Cameron Heights Neighbourhood Area Structure Plan

Office Consolidation July 2008

Prepared by:

Planning and Policy Services Branch
Planning and Development
City of Edmonton

Bylaw 12608 (as amended) was adopted by Council in June 2001. In July 2008 this document was consolidated by virtue of the incorporation of the following bylaws which were amendments to the original Bylaw 12608.

Bylaw 12608 Approved June 26, 2001
Bylaw 14320 Approved July 11, 2006
Bylaw 14948 Approved July 23, 2008

Editor's Note:

This is an office consolidation edition of the Cameron Heights Neighbourhood Area Structure Plan, as approved by City Council on June 26, 2001.

This edition contains all amendments and additions to Bylaw 12608. For the sake of clarity, new maps and a standardized format were utilized in this Plan. All names of City departments have been standardized to reflect their present titles. Private owner's names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws. All text changes are noted in the right margin and 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

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Section 1
Introduction

1.1 Purpose

The purpose of this Neighbourhood Area Structure Plan is to describe the land use framework and development objectives for the Cameron Heights Neighbourhood Area Structure Plan, consisting of approximately 127 hectares (see Figure 1.0 - Location Plan). The plan area is located north of the Transportation and Utilities Corridor (TUC) and west of the North Saskatchewan River Valley within northwest sector of the City of Edmonton.

The Neighbourhood Area Structure Plan (NASP) will implement a general land use framework by identifying the type, size and location of various land uses, density and pattern of development, location of roadways, conceptual servicing schemes and sequence of development.

Amended by Editor

The Cameron Heights NASP has been prepared on behalf of *two private property owners* each with an undivided ½ interest in approximately 83 hectares of land within the plan area and *another private property owner* with approximately 24.4 hectares in the plan area.

1.2 Background

The City of Edmonton Council authorized the preparation of a NASP for these lands on November 13, 1990. A submission and circulation of the plan occurred subsequently, however formal consideration of the plan by council did not take place. At that time access to the site via 184th Street was of major concern. This concern is now addressed with the ongoing construction of Anthony Henday Drive Outer Ring Road.

1.3 Definition of Plan Area

The Cameron Heights Area Structure Plan is comprised of a number of parcels within quarter sections 4, 8 and 9-52-25-W4. The total area for the NASP is approximately 127 hectares. As shown on Figure 2.0 – Context Plan, the NASP is defined by the following boundaries:

- **Northern Boundary** – Wedgewood Ravine
- **Western Boundary** – Wedgewood Ravine
- **Eastern Boundary** – North Saskatchewan River Valley

- **Southern Boundary** – Transportation and Utility Corridor

The Cameron Heights NASP constitutes a logical planning unit with respect to identifiable plan boundaries and servicing considerations.

1.4 Land Ownership

Approximately 87% of the land within the Cameron Heights NASP is privately owned and 13% of the plan area is publicly owned. Current land ownership is shown on Figure 3.0 - Land Ownership. A listing of the legal parcels is provided on Table 1 – Land Ownership *(As amended by the Editor).*

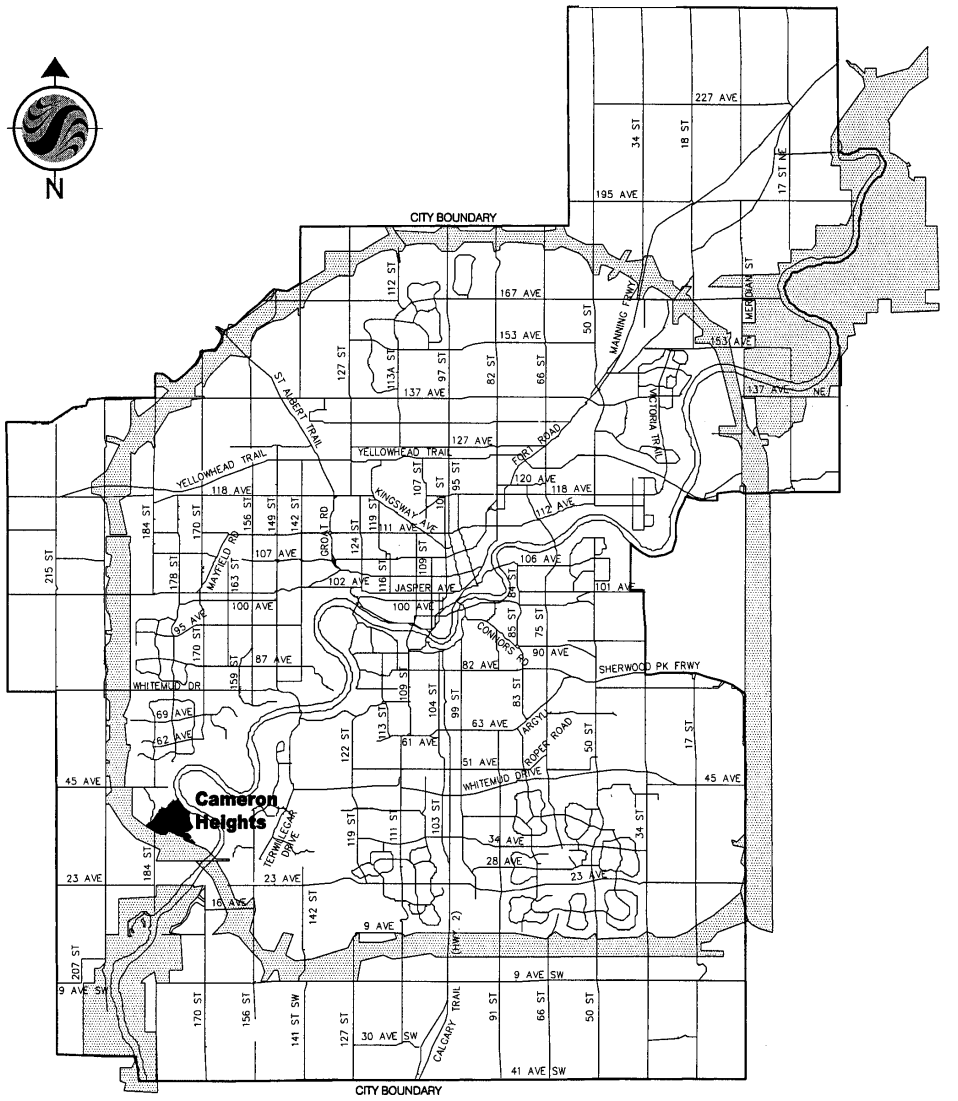
Amended by Editor

Table 1*
LAND OWNERSHIP
Cameron Heights NASP

	Titled Owner	Legal Description	Area (ha) in NASP
1	Private	Ptn NW 9-52-25-W4	17.13
2	Private	Ptn. NE 9-52-25-W4	7.55
3	Private (1/2 interest) Private (1/2 interest)	Ptn. SW 8-52-25-W4	48.96
4	Private	Ptn SE 8-52-25-W4	1.40
5	Private (1/2 interest) Private (1/2 interest)	Ptn. SE 8-52-25-W4	6.80
6	Government of Canada	Block 2 Plan 882 2315	6.20
7	City of Edmonton	Plan 872 2513	4.18
8	Private (1/2 interest) Private (1/2 interest)	Ptn. SE 9-52-25-W4	28.77
9	City of Edmonton	Ptn. NE 4-52-25-W4	6.02
		Total Area	**127.01**

*** As amended by the Editor**

Figure 1* Location Plan



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Client/Project
CAMERON HEIGHTS
NEIGHBOURHOOD AREA STRUCTURE PLAN

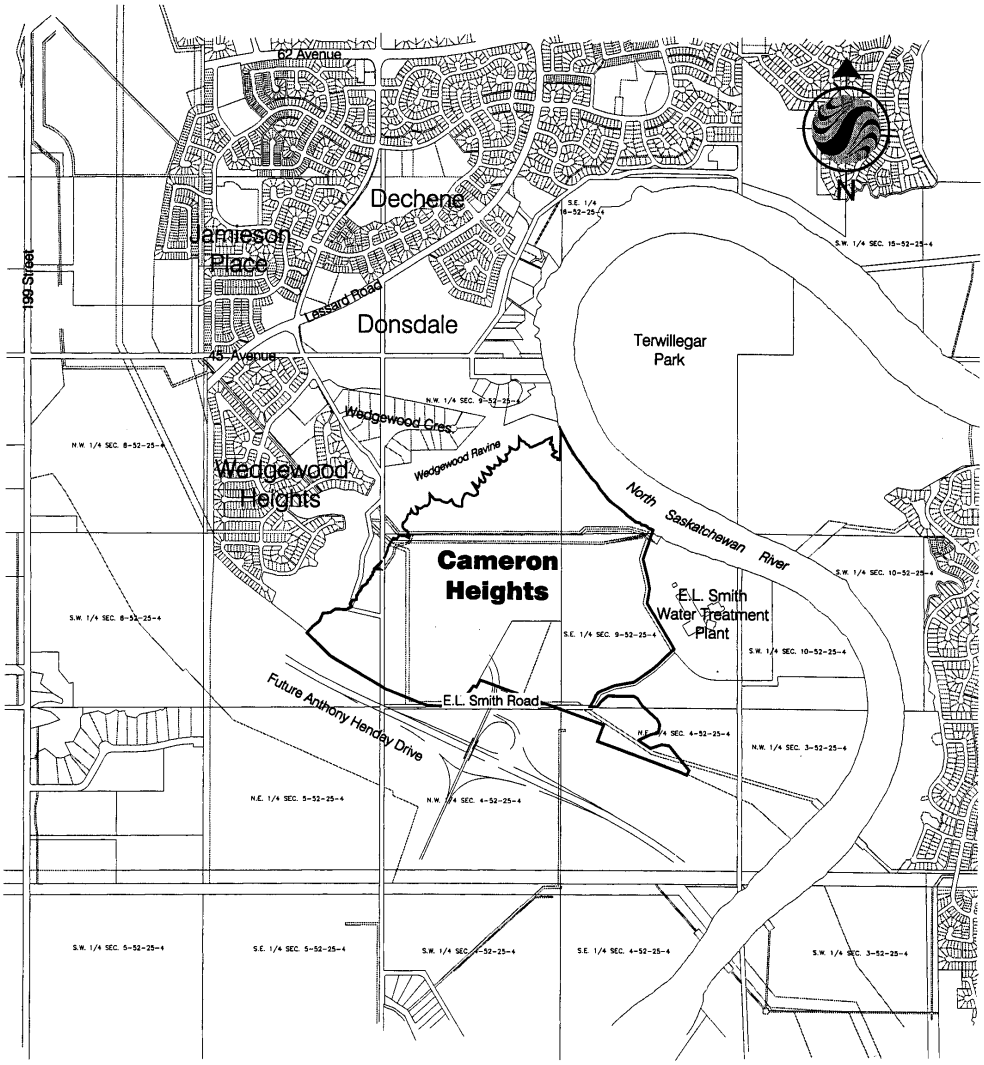
Figure No.
1.0

Title
Location Plan

March, 2001
161 09070

*** Bylaw 12608 June 25, 2001**

Figure 2* Context Plan



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Client/Project
CAMERON HEIGHTS
NEIGHBOURHOOD AREA STRUCTURE PLAN

