

Cumberland Neighbourhood Structure Plan

Office Consolidation December 2005

Prepared by:

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

Bylaw 7563, was adopted by Council in June 1984. In December 2005, this document was consolidated by virtue of the incorporation of the following bylaws:

<i>Bylaw 7563</i>	Approved June 19, 1984 (to adopt the Cumberland Neighbourhood Structure Plan)
<i>Bylaw 10105</i>	Approved June 19, 1992 (to accommodate the development of affordable and innovative housing to meet a significant demand for this type of housing in the northwest area of Edmonton)
<i>Bylaw 10384</i>	Approved June 17, 1993 (to update the remainder of the 1984 plan to reflect currently City policies, and current and anticipated market conditions)
<i>Bylaw 10677</i>	Approved April 18, 1994 (to update and clarify the residential land uses for a 8.0 hectare site located in the northeast portion of the neighbourhood that was addressed in Bylaw 10105)
<i>Bylaw 11519</i>	Approved June 17, 1997 (to combine Neighbourhoods 5 and 6 and describe in detail the policies and guidelines for the development of these lands)
<i>Bylaw 11814</i>	Approved August 24, 1998 (to redesignate the land uses north of the utility right-of-way to low density residential and medium density residential development)
<i>Bylaw 12000</i>	Approved April 26, 1999 (to replace the land use and population statistics to reflect amendments made to the Palisades Area Structure Plan)
<i>Bylaw 12528</i>	Approved March 14, 2001 (to re-allocate the land uses north of the utility right-of-way such that a community commercial site is introduced on the lands abutting 127 Street and medium density residential land uses are located in the western portion of this area)

Editor's Note:

This is an office consolidation edition of the Cumberland Neighbourhood Structure Plan, Bylaw, as approved by City Council on June 19, 1984. This Plan is an amendment to the Palisades Area Structure Plan, Bylaw 7464 as approved by City Council on April 24, 1984. This edition contains all amendments and additions to Bylaw 7563.

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

Cumberland
Neighbourhood Structure Plan

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Chapter 1: Introduction

This report proposes a development concept that will serve to guide the subsequent subdivision and ultimate development of *143.02 hectares* of land in the northwest sector of the City of Edmonton.

Bylaw 11814
August 24, 1998

i) Location

This proposed Neighbourhood is defined as Cumberland of The Palisades Area Structure Plan, located within portions of NW ¼ Section 25, SE ¼ Section 25, NE ¼ Section 25, and SE ¼ Section 36, situated within Township 53, Range 25, west of the 4th Meridian. As presented in Figure 1, the Neighbourhood is bounded on the east by 127 Street, on the north by 153 Avenue, on the west by the railway tracks and 142 Avenue (Cumberland Road) to the south. The southwest edge of the Neighbourhood is defined by the existing industrial area and quarter section line.

Bylaw 11519
June 17, 1997
Amended by Editor

ii) Conformance to Statutory Plans

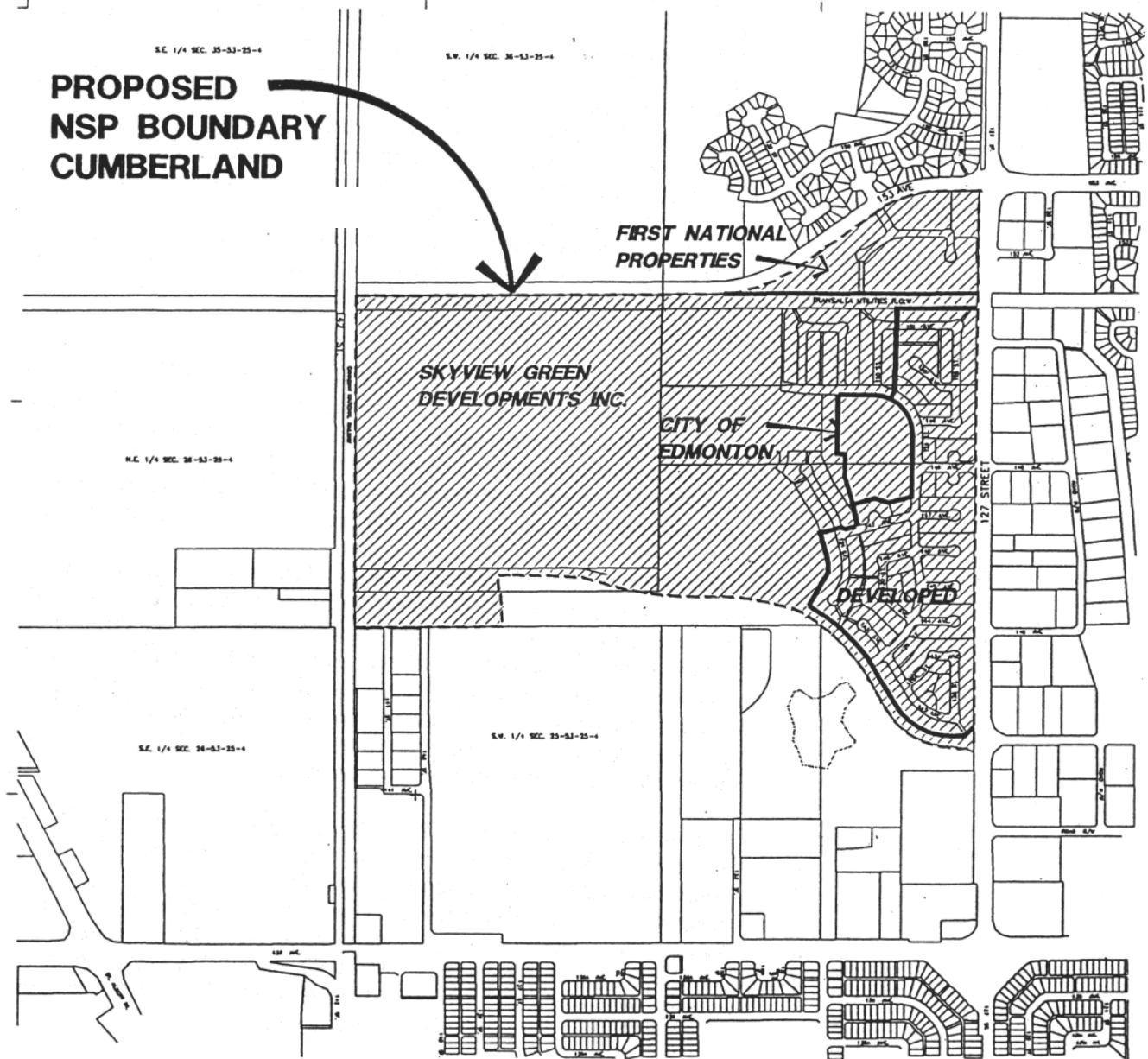
This Neighbourhood Structure Plan is based on, and conforms to, The Palisades Area Structure Plan as approved by Bylaw 7464 which was granted third reading by Council on April 24, 1984. The area encompassed by the Neighbourhood Structure Plan has been designated by the City of Edmonton's "Urban Growth Strategy" as part of a residential development sector. This Strategy was formally incorporated into the Edmonton General Municipal Plan by bylaw on November 23, 1982. The lands within *Cumberland* are currently designated GU - General Urban by the Edmonton Regional Plan - Metropolitan Part.

Amended by Editor

Although the area of The Palisades was annexed to the City of Edmonton on January 1, 1982, the City's *Zoning* Bylaw has not yet been amended to include this area. In the interim, the Municipal District of Sturgeon Land Use Bylaw 388/81 remains in effect and continues to regulate development within The Palisades. This Bylaw designates the lands within *Cumberland* AG - Agricultural. Prior to development occurring, however, within *Cumberland* as envisioned by this Neighbourhood Structure Plan, the Edmonton *Zoning* Bylaw must be amended to include this area.

Amended by Editor

Amended by Editor



CUMBERLAND - NEIGHBOURHOOD
NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

LOCAL CONTEXT/OWNERSHIP



Figure 1

FEBRUARY 1997
REVISED APRIL 1997

iii) The Proponents of The Neighbourhood Structure Plan

As presented in Appendix A, a private corporation is currently the registered and beneficial owner of approximately 95 ha of undeveloped lands located south of the power utility right-of-way. This comprises 67% of the total neighbourhood area. Approximately 26.5 ha of lands have been developed in the Neighbourhood. A 5.53 ha right-of-way is owned by a private utilities corporation and a 9.80 ha parcel located north of the right-of-way is owned by a private corporation. The City of Edmonton owns a Municipal Reserve (MR) parcel approximately 4.7 ha in size.

