

Ogilvie Ridge Neighbourhood Structure Plan

Office Consolidation March 2006

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Bylaw 6365 was adopted by Council in April 1981. In March 2006, this document was consolidated by virtue of the incorporation of the following bylaws:

- Bylaw 6365* Approved April 28, 1981 (to adopt the Ogilvie Ridge Neighbourhood Structure Plan)
Bylaw 7595 Approved July 10, 1984 (to replace the entire text of the plan)
Bylaw 8633 Approved November 10, 1987 (to replace the entire text of the plan)
Bylaw 9181 Approved June 27, 1989 (to redesignate a parcel from direct control mixed density residential to single detached residential uses)
Bylaw 10595 Approved January 17, 1994 (to redesignate a parcel from neighbourhood commercial to row housing)

Editor's Note:

This is an office consolidation edition of the Ogilvie Ridge Neighbourhood Structure Plan, Bylaw 6365, as approved by City Council on April 28, 1981. This Plan is an amendment to the Riverbend Area Structure Plan, Bylaw 5710 as approved by City Council on September 12, 1979. This edition contains all amendments and additions to Bylaw 6365.

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

**RIVERBEND NEIGHBOURHOOD 8
OGILVIE RIDGE**

**NEIGHBOURHOOD STRUCTURE
PLAN**

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1.0 INTRODUCTION

1.1 Background

A Neighbourhood Structure Plan was adopted by Council as Bylaw No. 6365 in April of 1981. In June, 1981, Council adopted Bylaw No. 6510 providing detailed districting for the entire neighbourhood.

Subsequent to the approval of the above Bylaws, development activities were postponed and no development proceeded until 1984. Due to changing market conditions, it became necessary to amend the approved Neighbourhood Structure Plan. The Neighbourhood Structure Plan Amendment was submitted in May of 1984 and adopted by Council as Bylaw No. 7595 on July 10, 1984.

In 1984, Phase 1 containing 193 single family lots was developed.

In 1986, a second stage of development containing an area of 7.6 hectares and districted as RF5 and RA7, was developed as a low density single story adult condominium development. This project contains 85 units.

In order that the balance of Neighbourhood 8 can be developed in an appropriate manner, the Neighbourhood 8 Structure Plan (*Ogilvie Ridge NSP*) is being amended to recognize current market conditions and new requirements. The amendment updates the Neighbourhood Plan giving consideration to the development that has been completed to date and recognizes market conditions that determine the ultimate form of development for the balance of the neighbourhood.

Amended by Editor

1.2 Mandate

The Neighbourhood Structure Plan has been prepared pursuant to the policies and provisions of the Riverbend Area Structure Plan.

1.3 Purpose

This plan defines the land use concept standards and guidelines for the subdivision and development of the lands within Riverbend Neighbourhood 8 in an effort to ensure the efficient provision of land uses, services and facilities within the Neighbourhood and in relation to the overall district. This amendment gives recognition to development that has been previously completed and establishes the framework for development of the remaining undeveloped lands.

1.4 Scope

This plan has been prepared in accordance with the Terms of Reference for Neighbourhood Structure Plans.

1.5 Organization of Report

This report is divided into seven sections as outlined in the Table of Contents. The first three sections contain background and introductory information relating to the site and city policies affecting its development. The next two sections review the servicing characteristics and natural features of the site. The sixth section outlines the principles and rationale which led to the formulation of the development concept for the Neighbourhood. The last section defines the policies and implementation program for the Neighbourhood Structure Plan.

2.0 SITE CONTEXT

2.1 Location

Riverbend Neighbourhood 8 is located immediately adjacent to the Whitemud Creek ravine in the extreme southeast of Riverbend. This area is situated some five miles from the core of the City and will be accessed by Terwillegar Drive and Rabbit Hill Road.

2.2 Size and Boundaries

The total site area comprises 58.5 hectares (145 acres). The site is bordered on the north by the Bulyea Heights neighbourhood; on the south by a 60 metre *powerline* right-of-way; on the east by the top-of-bank of the Whitemud Creek ravine; and on the west by Rabbit Hill Road and Bulyea Road.

Amended by Editor

2.3 Legal Description

The site lies in the northeast portion of Section 2-52-25-W4th and the northwest portion of Section 1-52-25-W4th.

2.4 Land Ownership

The remaining undeveloped land in Neighbourhood 8 is owned by *a private corporation*.

