alignment provided that the right-ofway is available. A temporary connection to the existing 111 Street may be required.

Stage 4 - Ellerslie Road (107 Street to Calgary Trail)

The Urban Development Institute (UDI) and the City of Edmonton are currently negotiating an arterial roadway assessment for the purpose of providing a funding mechanism for the construction of arterial roadways within neighbourhoods.

In addition, some of the above roadway construction has "funded project" status within the City of Edmonton Capital Priorities Plan (CPP). It is anticipated that any arterial roadway assessment that may apply and funding that may be available will be applied to the unsubdivided lands within this neighbourhood.

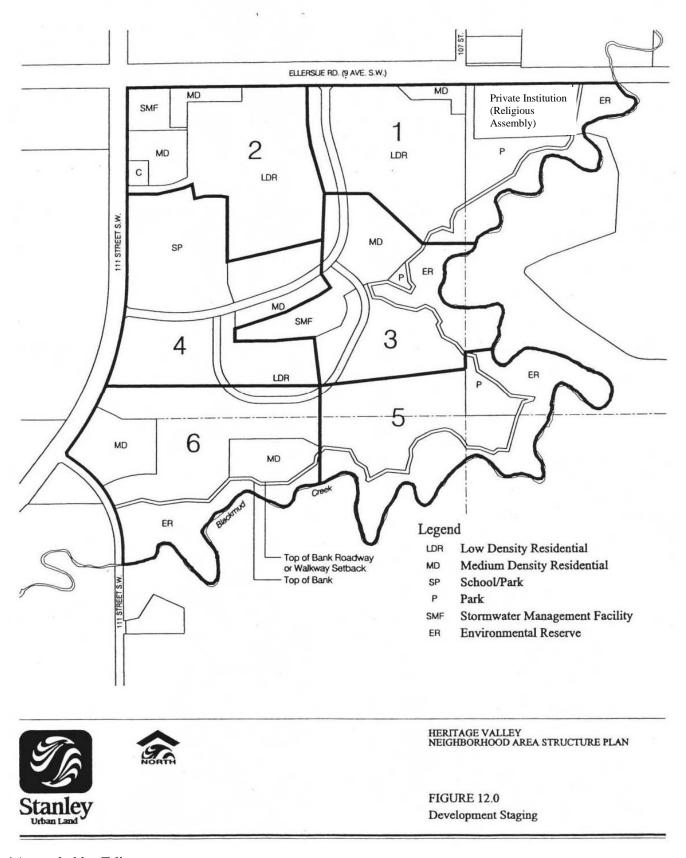
5.3 DEVELOPMENT STAGING

As shown on Figure 12.0 - Staging Concept, development within the *Blackmud Creek* NASP will begin in the northeast portion of the neighbourhood and then continue west along Ellerslie Road. Following these initial stages, development will proceed south in an east to west direction.

Amended by Editor

The pace of development will depend on many factors including market conditions and availability of infrastructure.

FIGURE 12.0 – Development Staging * (Bylaw 11705, May 11, 1998)



^{*}Amended by Editor

Appendix

		Page
APPENDIX		44
A.1	Land Use & Demographic Profile	45

BLACKMUD CREEK NEIGHBOURHOOD AREA STRUCTURE PLAN LAND USE AND DEMOGRAPHIC PROFILE

Amended by Bylaw 13199, November 6, 2002

Amended by Editor

			AR	REA (ha)	
GROSS AREA				100.80	
Environmental Reserve					
	Blackmud Creek Ravine Environmental Reser	ve	17.82		
Arterial Roadway Wide	ning				
	Ellerslie Road & 111 Street		2.62		
GROSS DEVELOPABL	E AREA			80.36	
C4		2.06			
Stormwater Managemen	nt Facilities		2.96		
Circulation					
	Collector Roadways	11.69			
	Local Roadways	4.35			
	Walkways	1.92			
Maniainal Danama			17.96		
Municipal Reserve	Public K-8 School & Neighbourhood Park	7.08			
	Viewpoint Park	0.16			
	viewpoint i ark	0.10	7.24		
Non-Residential Land Uses			7.24		
11011 110011111111111111111111111111111	Commercial	4.25			
	Klondike Valley Campground	10.76			
	Private Institution (Religious Assembly)	5.91			
			20.92		
NET RESIDENTIAL AREA				31.28	

RESIDENTIAL LAND USE ANALYSIS

Land Use	Area (ha)	Units/ha	Units	Pop/Unit	Population	Single/Multi-Family Unit Ratio
						80.0% / 20.0%
Low Density Res.	27.62	23	635	3.46	2,198	
Medium Density Res.	3.66	42	154	2.98	458	Persons per Gross Dev Hectare
						33.0
TOTAL	31.28		798		2,656	

STUDENT GENERATION STATISTICS

LEVEL	Public	Separate	Total	
Grades K-8 Grades 9-12	366 142	122 47	488 189	
TOTAL	508	169	677	