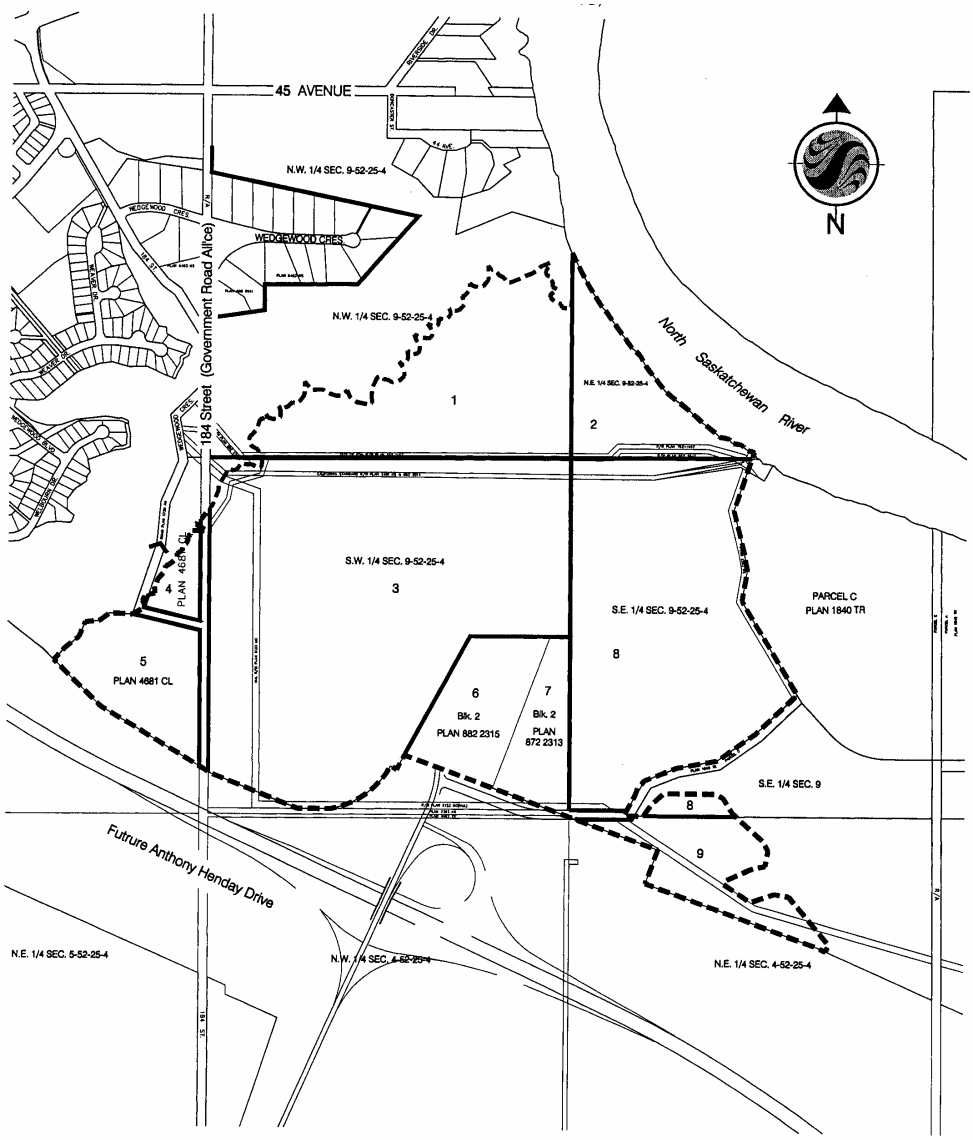
Figure No.
2.0

Title
Context Plan

March, 2001
161 09070

*** Bylaw 12608 June 26, 2001**

Figure 3* Land Ownership



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Client/Project
CAMERON HEIGHTS
NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure No.
3.0

Title
Land Ownership

March, 2001
161 09070

*** Bylaw 12608 June 26, 2001**

Section 2
Statutory Plan and Policy Context

2.1 Edmonton Municipal Development Plan

The land within Cameron Heights is designated in the City of Edmonton's Municipal Development Plan (MDP) as a Suburban Area, meaning that it is intended for suburban residential development.

Numerous strategies are cited in the MDP regarding Planned Growth and other areas of responsibility. The following sections highlight those of particular relevance to the Cameron Heights NSP.

2.1.1 Planned Growth - Land Development Philosophy

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

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

The Cameron Heights NASP provides for low and medium density residential and commercial development opportunities within a growing sector of the City of Edmonton.

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

The Cameron Heights NASP proposes the development of low and medium density housing adjacent to pipeline corridors, natural areas and the Transportation and Utilities Corridor. Careful attention has been paid to addressing the interface and compatibility of land uses.

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

The Cameron Heights NASP plans for a mix of residential and commercial uses in an efficient land use pattern which maximizes

developable land while respecting ownership boundaries, natural features, top of bank integrity and interface and other development constraints. The NASP has been conceived so that it may be developed on a staged basis in step with market demands.

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

The Cameron Heights NASP contains both north - south and east - west utility right of ways which have been integrated into the plan and, where appropriate, will be employed in the open space and walkway system.

2.1.2 Planned Growth - Utilization of Existing Infrastructure

"Encourage maximum development around City infrastructure."

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

The Cameron Heights NASP is situated immediately south of the existing Wedgewood Heights residential neighbourhood currently under development and is separated by the Wedgewood Ravine. This development proposes the extension of services from the existing Wedgwood Neighbourhood with major connection following the 184th Street corridor.

2.1.3 Planned Growth - Managing Suburban Growth

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

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

Given its contiguous nature (from both a land use and servicing perspective) with the developing Wedgewood Heights area and it location relative to the Anthony Henday Drive Outer Ring Road, the Cameron Heights NASP represents a logical location in south Edmonton for the development of residential land uses. Services can be extended into this area in a cost-effective manner.

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

The Cameron Heights NASP proposes that a range of low and

medium density residential development take place. The ratio of low to medium density residential development is consistent with current City Council guidelines.

2.2 Airport Protection Overlay

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

2.3 Suburban Neighbourhood Design Principles

The City of Edmonton's Suburban Neighbourhood Design Principles report describes a variety of design principles intended to encourage flexibility and innovation in the design and servicing of new neighbourhoods. Given the relatively small area of plan, a number of the principles do not specifically apply. However, the proximity of the Cameron Heights NASP to other approved and proposed neighbourhoods does allow it to share neighboring facilities.

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

Infrastructure to service the Cameron Heights NASP is an extension of a system currently servicing lands directly to the north. Access to the area will be from the proposed Anthony Henday Drive ring road which forms the south boundary of the plan area. The neighbourhood has been designed in accordance with the access management controls of the ring road and to City of Edmonton standards.

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

The central park area has been located to facilitate easy access for all residents and to serve as a focal point of the community. The site has been configured to accommodate a K-6 school and community facility. The pedestrian linkages to the T.U.C. and Wedgewood Ravine provide opportunities for access from neighboring communities.

Design Principle 3 - *Design the arterial and collector roads along*

a grid pattern, peripheral to the neighbourhoods.

The boundary of Cameron Heights is defined by Anthony Henday Drive to the south, and ravines on the north, west and east of the plan area. The looping collector roadway throughout the neighbourhood provides ease of access to all areas without dominating the area nor providing short-cutting routes.

Design Principle 4 - *Design neighbourhood streets (both neighbourhood design and cross section of roadway) with standards that cater to the main intended use of the road.*

Roadways within the neighbourhood are intended to be developed as a mixture of collector and local roadways. Adjacent land uses and densities will assist in the determination of appropriate road right-of-way widths and cross sections.

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

Bicycle and pedestrian movement throughout Cameron Heights is intended to follow the local and collector roadway network. Additional pedestrian only walkways and other open space corridors are provided throughout which links major nodes, view points and a planned trail system within the Transportation and Utility Corridor lands.

Bicycle traffic is proposed to follow the collector and local roadway system while pedestrian traffic will utilize the formal walkway system. The goal is to minimize the conflicts between cyclists and pedestrians in the neighbourhood.

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

Future transit service is appropriate along the collector roadway network. Given the shape of Cameron Heights and the abundant pedestrian opportunities throughout, access to transit is generally within 400m walking distance of virtually all parts of the neighbourhood.

Design Principle 7 - *At the area and neighbourhood planning stage, plan the location of the school/park facilities relative to neighbourhood staging such that they can be consolidated, serviced*

and available early in the development of a neighbourhood or catchment area.

The municipal reserve sites within Cameron Heights have been located such that all sites are easily assembled which will facilitate ease of dedication. Municipal reserve parcels within the Neighbourhood have been proposed to take advantage of logical linkages to the internal trail system and provide adequate and accessible open space.

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

The proposed central park site is of sufficient size to accommodate a schools and community facility. Should the requirements of the site change over time, the parcel is of sufficient size to accommodate other land uses on all or a portion of the land. The site is located as a central focal point of the community to maximize its use potential.

Design Principle 9 - *Explore opportunities to provide smaller, dispersed open space and parks in a neighbourhood to provide for localized needs while meeting the recreational needs of residents of the catchment area.*

The NASP proposes dispersed park sites that could be created from municipal reserves at the subdivision stage. These areas provide residents with several open space opportunities and options.

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

Site areas for park sites and schools / community league building envelopes have been identified within the 10% municipal reserves available for the Cameron Heights NASP.

Design Principle 11 - *Create a linked open space system through open spaces created by stormwater management facilities, some utility rights-of-way, preservation of appropriate natural areas and drainage courses, and school and park open spaces.*

The pipeline corridors and ravines within and adjacent to Cameron Heights provide excellent opportunities to provide linkages throughout and beyond the plan area to connect residents with amenities, transit and commercial uses. The centrally located

stormwater management facilities and school / park sites provide opportunities both for visual amenity and as additional open space for residents.

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

Medium density residential parcels of varying sizes have been designated throughout the plan area alongside collector roads, SWM facilities, pipeline corridors, park sites and, ravine amenities. A majority of the parcels have been located in the central portion of the plan area taking advantage of the open space amenities offered. All sites are easily accessed by pedestrian, bicycle, transit and vehicle traffic.

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

Alternative SWM techniques have been identified in the Cameron Heights NASP where appropriate and are intended to be pursued at the subdivision and building stage if the Drainage Branch determines them to be suitable alternatives.

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

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

Design Principle 15 - *Provide opportunity through the residential districts of the Land Use Bylaw for the intensification of housing forms and for alternative site design and building siting.*

It is intended that a range of low and medium density residential housing forms will be developed within the Cameron Heights NASP. Opportunities for innovative site design and building siting can be pursued through the redistricting and subdivision processes with the intent of maximizing views and proximity to natural amenities.

Design Principle 16 - *Use current population and student generation formulas when planning facilities for a neighbourhood. Take into account the life cycle of the neighbourhood.*

The population and student generation ratios provided in the Suburban Neighbourhood Design Principles report were used to develop demographic projections in the NASP.

Section 3
Site Context and Development Considerations

3.1 Topography

The topography of the Cameron Heights area consists of three distinctive components: an upland lacustrine plain, the North Saskatchewan River Valley and ravines that run perpendicular to the river valley. (see figures 4 & 5)

The upland plain dominates the study area and is currently under cultivation. The area generally slopes towards the river valley and ravines and is relatively flat.

The North Saskatchewan River Valley occurs immediately east of the lacustrine plain and consists of sloping valley walls and large undulating terraces. Lying between the North Saskatchewan River Valley and the river proper is an area of flats and contains the E.L. Smith Water Treatment Plant.

Three ravines systems (Wedgewood Ravine, Cameron Ravine and Smith Road Ravines) are distinctive features in the study area. (See figure 5) Wedgewood Ravine is the largest in the study area and extends southwest from the North Saskatchewan River Valley for several kilometers. The Cameron Ravine is the second largest ravine and occurs in the south central portion of the site. The Smith Road Ravine is relatively small and is the most southerly. Both of these latter ravines terminate within the study area. The width and depth of these ravines decreases with distance from the River Valley.

3.2 Vegetation

The ravines and valley slopes are vegetated with native plants communities. The balance of the area is currently in agricultural pursuits. Five different plant communities were recognized within these areas. Of the community types within the plan area, spruce dominated forest stands and were found to be most significant. This significance stems from the unique habitat that it provides for wildlife and the unique visual diversity. Urban development of the Cameron Heights area should not directly impact this vegetation since it occurs on slopes which precludes development. The upland area is proposed to be retained through a 7.5 m Environmental

Reserve area which will not allow any disturbance or development.

3.3 Geotechnical

Detailed geotechnical hydrogeological investigations have been undertaken for the Cameron Heights Neighbourhood Area Structure Plan by Omni-McCann Consultants Ltd. in 1991 and 2001. The following summary is based on the results of these investigations.

During the investigations, a total of 32 boreholes were put down at 21 locations across the proposed development site. The boreholes varied in depth from 2.4 m to 45.4 m below ground surface. Water table wells or Piezometers were installed in all boreholes upon termination of drilling. Groundwater levels have been monitored in the piezometers from early May to the beginning of August, 1991 and in 2000 installation during January 2001.

The soil stratigraphy consists of organic soils to depths of up to 300 mm where penetrated. These soils are generally underlain by glaciolacustrine medium to high plastic clay deposits to depths ranging from 1.1 to 2.8 m from surface. A glaciolacustrine silt unit with variable clay content underlies the above-noted deposits and is in the order of 0.9 to 3.5 m thick. These deposits overlie glaciolacustrine silts / sands that are present between 2.7 m to 14 m (approx.) in places beneath the site. At greater depths, the site is underlain by about 17 m of glacial fill that overlies pre-glacial Saskatchewan sand deposits and/or bedrock.

Slope stability analyses have been undertaken to determine building set-back distances from the North Saskatchewan River valley and ravine side slopes in this area. Based on these analyses and site inspection of more critical locations, a number of set-back conditions have been developed and incorporated into the layout of the area.

