

# ***Ebbers Neighbourhood Area Structure Plan***

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Office Consolidation March 2006

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*Prepared by:  
Planning and Policy Services Branch  
Planning and Development Department  
City of Edmonton*

**Bylaw 14079, was adopted by Council in February 2006. In March 2006, this document was consolidated by virtue of the incorporation of the following bylaws:**

*Bylaw 14079* Approved February 27, 2006 (to adopt the Ebbers Neighbourhood Area Structure Plan)

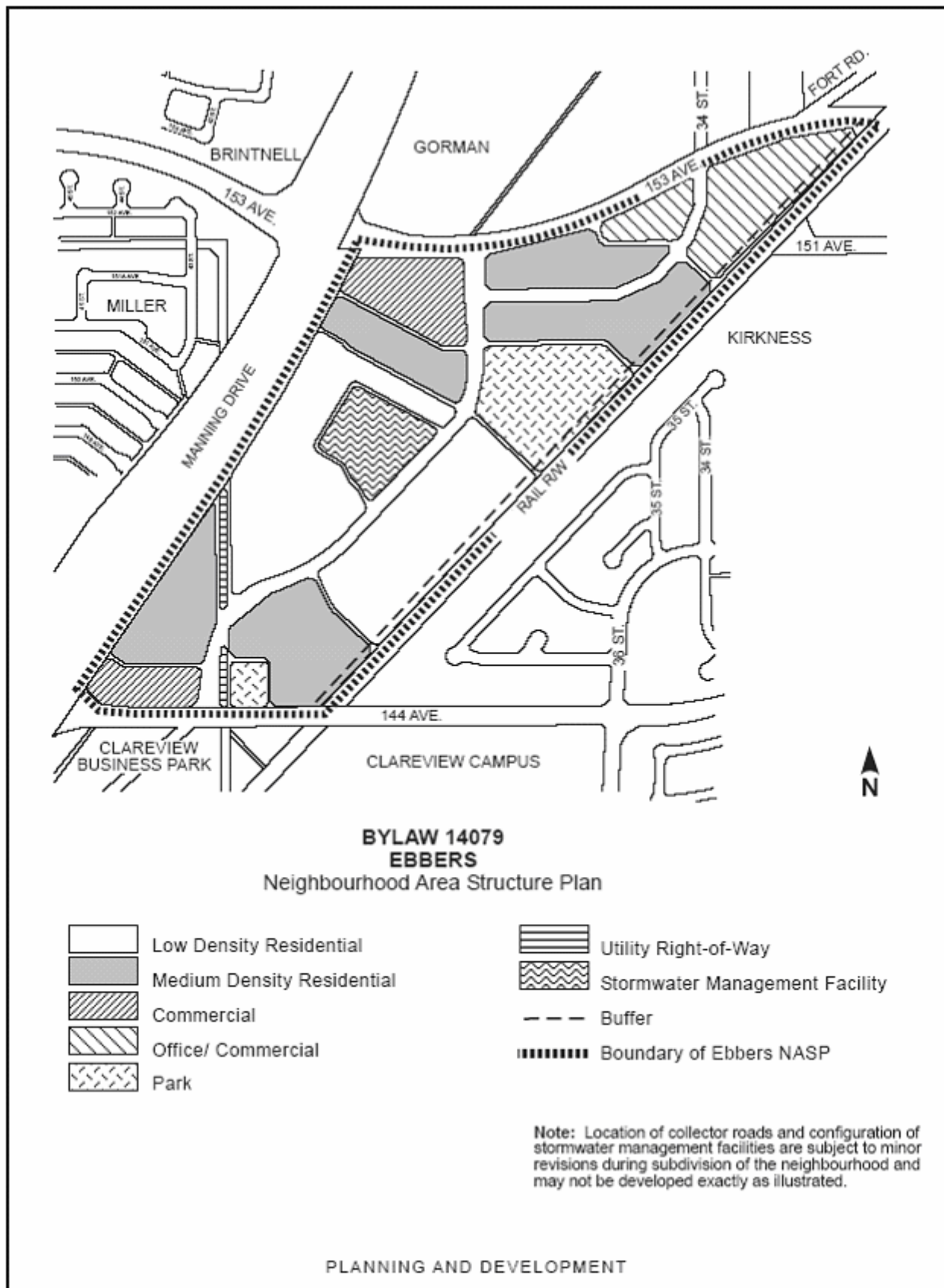
**Editor's Note:**

This is an office consolidation edition of the Ebbers Neighbourhood Area Structure Plan, Bylaw, as approved by City Council on February 22, 2006. This edition contains all amendments and additions to Bylaw 14079.

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



# EBBERS NEIGHBOURHOOD AREA STRUCTURE PLAN Bylaw 14079

Prepared for

*Three Private Corporations  
(Amended by Editor)*

by

ARMIN A. PREIKSAITIS  
& ASSOCIATES LTD.

in association with



Revised January 13, 2006

## TABLE OF CONTENTS (Amended by Editor)

---

1.0	INTRODUCITON .....	1
1.1	Purpose .....	1
1.2	Plan Area .....	1
1.3	Land Ownership .....	1
1.4	Report Organization .....	4
2.0	POLICY COMPLIANCE .....	5
2.1	Edmonton Municipal Design Principles .....	5
2.2	Suburban Neighbourhood Design Principles .....	9
3.0	SITE CPMTEXT AMD DEVELOPMENT CONSIDERATIONS .....	10
3.1	Topography, Vegetation and Soils .....	10
3.2	Phase I – Environmental Site Assessment .....	10
3.3	Existing Land Use .....	13
3.4	Surrounding Land Uses .....	13
3.5	Utility Right-Of-Ways .....	13
3.6	<i>Private Railway Corporation</i> .....	14
3.7	Access / Buffering .....	15
4.0	DEVELOPMENT CONCEPT .....	16
4.1	Development Goals .....	16
4.2	Development Objectives .....	16
4.3	Development Concept .....	17
4.4	Residential .....	17
4.5	Commercial .....	19
4.6	Office / Commercial .....	20
4.7	Parks and Open Space .....	20
4.8	Urban Design Principles .....	21

5.0	TRANSPORTATION .....	22
5.1	External Transportation Network .....	22
5.2	Internal Transportation Network .....	22
5.3	Public Transit.....	22
5.4	Traffic Impact Assessment .....	23
5.5	Pedestrian Circulation .....	23
5.6	Truck Routes .....	25
5.7	Multi-Use Trail .....	25
5.8	Parking .....	25
6.0	SERVICING.....	26
6.1	Water Distribution.....	26
6.2	Sanitary Drainage.....	26
6.3	Stormwater Drainage System .....	26
6.4	Shallow Utilities .....	26
7.0	STAGING AND IMPLEMENTATION.....	30

LIST OF FIGURES		PAGE
Figure 1.0	Location Plan	2
Figure 2.0	Plan Area	3
Figure 3.0	Site Features	11
Figure 4.0	Lands Subject to Environmental Assessment	12
Figure 5.0	Development Concept	18
Figure 6.0	Circulation System	24
Figure 7.0	Water Network	27
Figure 8.0	Sanitary Sewer	28
Figure 9.0	Storm Sewer	29
Figure 10.0	Development Staging	31

LIST OF EXHIBITS		PAGE
Exhibit 1.0	Proposed Residential Building Setback / Buffering Adjacent to Railway	15

LIST OF TABLES		PAGE
Table 1	Land Use and Population Statistics	32

## 1.0 INTRODUCTION

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### 1.1 Purpose

The purpose of the Ebbers Neighbourhood Area Structure Plan (Ebbers NASP) is to establish a general land use framework for the development and servicing for the lands, totalling 48.2 ha, located within the boundaries of the Ebbers Neighbourhood located in the northeast sector of Edmonton as shown on *Figure 1.0 - Location Plan*.

The applicants' vision for the development of the Ebbers Neighbourhood is to develop a compact neighbourhood that provides a wide range of housing choice (including low-density single detached units, duplexes, row housing and low rise apartments) in an environment that provides easy access to public transit, nearby shopping, parks and other amenities.

The Ebbers NASP has been prepared on behalf of *three private corporations*.