Bylaw 11519
June 17, 1997
Amended by Editor

Chapter 2: Development Objectives *and Policy Context*

(Bylaw 11519, June 17, 1997)

I. Development Objectives

Amended by Editor

The primary objective of the development concept proposed to apply within this residential neighbourhood of The Palisades is to serve as a guide for the subsequent subdivision and ultimate development of *the Cumberland Neighbourhood*. Specifically, the objectives of this plan are:

Amended by Editor

- i) to provide a land use framework for the development of *Cumberland* that will, first, form an integral component of The Palisades residential district, and second, provide an internal organization of land uses that promotes community identity through the definition and integration of distinct sub-neighbourhood units;
- ii) to anticipate the demand of the marketplace by placing the emphasis on housing form with the single-family dwelling as opposed to the multiple-family project development and to provide that housing within the economic reach of that segment of the general population projected to ultimately reside in the northwest sector of the City of Edmonton;
- iii) to provide a land use framework through which may be provided a basic level of services required to sustain the resident population's day-to-day needs; and,
- iv) to ensure that the design of *the Cumberland Neighbourhood* is sensitive to existing "boundary conditions" of the area (i.e., truck routes, the proposed Business Commercial area situated south of the Neighbourhood, and the Business Industrial area located east of 127 Street) and the potential impact of existing and proposed internal land uses (i.e., the *power utility* right-of-way).

Amended by Editor

Amended by Editor

Bylaw 10384
June 17, 1993
Amended by Editor

While these objectives form the basic design approach utilized in the formulation of the Neighbourhood Structure Plan for *Cumberland*, the opportunities and constraints imposed by the man-made and natural environments within the area, to a large extent, pre-dominate in shaping the future urban form of this proposed residential development area. Those environmental factors are the subject of the following Chapter.

Amended by Editor

II. Policy Context

Bylaw 11519
June 17, 1997

The Cumberland Neighbourhood Structure Plan has been prepared in the context of the applicable development policies and objectives governing this area. These policies are identified below.

Edmonton Municipal Development Plan

Bylaw 11519
June 17, 1997
Amended by Editor

The Edmonton Municipal Development Plan sets out a strategy to accommodate the development of the City. The following are strategic objectives and policies specific to the development in this Neighbourhood:

Managing Suburban Growth

- *Objective 2.A - to accommodate growth, serviced in an orderly fashion, in all suburban areas of the City;*
- *Policy 2.A. 1 - encourage new development to be contiguous with existing development;*
- *Policy 2.A.2 - allow the location of new suburban residential development to be guided by the demands of housing market. for choices in housing types and location and the availability of municipal services;*
- *Policy 2.A.7 - encourage development proposals which lead toward the completion of neighbourhoods and meet the service and amenity needs of residents within a reasonable time frame.*

Ensuring Adequate Neighbourhood Services

- *Objective 2.B - encourage flexibility in creating attractive and functional neighbourhoods;*
- *Policy 2.B.1 - provide planned, integrated neighbourhoods as a basis for new suburban residential developments, accommodating flexibility in neighbourhood size, population and geographic extent, and recognizing the need for municipal services and transportation facilities to be efficiently supplied;*
- *Policy 2.B.3 - allow flexibility in the type of central focus for each neighbourhood, using a range of community and private facilities to serve the resident's needs;*
-

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

Maintaining a Balanced Mix & Density of Dwellings

- *Objective 2.0 - to provide a range of housing types and density opportunities in each neighbourhood.*

The proposed amendment meets the above noted strategic objectives and policies as follows:

- *the development of the balance of the proposed Neighbourhood will be contiguous with existing development;*
- *the development of the Neighbourhood will be guided by the housing market demands through the provision of a variety of housing types and density opportunities;*
- *the combined Neighbourhoods will lead to the efficient and orderly development and completion of the Neighbourhood;*
- *an attractive and more functional neighbourhood will be created through the consolidation of Neighbourhoods 5 & 6 (Cumberland Neighbourhood);*
- *inter and intra-community linkages will be promoted through the proposed extensive walkway/open space network linking the school site, parks and residential areas;*
- *through the consolidation of Neighbourhoods 5 & 6 (Cumberland Neighbourhood), municipal services and transportation facilities will be more efficiently supplied;*
- *the overall focus of the Neighbourhood will be the open space system which will link the school/park site, stormwater features, natural park and residential areas together.*

Edmonton's Suburban Neighbourhood Design Principles

This report is a summary of the Suburban Neighbourhood Design Project's work to date. The purpose of this project is to:

- *review the design of the neighbourhoods to make infrastructure more cost efficient*

Bylaw 11519
June 17, 1997
Amended by Editor

while maintaining a good living environment;

- *to generate thought and discussion and general principles which encourage flexibility and innovation in the design and servicing of neighbourhoods.*

While this report is not a statutory plan or document, the City of Edmonton Administration has stated that the design principles contained in this report will be used as a guide in assessing the design and servicing of new neighbourhoods.

The following are design principles specific to development in the Cumberland Neighbourhood:

- ***Principle 1*** - *Design neighbourhoods with the intent of sharing common infrastructure and neighbourhood facilities among neighbourhoods.*
- ***Principle 2*** - *Design and locate schools and community facilities to provide inter-neighbourhood focal points.*
- ***Principle 5*** - *Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.*
- ***Principle 7*** - *At the area and neighbourhood planning stage, plan the location of 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. .*
- ***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.*
- ***Principle 10*** - *Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and stormwater management.*
- ***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.*
- ***Principle 12*** - *Locate multi family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points.*

- **Principle 13** - Use stormwater management techniques which provide an alternative to the man made lakes and dry ponds typical to Edmonton.
- **Principle 16** - Use current population projections and student generation formulas when planning facilities for a neighbourhood. Take into account the life cycle of the neighbourhood.

The proposed amendment meets the above-noted design principles as follows:

- common infrastructure and facilities such as schools and parks will be shared among the Cumberland and Hudson Neighbourhoods and will become inter-neighbourhood focal points;
- pedestrian/bicycle access will be conveniently provided through the extensive open space system through the Neighbourhood, with opportunities to link to points outside the Neighbourhood;
- the Public Elementary School/Park site in the Cumberland Neighbourhood has already been assembled in the eastern half of the Neighbourhood, and the Hudson Neighbourhood combined School/Park site will be assembled as the catchment area for this school is developed;
- dispersed open space is provided through the designation of a natural tree stand as a park, meeting local recreation needs for the Cumberland Neighbourhood;
- land for community facilities such as schools and parks will be optimized;
- a linked open space system is provided through the linkage of the stormwater management system, natural park, school/park sites and the powerline utility right-of-way;
- multi-family sites are located on the edge of the Neighbourhood, close to amenities such as the open space walkway system and nature park, with good access to the Neighbourhood transportation system;
- population projections and student generations have been developed for the Cumberland Neighbourhood using current formulae.

The amendment does not satisfy Principles 3, 4 and 6 dealing with internal road design and external transit service. These Principles cannot be met since the original Neighbourhood Plan established parameters which cannot be changed.

Chapter 3: Environmental Assessment

A number of man-made factors, both existing and proposed, and natural features define potential constraints and/or opportunities which should be ameliorated or exploited, respectively, by the development concept proposed for *the Cumberland Neighbourhood*. Among those factors are the existing land use, soils, vegetation and topography in the Neighbourhood, the proposed truck route which forms the east boundary of the area, the lineal land use feature which bisects the Neighbourhood (i.e., the existing *utility* right-of-way), the Business Industrial area which is situated immediately east of 127 Street, and finally, the proposed Business Commercial *south of the neighbourhood adjacent to 127 Street*.

Amended by Editor

Bylaw 10384
June 17, 1993

A. Existing Land Use

Development has been underway since 1992 with single family housing being constructed in the east portion of the Neighbourhood. The southeast and the most southwest portion of the lands were formerly in use as Speedway Park, an abandoned auto racing facility (Figure 2). Portions of the track have already been removed and the balance of the track will be removed at the time of subdivision as development progresses into these areas of the Neighbourhood. The Environment Site Assessment carried out in 1994 as part of the Neighbourhood Structure Plan Amendment process identified no environmental constraints to development. Excluding the 36.5m wide power utility right-of-way, the balance of the lands in the Neighbourhood have been in agricultural use for the past 18 years.