Based on the assessment, is was concluded that the river valley and ravine slopes are unlikely to experience slope movements detrimental to the proposed development, provided existing natural equilibrium is not allowed to change. The report notes that strict compliance to the setback requirements are adhered to during design, construction, and future use of the area.

Further information and complete details regarding the geotechnical conditions and recommendations should be referenced in the Omni McCANN document submitted under separate cover. All development shall be in accordance with the requirements and recommendations of the geotechnical report.

3.4 Existing Land Uses

As shown on Figure 5.0 - Development Considerations, there is an existing farmhouse in the north west portion of the property. The remainder of the lands are cleared and under cultivation. None of these uses pose any particular constraints to future urban development. However, future development of any and all properties within the neighbourhood is the option of the respective landowners.

3.5 Environmental Resources

The City of Edmonton's Inventory of Environmentally Sensitive and Significant Natural Areas (1993) identifies both the Wedgwood Ravine and Cameron Ravine a locally environmentally sensitive area. It is intended to dedicate these areas, in consultation with the City of Edmonton, as Environmental Reserve.

3.6 Environmental Site Assessment

Phase I Environmental Site Assessments (ESA) have been undertaken as part of the preparation of the Cameron Heights NASP. This report has been submitted under separate cover. Given the largely agricultural history of the land holdings, there are no outstanding concerns and no further investigation is required.

3.7 Environmental Impact Assessment

An Environmental Impact Assessment (EIA) has been completed for the plan area. The document assesses the impacts of the proposed development with specific attention to the stormwater management facilities and the stormwater outfall structure. The report recommends a number of mitigation measure to prevent adverse environmental impacts to be employed during the construction of these facilities.

A detailed EIA for the stormwater outfall, vehicular crossing of Cameron Ravine and the services crossing Wedgwood Ravine will be provided at the Engineering Drawing stage, prior to construction of these facilities.

3.8 Energy & Natural Resources

3.8.1 Oil & Gas Well Sites

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

3.8.2 Pipeline Rights-of-Way and Facilities

As shown on Figure 4.0, there are a number of pipeline transmission facilities within the Cameron Heights NASP. These facilities are clustered within two rights-of-way, one major corridor east and west through the neighbourhood, and another corridor running north and south through the west side of the neighbourhood.

Right of Way plan 762 1167 is 10.6 m wide and traverses the property from east to west and contains a 1,067 mm water line whose source is the E.L. Smith water treatment plant. Directly south is a second right-of-way, Plan 892 2547, which also contains a water transmission main with a diameter of 1350 mm. *Right-of-Way plan 902 0391, which lies directly south of the previously mentioned right-of-way, is 10.6 m wide and is a working and access easement.* Access to this easement will be maintained throughout the staged development of this area and will be to the satisfaction of EPCOR.

Amended by Editor

Right-of-way 882 2014 is located directly south of the above noted rights of way and also traverses the property from east to west. *This right-of-way is 10 m wide.* This right-of-way contains two water lines (219 mm and 273 mm) which are fed by a pumping station located north of the E.L. Smith Water Treatment Plant in the flats area along the North Saskatchewan River.

Amended by Editor

In addition to the water lines, a 168.3mm high pressure natural gas line runs north-south through the plan area to the south boundary and then due west across the southern portion of the plan area. *The right-of-way (Plan 6123 M.C.) is 15.2 m wide.* The Alberta Energy and Utilities Board Pipeline License Register identifies these pipeline transmission licenses within the Cameron Heights Neighbourhood Area Structure Plan (summarized on Table 2 – Existing Pipeline Transmission Facilities – *As amended by the Editor*.)

Amended by Editor

The east-west pipeline corridor and lands in between will be utilized as a pedestrian corridor and will have only a limited impact on the land use plan for Cameron Heights. The north south corridor is intended to form part of the walkway system.

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

TABLE 2*
CAMERON HEIGHTS NASP
EXISTING PIPELINE TRANSMISSION FACILITIES

Company	Substance	H_2S Content (mol/kmol)[1]	Max. Operating Pressure (kPa)[2]	Max. Outside Diameter (mm)[3]
Private	Water	0	3500	219
Private	Water	0	3500	273
City of Edmonton	Water	0	0	1350
City of Edmonton	Water	0	1035	1067
Private	Natural Gas	0	8,270	168.3

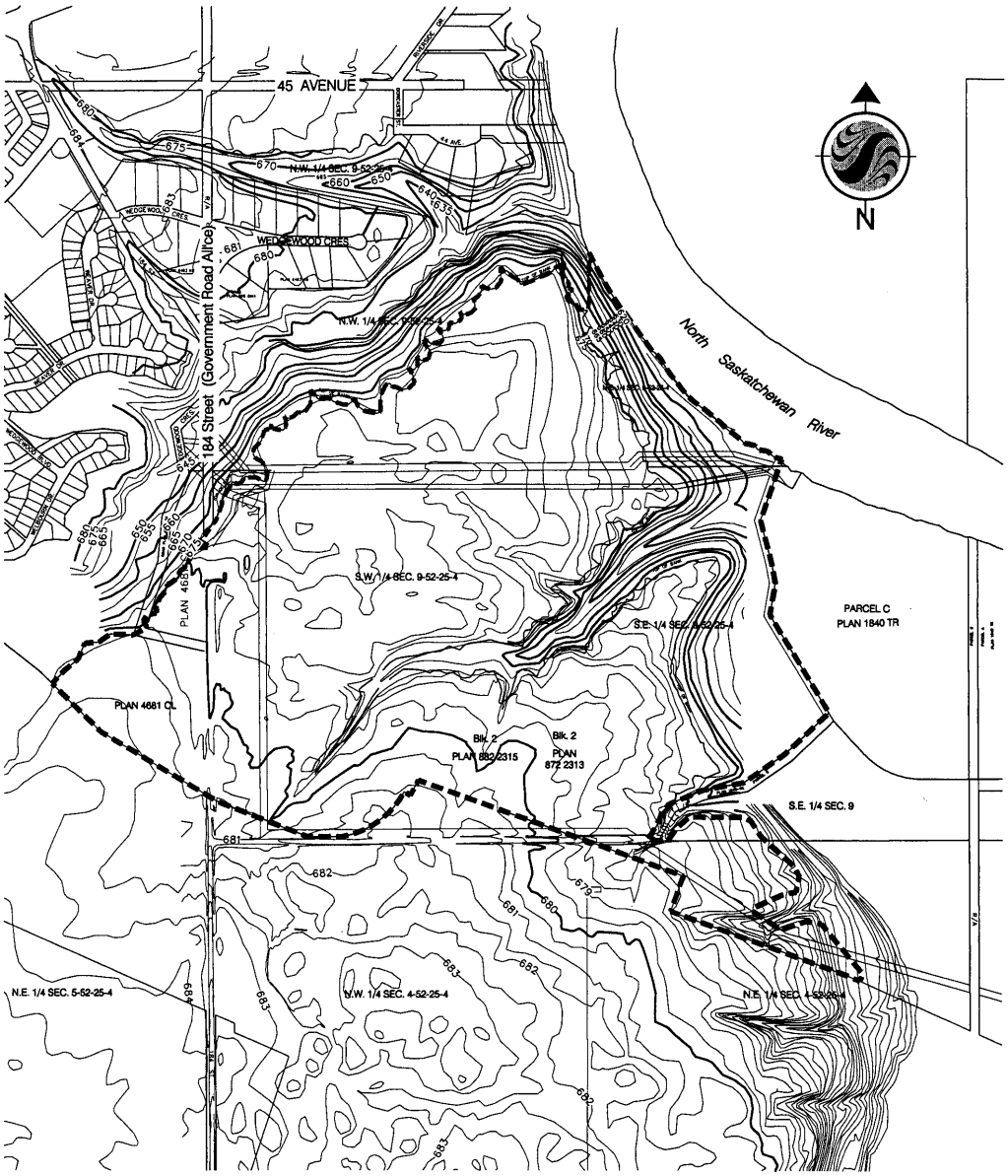
[1] sour natural gas occurs when the H2S content is greater than 10.0 mol/kmol

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

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

*** As amended by the Editor**

Figure 4* Site Contours



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Client/Project
CAMERON HEIGHTS
NEIGHBOURHOOD AREA STRUCTURE PLAN

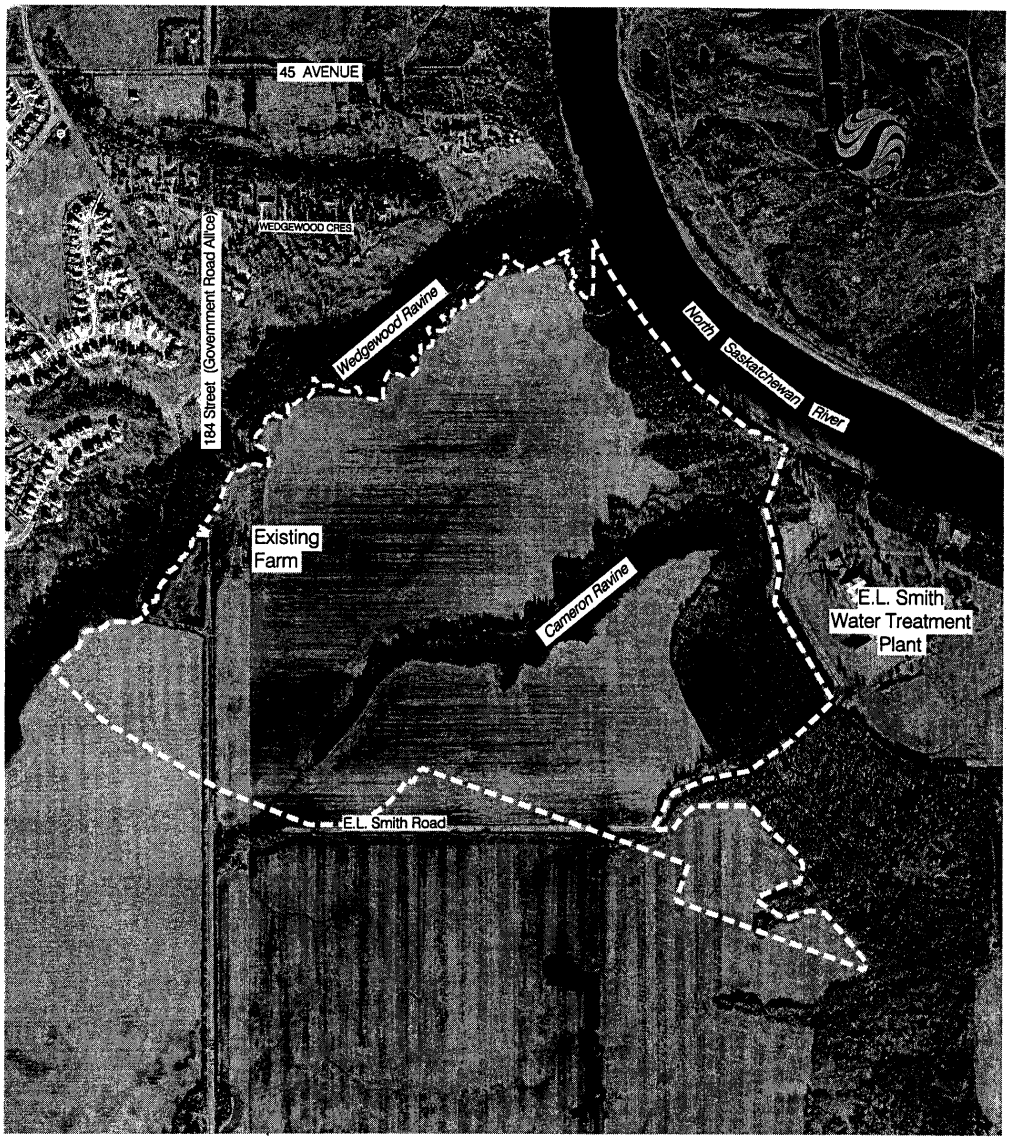
Figure No.
4.0

Title
Site Contours

March, 2001
161 09070

*** Bylaw 12608 June 26, 2001**

Figure 5* Site Features



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Client/Project
CAMERON HEIGHTS
NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure No.
5.0

Title
Site Features

March, 2001
161 09070

*** Bylaw 12608 June 26, 2001**

Section 4
Development Objectives & Principles

4.1 Development Objectives

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

- to develop a plan consistent with the general intent and purpose of the City of Edmonton Municipal Development Plan;
- to provide a framework to deliver a high quality, comprehensively planned residential area by defining the general pattern and composition of land uses, linkages, servicing designs and development staging;
- to integrate the natural features of the plan where feasible and economically viable;
- to ensure implementation of the plan on an orderly, staged basis.