Amended by Editor

### 1.2 Plan Area

The Ebbers NASP area encompasses portions of N.E. 25-53-24-4; N.W. 25-53-24-4; SE 36-53-24-4; NW 30-53-23-4; SE 25-53-24-4; Blocks C, F and H, Plan 414ET; Lot A, Plan 4073NY. The area for which the NASP is being prepared is situated in northeast Edmonton. As shown on *Figure 2.0 – Plan Area*, the Ebbers NASP is defined by the following boundaries:

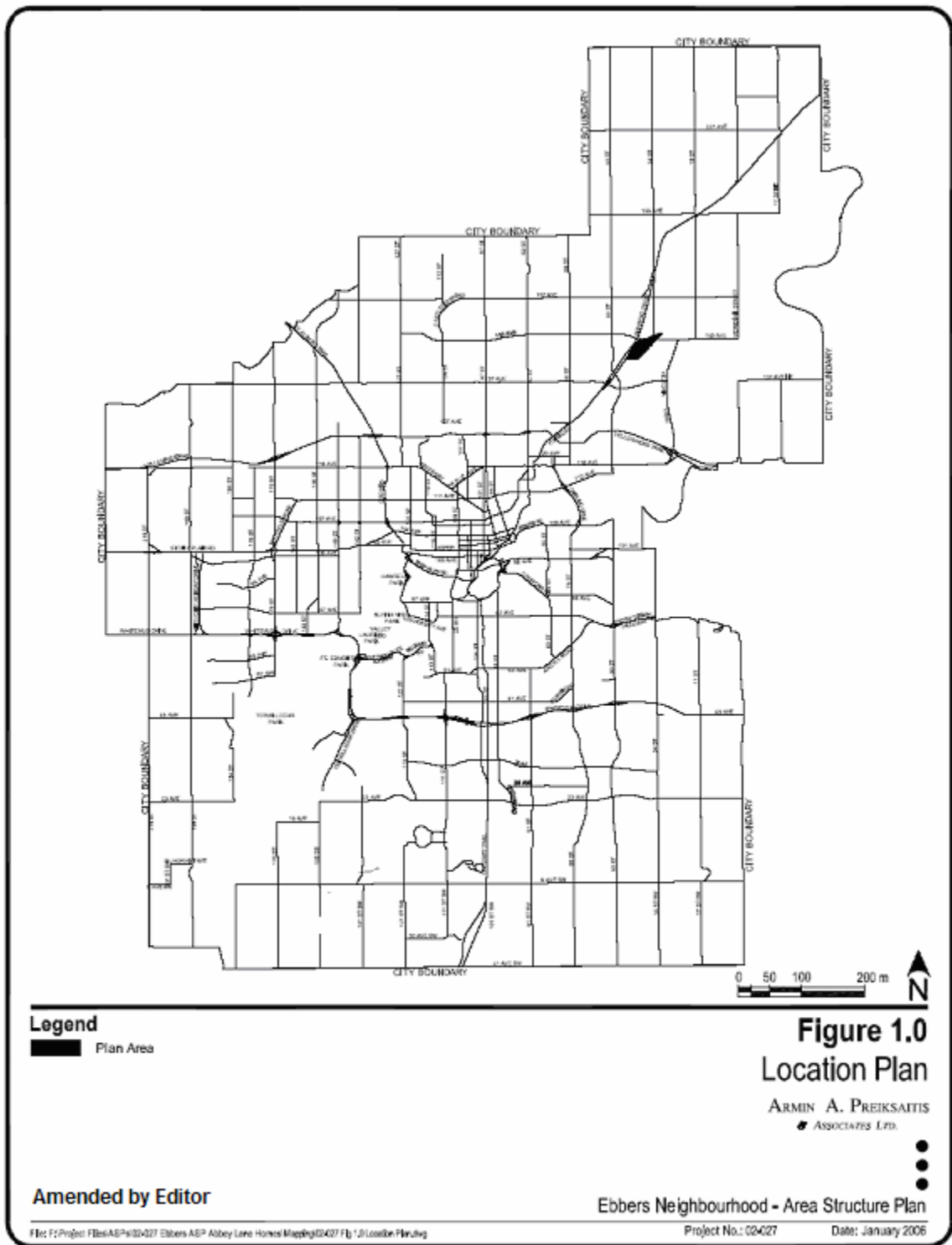
- Northern Boundary – Eastern extension of the proposed 153 Avenue.
- Western Boundary – Manning Drive.
- Eastern Boundary – *Railway* right-of-way.
- Southern Boundary – 144 Avenue.

Amended by Editor

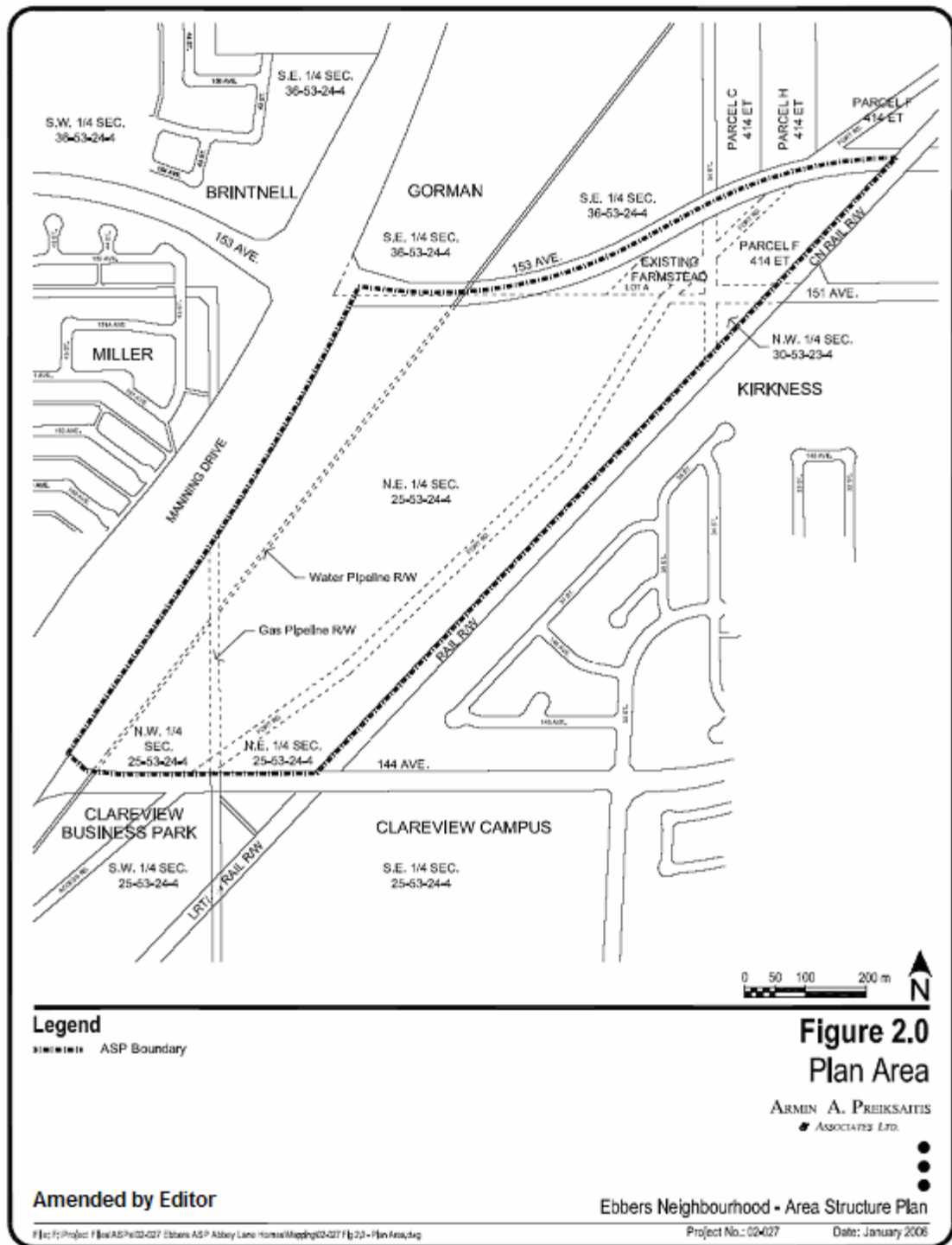
The Ebbers NASP boundaries forms a logical neighbourhood planning unit with the Miller neighbourhood to the west, Kirkness neighbourhood to the east, Clareview Campus including the Clareview Business Park to the south and the proposed 153 Avenue arterial roadway, south of the Gorman neighbourhood defining the northern limits.

### 1.3 Land Ownership

All lands within the NASP area are privately owned, with the exception of the existing Fort Road right-of-way.







## 1.4 Report Organization

The NASP is organized into seven sections. *Section 1.0 – Introduction* provides a brief introduction and background to the report. *Section 2.0 – Policy Compliance* discusses compliance with relevant planning policies of the City of Edmonton. *Section 3.0 – Site Context and Development Considerations* describes the site influences that need to be considered in formulating the development concept. *Section 4.0 – Development Concept* describes the development concept. *Section 5.0 - Transportation* describes the external and internal transportation network for the NASP. *Section 6.0 - Servicing* describes the servicing concepts for stormwater management, water distribution and sanitary drainage. Finally, *Section 7.0 – Staging and Implementation* concludes with an implementation strategy.

## 2.0 POLICY COMPLIANCE

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### 2.1 Edmonton Municipal Development Plan

Plan Edmonton's *Municipal Development Plan Bylaw 11777* (MDP), as amended, designates the Ebbers NASP area as a Suburban Area on *Map 1 – Land Development Concept*.

The Ebbers NASP complies with the following strategies in 'Managing Suburban Growth' in the MDP.

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

The Ebbers NASP area provides for a logical and compatible extension of residential uses that infills vacant land bordered by the Miller and Kirkness neighbourhoods and Clareview Campus.

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

The development concept provides for a wide range of housing choice including single detached dwellings, duplexes, row housing, and medium density apartments for residents at various stages of the life cycle.