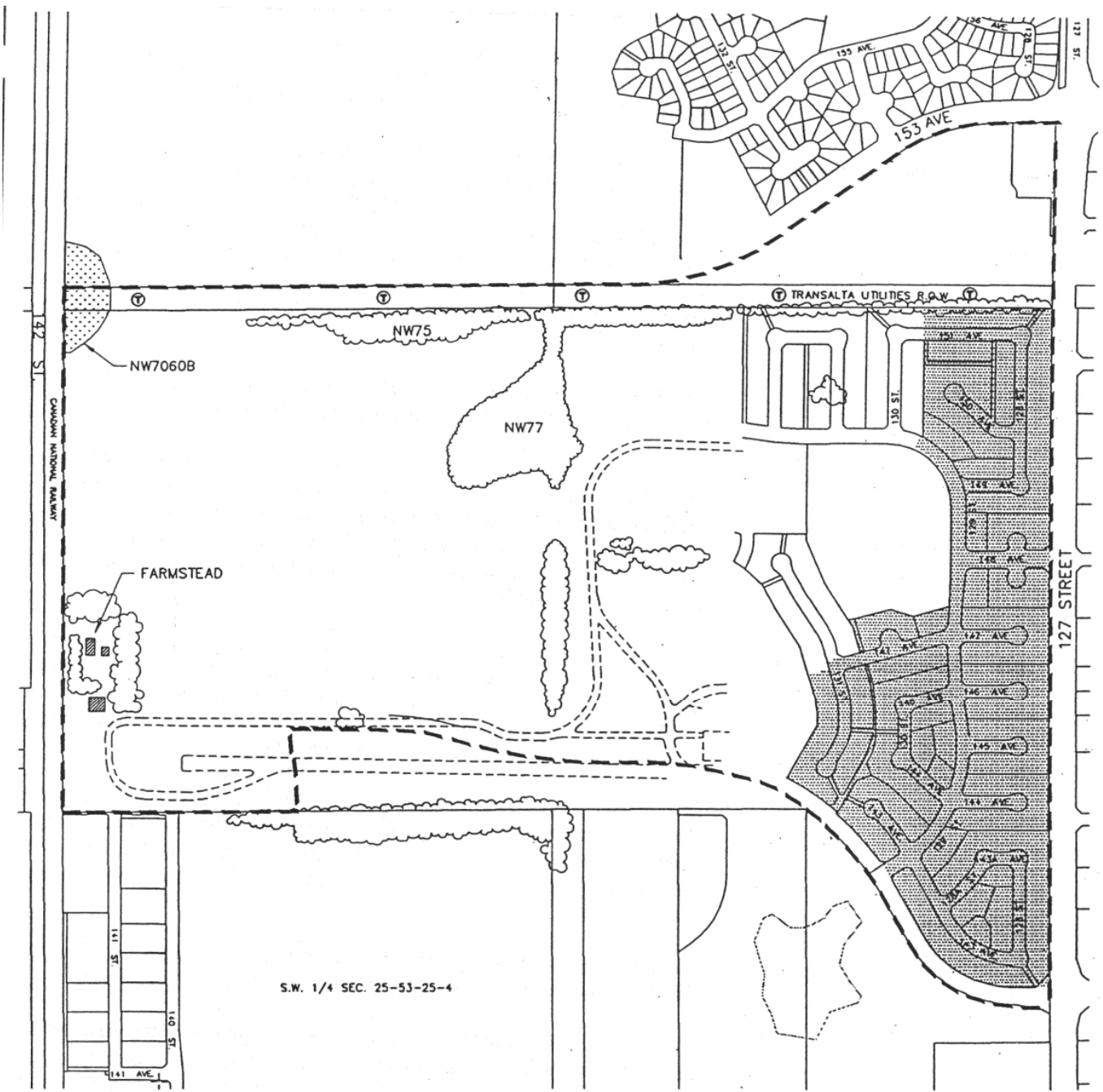
Bylaw 11519
June 17, 1997
Amended by Editor

One 2.40 ha farmstead is located in the west area of the Neighbourhood, adjacent to the railway track.

The power utility right-of-way is aligned in a west/east direction through the north portion of the Neighbourhood and contains five metal transmission towers in the plan area.

B. Soils

The Alberta Soil Survey classifies soils within the Neighbourhood as Malmo Silty Clay Loam (70%), Wetaskiwin Silty Clay Loam (20%), and Prestville Silty Clay Loam (10%) of the Chernozemic, Solonchic, and Gleysolic Soil Orders respectively.



CUMBERLAND - NEIGHBOURHOOD

NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT



EXISTING CONDITIONS

Figure 2

LEGEND

- EXISTING TREE STAND
- POWER TRANSMISSION TOWER
- FORMER SPEEDWAY RACETRACK
- EXISTING BUILDINGS
- NEIGHBOURHOOD BOUNDARY

- EXISTING DEVELOPMENT
- PLANNED DEVELOPMENT
- ENVIRONMENTALLY SENSITIVE AREA
- NATURAL AREA

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PLANNERS

FEBRUARY 1997
REVISED APRIL 1997

Soils in the former two Orders may be described as soils with a black surface of varying thickness over a light brown sub-surface. The sub-soil in these two Orders varies from hard to fairly friable. The characteristics of the Chernozemic and Solonetzic soils (i.e., permeability, water storage, natural drainage, salinity, and surface pattern) generally do not encumber ultimate utilization of the lands within *the Cumberland Neighbourhood* for intensive urban development. The presence of Gleysolic soils, however, may require the application of special engineering techniques inasmuch as these soils are characterized by an upper layer of peat and low permeability.

Amended by Editor

The Canada Land Inventory rates the soils within *the Cumberland Neighbourhood* as predominantly Class 2s. This Class of soils has moderate limitations that restrict the range of crops or require moderate conservation practices. In addition, these soils have certain limitations which reduce their agricultural productivity - undesirable structure, low permeability, low natural fertility, and/or salinity.

Amended by Editor

C. *Vegetation/Natural Areas & Environmentally Sensitive Areas*

Bylaw 11519
June 17, 1997

As a result of past agricultural practices, most of the mature vegetation within the Neighbourhood has been removed. The majority of lands in the western half of the neighbourhood are under cultivation.

A number of small stands of trees associated with the farmstead are located in the western edge of the Neighbourhood.

Bylaw 11519
June 17, 1997

The City of Edmonton's Inventory of Environmentally Sensitive & Significant Natural Areas (1993) identifies two sites (NW77/NW75) in the plan area that are described as Natural Areas (Exhibit 2). Natural areas in this inventory are defined by the "presence of vegetation, water or natural features". NW77 is a natural tree stand totaling 2.6 ha, located south of the utility right-of-way. This tree stand contains primarily aspen/balsam poplars. NW75, a 1.0 ha linear natural tree stand, is located in the northwest half of the Neighbourhood. This tree stand consists primarily of aspen/balsam poplars. Due to the size, location and configuration of NW77, this site is sustainable in the context of this proposed development. Due to its linear configuration and small size, NW75 is not sustainable in the context of this proposed development. However, there may be an opportunity to integrate portions of the existing tree stand into the proposed development.

Bylaw 11519
June 17, 1997
Amended by Editor

The Henry Singer Sports Field (NW7060) has been identified as a Local Environmentally Sensitive Area, of which a small portion of the site (NW7060B), is located in the northern

Bylaw 11519
June 17, 1997

area of this Neighbourhood. Local environmentally sensitive areas are defined as "undisturbed or relatively undisturbed sites which, because of their natural features have value to society and ecosystems worth protecting but are susceptible to further disturbance."

The portion of the wetland site east of 142 Street occurs as a result of the splitting of the wetland by 142 Street. This portion of the wetland consists primarily of intermittent open water with sedge meadows. The water levels in the ponds are seasonal in nature. This wetland complex has been significantly altered and disturbed by the development of 142 Street and the presence of the railway track. Due to the site's location, small size and the proposed changes to the drainage regime in the area, NW7060B is not sustainable if the surrounding lands are developed.