4.2 Development Principles

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

4.2.1 Residential

- Provide for residential development within the Cameron Heights NASP to allow for a variety of housing forms and options consistent with consumer preferences and in conformance with municipal standards and policies.
- Establish sufficient overall residential densities within the Cameron Heights NASP to help support the efficient provision of neighbouring educational facilities, recreational facilities and municipal services, such as

public transit, in a timely fashion.

- Employ applicable design principles from the Suburban Neighbourhood Design Principles report within the plan area.

- Locate residential development to take advantage of natural and man-made features such as SWM facilities, park/open space, retained natural areas and pipeline corridors.

- Orient parcels of medium density residential development toward the collector road system to provide easy access and, where appropriate near natural amenities, to provide a transitional land use between adjacent single family development and major roads and commercial uses.

- Establish the single family to multi family dwelling unit ratio that conforms with City Council's current guidelines.

- Ensure that the integrity of the top of bank interface is protected by locating a 7.5 m upland Environmental Reserve strip along the top of bank of the Cameron Ravine, Wedgewood Ravine and North Saskatchewan River Valley.

4.2.2 Commercial

- Provide for neighbourhood convenience development opportunities within Cameron Heights to serve area residents.

- Locate and orient the commercial site along collector roadways to ensure high visibility and to provide convenient access opportunities.

- Ensure that the impact of commercial development on adjacent land uses is minimized through the orientation of land uses and the application of setbacks/buffering available through the Land Use Bylaw.

4.2.3 Municipal Reserves

- Provide municipal reserve sites for school and community league facilities within the neighbourhood through the dedication of municipal reserves.

- Allow for the provision of dispersed park space within the neighbourhood to provide open space and

opportunities for recreation for residents through the dedication of municipal reserves.

4.2.4 Existing Uses

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

4.2.5 Circulation

- Provide a logical, safe and efficient transportation systems within the plan area to address the pedestrian, bicycle and vehicular transportation needs of residents moving to, from and within the Cameron Heights NASP.

- Integrate pipeline corridors into the neighbourhood and make use of their walkway and linkage potential having regard for the safe, ongoing operation of these transmission facilities.

- Provide an alternative pedestrian circulation system that links key viewpoints and park areas without compromising top of bank and upland setback areas.

- Provide for opportunities for pedestrian and bicycle access into adjoining neighbourhoods through Wedgewood Ravine and the TUC.

- Ensure that appropriate sections of 184th Street are closed prior to the registration of the first phase of subdivision and that the closed portions are designated as an emergency access.

4.2.6 Geotechnical

- Ensure that all development is in accordance with the recommendations and requirements of the Omni-McCANN Hydrgeological and Geotechnical Investigation.

- Preserve the integrity of the Cameron Ravine through access management and a 7.5 m Environmental Setback from the Top of Bank.

4.2.6 Resource Operations and Public Utilities

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

- Provide adequate separation and screening between E.L. Smith Road and adjacent residents.

- Ensure that future residential development does not compromise the operation or limit the required 24 hour access to the E. L. Smith Treatment Plant.

- Maintain setback distances from high pressure gas lines as recommended by the A.E.U.B.

4.2.7 Environmental Considerations

- Preserve and integrate natural, sensitive and Top of Bank areas into the plan area where sustainable and economically viable through the use of municipal reserve, environmental reserve, and storm water management facilities.

- Ensure that the appropriate environmental impact assessments are conducted in conjunction with the detailed design of unnamed ravine crossing. Careful attention is to be paid to ensure impact on the environment is kept to a minimum.

- Ensure that the appropriate environmental impact assessment is conducted for the service and utility crossing of the Wedgewood Ravine. Careful attention is to be paid to ensure impact on the environment is kept to a minimum.

- Ensure that the appropriate environmental impact assessment is conducted for the stormwater outfall into the North Saskatchewan River. Careful attention is to be paid to ensure impact on the environment is kept to a minimum.

Section 5
Development Concept

The following sections outline the development concept for the Cameron Heights NASP in response to the development objectives and principles outlined in this document and in accordance with City of Edmonton statutory plans and market research.

The development concept for Cameron Heights has been prepared in response to current and anticipated residential market demands in the Edmonton Region. An analysis of these demands and an assessment of their implications help shape the plan with respect to the type, size and location of various land uses and amenity preferences of the anticipated residents.

5.1 Neighbourhood Unit

The Cameron Heights NASP is comprised of approximately 127 hectares and is bound on all sides by either the Transportation and Utilities Corridor or river valley which creates a logical planning unit as shown on Figure 6.0 – Development Concept.

5.2 Residential

The majority of land within Cameron Heights is intended for residential development as shown on Figure 6.0. A broad range of low and medium density residential dwelling units is described and will be implemented based on market conditions and consumer preferences at the time of development. Residential densities result in approximately 79 people per net residential hectare.

5.2.1 Low Density Residential

As shown on Figure 6.0, low density residential development has been located to take advantage of the natural amenity offered by the North Saskatchewan River Valley, Cameron Ravine, stormwater management facilities, walkways and neighbourhood park sites. Within the low density residential areas identified in the plan, a range of housing forms will be possible within the RPL, RSL, RF1 and RF4 land use districts.

Low density residential development will be planned in clusters/cells to provide a greater sense of identity to the various residential sub-areas and to create a safe pedestrian environment. Architectural guidelines will be employed within the residential

areas to ensure esthetically pleasing residential streetscapes. The area, number of dwelling units and population attributed to low density residential development is shown in Appendix 1.

5.2.2 Medium Density Residential

Opportunities exist within the Cameron Heights NASP for a variety of medium density housing forms and densities including townhouses, row housing, stacked townhouses and low rise apartment buildings. These housing forms have been allocated to three specific categories; MDR 1, MDR2 and MDR3.

Bylaw 14320
July 11, 2006

Two MDR 1 sites are located within the plan area and are situated adjacent to the Unnamed Ravine, Wedgewood Ravine and stormwater management facilities. It is intended to develop these MDR 1 sites with a maximum allowable density of 30 units per hectare. The specific development criteria and controls for these areas will be confirmed though DC2 zoning.

These sites have been designated as MDR to allow the development of the various housing forms contemplated under the MDR designation. Under the DC2 the density will be reduced to ensure a high amount of open space in the developments.

One MDR 2 site is located in the central portion of the plan area between the school / park site and the stormwater management facility. This location also provides the site with linkages to the linear park area. This site is intended to be developed to a maximum density of 61 units per hectare and a maximum height of 4 storeys. As with the MDR 1 the specific development criteria and controls for the MDR 2 area will be confirmed through subsequent DC2 zoning.

One MDR 3 site is located in the north east portion of the plan area and is bound by the collector roadway to the north, storm water management facility to the east, school park site to the west and the linear park to the south. This area is intended to be developed under the applicable uses and densities in the Zoning Bylaw; RF5, RF6 or RA7.

All medium density residential sites have been located with direct access to the major roadways to ensure efficient traffic circulation.

While many of the medium density parcels are likely to be developed on a self contained basis, opportunities exist to develop street-oriented townhousing designs and will be again confirmed through DC2 zoning. The medium density developments also serve as a transitional land use in portions of the plan between low

density residential development and arterial roadways. These developments will be integrated along side low density residential housing through sensitive streetscape design and attention to transitioning.

The area, number of dwelling units and population attributed to medium density residential development is shown in Appendix 1.

5.3 Commercial

One commercial site is proposed within Cameron Heights located at the entrance to the community. This peripheral location on the looping collector will ensure convenient access to residents while maintaining appropriate traffic patterns and volumes in the neighbourhood. The commercial site is intended to serve the immediate needs of the neighbourhood as well as the needs of neighboring communities and will be developed under the provisions of the CSC zone.

The area attributed to the neighbourhood commercial site is shown in Appendix 1.

5.4 Parks & Open Space

A variety of park and open space is provided in the plan as shown on Figure 6.0. The park areas have been provided for within the 10% municipal reserve dedication, the area designated for these sites is shown in Appendix 1.

A major park with provisions for a school and community league facility is located at the approximate geographic center of the neighbourhood. This area enjoys high visibility and accessibility by virtue of its location at the intersection of the collector roadways and pedestrian circulation system within the area. Lots across from the south portion of the school park site will not front onto the school park area.

The second major park area is a linear, broad, parkway traversing the plan area from east to west. This linear park connects the North Saskatchewan River Valley with Wedgewood Ravine and the school/park site creating an amenity with easy access for the use and enjoyment of all residents. The site is bound on both the north and south sides by pipeline right-of-ways, which will add additional open space to the linear park as well as provide a corridor for a pedestrian walkway. It is intended that Municipal Reserve dedication be granted for the area of land between the pipeline right of ways.

The dedication of a linear park as Municipal Reserve is an unusual feature of this plan. While the linear park will provide an attractive amenity, the City had some concerns about funding the development of this area and about the decreased potential for "cash in lieu of reserve" as a result of this land dedication. To address these concerns the Cameron Heights developer has committed to the development of the linear park as well as to the provision of some additional funding to assist in the development of other proposed park areas. This will be detailed under a separate agreement between the developer and the City of Edmonton.

In addition to the central park areas, smaller dispersed park sites are proposed for Cameron Heights as shown on Figure 6.0. Pocket parks are located in the northeast portion of the plan area and directly south of Cameron Ravine. These areas act as a view point park taking advantage of river valley views. A third park area is located in the southeast portion of the plan area adjacent to the stormwater management facility and is intended to enhance the esthetic quality of the area and to provide accessible green space to the residents.

Two access points have been allocated to the Transportation and Utility Corridor (TUC) to ensure a convenient tie in to the multi use trails within the TUC. Via these TUC trails linkages will also be provided to the Anthony Henday River crossing.

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

5.5 Stormwater Management Facilities

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

Three stormwater management facilities are located in the plan area with two located in the central portion of the neighbourhood adjacent to the east west linear park and a third facility is located in the south eastern portion of the plan area.

5.6 Circulation System

5.6.1 Roadway Network

The circulation system proposed for Cameron Heights is as shown on Figure 6.0. The area is well served in terms of access with an ultimate access point in the south central area of plan area to Anthony Henday Drive. The internal looping collector roadway connecting with Anthony Henday has been designed to cross Cameron Ravine at the shallowest point possible. The crossing point has the least amount of impact and disturbance to both the natural vegetation and stability of the ravine. The proposed crossing point is logical and is characterized by a gentle, shallow slope with less vegetation than other areas.

It is proposed to cross the ravine via an arch culvert structure, which will be lowered, into the ravine and backfilled. Concurrent with the design of this crossing an addendum to the Environmental Impact Assessment will be completed to the satisfaction of the City of Edmonton. This addendum describes the proposed crossing method and the need to restore vegetation in the disrupted area after construction.

The Cameron Heights area contains two existing roadways located in the west and south portions of the plan area. The westerly road, 184th street, currently acts as a link to the Wedgwood Heights development in the north. The street winds its way across Wedgewood Ravine and realigns itself with the 184th Street Government road allowance south of the Wedgewood Ravine. No access to Cameron Heights is proposed via 184th street. It is proposed to close the portion of the roadway within Wedgewood Ravine and use it as a pedestrian / bicycle trail and emergency access.

A road closure bylaw closing the appropriate portions of 184th Street will be submitted and approved prior to the registration of the first stage of subdivision. Prior to construction, a physical closure of these same sections of 184th Street will occur to ensure that construction traffic does not utilize this roadway.

Until the completion of the Anthony Henday, access to the area is proposed via the existing grid roads south of the plan area. Access is possible via 199 street to 23rd Avenue and then north on 184th Street to E.L Smith Road.

E.L. Smith Road, located in the southerly portion of the plan area, currently provides access to the City owned E.L. Smith Water Treatment Plant located in the North Saskatchewan River Valley

below Cameron Heights. Access to the Water Treatment Plant will be provided from a point east of the Anthony Henday access road. The road will generally follow the alignment of the existing road right-of-way with the existing structure being utilized where possible. It is also proposed to locate a portion of the walkway system within the Northwestern Utilities right-of-way on the north side of the E.L. Smith right-of-way which will connect back into the neighbourhood and park area.

As shown on Figure 7.0 buffer treatments along E.L. Smith Road will include the construction of a 1.0 m berm with a 1.80 m fence. Additionally, lots backing on the E.L. Smith Road will be configured with extra depth to provide adequate separation space.

The portion of E.L. Smith road west of the Anthony Henday access is proposed to be closed. The current dangerous good route and 24 hour truck route status of E.L. Smith Road will be maintained for the portion east of the Anthony Henday access road.