**Strategy 1.7.3 Encourage flexibility in creating attractive and functional residential neighbourhoods and business areas.**

A higher proportion of medium density housing is proposed to respond to changing demographics and the need for affordable housing. Commercial and local employment opportunities have been incorporated in the design of the Ebbers neighbourhood.

**Strategy 1.7.4 Ensure availability and access to recreational opportunities and open spaces.**

Parks and pedestrian connections opportunities have been incorporated into the NASP. The Ebbers neighbourhood is not expected to generate sufficient student population and, considering the proximity to the existing schools within the adjoining neighbourhoods, the Edmonton Public School Boards indicated that a school site is not required. Pedestrian connections have been provided within the neighbourhood and to the Kirkness neighbourhood where a school and parks already exist.

**Strategy 1.9.2 Land or money dedicated as municipal reserve will be dedicated to the City of Edmonton to be used for schools, parks and other public recreation purposes.**

As a school site is not required within the Ebbers neighbourhood, the municipal reserve within the plan area is provided for park uses. A 4.1 ha park site is located within the central portion of the plan area as a large, active/passive park space. A smaller, passive 0.6 ha open area is located immediately north of 144 Avenue. This smaller open space will incorporate with the adjoining utility right-of-way to form a passive recreational space.

## 2.2 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.

A brief description of some of the design principles as they relate to the development concept proposed for the Ebbers neighbourhood follows.

**Design Principle 1 – *Design neighbourhoods with the intent of sharing common infrastructure and neighbourhood facilities among neighbourhoods.***

Given the size of the student population generated by the Ebbers neighbourhood, the school and other neighbourhood facilities will be shared with the adjoining neighbourhoods, particularly the Kirkness neighbourhood and Clareview Campus.

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

Edmonton Public Schools determined a school site was not required within the Ebbers neighbourhood and recommended that access for yellow buses along the main collector roadway be provided along with pedestrian connections via 153<sup>rd</sup> Avenue to the Kirkness neighbourhood. At the south entrance to the Ebbers Neighbourhood, a 0.6 ha open space provides an opportunity for entrance feature development and acts as a focal point between the plan area and Clareview Town Centre to the south as well as the Clareview Campus and Kirkness neighbourhoods.

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

The Manning Drive, proposed 153 Avenue arterial and 144 Avenue collector define the periphery of the Ebbers Neighbourhood.

**Design Principle 4 – *Design neighbourhood streets with standards that cater to the intended use of the road.***

A hierarchy of streets is provided for. As described above, two arterials and a major collector frame the neighbourhood. A new north-south collector bisects and provides the needed north-south connection. An additional collector road will run eastward from the north part of this collector, and intersect with 153 Avenue. A series of local streets would branch off from these collectors. All proposed streets will be constructed to City of Edmonton standards which include requirements for bicycle and pedestrian uses.

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

Pedestrian / bicycle connections have been provided to connect parks, the stormwater pond and transit stops within the neighbourhood. Safe pedestrian connections have also been provided to the Kirkness

neighbourhood through the use of urban design elements to create pedestrian connections that promote safety of different users (pedestrians, cyclists and vehicle-operators) within the circulation system.

**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.***

This neighbourhood will be served by bus along the collector running north and south, with transit connection to the Clareview LRT station. Bus stops can be located on 153 and 144 Avenues, and collector roads, to provide convenient walking distance to transit.

**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 existing school and park in Kirkness will complement the parks and open spaces being proposed in the Ebbers neighbourhood. In the early stages of development, the large central park site will be dedicated, with the smaller southern site anticipated in the following stage. Final design and programming of these spaces is the responsibility of the City of Edmonton Community Services Department in consultation with the community.

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

Park space and the proposed stormwater pond provide focal points for the neighbourhood through enhanced connectivity and accessibility.

**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.***

A smaller park space is proposed along with pedestrian walkway connections north of 144 Avenue at the south entrance to the site. These connections will provide access between this park, the proposed stormwater pond, and the large central park site.

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

There are no churches or school sites proposed within the NASP area. The area around the stormwater management facility provides opportunities for passive recreation uses. The central park site could accommodate a future Community League component, if required, in addition to active and passive recreational uses.

**Design Principle 11 – *Create a linked open space system through open spaces created by storm water management facilities, some utility right-of-ways, preservation of appropriate natural areas and drainage courses, and school and park open spaces.***

Pedestrian connections are planned integrating walkways, utility right-of-ways, the stormwater pond and park.

**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 have been designated in the neighbourhood adjacent to collector roadways and close to the community and neighbourhood focal points.

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

Alternative stormwater management techniques have not been identified. The Stormwater Drainage System proposed through the plan is the result of consultation with the Drainage Services Branch of the Asset Management and Public Works Department.

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

This principle can be considered at the subdivision and engineering design stage.

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

A range of residential densities has been proposed throughout this neighbourhood consistent with sustainable development practices and in keeping with the City's recent *Smart Choices Project*, which promotes more compact intensification of development.

**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 were based upon factors obtained from the City of Edmonton Planning and Development Department in keeping with principles set out in Edmonton's *Suburban Neighbourhood Design Principles*.

## 2.3 Smart Choices Initiative

In March 2004, City Council approved the *Smart Choices Initiative* intended to manage growth and preserve the quality of life in Edmonton.

A brief description of these initiatives as they relate to the development concept proposed for the Ebbers neighbourhood follows.

**Transit Oriented Development** – *Encouraging the development of housing and businesses areas close to key transit stations will give residents and visitors convenient transit access with less reliance on the use of a private automobile to meet daily needs.*

The Ebbers Neighbourhood is located north of the existing Clareview LRT station, providing access to downtown, the University of Alberta, and all transit centres in between. This neighbourhood will be served by bus along the collector running north and south, with transit connection to the Clareview LRT station. Bus stops can be located on 153 and 144 Avenues, and collector roads, to provide convenient walking distance to transit.

**Urban Design** – *Urban design guidelines will be developed to shape the look, feel, and function of new buildings and public spaces.*

Refer to section 4.8 *Urban Design Principles*

**Walkable City** – *The City will look at areas where sidewalks or pathways are missing or deteriorated, and develop financing strategies to upgrade these areas. Making new communities walkable will also be considered.*

Pedestrian connections are intended to link activity nodes and park spaces within the neighbourhood and provide safe pedestrian connections to the Kirkness neighbourhood school site. Convenient and safe pedestrian access to the public transit route along the main collector roadways is also to be provided. This access will be provided, from the residential areas not directly adjacent to the collector roadways, by trails and PUL lots which will connect to the sidewalks along the roadways.

## 3.0 SITE CONTEXT AND DEVELOPMENT CONSIDERATIONS

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### 3.1 Topography, Vegetation and Soils

The Plan area is relatively flat with no significant topographic variation. The land slopes gradually away from Manning Drive on the west and drains gradually to the *railway* right-of-way. Site contours and elevations range from 658m to 651m.

Amended by Editor

Most of the Plan area has been cleared for agriculture. The Community Services Department advises that there are no natural tree stands, as identified in the City of Edmonton's *Inventory of Environmentally Sensitive and Significant Natural Areas* (1993), within the proposed NASP area. Community Services Forestry Section appraised existing tree stands and indicated that although it may be desirable to save some of the natural vegetation, where feasible, it would not be mandatory. Specifically noted was a wooded area (an existing tree stand) in the upper northeast portion of the NASP area which could be utilized as part of the buffer along the *railway* right-of-way, if feasible. The opportunity to utilize the existing tree stand will be analyzed at the subdivision and development permit stages. The City's Corporate Tree Management policy would apply to existing trees located within the existing Fort Road right-of-way.

Amended by Editor

Soils in the NASP are classified as Eluviated Black to Orthic Black Chernozemic soils. The majority of the Plan area is well drained and does not present any serious limitations to servicing and development. Refer to *Figure 3.0 – Site Features*.