Bylaw 11519
June 17, 1997

D. Environmental Site Assessment

In April 1994, a Level I Environmental Site Assessment for Cumberland Neighbourhood was prepared as part of the Neighbourhood Structure Plan process. The study area for this assessment did not include the western half of the plan area (formerly Neighbourhood 5). The facilities such as the fuelling area, pit and tower for Speedway Park were located in the Cumberland Neighbourhood.

Bylaw 11519
June 17, 1997
Amended by Editor

This assessment concluded that the potential for environmental contamination of this property would be greatest from an underground fuel storage source which may have experienced leakage over a period of time. It was found that the only storage facility located on the property was safe. It was removed and sold for reuse.

The assessment concluded that no further study be carried out and the Neighbourhood lands were appropriate for residential development.

A Level 1 Environmental Site Assessment was completed for the west half of the Neighbourhood and concluded that since most of the west lands have been in continuous agricultural use, there is little potential for environmental contamination from this sources.

A small portion of the former Speedway Park race track was located on the west lands, however, no other facilities such as underground storage tanks were located in this area.

As a result of these conclusions and the relatively small risk of environmental contamination, it was recommended that no further study is required at this stage on the subject property.

E. Topography

The topography of the lands within the Neighbourhood is relatively flat to gently undulating with no significant aesthetic views. *Cumberland* lands generally lower toward the east and south boundary from a high point at 153 Avenue and 135 Street through a change in elevation approximating three metres. One depression or "slough" is evident within the Neighbourhood boundaries. This is not a natural but a man-made feature which resulted from the removal of soil from the depressional area during the construction of the track in Speedway Park. The existence of this depression, nevertheless, presents an opportunity in the design of the stormwater management system within The Palisades to locate a retention pond within this man-made "slough". This opportunity, if exploited, could significantly reduce the cost of servicing this portion of The Palisades with a stormwater management system.

Amended by Editor

F. Noise Intrusion

A potential 24 hour truck route defines the east boundary (i.e., 127 Street) of *the Cumberland Neighbourhood*. The potential noise intrusion into the Neighbourhood as a result of the existence of this truck route must be minimized. Attenuation measures sufficient to reduce the potential noise within the Neighbourhood to a maximum 60 Ldn dbA from the adjacent truck route, therefore, must be provided to effect an "acceptable level" of noise within the urban, residential environment of this neighbourhood.

Amended by Editor

G. Visual Intrusion

A lineal land use feature bisects the Neighbourhood at its northern extremity and creates a visual intrusion into the residential environment envisioned for *the Cumberland Neighbourhood*. The *power utilities* right-of-way, within the limits of the Neighbourhood, contains three steel power transmission standards that, due to the height of these structures, are visible for a considerable distance. While direct, technically feasible measures are unavailable that would reduce the visual impact of these structures, it is possible to minimize this potential impact through the strategic placement within the Neighbourhood of significant visual, urban focal points (eg., school buildings, open space, and multiple family project developments) and through the sensitive manipulation of the massing of buildings within *the Cumberland Neighbourhood*.

Amended by Editor

H. Residential/Railway Buffer

Bylaw 11519
June 17, 1997

The Neighbourhood is bounded on the west by the rail tracks - (Sangudo Rail Line).

Train movements on this line average approximately 2 trains per day (round trip) on an unscheduled basis. The trains run every day except for Sunday. The train speed is approximately 50 km/hour.

Noise attenuation/visual screening measures are proposed east of the rail line, including the following:

- *2.0m height berm;*
- *1.8m height wood screen fence;*
- *buffer tree planting at rear of lots;*
- *increased lot depths adjacent to the berm to accommodate the berm and buffer tree planting areas.*

These measures will provide visual and noise screening for adjacent residential development.

At the time of subdivision of the lands adjacent to the CN rail tracks, the adequacy of the proposed noise attenuation facility shall be confirmed by an Acoustical Engineer. The noise abatement guidelines are to be defined by the Canadian Mortgage & Housing Corporation (CMHC) residential development guidelines and the City's rail noise policy.

I. Adjacent and Internal Land Uses

Two proposed adjacent land uses influence to varying degrees the land use framework proposed for the residential component of the Neighbourhood and the manner in which it is ultimately developed. First, an approved Business Industrial area which is yet to be developed is situated immediately to the east of 127 Street opposite *Cumberland*. This potential use, while not a "traditional" industrial district that creates various forms of noise and air pollution, will generate a significant amount of traffic which must be encouraged to use the arterial road network serving The Palisades rather than the internal road network within the residential neighbourhoods. This can be accomplished by continuing within *Cumberland* the development of a distinct hierarchy of roads as contemplated by The Palisades Area Structure Plan. Also, a certain amount of visual separation should be provided between this Business Industrial area and the east perimeter of *Cumberland* to maintain acceptable working and living environments in each of these respective areas. *Second*, a Business Commercial area is proposed to be developed as part of the *Hudson NSP*, south of *Cumberland*. This commercial area will extend north along 127 Street to 145 Avenue. As with the two previously noted uses which are incompatible with a residential environment, the development concept for *Cumberland* should provide for the separation of the vehicular movements generated by

Bylaw 10384
June 17, 1993

Amended by Editor

Amended by Editor

Bylaw 10384
June 17, 1993

these two major land uses (i.e., the residential and Business Commercial areas) as well as separating visually the residential environment immediately north of 145 Avenue from the Business Commercial development to the south.

J. Conclusion

The development concept proposed for *Cumberland* must recognize various environmental limitations in the design of the Neighbourhood. The natural and man-made environment, however, provides a number of opportunities which can be exploited to the long-term benefit of the urban environment in this residential neighbourhood of The Palisades. The manner in which these limitations are recognized and the opportunities exploited are detailed in the following Chapter which outlines the development concept proposed for *Cumberland*.

Amended by Editor

Amended by Editor

Chapter 4: The Development Concept

I. General Land Use Structure

The development concept proposed to guide the future subdivision of *the Cumberland Neighbourhood* is outlined on Figure 3. *The plan proposes the creation of a number of residential precincts which can be developed with their own character and image. These precincts are defined by a combination of perimeter boundaries, including local roads, green spaces, walkways and the stormwater management system.*

Bylaw 11519
June 17, 1997
Amended by Editor

Low density housing has already been developed in the east portion of the neighbourhood, south of the utility right-of-way, north of Cumberland Road.

Low density housing forms will continue to be developed to reflect the range of densities permitted in the City of Edmonton Land Use Bylaw including a range of single family residential on a variety of lot sizes and semi-detached residential opportunities.

Medium density housing including row housing and walk-up apartments, are proposed in locations where good transportation access and transit routes are available, as well as pedestrian and bicycle access to the area's amenities.

All residential areas are proposed to be within walking distance to transit as defined in current City policy. Pedestrian and bicycle networks are proposed within the Neighbourhood to link residential areas to each other and to open space features.

The housing mix proportions proposed for the whole Neighbourhood through this amendment will conform to the current City policy for low density/ medium density mix. Low density is proposed at 83% with medium density comprising 17%.

Bylaw 12528
March 14, 2001

Low Density Residential

The emphasis of housing for this Neighbourhood is on Low Density Residential. To the extent possible, low density residential development will be located with access to local roads to provide quiet and private residential environments. This residential form will total some 80.14 ha, generating some 1,603 dwelling units.

Bylaw 11519
June 17, 1997
Amended by Editor

Medium Density Residential

Bylaw 11519
June 17, 1997
Amended by Editor

Medium density housing is proposed in two locations in the Neighbourhood: north of the utility right-of-way and directly south of the utility right-of-way in the northwest portion of the Neighbourhood.

Bylaw 12528
March 14, 2001

North of the utility right-of-way, 5.42 ha of land is designated for a mixture of low to medium density development. The total unit generation of this area is 228 dwelling units.