Access to individual lots will generally be from local roads although opportunities exist for residential development with direct access off of the collector roadway system.

The plan does not make provisions for a top-of-bank roadway due to the curvature associated with the top-of-bank. The top-of-bank is such that, from a functional standpoint, the roadway will not form a viable portion of the transportation network. Given the development setback required for roadway construction, the resulting configuration is extremely inefficient as the lands between the road right-of-way and development setback line would not be eligible for development.

The looping collector road within Cameron Heights provides an opportunity for transit service to access within a reasonable walking distance of all residential areas in the Neighbourhood. A more detailed description of the existing and proposed transportation and circulation system is provided in Section 7.0.

5.6.2 Walkway Network

In lieu of providing top-of-bank walkways, walking corridors are provided throughout the plan area connecting the open space system with key nodes in the community and controlled access points to the ravine system. Design of the walking system provides a virtually uninterrupted circulation system through the community.

An extensive walkway system is proposed for Cameron Heights as shown on Figure 8.0. The walkway system and/or sidewalks will

serve to link all park nodes with adjacent residential areas and amenities such as the T.U.C., stormwater management facilities, park facilities and commercial sites. A connection with the North Saskatchewan River Valley is contemplated pending further study by the City's Community Services department. Formal pedestrian connection to Cameron Ravine will not be provided.

As an alternative to a top-of-bank walkway, a formal walkway is proposed through the linear municipal reserve lot in the north central portion of the plan area. This formal trail and reserve area will provide linkages between the existing informal trails in the Wedgewood Ravine, central park area, multi family sites and stormwater management facilities. The walkways will utilize the pipeline right-of-ways on the south and north sides of the park area to provide maximum use opportunities in the central area

The intersection of the trail and the North Saskatchewan River Valley System takes advantage of previous clearing carried out for pipeline right-of-ways. This vista point provides excellent views of the river valley system and downtown. The western end of the walkway provides pedestrians with the choice of accessing the informal trails in the Wedgewood Ravine area or continuing south on a formal walkway.

The north south portion of the formal walkway system utilizes the NUL right-of-way and links the central areas and the T.U.C.

The pedestrian circulation system provide linkages to three access points to the TUC thus providing convenient access to the multi use trails and river crossing being planned within the TUC. These linkages will provide ample opportunity to access the greater pedestrian system including the river crossing associated with Anthony Henday Drive. The exact linkages and configuration will be subject to the finalization of plans within the TUC.

A bicycle system, as shown on figure 9.0 will be provided in the neighbourhood which follows the collector and local roadway system. Bicycle routes will be clearly marked via appropriate signage and markings. This system will minimize conflicts between cyclists and pedestrians in the neighbourhood.

5.7 Top-of-Bank Policy

The stated purpose of the City of Edmonton's Top-of-Bank Roadway Policy is twofold. The first is to ensure the provision of open space between the North Saskatchewan River Valley System and urban development and, secondly, to provide public access to

the North Saskatchewan River Valley System. The Cameron Heights NASP has endeavored to meet these objectives in other ways.

As shown on figure 9.0 it is proposed to back residential development onto the ravine system such that the rear property line of the residential lots is separated from the TOB by a 7.5m environmental reserve area. The environmental reserve area will ensure that the upland area will be kept in its natural state by prohibiting encroachment or disturbance, through the construction of trails or roadways, of the top-of-bank area. This approach ensures that the current slope stability will be maintained by prohibiting the removal of any vegetation within the 7.5m area. It also ensures an open space system between development and the top-of-bank area. Where current cultivation extends into the 7.5m area, a naturalization process through replanting will be undertaken. It is also proposed to delineate the back of lots interfacing with the 7.5m environmental reserve area with a developer installed chain link fence.

Ample viewing areas to the North Saskatchewan River Valley System are provided at various points via municipal reserve viewpoints. These viewpoints are easily accessible from the collector roadway network and by pedestrians via the extensive trail network. These access sites are easily accessed both from a inter and intra community perspective.

In addition to the environmental setback, and in accordance with geotechnical investigation information, a building setback line is identified in the geotechnical report. This will ensure that the distance from any permanent structure to the top-of-bank line is geotechnically sound. Private properties backing onto the River and Ravines will be subject to certain restrictions to reduce risk of bank erosion. Detailed information in this regard has been submitted under separate cover by Omni McCANN Consultants Ltd.

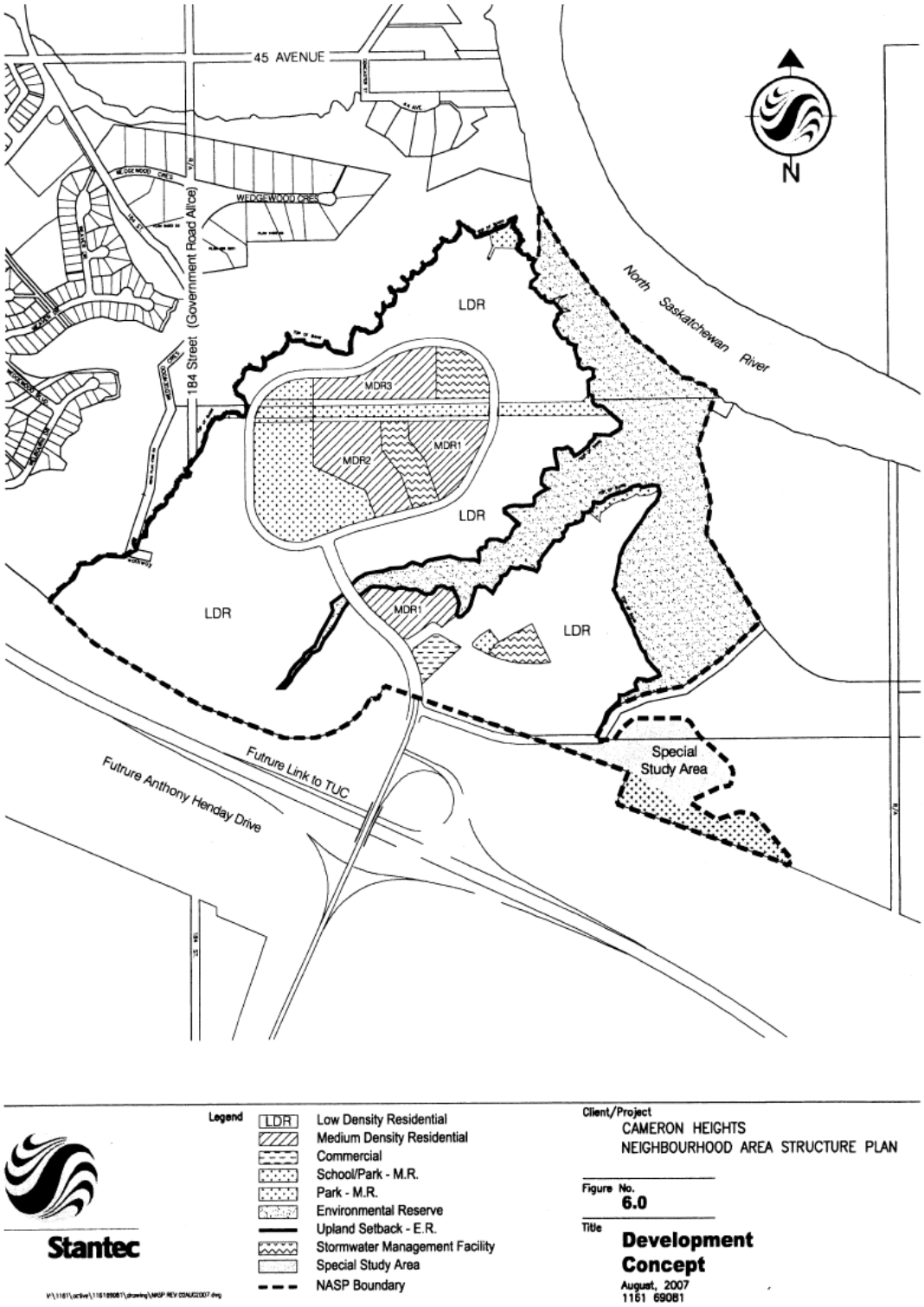
5.8 Special Study Area

The lands in the south east portion of the plan area have been designated as a special study area. (See Figure 6) The area is bound by the North Saskatchewan River Valley to the east, E.L. Smith Road to the north and the TUC to the west and south.

Future development opportunities for this area may include residential uses in the central portion with the southeast corner of the plan area designated as a large view point park providing public access to the North Saskatchewan River Valley.

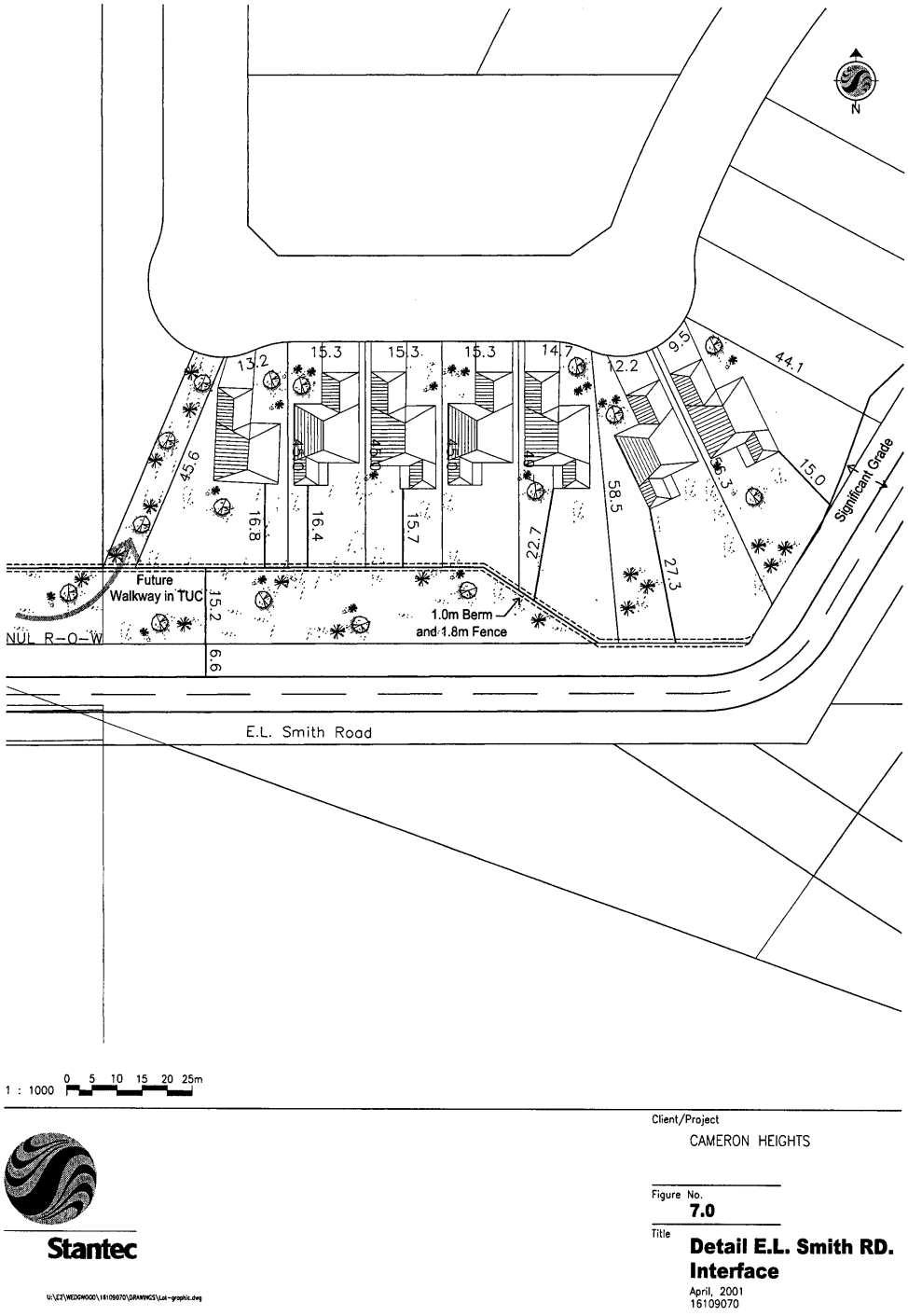
At the time of development of this area it will be necessary to determine how access can best be provided without conflicting with access to the E.L. Smith Water Treatment Plan