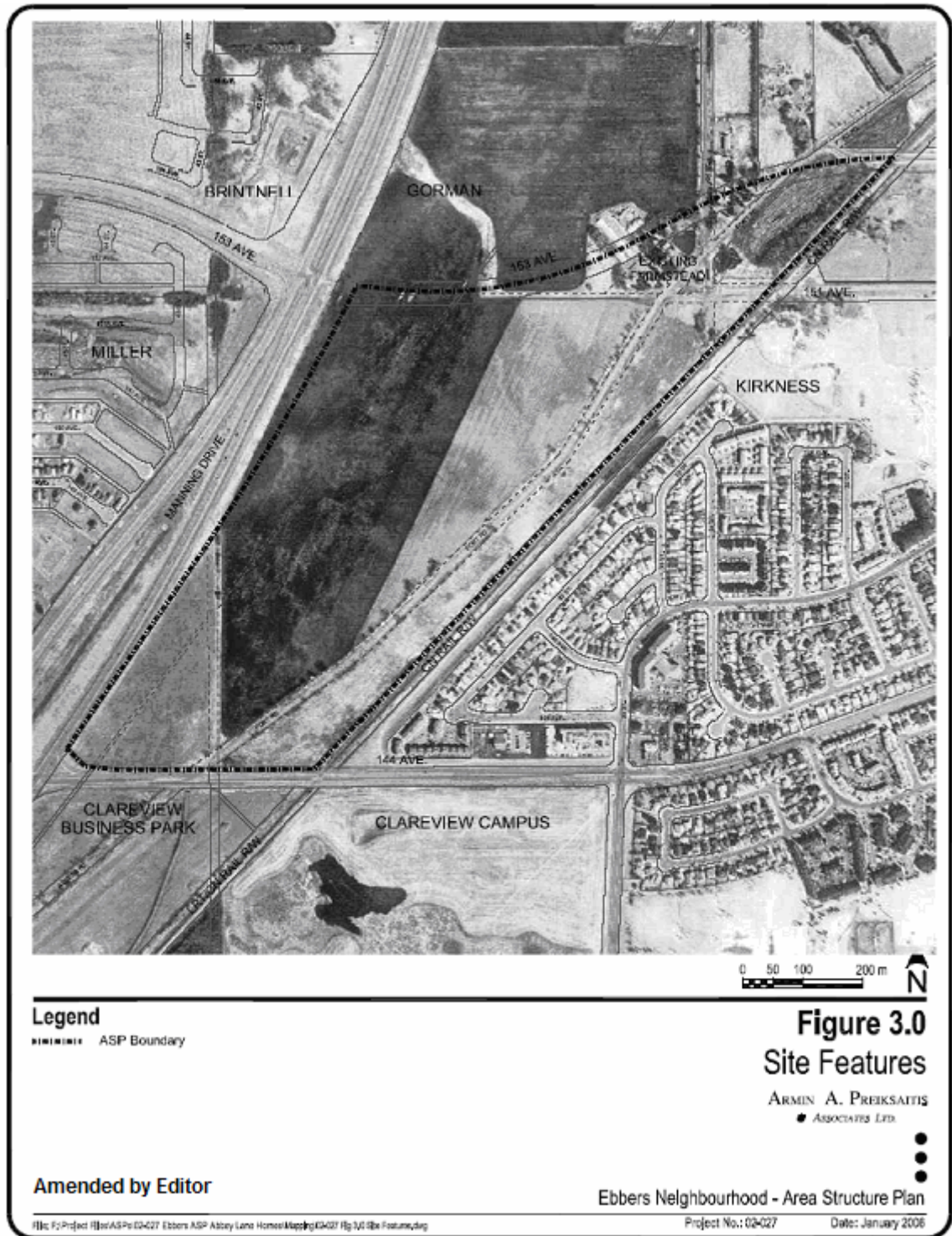
### 3.2 Phase I – Environmental Site Assessment

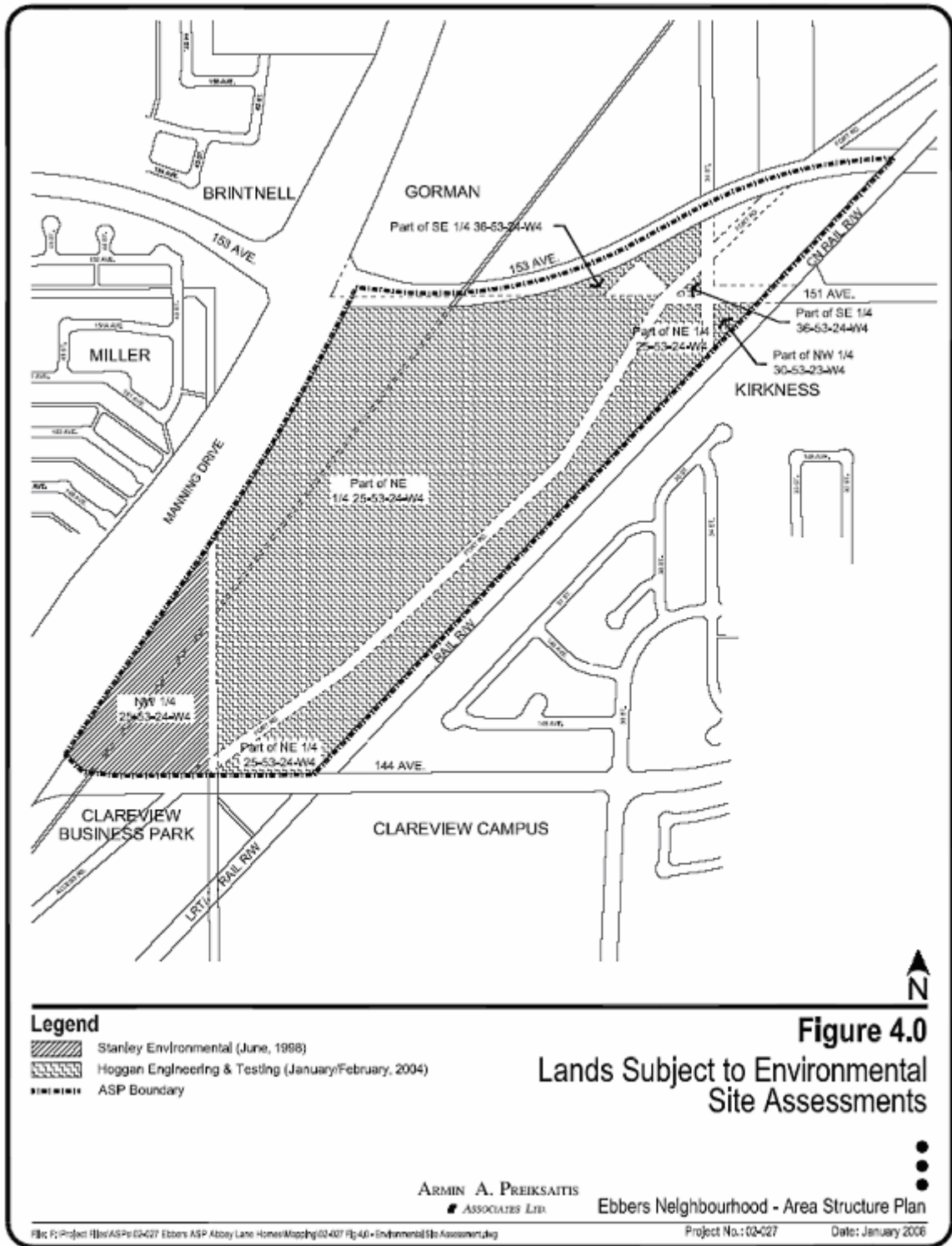
Phase I – Environmental Site Assessments (ESA) have been carried out for lands identified on *Figure 4.0 – Lands Subject to Environmental Site Assessments*. Hoggan Engineering and Testing Ltd. performed an ESA - Phase I, January/February 2004, on part of the NE 25-53-24-4, with small areas within SE 36-53-24-4 and NW 30-53-23-4 of the planning area. The ESA - Phase I research revealed most of the study area had been agricultural land. Two areas of environmental concern were identified in this report. A former service station was located within one of the lots, located east of the intersection of Fort Road and 34 Street. It is known that the building has been removed, however there was no information regarding the number and size of the former underground fuel tank(s) that were located at the site, or if they had been removed when the service station portion of the site was discontinued, approximately 35 years ago. Moreover, to the south-west of the intersection of 153 Avenue and 34 Street, a former AST fuel storage site was found. Based on the available information, the risk of potential environmental impact on both of these sites are considered to be high and therefore, both locations will require further testing (ESA Phase II) at the rezoning stage. The other properties in the Hoggan Engineering study were considered low risk for any environmental contamination.

Stanley Environmental was retained by a *private corporation* to conduct a Phase I ESA, June 1998, on the three parcels of property located at NW 25-53-24-4, Lot A, Plan 8422557, and Plan 8822879, near Manning Drive and 144 Avenue. The property consists of three adjacent parcels of undeveloped and agricultural land. Based on a review of the information obtained in this ESA Phase I, no areas of potential environmental concern were identified within these properties.

Amended by Editor







At the rezoning stage, ESA Phase II will be required for areas where risks of potential environmental impact are high.

Additionally, at the rezoning stage, areas not included in the submitted ESA Phase I, as shown in *Figure 4.0 – Lands Subject to Environmental Site Assessments*, will require testing. These areas are identified as Office Commercial in the northeast portion of the neighbourhood, as illustrated in *Figure 5.0 - Development Concept*.

### 3.3 Existing Land Use

Most of the land within the Plan area is currently being used for agricultural purposes. An existing farmstead is located in the northwest part of the NASP area.

### 3.4 Surrounding Land Uses

On the west side of the Manning Drive is the Miller neighbourhood, which is currently being developed as a residential area.

To the east of the *private corporations'* railway tracks is the established residential neighbourhood of Kirkness.

Amended by Editor

South of 144 Avenue is the Clareview Campus, which is developing a mixed commercial / higher density residential neighbourhood containing the Clareview LRT Station.

North of the proposed 153 Avenue roadway is the Gorman neighbourhood, currently predominantly in agricultural uses and is planned for Business Employment Area uses.

### 3.5 Utility Right-Of-Ways

Several utility right-of-ways traverse the Plan area as shown in *Figure 2.0 – Plan Area*.

Epcor has a high-pressure waterline (Plan 792 JY) running through the Plan area in a north-south direction roughly parallel with the Manning Drive. This is the water supply line for Alberta Hospital. It will be strategically abandoned with development within the area. Water supply to the hospital will be maintained at all times.