Amended by Editor

2.5 Existing Land Uses

Single family residential lots were developed in 1984, with approximately 50% of the lots having had homes constructed on them. The RF5 and RA7 sites developed in 1986 in the northwest quadrant of the plan area contains 85 units of single story adult condominiums.

The east half of the plan area is primarily used for agricultural purposes with the exception of the Petrolia Substation. The Petrolia Substation, owned by Edmonton Power, is located along the southern boundary of the Neighbourhood, east of 142 Street.

In the extreme west portion of the plan area future Row Housing site is undeveloped.

Bylaw 10595
January 17, 1994

3.0 POLICY CONTEXT

3.1 Edmonton General Municipal Plan

The Edmonton General Municipal Plan defines the general growth strategy for the City. The entire Riverbend area is identified in the General Plan as a residential area to be developed consistent with the growth strategy policies and principles for Suburban Areas.

3.2 Riverbend Area Structure Plan

The Riverbend Area Structure Plan provides the policy framework for development within the Riverbend Area.

It delineates the following policies and guidelines specifically for the development of Neighbourhood 8.

Density Range

A density range of 40-55 persons per gross hectare (16-22 people per gross acre) or 12.5-25 units per gross hectare (5-10 units per gross acre) is permitted. Neighbourhoods with limited environmental carrying capacities shall contain the lower densities in this range.

Residential Neighbourhood

Neighbourhood 8 is designated for a low profile development with predominantly low density housing due to the topography, winding valley crest, fragile ravine lands and low lying terrain adjacent to the higher site of Neighbourhood 9 (*Carter Crest NSP*).

Amended by Editor

Commercial Uses (Section Deleted)

Bylaw 10595
January 17, 1994

Schools

A school site was provided with the first stage of development and will accommodate the future development of a public elementary school. The requirements for public junior high, separate elementary and junior high schools have or will be accommodated within other neighbourhoods in Riverbend. Senior high school requirements have not been provided for within the Riverbend Area.

Parks and Open Space

A neighbourhood park has been located within the neighbourhood and other open spaces shall be designed in relation to the housing densities, mix of the population and environmental features worthy of preservation, all in accordance with the Parks and Recreation Master Plan. A linkage system comprising walkway, bikeway, nature trails, jogging lanes will connect the various parks and open spaces with the major community facilities in the district. Environmental reserves shall be provided for ravine areas in accordance with The Planning Act and the North Saskatchewan River Valley Area Redevelopment Plan Bylaw.

Circulation

Vehicular circulation is based on a hierarchical system starting from the major arterial Terwillegar Drive that will in the future connect the proposed outer ring road and Whitemud Drive. The major roadway serving the neighbourhood is Rabbit Hill Road, the east-west arterial which provides access to Terwillegar Drive. Pedestrian circulation is to be provided by a system of walkway/bikeways linking the major school/park sites, transportation facilities and top-of-bank areas. Public transportation is to be provided by bus routes which will serve the neighbourhood and provide neighbourhood identities.

Utilities

All utilities are provided for the remaining undeveloped lands by extension of existing facilities.

3.3 Guidelines for the Distribution and Design of Neighbourhood Density

The Area Structure Plan calls for development to be in conformity with the Guidelines for the Distribution and Development of Neighbourhood Density. This policy document provides guidance in relation to the design and development of residential neighbourhoods both at district and neighbourhood scale. Reference to specific guidelines and the manner in which they have been addressed in this plan may be found in Section 6 - Development Principles.

3.4 Top-of-Bank Policy

The Parks and Recreation Master Plan policy respecting top-of-bank calls for the establishment of public roadways or walkways separating residential land from the adjoining public park boundary so as to improve access to the River Valley and Ravine and to prevent encroachment on the ravine boundary. The North Saskatchewan River Valley Area Redevelopment Plan

Bylaw states that a public roadway should separate housing or other development from the ravines except where engineering or special planning considerations warrant the introduction of urban development, in which case sufficiently broad public upland area shall be provided. *The development concept for this neighbourhood has been designated in conformity with these policies, with the exception of the “ravine terrace area” where the Community Services Department has permitted the public upland setback walkway to be located below the top-of-the-bank.*

Bylaw 9181
July 27, 1989
Amended by Editor

4.0 SITE CHARACTERISTICS

4.1 Site Features

Riverbend 8 is an isolated area owing its adjacency and orientation to the ravine. These qualities offer the opportunity for creating one of the most attractive home sites in the City of Edmonton.

The site is naturally divided into three areas by two finger like extensions of the ravine. One finger runs due west close to the northern boundary. A second ravine extension runs south in the central area of the site. The two ravines clearly define the natural drainage in the site.