Figure 6* Development Concept



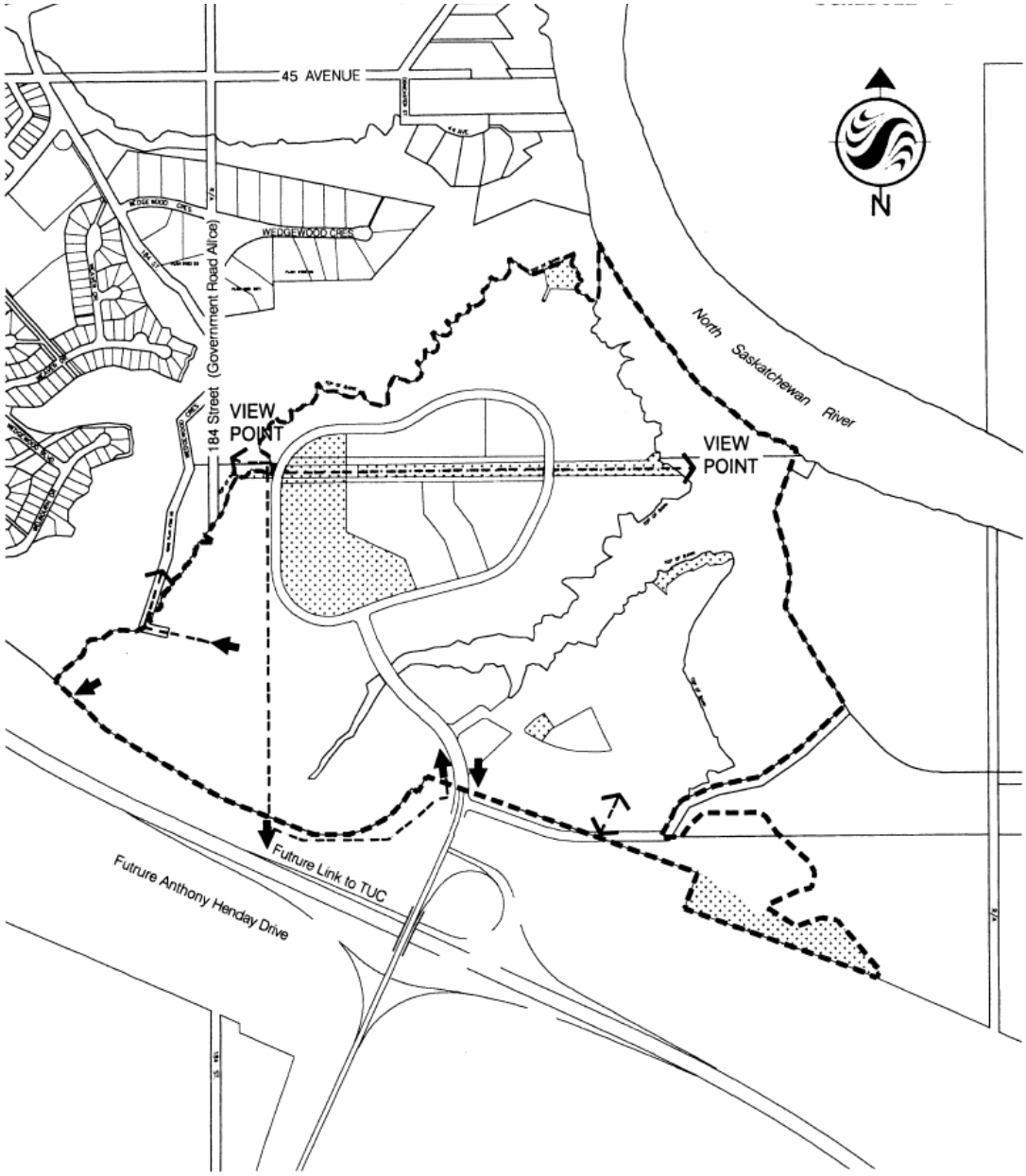
*** Bylaw 14948 July 23, 2008**

Figure 7* Detail E.L Smith Interface Road



*** Bylaw 12068 June 26, 2001**

Figure 8* Pedestrian Linkages



Legend

Formal Trails

Trail Access

Client/Project
CAMERON HEIGHTS
NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure No.
8.0

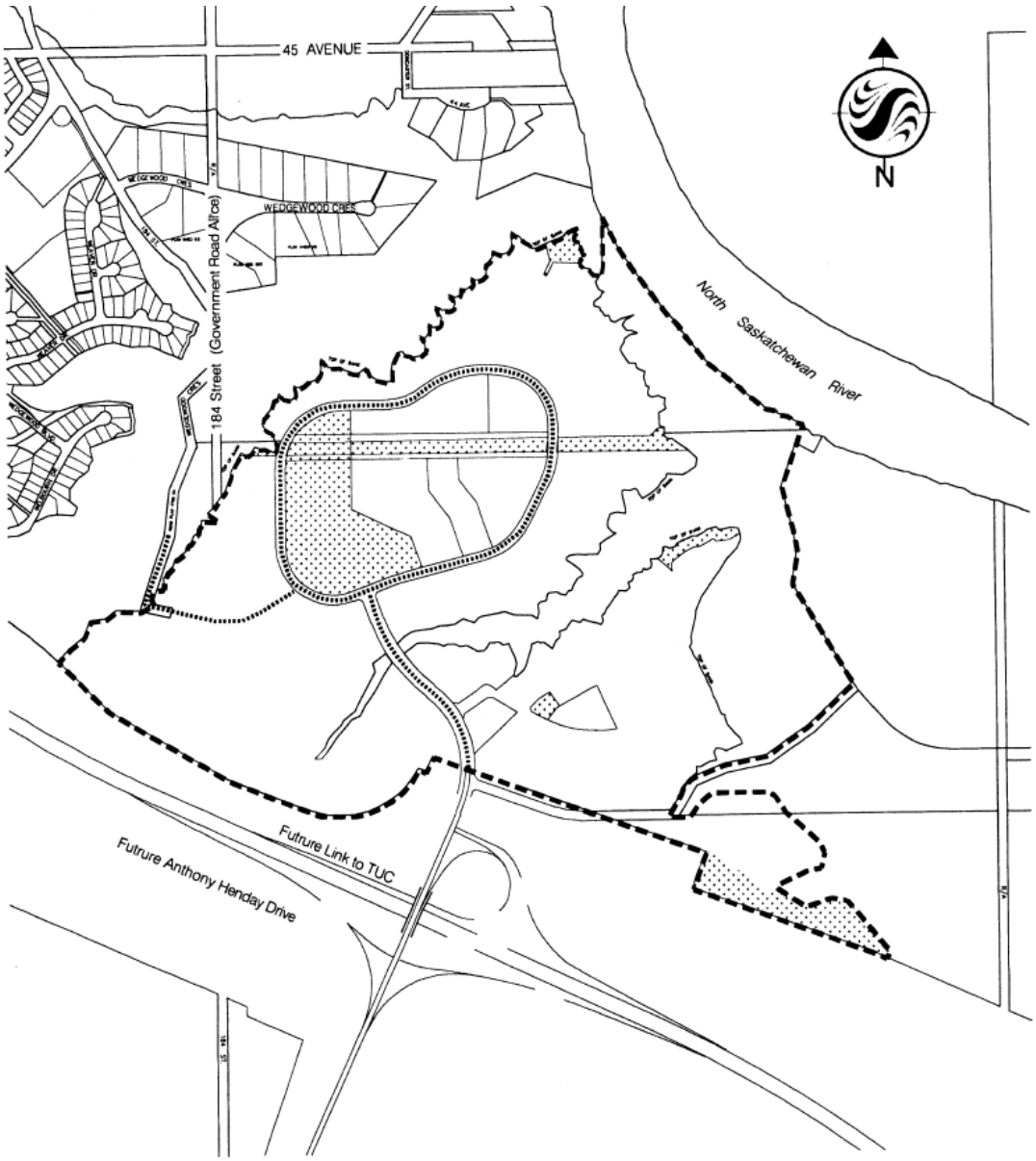
Title
Pedestrian System

Stantec

August, 2007
1161 69081

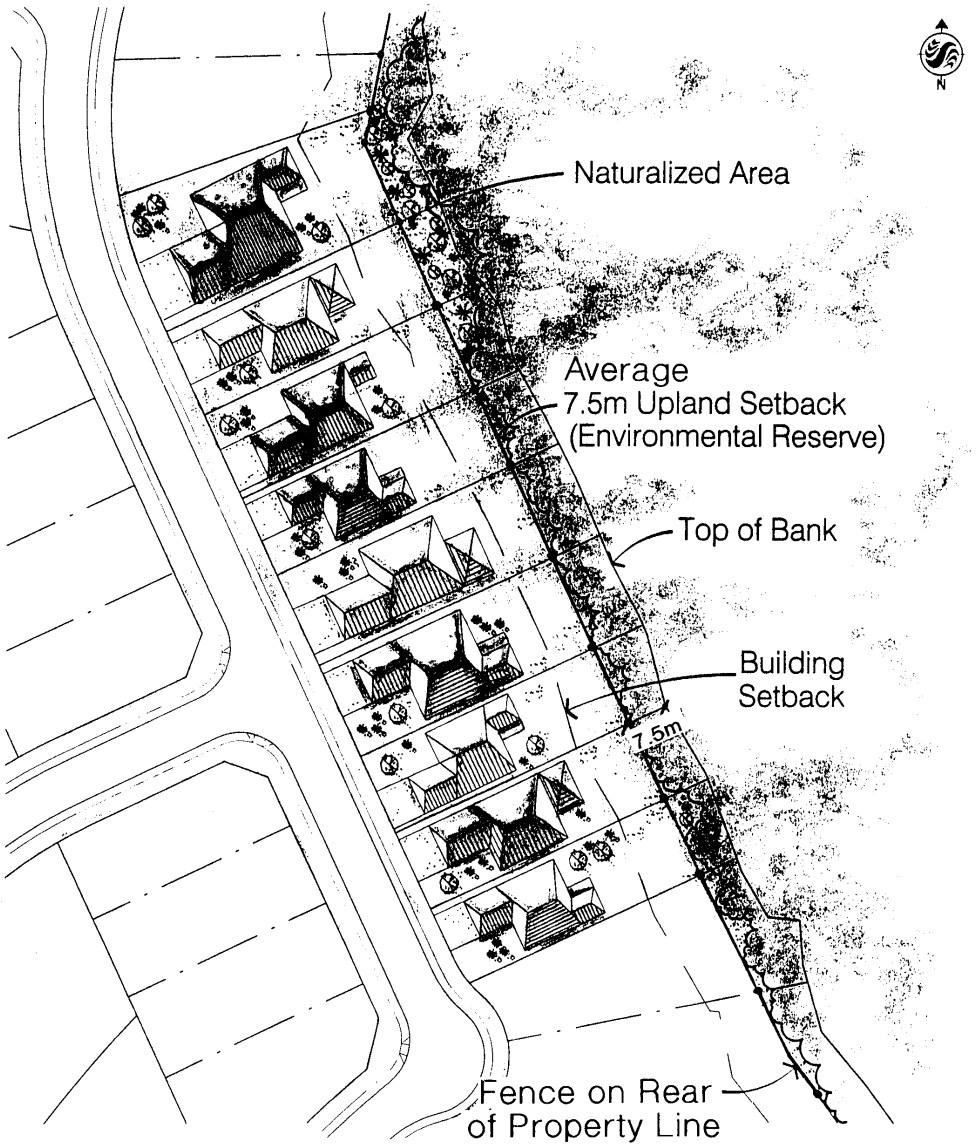
*** Bylaw 14948 July 23, 2008**

Figure 9* Bicycle System



*** Bylaw 14948 July 23, 2008**

Figure 10* Typical Top of Bank Interface



Stantec

Client/Project
CAMERON HEIGHTS
NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure No.
10.0

Title
Typical Top of Bank Interface
April, 2001
16109070

*** Bylaw 12608 June 26, 2001**

Section 6
Engineering Services

6.1 Stormwater Drainage

As shown on Figure 11.0 - Stormwater Drainage, three stormwater management facilities are designated for Cameron Heights. These facilities have been located based on the natural drainage patterns of the area. Two facilities are located in the central portion of the plan area will have an outfall, via pipe, eastwards to an outfall structure located at the intersection of the Cameron Ravine and the North Saskatchewan River. The third facility is located in the southeastern portion of the plan area.

Lots backing onto the Cameron Ravine and the North Saskatchewan River Valley will be graded such that overland storm flows will not exceed predevelopment flows to ensure that excessive erosion does not occur.

Further details regarding the stormwater drainage schemes for the Cameron Heights NASP are provided in the associated Neighbourhood Designs Report submitted under separate cover. An Environmental Impact Assessments of the stormwater management system has also been provided under separate cover. A more detailed E.I.A. of the stormwater outfall will be provided prior to construction.