A *private corporation* also has a pipeline (Plan 3604 HW) running in a north-south direction through the south part of the Plan area. Development adjacent to the pipeline will be in accordance with the City of Edmonton guidelines for pipeline corridors pertaining to development setbacks, fencing and surface disturbance. This utility right-of-way provides the opportunity to be part of the open space and neighbourhood walking system forming logical pedestrian linkages.

Amended by Editor

A gas pipeline right-of-way (Plan 922 0295) runs in an east-west direction parallel to the 153 Avenue road right-of-way at the north end of the Plan area.

### 3.6 *Private Railway Corporation*

Amended by Editor

Due to the proximity of the *railway* right-of-way and the planned residential development, Bel MK Engineering Ltd. prepared a risk assessment report to consider the potential risks associated with the proposed Ebbers neighbourhood adjacent to the *railway* right-of-way. The Risk Assessment Report was reviewed by the Emergency Response Department. The following is a summary of findings from the risk assessment report and the comments from the Emergency Response Department.

- Information from *the Railway* indicates that no incidents/accidents have occurred along this section of rail line. Historical data suggests that the likelihood is low of an incident/accident occurring along the *railway* right-of-way.
- The probability of an accident/incident with trains or their contents is  $5.5 \times 10^{-3}$  per year, which is equivalent to one incident in every 182 years, from a statistical viewpoint.
- There are rail crossings bordering the northern and southern boundary of the Ebbers neighbourhood. The data indicates a greater number of accidents/incidents occurring at railway crossings rather than along rail lines.
- The proposed Ebbers Neighbourhood, at the detailed design stage, will consider the most up to date recommendations of Canadian National Railway for "*Residential Development Adjacent to the Railway Right-of-Way (Principle Branch Line)*" and include acceptable protective measures.

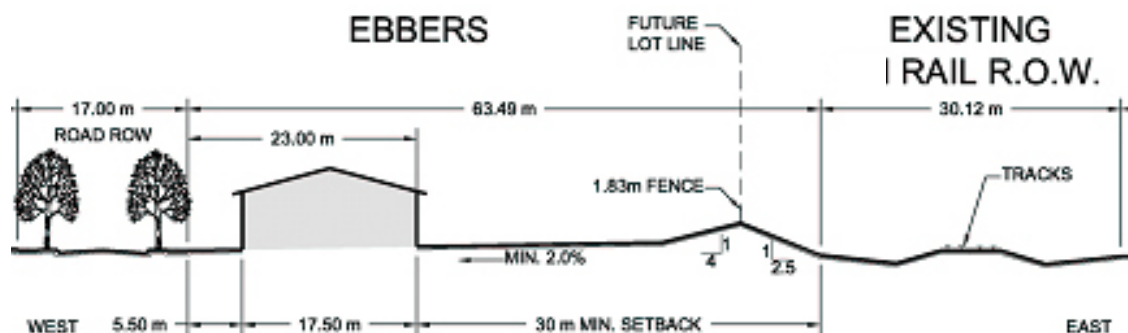
The Ebbers neighbourhood is bounded on the east by the *rail line*. *Exhibit 1.0 – Proposed Residential Building Setback / Buffering Adjacent to Railway* illustrates the railway setback proposed for the Ebbers neighbourhood. Development will be in accordance with *Railway* recommendations requiring a 30 m building setback from the existing rail right of way to residential buildings for noise attenuation and security. Where medium density development sites are located adjacent to the *railway* right-of-way, in addition to maintaining the 30 m building setback from the existing right-of-way to the residential development, other mitigation measures to reduce the impact of noise and safety concerns at the development permit application stage will be considered (e.g. landscaping, siting of parking areas if required, architectural treatment of buildings, etc.). The buffering proposed along the *rail line* consists of a 2.0 m high earthen berm topped with a 1.83 m fence, constructed entirely outside of *Railway* property. Upon construction of the berm and fence, ownership of the land on the east side of the fence will be transferred to *the Railway* and consolidated with the *railway* right-of-way. An agreement would be entered into with the *Railway* to provide stormwater management on the east side of the berm next to the railway tracks. A minimum height differential of 4.5 m will be retained between the top of the rail and the top of the fence. It should be noted that the proposed setback adheres to current *Railway* recommendations pertaining to buffering and setbacks for residential development adjacent to rail lines.

Amended by Editor

A 15 m buffer between the existing rail right of way and abutting non-residential buildings is recommended for noise attenuation and safety. Berming and fencing is the same as described above for residential development abutting the rail line. Upon construction of the berm and fence, ownership of the land on the east side of the fence will be transferred to *the Railway* and consolidated with the *railway* right-of-way. An agreement would be entered into with the *Railway* to provide stormwater management on the east side of the berm next to the railway tracks. An existing tree stand, in the upper northeast portion of the NASP area, could be considered for integration into the buffer along the *railway* right-of-way at the subdivision stage, if feasible.

Amended by Editor

### *Exhibit 1.0 – Proposed Residential Building Setback / Buffering Adjacent to Railway*



Private property lines extend to this buffer and the rear yards of houses back on to the buffer providing opportunities for natural observation and access control in this area. This is in accordance with considering first generation, or physical, CPTED (Crime Prevention Through Environmental Design) principles.

In addition to the above, it is noted that the existing *railway* right-of-way is of sufficient width to accommodate LRT tracks should the existing LRT line be extended north of the Clareview Station. It is not anticipated that there would be an LRT Station within the Ebbers Neighbourhood.

Amended by Editor

## **3.7 Access / Buffering**

No direct access will be provided to the Plan area via the Manning Drive. Access to the project area will be provided via 144 Avenue and the proposed 153 Avenue roadway. Most access will be provided from the internal roadways. Due to the role and function of 144 Avenue and 153 Avenue, limited access to these east-west corridors will be provided.

At the subdivision application stage, the developer will prove to the satisfaction of the City that the projected noise levels in outdoor amenity spaces for residential development will not exceed the standards outlined in the City of Edmonton Urban Traffic Noise Policy (C506). This policy requires that the developer proves, to the satisfaction of the City, that the projected noise level in outdoor amenity areas will not exceed 60 dBA Leq<sub>24</sub>. Specific site characteristics, such as topography or existing land uses, may necessitate the consideration of relief from the requirement. Under these circumstances, the attenuated noise level in outdoor amenity areas should be the lowest level technically and economically practicable with an objective of up to 65 dBA Leq<sub>24</sub>.

Additionally, for residential developments without outdoor amenity areas, or for residential development of three storeys or more, where the incident sound level at the façade of any dwelling unit exceeds 60 dBA Leq<sub>24</sub>, the developer will endeavour to achieve the projected interior noise level of 45 dBA Leq<sub>24</sub> outlined in the City of Edmonton Urban Traffic Noise Policy. Funding and construction of any noise attenuation measures will be provided by the developer.

At a minimum, the City will require that the developer construct a 1.0 m berm and a 1.8 m double boarded solid screen fence for all residential development adjacent to Manning Drive and 153 Avenue.

## 4.0 DEVELOPMENT CONCEPT

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*Figure 5.0 – Development Concept* illustrates future land uses proposed for the Ebbers NASP area. Land Use and Population Statistics are found on *Table 1* at the end of the NASP document.

### 4.1 Development Goals

The main goals of the Ebbers NASP are to:

- Establish a general land use framework for the development and servicing for the lands located in the northeast sector of Edmonton as shown on *Figure 1.0 - Location Plan*.
- Develop a compact neighbourhood that provides a wide range of housing choice (including low-density single detached units, duplexes, row housing and low rise apartments).
- Develop an environment that provides easy access to public transit, nearby shopping, parks and other amenities.

### 4.2 Development Objectives

The main objectives of the Ebbers NASP are to:

- Provide for the design of a compact and pedestrian friendly residential community with a wide range of housing choices.
- Provide for convenient pedestrian and bicycle access to connect parks, open space systems and transit stops within the neighbourhood.
- Establish the parks and open space system as a focal point of the community by promoting interconnectivity and a sense of place.
- Be responsive to both natural and man-made constraints in making the plan feasible and economically viable.
- Integrate, where feasible, natural areas and features such as tree stands and wetlands.
- Comply with the intent and policies of the City of Edmonton Municipal Development Plan, the Smart Choices Initiatives and the Suburban Neighbourhood Design Principles, as explained in Section 2.0 – Policy Compliance.



## 4.3 Development Concept

The objectives and goals are reflected in the development concept in the following ways:

- The development concept provides a continuum of housing choice including low-density single detached units, duplexes, row housing and low rise apartments consistent with the concept of sustainability by providing for the needs of various age groups and incomes.
- The development concept provides for good connectivity within and to adjacent neighbourhoods by private automobile, transit, and on foot.
- Man-made constraints such as proximity to the *private corporate* railway and Manning Drive have been addressed through the arrangement of land uses and buffering as explained in Section 3.6 – *Private Corporate* Railway.
- Local amenities such as the neighbourhood park and stormwater management facility provide a focal point and amenity for the enjoyment of local residents.

Amended by Editor

The development concept has taken into account and reflected the City of Edmonton's *Suburban Neighbourhood Design Principles* and *Smart Choices Initiatives* where possible.