In the northeast central portion of the site a one hectare natural "amphitheatre" or terrace lies some 15' lower than adjacent lands and extends into the ravine. Within the ravine area itself, two observation points provide views into the river valley 70' - 80' below and into the adjacent forest areas.

The topography of the site is characterized by gently rolling hills with slopes ranging from 5% to 7% and in certain instances approximately 10% around the dominant hills.

The site rises some 15 metres from the ravine edge to the higher ground in the southwest adjacent to Neighbourhood 9. From this higher ground, views and vistas are available to the city centre. In the lower areas, views are limited by the dense ravine foliage.

4.2 Development Constraints

The two major development constraints for the site are man-made. The Petrolia Power substation and the *powerline* right-of-way create a negative visual impact. This impact is being ameliorated by berming and planting and by emphasizing the natural orientation of the site northward to the ravine edge and the City.

Amended by Editor

4.3 Existing Development

The Neighbourhood Structure Plan amendment gives recognition to the differences between the development that has been completed in Phases 1 and 2 and the current Neighbourhood Structure Plan. These differences can be summarized as follows:

- Oeming Road has been realigned to connect with 142 Street (*renamed Rabbit Hill Road*) within Neighbourhood 8 (*Ogilvie Ridge NSP*) rather than extending into Neighbourhood 4 (*Bulyea Heights NSP*) to the north;

Amended by Editor

- The parcel of land located at the intersection of Rabbit Hill Road and Ogilvie Boulevard has been developed as conventional single detached residential rather than the single detached residential with site specific regulations as identified within the Neighbourhood Structure Plan;
- The proposed row housing along Ogilvie Boulevard has been developed as single detached residential as approved by Council as Bylaw No. 7824 and adopted on May 14, 1985.

4.4 Ravine Edge

The ravine edge is defined by a top-of-bank line which was established in the field according to City policies. A development setback line was recommended as a part of the detailed geotechnical study by R.M. Hardy & Associates. This line lies some 7-15 metres back from the top-of-bank line depending on specific local edge conditions. Slope stability analysis created three categories of ravine edge.

The first category comprises slopes along the main valley wall of the Whitemud Creek. In this area a development setback line of 9.5 metres was recommended as adequate for all development purposes.

The second category comprises slopes along the main valley wall in the southeast extreme of the site. In this area, creek erosion is evident at the toe of the slope. Excessive seepage and slope softening higher on the valley wall will likely initiate some slumping of the slope. The recommended location of development setback in this category ranges from 10 to 30 metres.

The third category comprises slopes along the two creeks that project into the site area. Some slope instability is evident along certain portions of the eastern bank of the north to south creek. Mechanisms causing these areas to slump are predicted along the west to east creek as well. Setback lines have been established using a formula based on a ratio of 3 horizontal to 1 vertical beginning at the elevation of the creek bottom.

4.5 Geology and Soils

The cultivated portions of the plan area above the crest of the ravines and creek have predominantly chernozemic soils of the Malmo silty clay loam type. These soils are characteristically fairly well to well drained, developed on slightly saline lacustrine materials. Alluvial soils in the regosolic group and unclassified soils border the creek and ravines.

Brief reconnaissance along the creek showed exposed rock and gravel to a depth of at least 15 to 20 centimetres in some areas along the steep slopes. Technical studies show that a lacustrine silty clay layer ranging from 2.5 to 12 metres in thickness characteristically lies beneath the topsoil. A layer of stratified sand ranging from 2 to 6 metres in thickness with traces of silt lies beneath the clay; a medium to highly plastic silty clay till lies beneath the silts and sands; and a clay shale bedrock is located beneath the glacial silty clay till.

Information on ground water, collected from holes on site and from Edmonton Power, indicates the ground water regime is divided into a section within the main area of the proposed subdivision and another along the western portion of the site.

In the first section ground water flows from the south towards the top of the valley of the Whitemud Creek and is primarily influenced by the stratified sand silt. It was noted by the geotechnical consultants that water elevation in the south to north creek coincided typically with the ground water level in the adjacent test holes. From this it is inferred that there would likely be a continuous flow in the creek after subdivision development.

Ground water elevation in the western portion of the neighbourhood site was significantly higher regardless of the fact that silt and sand layers were close to the clay shale. The geotechnical consultants suggested that in this area ground water flows are being controlled by subsurface flow from lands further west of the site as in the case of the south to north creek. Water levels in the west and east creek are approximately the same as in the test holes in the area.