6.2 Sanitary Servicing

As shown on Figure 12.0 - Sanitary Services for Cameron Heights will connect into a lift station located at the northwest corner of the plan area north of the MDR 1 area. From the lift station sanitary will be pumped via a force main which will follow 184th street to a 675 mm trunk located at the intersection of Lessard Road and 184th Street. The on-site sanitary network will follow the internal roadway network and associated public utility lots.

The crossing of the Wedgewood Ravine will follow the 184th Street road right-of-way except in the are where the pipe will cut through the ravine over to the lift station. Auguring is proposed for this section. A more detailed environmental impact assessment will be undertaken prior to acceptance of the engineering drawings and appropriate mitigative measures will be taken during construction.

A future service connection to the E.L. Smith Water Treatment Plant will be accommodated in the detailed design of the services and will be located at an appropriate location. This location will be determined in consultation with EPCOR. The costs associated with this connection will be borne by EPCOR.

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

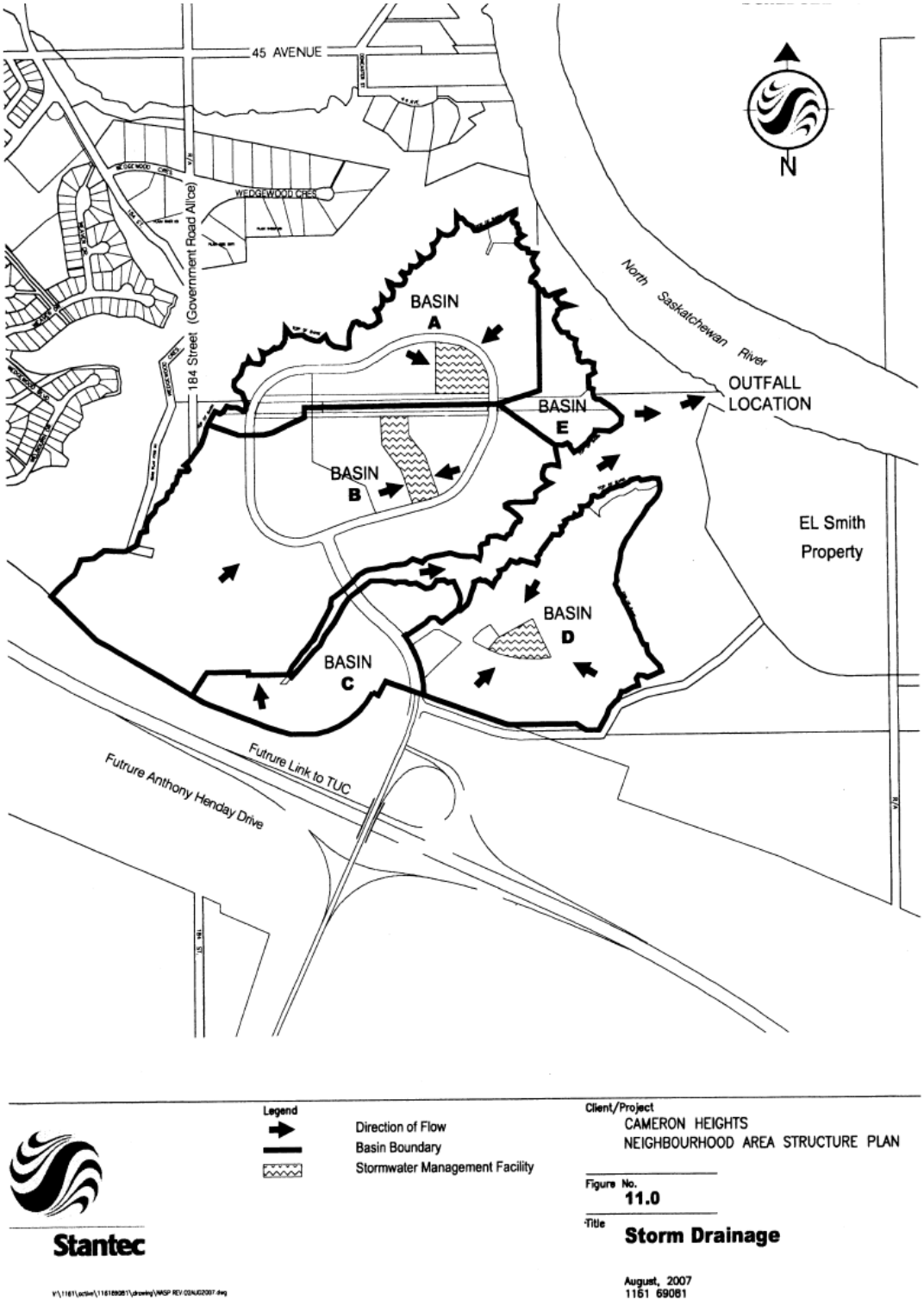
6.3 Water Servicing

It is proposed to connect, at 2 points, to the existing City of Edmonton water line running east – west through the plan area. The connections will be made the points where the collector road crosses the water line. Water servicing within the neighbourhood will be designed to provide peak hour flows and fire flows for low density and medium density uses. Water looping will be provided in accordance with the requirements of Aqualta. Prior to detailed design, a Water Network Analysis will be submitted to Aqualta for review and approval.

6.4 Shallow Utilities

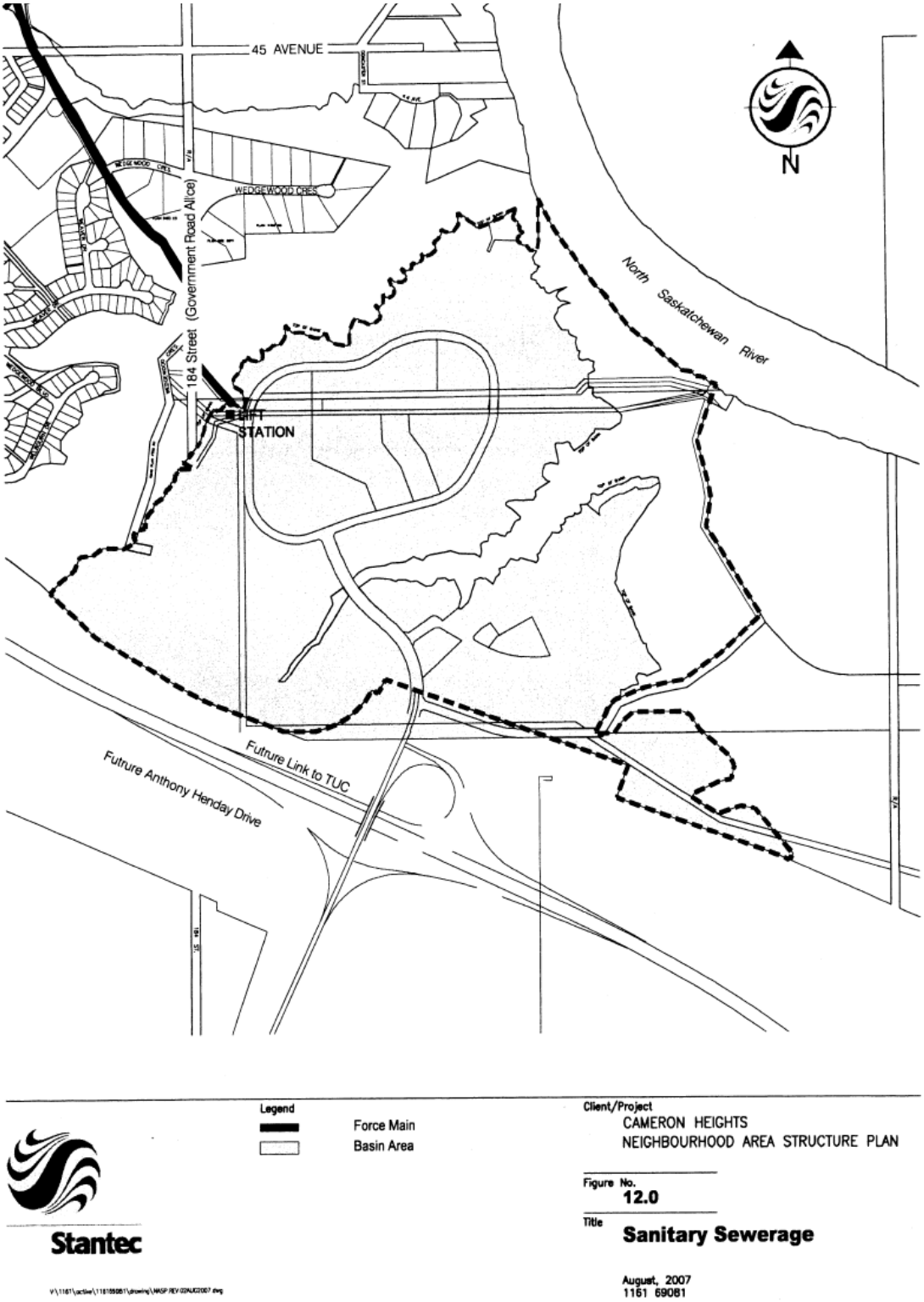
Power, gas and telecommunication services are all located within close proximity to the Cameron Heights NASP and will be extended as required.

Figure 11* Storm Drainage



*** Bylaw 14948 July 23, 2008**

Figure 12* Sanitary Sewerage



*** Bylaw 14948 July 23, 2008**

Section 7
Transportation

7.1 Transportation

The transportation network within the Cameron Heights NASP consists of a system of collector and local roadways and walkways to accommodate the movement of automobiles, pedestrians and bicycles.

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

As there are no arterial roadways to construct in this area, Cameron Heights will not be subject to the Arterial Roadway Assessment program.

7.2 Roadway Network

As shown on Figure 13.0 - Circulation, the proposed development will enjoy a high level of accessibility by virtue of its proximity to Anthony Henday Drive.

The internal 4 lane collector roadway will provide access off of Anthony Henday, into the neighbourhood and onto the internal local roadway network.

E.L. Smith Road currently provides access to the E.L. Smith Water Treatment Plant. Access to the plant will be maintained from a point east of Anthony Henday Drive access with the existing roadway being utilized where possible. The portion of the road west of the Anthony Henday access is proposed to closed. The current dangerous goods and 24 hour truck route status of the road will be maintained for the reconfigured access road and will be designed to accommodate turning movements of B-Train trucks. As shown on Figure 7.0 appropriate buffers will be provided between residential development and E.L. Smith Road.

As access, both interim and ultimate, will not utilize 184th Street north of the plan area a road closure bylaw closing portions of the roadway that fall within the Wedgewood Ravine will be submitted. The closed portions of the roadway will become a

pedestrian/bicycle trail as well as an emergency access.

The road closure bylaw will be submitted and approved prior to the first stage of subdivision with physical closure of these sections occurring prior to the construction commenting.

Access to the commercial site and roadway requirements will be determined at the redistricting and subdivision stages to the satisfaction of the Transportation & Streets Department.

7.3 Roadway Staging

The Cameron Heights area is not bound by any arterial roadways. Access to the area is gained from Anthony Henday Drive which is scheduled to be constructed in 2003. Staging of the internal collector and local roads will follow the proposed staging scheme for the area.

In the interim it is proposed to access the neighbourhood via the existing grid roads to the south. No access to the development will be permitted on 184th Street from the north of the plan area.

7.4 Transit Service

Future transit routes will follow the looping collector roadway and will be established on the basis of the proportion of trips which are expected to be generated from within the neighbourhood and adjacent areas. The collector road will be designed in accordance with the City's specifications for a bus route.

Based on this routing, the majority of land within the Cameron Heights is within 400 m of these roadways.