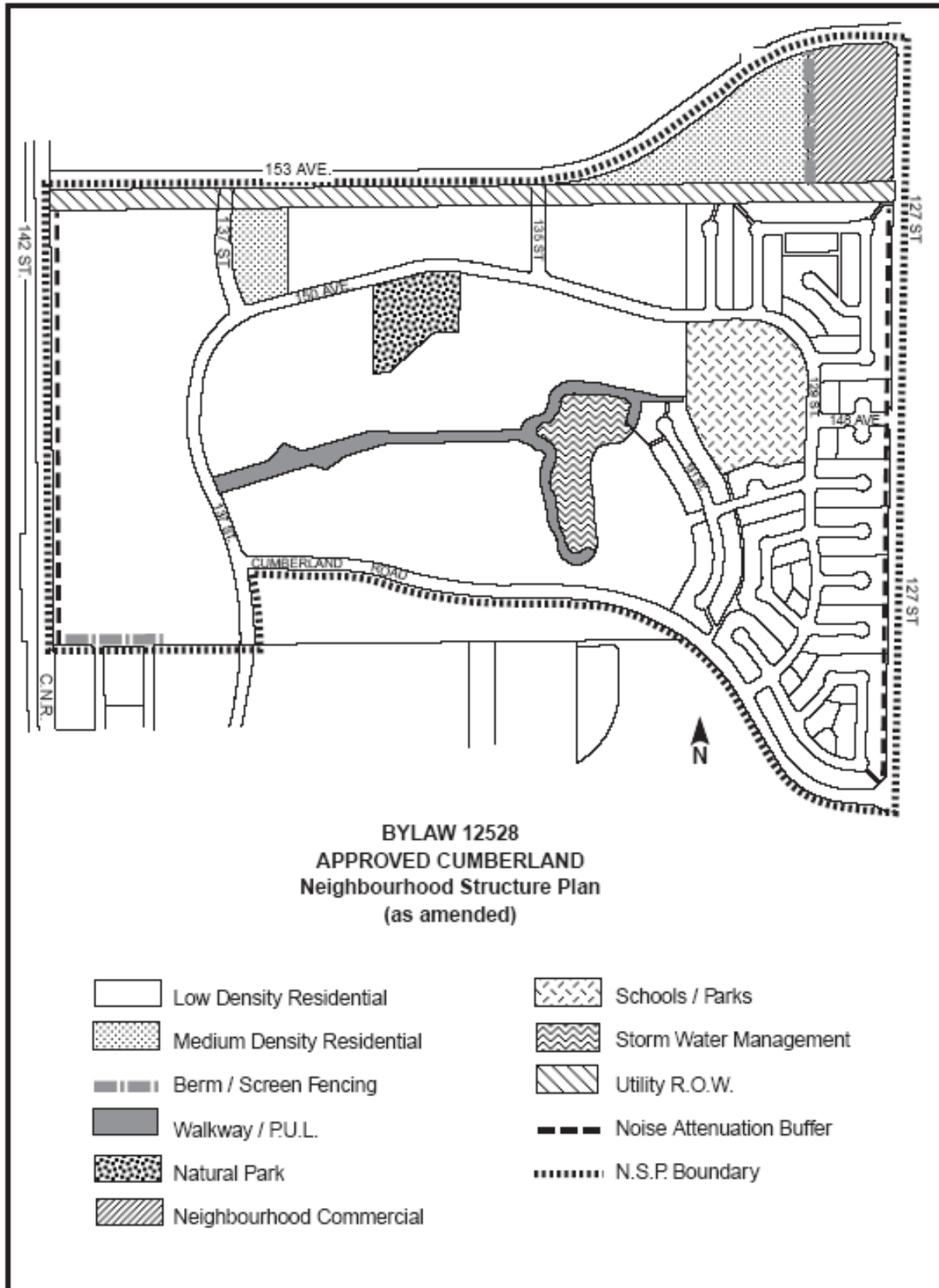
Bylaw 11519
June 17, 1997
Amended by Editor

The Medium Density Residential areas designated south of the utility right-of-way are oriented toward the walkway system/open spaces (utility right-of-way and natural park). These medium residential areas have direct access to the planned pedestrian/bicycle circulation system which connects all elements of the neighbourhood plan.

Bylaw 12528
March 14, 2001
Amended by Editor

The Medium Density Residential sites located south of the utility right-of-way will comprise 1.70 ha, accommodating approximately 71 dwelling units.

Figure 3: Development Concept (Bylaw 12528, March 14, 2001)



APPROVED BY COUNCIL:
March 14, 2001

TABLE 2
CUMBERLAND NEIGHBOURHOOD STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 12528

	Area (ha)	% of GDA
Gross Area	143.02	
TransAlta ROW	5.53	
Northwest Utilities Ltd. ROW	0.23	
Gross Developable Area	137.26	100.0
School/Park Site	5.66	4.1
Natural Area Park (MR)	2.44	1.8
Stormwater Management Facilities	5.59	4.1
Noise Attenuation Buffer	2.04	1.5
Total	15.73	11.46
Net Developable Area	121.53	88.54
Circulation	30.23	22.02
Community Level Commercial	4.04	2.94
Residential	87.26	63.57

	Area	Units	% of Total Units	Population
Low Density	80.14	1,603	84.3	5,531
Medium Density	7.12	299	15.7	934
Total Residential)	87.26	1,902		6,465
Density:	47.10 persons per gross developable hectare			

Student Generation

	Elementary		Junior High		Senior High	
	PE	SE	PJH	SJH	PSH	SSH
Low Density Residential	590	292	228	146	228	81
Medium Density Residential	94	54	30	15	30	9
Total	684	346	258	161	258	90

II. Circulation System

The circulation system proposed to serve the Neighbourhood is comprised of three key elements - the road network, the public transit system, and the pedestrian circulation system.

A. The Road Network

The Cumberland Neighbourhood is bounded by 153 Avenue to the north and 127 Street to the east, both designated as arterial roads (Figure 4).

Bylaw 11519
June 17, 1997

Although both are arterial roads which will be developed to a four lane divided standard, only 127 Street is planned as a 24 hour truck route. Noise attenuation measures are proposed for 127 Street, which include the use of a berm/wood fence combination consistent with the existing approved facilities between 148 Avenue and Cumberland Road. To accommodate the berm/wood fence, lots adjacent to the arterial road will be increased in depth. Since the road level on 127 Street is 1-2m below the level of the adjacent lots, the berm will be integrated into the lot grades to provide a minimum 2 m berm height on the arterial road side, graded at typical 4:1 slope (3:1 maximum). The lots will be graded to provide back-to-front drainage at a minimum 2% slope from the top of the berm to the adjacent local streets.

Bylaw 10384
June 17, 1993
Amended by Editor

The Cumberland Neighbourhood is comprised of a looped collector roadway system. These collector roads will be developed to a 2-lane undivided collector standard. 129 Street and 137 Street are connected to Cumberland Road. Cumberland Road will be developed to a 4-lane divided standard east of 129 Street. West of 129 Street, Cumberland Road will function as an undivided arterial. These roads will serve to link Cumberland to other residential areas and to the arterial road system.

Bylaw 11519
June 17, 1997

The balance of the internal road network will be a series of local streets which will define the sub-neighbourhood residential areas.

Access to the proposed multi-family sites located north of the utility right-of-way will be provided by means of a short local cul-de-sac from 153 Avenue.

B. Public Transportation

The Cumberland Neighbourhood will be served with public transportation on the perimeter via 127 Street, Cumberland Road and 153 Avenue. A bus route is also proposed internal to the Neighbourhood via 129 Street, 150 Avenue and 137 Street and connections to 153 Avenue (Figure 4).