4.6 Vegetation/Habitat

Since the area has previously been cleared for cultivation, tree cover within the site is virtually non-existent. A notable exception is the small cluster of small poplar and willow at the shallow end of the central ravine. The significant vegetation therefore is found along and below the well treed ravine edge. Along the creek predominant tree cover comprises larger poplar, some aspen and birch, and in isolated areas spruce that reach approximately 20 metres in height. The two ravines are lined primarily with poplar and spruce and smaller poplar and willows in the shallow southern ends.

Other than small rodents such as field mice, the cultivated site has no visible significant wildlife. Beyond the mature tree line and into the creek valley and ravines, signs of game, rabbits and deer have been identified.

4.7 Climate

The adverse regional climate, coupled with the exposed nature of the site particularly in the southern portion, corresponding roughly with the heights of land in this area, makes heat conservation and climate control important considerations in the design of the development and favours design solutions which provide buffering and/or offer exposure to the winter sun.

The prevailing winter winds are from the northwest and north northwest and consequently site relief will have little moderating influence. Areas immediately adjacent to the ravine ridge forming the northern boundary of the site will benefit somewhat from this feature which will have a modifying effect on both wind and precipitation distribution. Higher wind speeds can be expected near the higher ground in the southern areas of site.

Dwelling placement and orientation and the establishment of vegetation buffers to minimize wind tunnelling and snow drifting, for sheltering of pedestrian activity areas and generally to create a more favourable micro-climate should be prime considerations in the design and development of the site.

4.8 Historical and Archeological Sites

A special study was conducted on the site to meet the requirements of the Alberta Historical Resources Act (Section 22, Subsection 2). In total, 8 historical and archeological sites were found on Neighbourhood 8 lands. All sites identified were of limited value as there has been considerable ground disturbance. No further study was recommended for any of these sites. The historical title search was conducted on the farmstead. Evidence indicated that the site was in long continuous use as a farmstead and was typical of numerous such sites in Alberta. No historical significance was placed on the site.

5.0 DEVELOPMENT PRINCIPLES

This amended Neighbourhood Plan was prepared in the context of development objectives and principles in the Riverbend Area Structure Plan, the North Saskatchewan River Valley Area Redevelopment Plan Bylaw, and the Guidelines for the Distribution and Design of Neighbourhood Density within the Edmonton General Municipal Plan. Careful examination of these objectives and principles, current housing market trends and the unique features of this site lead to the following Site Development Principles.

OBJECTIVES

SITE DEVELOPMENT PRINCIPLES

Variety and Choice of Lifestyles

"....provide for a variety of urban and suburban lifestyle by... promoting a range of densities and diversity of dwelling types...." Riverbend Area Structure Plan Section 4 - Page 5

- Provide different density zones for various specific sectors within the plan area.
 - Recognizing the present multi-family development in the northernmost area to be a higher density area partially fulfilling the objective.
 - The majority of the area to be a lower density zone containing medium and large lot single family detached residences.
-

Compatibility of Housing Forms and Mix

"....various housing types should be sited so that only physically compatible forms are adjacent or otherwise buffered by transitional housing, land uses or open space. Guidelines for the Distribution and Design of Neighbourhood Density Guideline 2 - Page 4.

- Screen each density zone from its adjacent zones by extending the natural buffer provided by the ravine system.
 - Utilize specific housing types as a transitional housing zone between the higher density area and the lower density area.
-

Creation and/or Enhancement of Views and Vistas

"....preserve all significant viewpoints and vistas of the city centre skyline and other significant views...." Riverbend Area Structure Plan Section 4 - Page 5

- Locate less dense single-family housing on higher slopes to take advantage of views over ravine to the city.
- Locate some multi-housing parcels
- adjacent to the ravine edge to maximize the views to ravine.

OBJECTIVES

SITE DEVELOPMENT PRINCIPLES

Harmony Between Natural and Man Made Environment

"...conserve and optimize the use of the natural environment through sensitive integration of the development with natural features...." Riverbend Area Structure Plan Section 4 Page 5

- Maximize the ravine amenity for the public at large and the local residents by creating a pedestrian circulation system along the ravine edge. It will form an integral part of both the upper walkway system and any modest recreational amenity developed in the ravine proper (such as major and minor trails, observation points, seating areas, etc.).
-

Minimize Impact on the Ravine

"(ii) The preservation of the (North Saskatchewan) River Valley and Ravine System as an environmental protection area" Parks and Recreation Master Plan Page 158.