7.5 Pedestrian & Bicycle Circulation

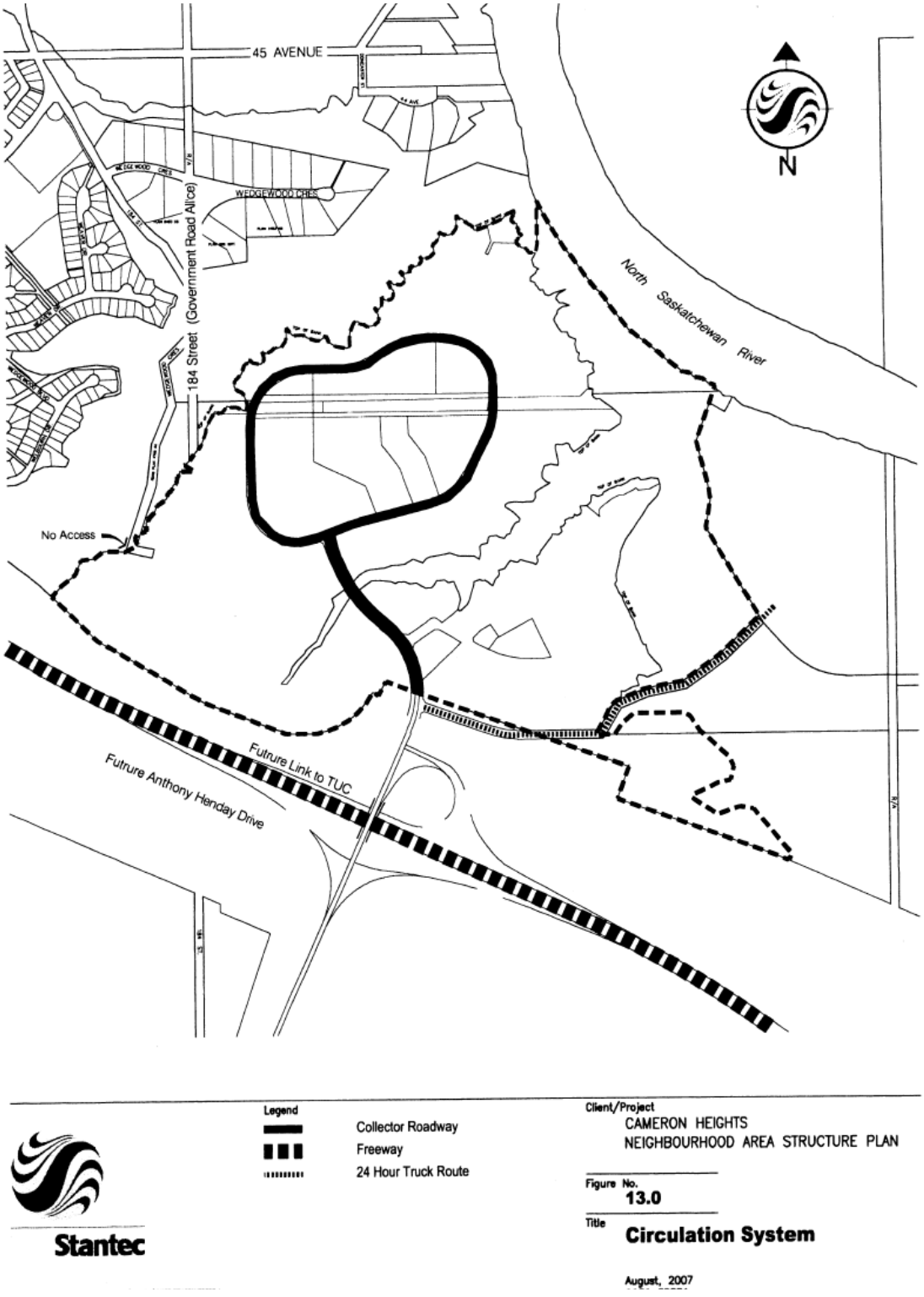
Sidewalks provided along all adjacent collector and internal local roadways in accordance with City policies and practices. Walkways will be provided to connect sidewalks along the internal roadway network with the stormwater management areas and power corridors.

The bicycle circulation system for Cameron Heights intended to follow the collector, local roadway within the neighbourhood area.

7.6 Parking

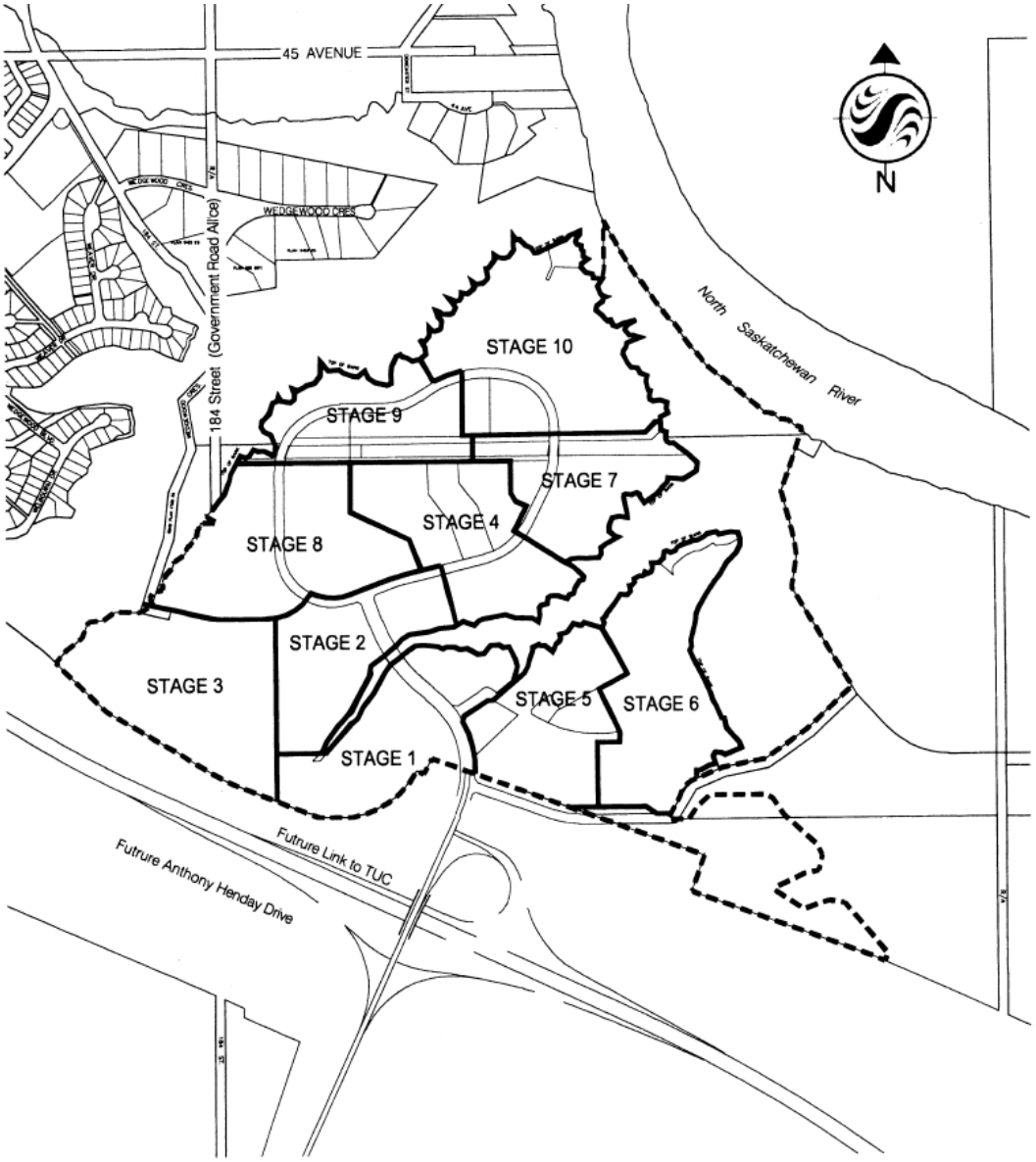
Parking for vehicles will generally be provided off-street in conjunction with residential development.

Figure 13* Circulation System



*** Bylaw 14948 July 23, 2008**

Figure 14* Staging Concept



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Client/Project
CAMERON HEIGHTS
NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure No.
14.0

Title
Staging Concept

August, 2007
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*** Bylaw 14948 July 23, 2008**

Section 8
Implementation

8.1 Development Staging

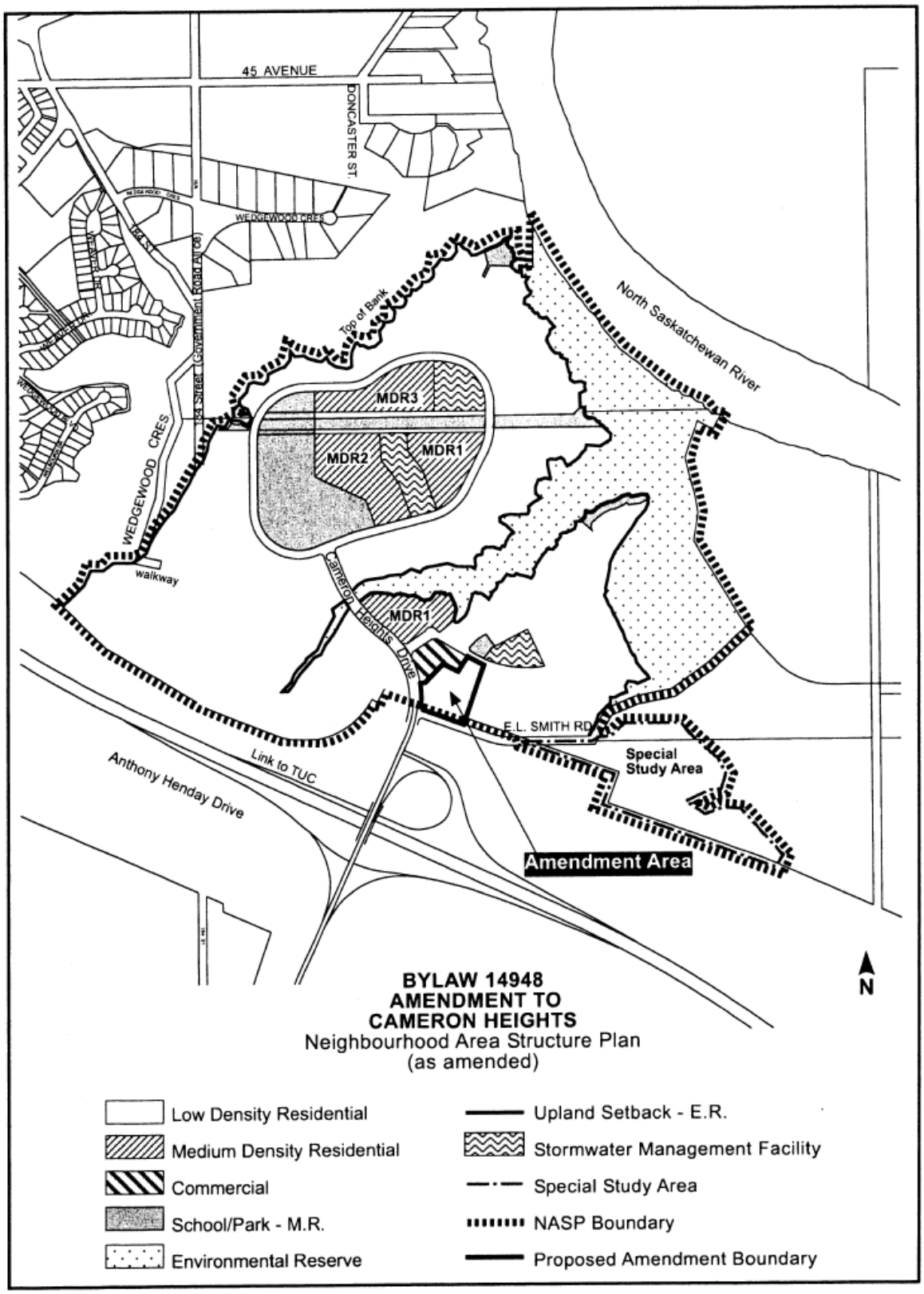
Infrastructure to service the initial stages of Cameron Heights will be extended into the neighbourhood from the existing development to the north.

As shown on Figure 14.0 - Staging Concept, initial stages of residential development are intended to begin in the south central portion of the plan area and progress to the west and north.

8.2 Rezoning and Subdivision

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

Map 1* Cameron Heights NASP



*** Bylaw14948, July 23, 2008**

Appendix*

CAMERON HEIGHTS NEIGHBOURHOOD AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 14948

	Area (ha)	% of GDA
Gross Area	**127.01**	
Environmental Reserve	30.93	
Gross Developable Area	**96.08**	
Parks and Schools	9.03	9.4%
Circulation	19.22	20.0
Stormwater Management Facilities	3.43	3.6
Total	**31.68**	**33.0**
Net Developable Area	**64.40**	**67.0**
Commercial	0.56	0.5
Special Study Area	6.85	7.1
Net Residential	**56.99**	**59.3**

	Hectares	Units	% of Total Units	Population
Low Density Residential	47.58	883	64.7	3054
Medium Density Residential 1	4.1	183	13.4	545
Medium Density Residential 2	3.0	183	13.4	545
Medium Density Residential 3	2.31	116	8.5	344
Total Residential	**56.99**	**1365**		**4488**

Density: 47.34 persons per gross hectare

*** Bylaw 14948, July 23, 2008**