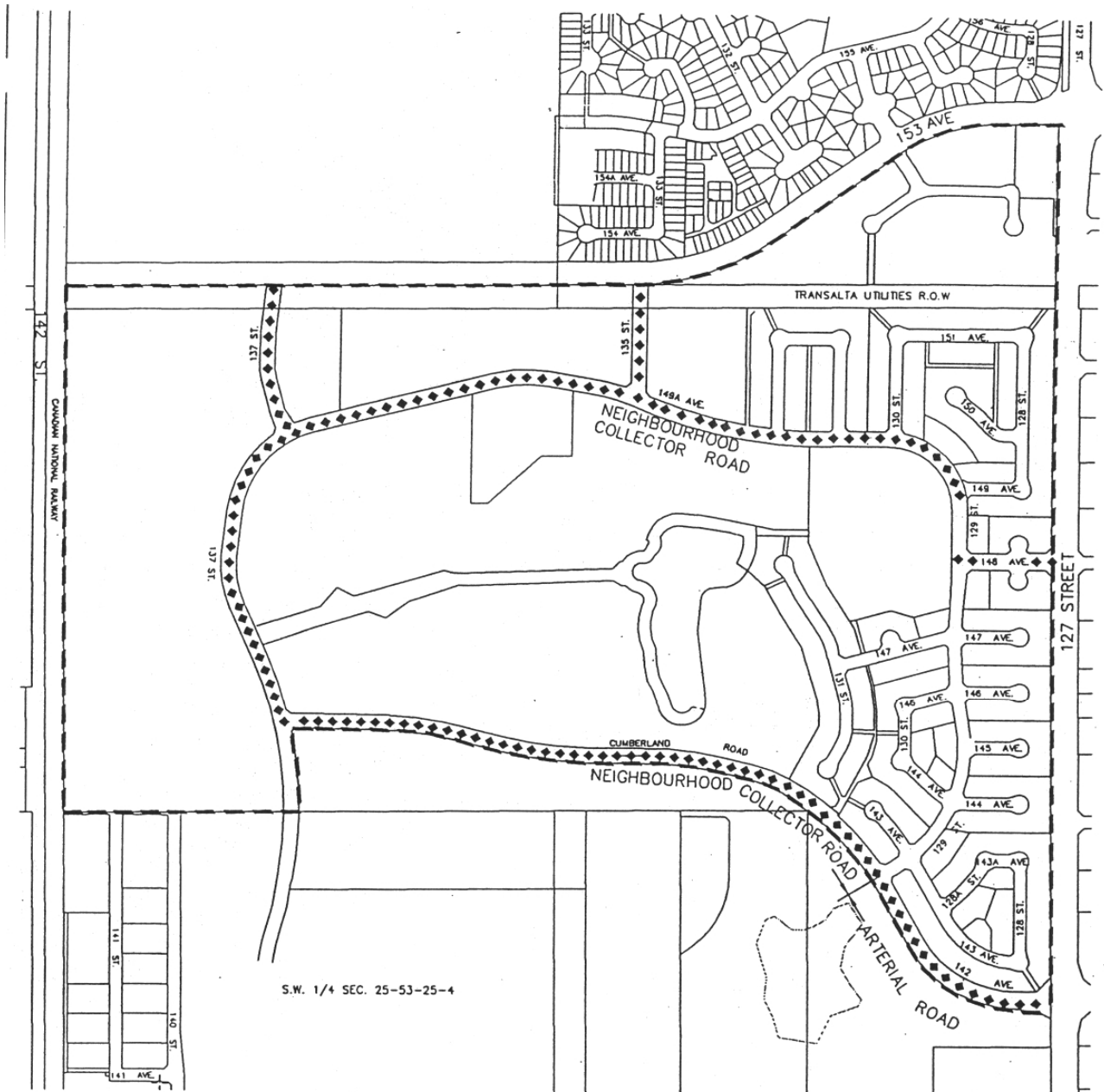
Bylaw 11519
June 17, 1997
Amended by Editor

C. Pedestrian Circulation

The utility right-of-way and a series of walkways to the school/park site, the natural park and stormwater management facilities are proposed as major open linkages, allowing for the integration of pedestrian and bicycle facilities. Figure 5 highlights the proposed pedestrian/bicycle circulation system.

Bylaw 11519
June 17, 1997
Amended by Editor

Figure 4: Transportation Network (Bylaw 11519, June 17, 1997)



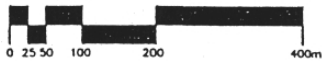
CUMBERLAND - NEIGHBOURHOOD
NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT
TRANSPORTATION NETWORK



◆ PROPOSED BUS ROUTE



Figure 4



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Figure 5: Pedestrian/Bicycle Circulation Plan (Bylaw 11519, June 17, 1997)

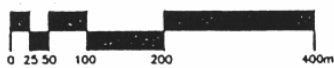


CUMBERLAND - NEIGHBOURHOOD

NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

PEDESTRIAN / BICYCLE CIRCULATION PLAN

Figure 5



LEGEND

- PEDESTRIAN WALKWAY
- ON-STREET BICYCLE ROUTE
- PEDESTRIAN/BICYCLE ROUTE
- SCHOOL/PARK SITE
- NATURAL PARK
- STORM WATER MANAGEMENT FACILITY
- MAJOR P.U.L.



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III. Community Services and Facilities

The community services and facilities ultimately required to serve the resident population of *the Cumberland Neighbourhood* consists primarily of schools, neighbourhood parks, retail commercial services, churches, and police, fire, health and library services.

Amended by Editor

A. Schools

Within *Cumberland* one school site has been provided as defined by the approved The Palisades Area Structure Plan. A Public Elementary School site is proposed approximately central to the Neighbourhood the catchment area for which is *Cumberland*. Students of the Public School System at the Junior and Senior High School levels will attend facilities proposed for development in *the Carlton NSP, the Hudson NSP*, and Castle Downs respectively. Students of the Separate School System at the Elementary and Junior High School levels from within *Cumberland* will attend a school planned within *the Hudson NSP*. Senior High School students residing in *Cumberland* will be accommodated by a facility proposed for development in Castle Downs.

Amended by Editor

Bylaw 11519
June 17, 1997

Amended by Editor

B. Parks and Open Space

A 5.66 ha public elementary school/park site exists in the northeast sector of the Neighbourhood which will accommodate a school, play fields, community league facilities and a neighbourhood park. This site already has been assembled through municipal reserve entitlements from subdivision activity in the Neighbourhood. The school site is physically separated from the lake system by a series of residential cul-de-sacs, however, walkway linkages will provide pedestrian access between these features. Pedestrian access is proposed to connect all portions of the Neighbourhood to this school site through local streets and walkways.

Bylaw 11519
June 17, 1997

A 2.44 ha natural/passive park is proposed, allowing for the retention and preservation of a natural tree stand.

Bylaw 11519
June 17, 1997

C. Retail Commercial Services

The community commercial/retail site (4.04 ha) is bounded by 127 Street on the east, the utility right-of-way to the south, and 153 Avenue to the north. Multi-directional accesses are permitted to this site from 153 Avenue.

Bylaw 12528
March 14, 2001

There are two convenience commercial sites located across 127 Street to the east. These

Bylaw 12528
March 14, 2001

sites serve the surrounding neighbourhood in which they are located. However, due to their size, they are unable to accommodate community level commercial development.

Buffering and separation between the residential and commercial uses will be provided via a berm/fence screening on the west side of the commercial site.

D. Churches (*Section Deleted*)

Bylaw 10384
June 17, 1993

E. Protective Services

Police services will be provided to the future *Cumberland* residents from the detachment located in Londonderry at approximately 65 Street and 137 Avenue until such time as a determination has been made by the Police Department of the necessity of a new detachment in the northwest sector of the City of Edmonton. Fire protection services for The Palisades will be the responsibility of the Castle Downs station located north of 153 Avenue on Castle Downs Road.

Amended by Editor

F. Health/Library Services

Health services will be provided to the residents of *Cumberland* from a facility located in the Castle Downs Town Square. Library services will be available to the residents of The Palisades from a facility also located within the Castle Downs Town Square. Each of these facilities will serve The Palisades until such time as a determination has been made as to whether or not new facilities will be required west of 127 Street.

Amended by Editor

Bylaw 10384
June 17, 1993

IV. Special Land Uses

A. Business Commercial (*Section Deleted*)

Bylaw 10384
June 17, 1993

B. Public and Manufactured Housing

No specific provision has been made by the Neighbourhood Structure Plan for either public and/or manufactured housing. If the City of Edmonton wishes to develop a public housing site within the Neighbourhood, then, the City could acquire from *a private developer* a designated multiple-family project site, or sites, and have that site(s) redistricted to provide for the development of public housing, such housing being sufficient to accommodate five percent of the Neighbourhood population.

Amended by Editor

C. Development Guidelines (*Section Deleted*)

Bylaw 10384
June 17, 1993

V. Utility Infrastructure

Water supply and distribution, sanitary sewerage collection and disposal, and stormwater drainage form the three major components of the servicing system which must be provided to allow development of *the Cumberland Neighbourhood*.