"with the exception of some trail development, it is proposed that the Whitemud Ravine remain as a nature preserve area".

- Provide for limited development of the ravine system as a recreational amenity with walkway systems, observation points and picnic areas.
- provide neighbourhood amenities at strategic points which facilitate controlled access to the ravine system due to its sensitivity and the desire to retain it as a natural preserve.
- Locate the major vehicular spine so that it intersects the ravine system at pedestrian access nodes.

6.0 NEIGHBOURHOOD STRUCTURE PLAN

Overall the plan creates a low profile but compact urban atmosphere accentuated by the overall orientation of the entire neighbourhood towards the ravine. Landscape and architectural design guidelines will be applied to all lots and homes within the subdivision to ensure that the man made environment is characterized by a high quality of design and construction.

One of the most important elements of the design concept for the neighbourhood is the manner in which the local streets are to be treated. Overall streets will be designed to complement the adjacent natural environment and ravine system and to be linked to it by means of pedestrian walkways at strategically located entry points. Individual streets and cul-de-sacs will take on separate but well integrated themes allowing for the development of individual clusters of homes by separate builders.

6.1 Residential Areas

Residential land uses proposed for the neighbourhood include a variety of large and medium single family lots, and multi-family parcels.

Conventional Single Family Housing

Larger lot single family detached housing will be in the southwestern and eastern portions of the site or adjacent to the *powerline* right-of-way, taking advantage of the higher slopes in this area and therefore the views of the city centre. Individual clusters of single-family lots will extend from the ravine edge from individual cul-de-sacs in the central portion of the site.

Amended by Editor

Multi Family Sites

Multi-family sites have been strategically situated within the site based on the principle of maximizing accessibility to the bus loop and collector road system as well as to the ravine. The sites have therefore been located in the north backing onto the northern edge of the ravine taking advantage of good collector road access in the area as well as providing southern exposure for this housing type.

The RA7 site in the northwest quadrant of the plan area along with the adjacent RF5 site has been developed as a single story adult condominium community.

The row housing site located in the northwest corner of the plan area, south of Oeming Road, is 1.54 ha in size

Bylaw 10595
January 17, 1994

6.2 Parks System

The Parks System for this development concept integrates the active park areas with the walkway/bikeway system of the ravine. Specific parkland provisions include the following:

Park/School Site

The school/park site for Riverbend 8 has been located adjacent to the Edmonton Power Substation. This park and school site complex is 4.49 hectares in size and may contain:

- elementary school site
- playing fields
- neighbourhood park

This site consists of 3.25 hectares school portion and a 1.21 hectare central park. These areas will be reserved as a possible school site and neighbourhood park site respectively, pending a detailed review of elementary school requirements in the eastern portion of the Riverbend/Terwillegar area.

Ravine Park Areas

One smaller neighbourhood park facility has been provided adjoining the Whitemud Ravine. It is located adjacent to the commercial area at the west end of the subdivision. This smaller park is .32 hectares and is used for passive recreational uses and serves as an entry way to the ravine system.

6.3 Transportation Network

The internal road system has been designed to provide for bus loop routes through the neighbourhood so that the principle of a 400 metre walking distance to the bus line is achieved. This road is to be a local collector road with a right-of-way width of 20 metres. Pavement widths will be 11.5 metres and sidewalks will be provided on both sides. The remaining roads in the neighbourhood are local in nature and have 9 metre pavement width.

6.4 **Development Implementation**

Development of this neighbourhood is being implemented in several phases by plan of subdivision in conformity with the proposed Neighbourhood Structure Plan. Proposed zoning categories include the following:

- RF1: This zoning designation will be used for single family lots
- DC5: *Section deleted*
- RF5: This districting designation applies to the remaining multi-family site.