## 4.4 Residential

A mixture of medium and low-density development is to locate in the Ebbers Neighbourhood to provide a major infill opportunity. A more compact, higher density development is being proposed given its good accessibility to a well-developed roadway network, good transit service, including LRT, and community facilities such as the Health Centre and North Division Police Station. Population generation statistics can be found in *Table 1 – Land Use and Population Statistics*.

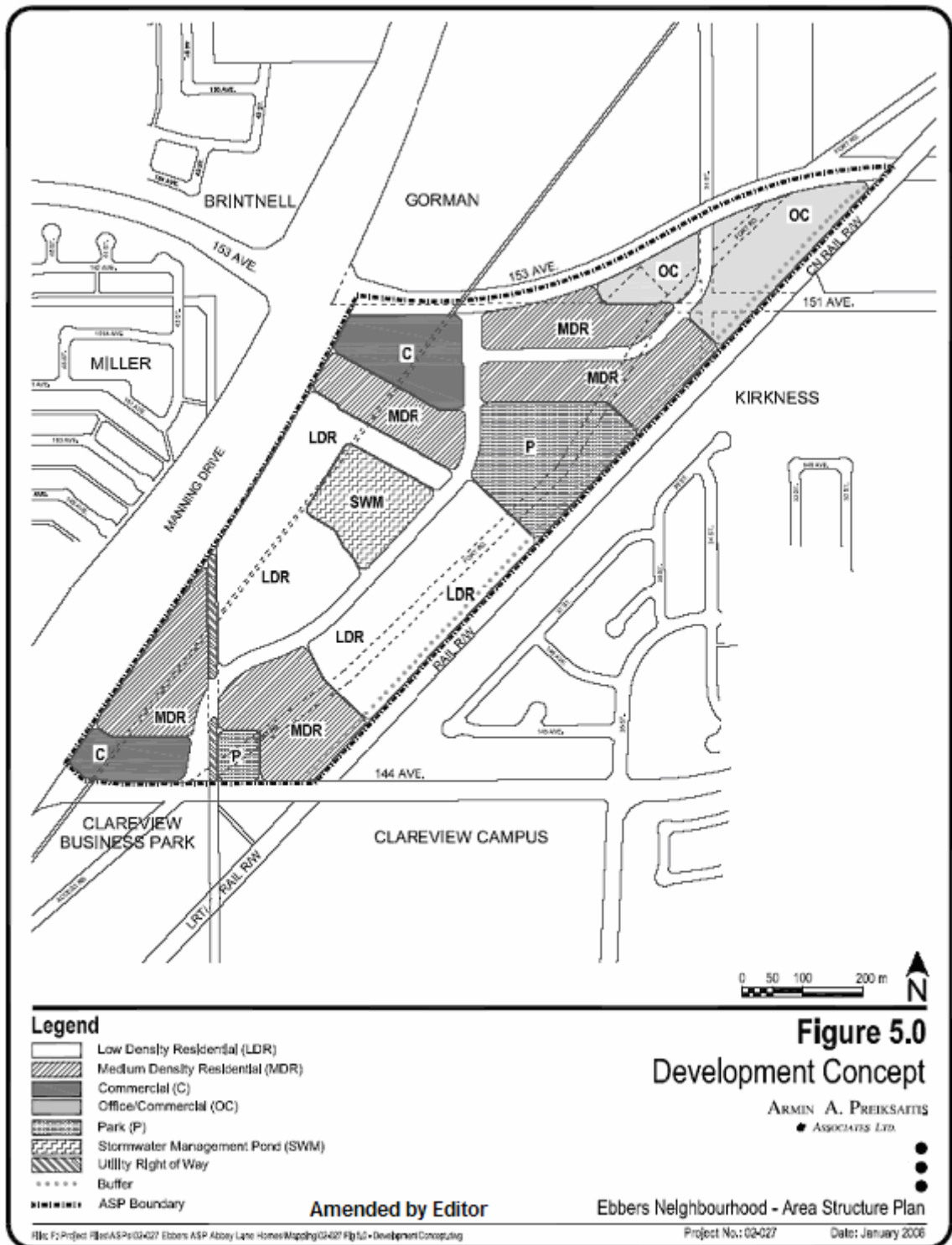
### Low Density Residential

Within the low density residential areas identified in the NASP, housing forms would include single and semi-detached housing. Low Density Residential housing is expected to consist of 23.6% of the total residential units proposed for this area. The low density residential uses are located within the central portion of the neighbourhood.

At the subdivision application stage, low density residential lots along the collector roadway will be either designed with lanes or oriented along local roadways running perpendicular to the collector roadway prohibiting housing design with driveway access directly onto the collector roads.

Buffering adjacent to the *private corporate* railway is described in Section 3.6 – *Private Corporate* Railway. To allow for the implementation of the required minimum of 30 m building setback between the existing *railway* right-of-way and abutting residential buildings, all residential lots located adjacent to the *railway* right-of-way shall be developed under (DC2) Direct Control Provisions to accommodate the buffering requirements.

Amended by Editor





## Medium Density Residential

Medium density residential development would include row housing and low rise apartment buildings. Medium density housing sites have been located near the major collector roadway and amenities (such as parks, public utility corridor and the commercial uses) to allow for appropriate land use transitions and ensure maximum exposure and access to these features. In some cases the medium density residential areas also serve as a transitional land use in portions of the Plan area between commercial and low-density residential areas.

Medium density residential development is expected to consist of 76.4% of the total residential units proposed in this area. The medium density residential sites will provide appropriate transition between the low density residential areas and the commercial, or commercial/office uses south of 153<sup>rd</sup> Avenue. On the east side of the collector, a major parks space and local roadways provide for substantial separation between the medium density residential sites and low density residential areas. On the west side of the collector, the medium density residential and low density residential areas will be separated by a local roadway and a utility right-of-way corridor.

The requirements of buffering, as specified in the Sections 3.6 and 3.7 of the NASP, will be provided between Manning Drive, 153 Avenue, and medium density and low density residential areas to mitigate both local noise and visual imprint. Buffering or building setbacks are required between the *railway* tracks and residential and commercial developments. To allow for the implementation of the required minimum of 30 m building setback between the existing *railway* right-of-way and abutting residential buildings, all residential lots located adjacent to the *railway* right-of-way shall be developed under (DC2) Direct Control Provisions to accommodate the buffering requirements.

Amended by Editor

Off-street parking for Medium Density Residential Development and Commercial uses will be provided in accordance with the regulations set out in the City of Edmonton Zoning Bylaw. To mitigate potential traffic and parking impacts resulting from the Medium Density Residential Development and their proximity to the Commercial uses in the Ebbers neighbourhood, no relaxation to the parking requirements shall be allowed for either the Medium Density Residential Development or Commercial uses.

## 4.5 Commercial

### District Shopping Centre

A district level shopping centre is to locate at the southeast corner of the intersection of Manning Drive and 153 Avenue to serve the Ebbers neighbourhood as well as neighbourhoods to the east, once the extension of 153 Avenue is completed. This location offers good visibility of the site and easy all-directional access can be provided from the north-south collector for both public transit and private automobiles. Locating commercial development at the outer boundaries of the development and adjacent to major roadways reduces the volume of through traffic within the neighbourhood.

## Neighbourhood Commercial

A future neighbourhood commercial site is to locate at the northeast corner of the intersection of Manning Drive and 144 Avenue to provide convenience-oriented services such as dry cleaning, convenience store, gas bar, etc. Easy all-directional access can be provided via the collector roadway for both public transit and private automobiles. This location also provides a high level of exposure.

Off-street parking for Medium Density Residential Development and Commercial uses will be provided in accordance with the regulations set out in the City of Edmonton Zoning Bylaw. To mitigate potential traffic and parking impacts resulting from the Medium Density Residential Development and their proximity to the Commercial uses in the Ebbers neighbourhood, no relaxation to the parking requirements shall be allowed for either the Medium Density Residential Development or Commercial uses.

## 4.6 Office / Commercial

As shown on *Figure 5.0 – Development Concept*, a business commercial area is to locate in the northeast part of the NASP area oriented to 153 Avenue. The Office / Commercial areas provide for the development of low intensity commercial, office and service uses, and businesses that require a location with good visibility and accessibility along, or adjacent to, major public roadways. Development shall be sensitive and in scale with any surrounding residential neighbourhood. The range of uses could include office, retail, automotive uses, entertainment, and institutional and civic uses.

Off-street parking for Medium Density Residential Development and Commercial uses will be provided in accordance with the regulations set out in the City of Edmonton Zoning Bylaw. To mitigate potential traffic and parking impacts resulting from the Medium Density Residential Development and their proximity to the Commercial uses in the Ebbers neighbourhood, no relaxation to the parking requirements shall be allowed for either the Medium Density Residential Development or Commercial uses.

Buffering adjacent to the *private corporate* railway is described in Section 3.6 – *Private Corporate* Railway. To allow for the implementation of the required minimum of 15 m building setback between the existing *railway* right-of-way and abutting non-residential buildings, all office/commercial lots located adjacent to the *railway* right-of-way shall be developed under (DC2) Direct Control Provisions to accommodate the buffering requirements.