Amended by Editor

A. Water Supply and Distribution

Edmonton Water and Sanitation has formulated a general plan for providing water to that undeveloped area of Edmonton situated between 127 Street and the St. Albert Trail (i.e., The Palisades and Rampart Industrial). An existing 450 mm (18 inch) line along 167 Avenue between St. Albert and the Castle Downs Reservoir is proposed to be augmented or replaced by a future 1,050 mm (42 inch) main feeder line. This will complete the 1,050 mm connection between the E.L. Smith Water Treatment Plant and the Castle Downs Reservoir. The routing of this feeder main between St. Albert and Castle Downs, however, will have a significant impact on The Palisades Area Structure Plan. The route of this water main presently envisioned by the City cuts through the top part of the Area Structure Plan. Either this main will have to be constructed along the curvilinear alignments of the proposed streets within this portion of the residential area or in a straight, linear right-of-way, the creation of which will place a constraint on the effective utilization of that part of The Palisades for residential development. An alternative to this potential alignment exists.

The *utility* right-of-way, which cuts through the north part of *Cumberland*, is on an existing straight, linear right-of-way. This alignment may provide a viable alternative to the 167 Avenue route for the 1,050 mm feeder. The *utility right-of-way* route would be shorter by approximately seven percent. In addition, this alternative route would probably pose less easement acquisition problems.

Amended by Editor

Once this main feeder line from the E.L. Smith Water Treatment Plant has been completed, The Palisades will be provided with water through the construction of a 450 mm (18 inch) north-south water line which will approximately bisect the area. The planned alignment of this line coincides with the western boundary of *Cumberland* or 135 Street. This network will be completed by 250 mm (10 inch) and 300 mm (12 inch) distribution mains.

Amended by Editor

A water network analysis was completed for the Cumberland Neighbourhood Structure Plan, this analysis has been updated for the Neighbourhood and has been submitted to EPCOR for review and approval.

Bylaw 11519
June 17, 1997
Amended by Editor

Water is supplied to the existing development from the existing 300mm water line on 127 Street, with connections at 142 Avenue, 148 Avenue and 151 Avenue. In addition, the City of Edmonton has proposed a 600mm watermain on 127 Street from the Castle Downs Reservoir to 153 Avenue and then west along 153 Avenue. The construction of the 600mm watermain will need to be by EPCOR as development of the Neighbourhood progresses west of 131 Street.

As shown in Figure 6, Cumberland will be served by an internal loop system comprising a 250mm diameter pipe on 129 Street, 149A Avenue and 137 Street. Connections to a 300mm diameter pipe on Cumberland Road will be at 129 Street and 137 Street. Also, a 300mm diameter pipe on 135 Street connecting 149A Avenue to the future 600mm diameter pipe on 153 Avenue. Each of the sub-neighbourhoods will in turn be connected by either a 200mm or 250mm diameter loop, connecting back to the main loop.

In the north residential land, water is proposed to be supplied by a connection to the existing Oxford subdivision north of 153 Avenue.

B. Sanitary Sewerage Collection and Disposal

The Palisades Area Structure Plan proposes the construction, north-south on 127 Street, of a 750 mm (30 inch) or 900 mm (36 inch) trunk collector sanitary sewer. The main east-west collectors which will tie into this north-south trunk will be located along 145 Avenue and along the utility right-of-way.

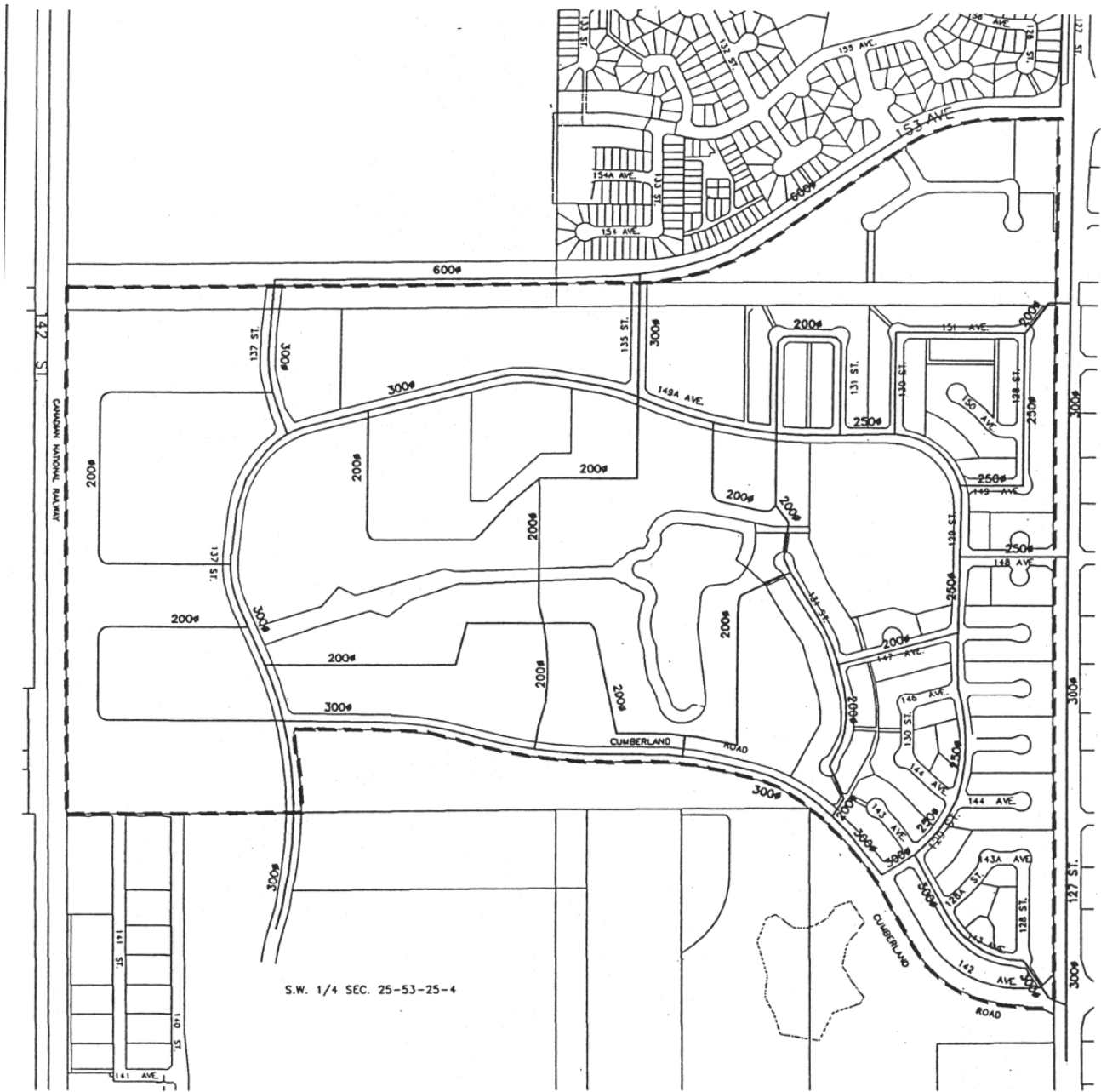
Amended by Editor

A Neighbourhood Drainage Report has been completed and submitted for the Cumberland Neighbourhood.

Bylaw 11519
June 17, 1997
Amended by Editor

Sanitary flows from the east and southeast of Cumberland will discharge south to the existing 750mm sanitary sewer on 127 Street which ties to the trunk system to the south (Exhibit 10). The 750mm sanitary sewer extends from 127 Street to 129 Street where it branches to the north to 148 Avenue with a 375mm pipe. A 375mm sanitary sewer runs west along Cumberland Road from 129 Street to service approximately 16.0 hectares west of existing Stage 5. Also, approximately 25 hectares from Cumberland, the Hudson NSP will be serviced by a 375mm pipe connected to the 750mm trunk at 129 Street. The total area being serviced via the 750mm trunk on 127 Street will be approximately 75 hectares compared to the 60 hectare suggested by the Drainage Branch. The increase in serviceable area is available due to the reduction of the daily sewage flow generation rate to 300 L/day/person and the revised residential peaking factor as per the Drainage Branch in January 1997.