Bylaw 9181
July 27, 1989

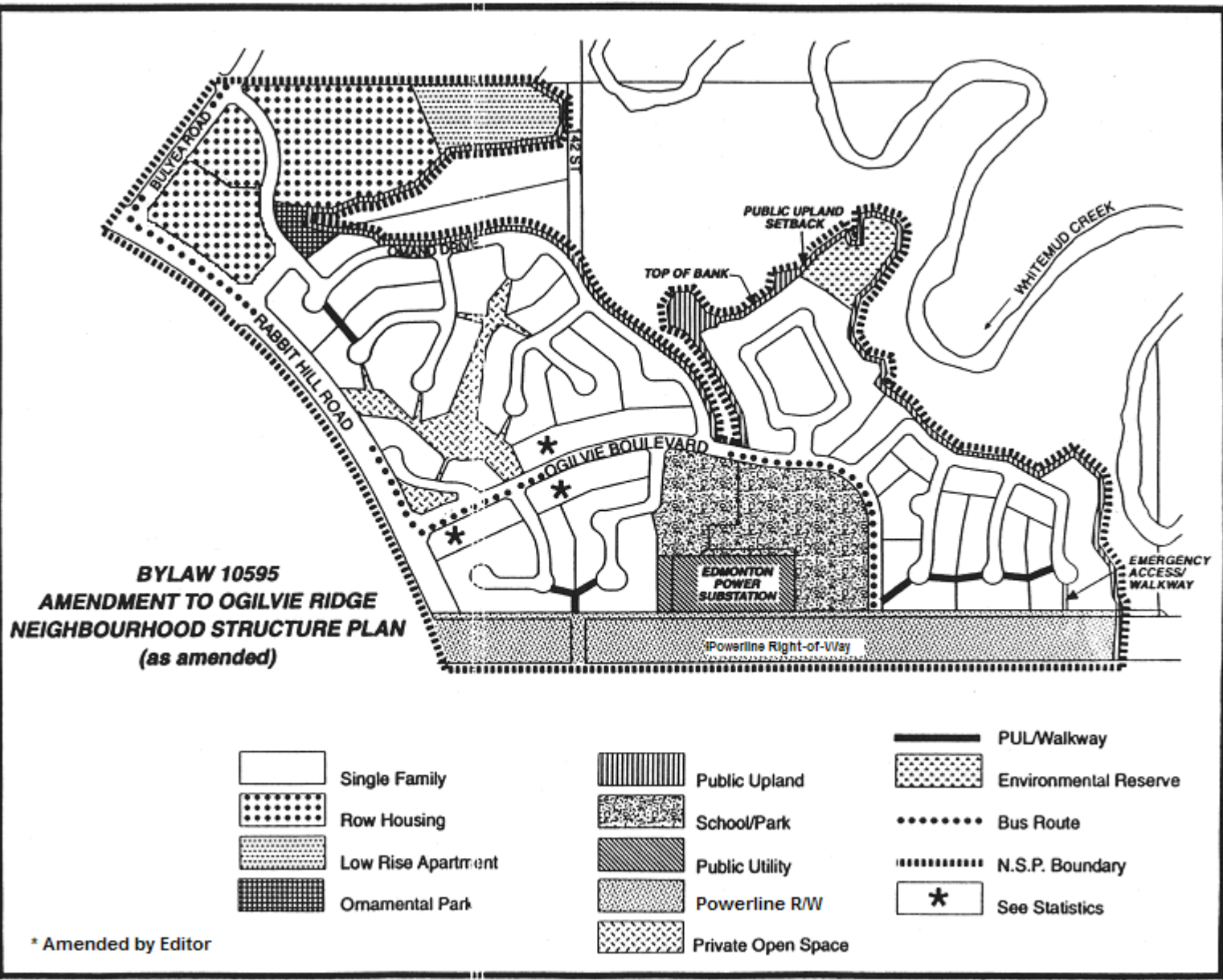


TABLE II - LAND USE STATISTICS

BYLAW 10595, January 17, 1994 (Amended by Editor)

LAND USE	UNITS	POPULATION	AREA (Ha)	PERCENT
Single Detached Residential ¹	321 ³	1,111	26.38	45.08
Existing Row Housing and Low Rise Apartments ²	129 ⁴	258 ⁵	6.94	11.86
Proposed Row Housing	21	63	0.49	0.84
Ornamental Parks			0.32	0.55
Central School/Park Site			4.49	7.67
Roadways			11.13	19.02
Open Space System (Private)			1.41	2.41
Public Utility Lots/Walkway			0.23	0.39
Upland Setback			2.10	3.59
Edmonton Power Substation			1.36	2.32
<i>Powerline</i> Right-of-Way			3.67	6.27
TOTAL	471	1,432	58.52	100.00

1. Inclusive of Bylaw 7824 adopted on May 14, 1985 which redistricted the proposed RF5 sites along Ogilvie Boulevard to RF1.
2. Existing low rise apartment/row housing site developed as low density row housing.
3. Unit generation is calculated assuming 12.18 units per hectare which is in turn based on existing and proposed RF1 lot sizes. This is well below the 17.3-21.0 units per net hectare employed by the City.
4. Unit generation is based on the existing units on the fully developed site.
5. Units in Adults Retirement Complex are generally occupied by two people.