Amended by Editor

## 4.7 Parks and Open Space

The Ebbers neighbourhood is not expected to generate sufficient student population and, considering the proximity to the existing schools within the adjoining neighbourhoods, the Edmonton Public School Boards indicated that a school site is not required. A 4.1 ha Neighbourhood Park is located in the central portion of the neighbourhood to accommodate play fields and other active/passive recreation facilities. This park will be served by a collector road and a local roadway located immediately to the south to allow for enhanced visibility and accessibility.

Additionally, a 0.6 ha smaller passive park space provides an opportunity for creating a focal point between the plan area and Clareview Town Centre to the south as well as the Clareview Campus and Kirkness neighbourhoods. This space, when combined with the existing pipeline right-of-way, forms an open area totalling 0.8 ha. Future pedestrian connections and park development on the utility right-of-way (including the portion adjoining a smaller passive park site north of 144 Avenue), would require consultation and approval by *the private corporation (gas pipeline)* at the subdivision stage of development.

Where possible, future development should integrate and retain existing tree stands into required open space dedication.

## 4.8 Urban Design Principles

Urban design principles that should be considered at the subdivision design stage include the following:

- Provide for different residential dwelling types and densities.
- Provide opportunities for focal points, green spaces, and gateways.
- Encourage development and design treatments that result in the design of attractive and functional open spaces.
- Consider Crime Prevention Through Environmental Design principles at the subdivision planning stage.
- Promote walkability by creating functional, safe, and attractive pedestrian environments with architectural features.
- Provide the full 10% Municipal Reserve dedication for active and passive parks and recreation opportunities.
- Incorporate the park site located immediately north of 144 Avenue for passive recreational/open space opportunities for the neighbourhood.

## 5.0 TRANSPORTATION

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*Figure 6.0 – Circulation System* shows the existing and proposed roadway system and pedestrian connections.

### 5.1 External Transportation Network

The following describes the existing and future external transportation system:

- Manning Drive is a major arterial with a four lane divided cross-section. Signalized intersections exist at 144 Avenue and 153 Avenue. There are no plans to widen Manning Drive except where channellization is required at future intersections.
- 153 Avenue will initially be constructed as a two lane arterial roadway east of Manning Drive. 153 Avenue will be upgraded to a four lane arterial when volumes exceed required thresholds for twinning.
- 144 Avenue is an east-west collector. It has been constructed to a higher standard four-lane divided collector.

The spine collector road as shown in the Ebbers NASP area will align across 144 Avenue with the future collector road to be constructed in the Clareview Town Centre area. This alignment, at a single intersection aligning with the collector road location put forward in the Ebbers NASP, has been identified in an amendment submitted for the existing Clareview Town Centre NASP.

### 5.2 Internal Transportation Network

A new north-south collector roadway is to connect 144 Avenue with the proposed 153 Avenue arterial to the north. It is proposed that this north-south collector will replace the existing Fort Road, a portion of which is proposed to be closed. An additional minor collector roadway will connect eastward from the north-south collector to 153 Avenue through the medium density residential and office commercial areas to 153 Avenue. Public Transit will be routed on these collector roadways. The balance of the neighbourhood's roadways will be made up of local streets feeding off the north-south collector.

The Ebbers area will be subject to an Arterial Road Assessment (ARA) to cost share the arterial roadways required to service the area. An ARA will be set up subsequent to the approval of the Ebbers NASP. The Ebbers area will likely be combined with the Gorman area to form the ARA catchment area. In general terms, the ARA to be set up will include 153 Avenue, 167 Avenue, and 34 Street within the limits of the Ebbers and Gorman areas.

### 5.3 Public Transit

The Ebbers neighbourhood has been designed to accommodate future transit service. Transit service will be provided along the adjacent arterial roadways and on internal collector roadways, including the proposed north-south collector from 144 Avenue, and along the east-west collector to 153 Avenue.

As shown on *Figure 6.0 – Circulation System*, any part of the Ebbers neighbourhood will be within a 400 m walking distance to a bus route when the site is developed.

Also shown on *Figure 6.0 – Circulation System*, currently public transit service exists on both Fort Road and 144 Avenue with existing transit stops located on Fort Road at approximately 151 Avenue and on 144 Avenue immediately west of the proposed collector roadway. The existing transit service will remain operating along Fort Road until the major north-south collector road is completed in Stage 3. Upon the development of Stage 3, the north-south collector road will be in place and the existing transit services on Fort Road would be re-routed to the proposed collector roadway.

An additional transit stop be provided by the developer on Fort Road south of 151 Avenue to serve the Ebbers NASP until such time as the new north/south collector roadway is constructed and available for transit use. This transit stop will include:

- Upgrades to the roadway shoulder on Fort Road
- Addition of a Transit shelter
- Construction of a paved walkway connection including walkway lighting.

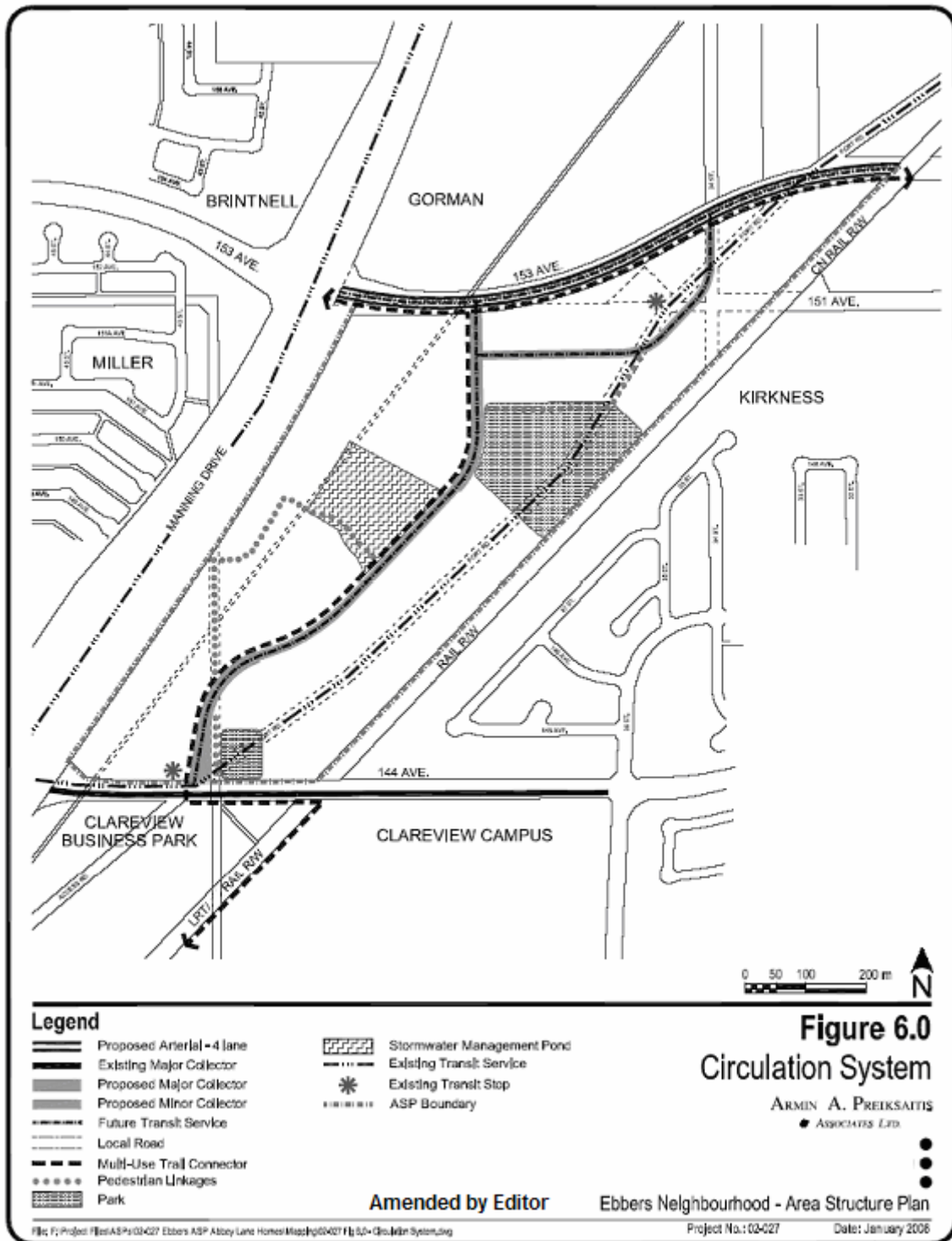
## 5.4 Traffic Impact Assessment

A Traffic Impact Assessment (TIA), dated April 2005, was conducted by Bunt & Associates Ltd. Based upon the anticipated traffic flows, it has been determined that the north-south spine road should be developed as a major collector roadway generally between the utility right-of-way and 144 Avenue and between the medium density residential development area south of the north commercial precinct and 153 Avenue. This level of roadway development is anticipated to be sufficient to accommodate the combination of commercial and residential traffic demands at the commercial site access intersections with the north-south spine road and the intersections of the north-south spine road with 144 Avenue and 153 Avenue. A 24 m wide right-of-way accommodating a 14.5 m carriageway should be considered through these segments.