Figure 6: Water Network (Bylaw 11519, June 17, 1997)



CUMBERLAND - NEIGHBOURHOOD

NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

WATER NETWORK




-  NSP BOUNDARY
-  200 PROPOSED WATERMAIN
-  200 EXISTING WATERMAIN



Figure 6



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Figure 7: Sanitary Sewer (Bylaw 11519, June 17, 1997)



CUMBERLAND - NEIGHBOURHOOD
 NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

SANITARY SEWER

Figure 7



- NSP BOUNDARY
- CATCHMENT BOUNDARY
- 375# PROPOSED SANITARY SEWER
- 375# EXISTING SANITARY SEWER
- ➔ FLOW DIRECTION



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The remaining area in the Cumberland Neighbourhood and the west half of the Hudson Neighbourhood will be serviced via a 900mm sanitary trunk north of the utility right-of-way in 153 Avenue which connects to the North Edmonton Sanitary Trunk System east of 127 Street.

As per the Neighbourhood Drainage Report, sanitary flows from the north residential lands will discharge north to the existing 250mm sanitary sewer on 132 Street. This sewer will be extended across 153 Avenue into the Oxford Neighbourhood Structure Plan area for servicing.

C. Stormwater Drainage

The "Watershed Plan - Northwest Annexation Area" prepared by Marshall Macklin & Monaghan in September 1982 has been approved by the City of Edmonton. This plan establishes guidelines for the management of stormwater runoff within the Northwest Annexation Area and identifies *the Cumberland and Hudson Neighbourhoods* of The Palisades as forming a drainage sub-basin.

Storm drainage for Cumberland and Hudson is provided by two separate facilities. Stages 1 - 8 of the east half of the Cumberland Neighbourhood is serviced by an existing dry pond, expanded as part of the Stage 1 construction, south of Cumberland Road. The dry pond will be expanded ultimately to a stormwater management lake to service Hudson. The remaining development of Cumberland requires the construction of stormwater facilities in the west part of the Neighbourhood (Figure 8). A drainage channel will be constructed in the central portion of the Neighbourhood dividing the north and south. The channel will drain east to a 4.38 hectare stormwater lake. The drainage channel provides additional storage for major storm events. The area west of the lake will be serviced via 1200mm and 1500mm storm trunks. This second lake will drain to the ultimate Lake 1 via 750mm and 900mm pipe on Cumberland Road. The outfall from Lake 1 to the storm trunk system at 137 Avenue exists and due to capacity limitations in the Kennedale Trunk system, a controlled discharge of the lake system is required.

As per the Neighbourhood Drainage Report, stormwater drainage from north residential lands will discharge north to the existing 1200mm storm sewer on 132 Street. This sewer will have to be extended southward across 153 Avenue into the Neighbourhood Structure Plan area to provide service.

Figure 8: Storm Sewer (Bylaw 11519, June 17, 1997)

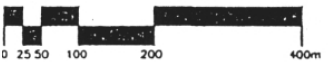


CUMBERLAND - NEIGHBOURHOOD

NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

STORM SEWER

Figure 8



- NSP BOUNDARY
- CATCHMENT BOUNDARY
- 900# PROPOSED STORM SEWER
- 900# EXISTING STORM SEWER
- ➔ FLOW DIRECTION



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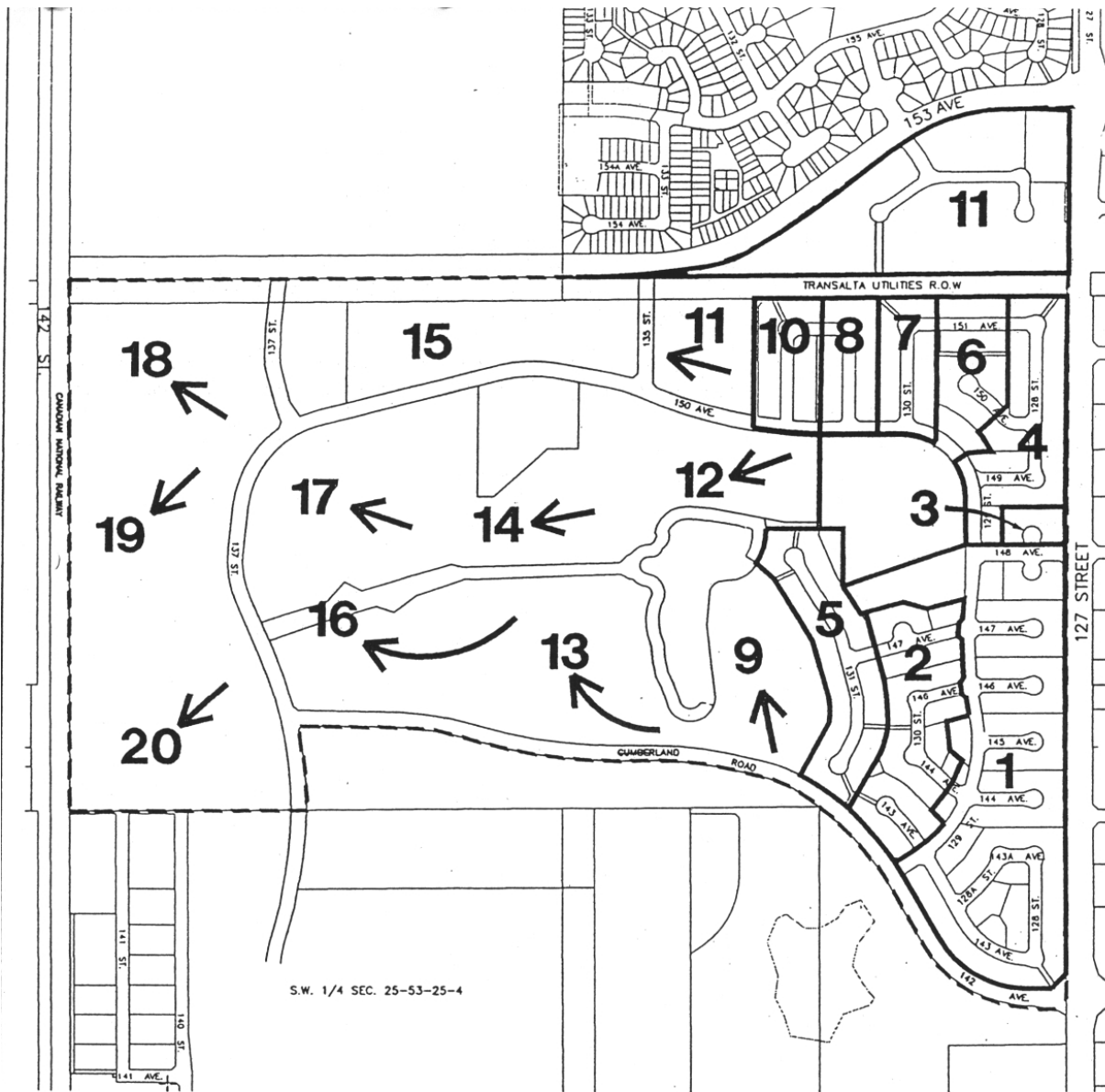
Chapter 5: Implementation

Based on the logical location of municipal services and existing development, development will progress in a westerly direction as shown on Figure 9. The initial phase of the stormwater lake in the Neighbourhood will be constructed in conjunction with the development of Stage 10. Water looping to the 600mm watermain at 153 Avenue will be required in conjunction with the development of Stage 10.

Bylaw 11519
June 17, 1997
Amended by Editor

The timing of subsequent stages of development will depend on market conditions in the City of Edmonton and will be developed as demand dictates.

Figure 9: Development Staging (Bylaw 11519, June 17, 1997)



CUMBERLAND - NEIGHBOURHOOD
 NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

DEVELOPMENT STAGING

Figure 9



- 2 EXISTING DEVELOPMENT STAGING
- 15 PROPOSED DEVELOPMENT STAGING



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Appendix A

TABLE 2
OWNERSHIP
Cumberland Neighbourhood Structure Plan
Bylaw 11519, June 17, 1997
(Amended by Editor)

Land Ownership	Area (ha)	Percent
Developed Lands	26.50	18.7%
<i>Private Corporation</i>	95.38	67.2%
<i>Private Corporation</i>	9.80	6.9%
<i>Private Corporation</i>	5.53	3.9%
City of Edmonton (MR)	4.71	3.3%
Total Neighbourhood	141.92*	100%

* Editor's Note: Total land area was reviewed and adjusted upward to 143.02 in Bylaw 11814 , August 24, 1998