Along the remainder of the north-south spine road, a basic two-lane minor collector roadway would accommodate anticipated residential traffic demands. The east-west collector that links the north-south spine road and 153 Avenue in the northern sector of the neighbourhood should be developed as a minor collector roadway. Additional widening of the right-of-way beyond a 24 m wide right-of-way to accommodate median development could be considered if deemed desirable for marketing purposes.

## 5.5 Pedestrian Circulation

Pedestrian circulation has been shown conceptually on *Figure 6.0 – Circulation System*. It is intended to link various activity nodes and parks spaces within the neighbourhood and provide safe and attractive pedestrian connections to the Kirkness neighbourhood school site. The open space areas (including utility right-of-way, stormwater management facility, and parks) should be integrated into an efficient and logically-staged pedestrian walkway system. Safety of the users of the walkway system should be promoted through incorporation of appropriate urban design elements. Pedestrian connections have also been conceptually shown to provide for easy access to the public transit route along the main collector roadways.



## 5.6 Truck Routes

The following truck routes currently exist along arterial roadways adjacent to and through the plan area:

- Manning Drive is designated as a Dangerous Goods Route;
- 144 Avenue is designated as a Restricted Truck Route (truck route between 7:00 AM and 10:00 PM Monday to Saturday inclusive) between Manning Drive and Fort Road;
- Fort Road is designated as a Restricted Truck Route (truck route between 7:00 AM and 10:00 PM Monday to Saturday inclusive) between 144 Avenue and 153 Avenue, and;
- 153 Avenue is designated as a Restricted Truck Route (truck route between 7:00 AM and 10:00 PM Monday to Saturday inclusive) between Fort Road and 18 Street.

It is anticipated that upon the completion of the Ebbers Neighbourhood that the truck route designation which currently exists along Manning Drive will remain in place. 153 Avenue will be designated as a Truck Route between Manning Drive and 18 Street. Truck route designations for Fort Road and 144 Avenue will be removed with the elimination of Fort Road.

For requirements of noise attenuation measures to be undertaken, refer to Section 3.7.

## 5.7 Multi-Use Trail

The Multi-Use Trail Corridor Study identified a multi-use trail connector through the Ebbers area. A multi-use trail will be provided along the west side of the Spine Road from 144 Avenue to 153 Avenue. To allow for the trail development, the road right-of-way will be widened along the minor collector portion of the Spine Road to a minimum of 22 m of right-of-way. The increased road right-of-way will allow for the development of a boulevard walk on the east side and a multi-use trail on the west side of the spine road. A multi-use trail will also be constructed on the south side of 153 Avenue, when the roadway is constructed.

A multi-use trail connection is to be provided on the south side of 144 Avenue, connecting Ebbers to the planned pedestrian corridor east of the *railway* right of way in Clareview Town Centre. This connection will provide residents access to the Clareview LRT station. Ultimately, pedestrian access to the Clareview LRT station will also be provided in the future collector road right of way in Clareview Town Centre.

Amended by Editor

## 5.8 Parking

Parking for vehicles will be provided off-street in conjunction with residential and commercial development activity. The Zoning Bylaw requirements will be used as the basis for establishing appropriate off-street parking facilities.

Off-street parking for Medium Density Residential Development and Commercial uses will be provided in accordance with the regulations set out in the Zoning Bylaw. To mitigate potential traffic and parking impacts resulting from the Medium Density Residential Development and their proximity to the Commercial uses in the Ebbers neighbourhood, no relaxation to the parking requirements shall be allowed for either the Medium Density Residential Development or Commercial uses.

## 6.0 SERVICING

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The following is a description of proposed servicing systems for the Ebbers NASP

### 6.1 Water Distribution

Bel-MK Engineering Ltd. completed a Hydraulic Network Analysis to assess the feasibility of servicing the area with water for development. The Analysis concludes that the proposed system will be adequate to provide water service to the development and conform to City of Edmonton Standards. Water can be supplied to the neighbourhood by extending the existing 300 mm water main located at approximately 32 Street (200 m east of the *railway* right-of-way on 151 Avenue) and from the 400 mm water main located on 144 Avenue, directly east of the *railway* right-of-way. Adequate water supply for the interim basis must be provided in accordance with the requisite Hydraulic Network Analysis to be submitted to EPCOR Water before or concurrent with rezoning applications in the area. Refer to *Figure 7.0 – Water Network*.

Amended by Editor

### 6.2 Sanitary Drainage

Bel-MK Engineering Ltd. completed the Neighbourhood Design Report to assess the feasibility of servicing the area for development. The proposed gravity sanitary system will drain into the existing sanitary sewer at 34 Street and 151 Avenue at the northeast corner of the neighbourhood. Refer to *Figure 8.0 – Sanitary Sewer*.

### 6.3 Stormwater Drainage System

The proposed storm system, which will include a stormwater management pond, will ultimately drain into the existing storm trunk sewer near the same tie in as the sanitary sewer. This facility will also serve 32 ha of the Gorman area north of 153 Avenue and west of 34 Street. The proposed Stormwater Concept and pond conforms to the City of Edmonton Design and Construction Standards, and will facilitate staged development. There is sufficient capacity downstream to service the Ebbers neighbourhood with storm and sanitary sewers. A system of cost sharing will provide an equitable framework for the distribution of storm and sanitary servicing costs. Refer to *Figure 9.0 – Storm Sewer*.

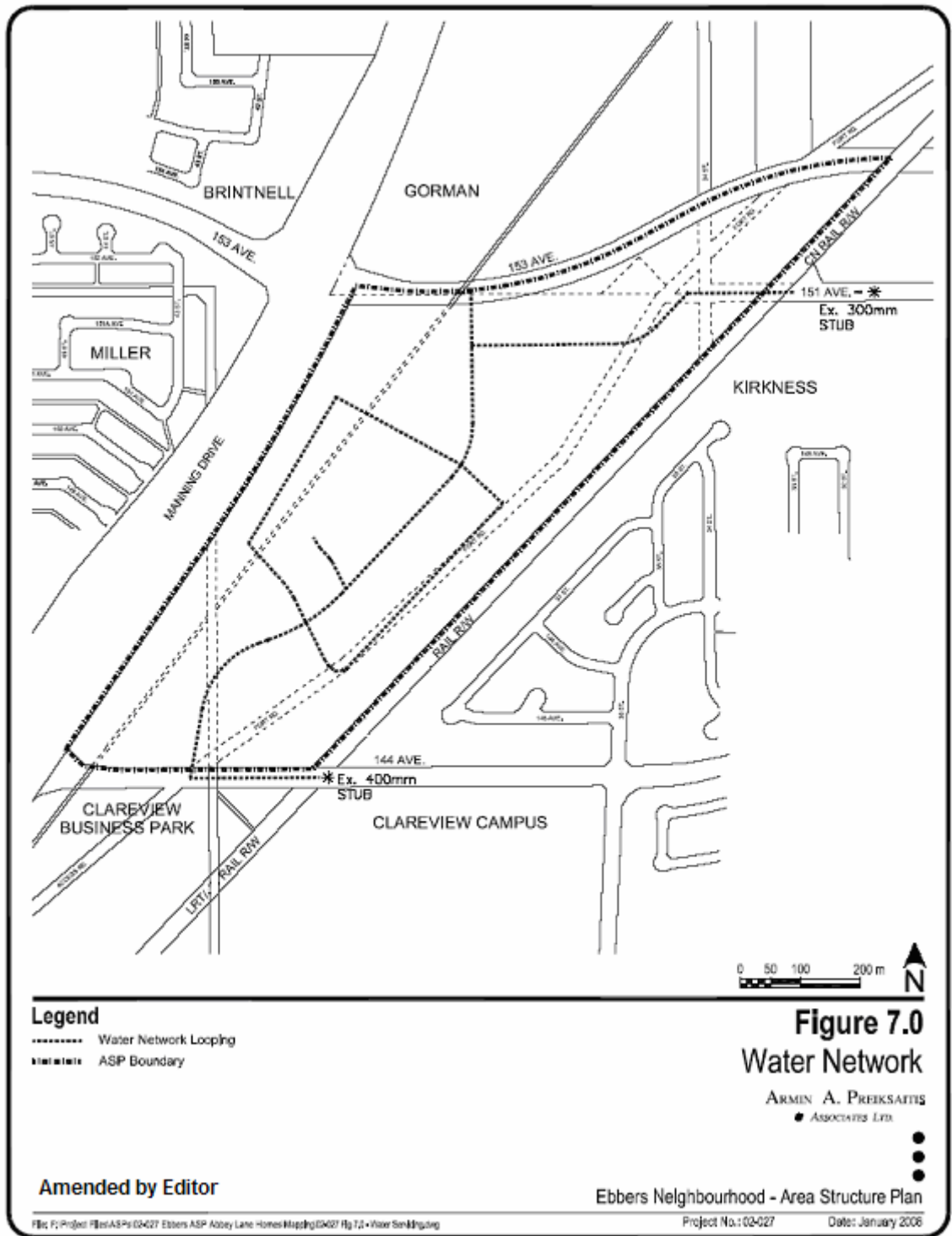
### 6.4 Shallow Utilities

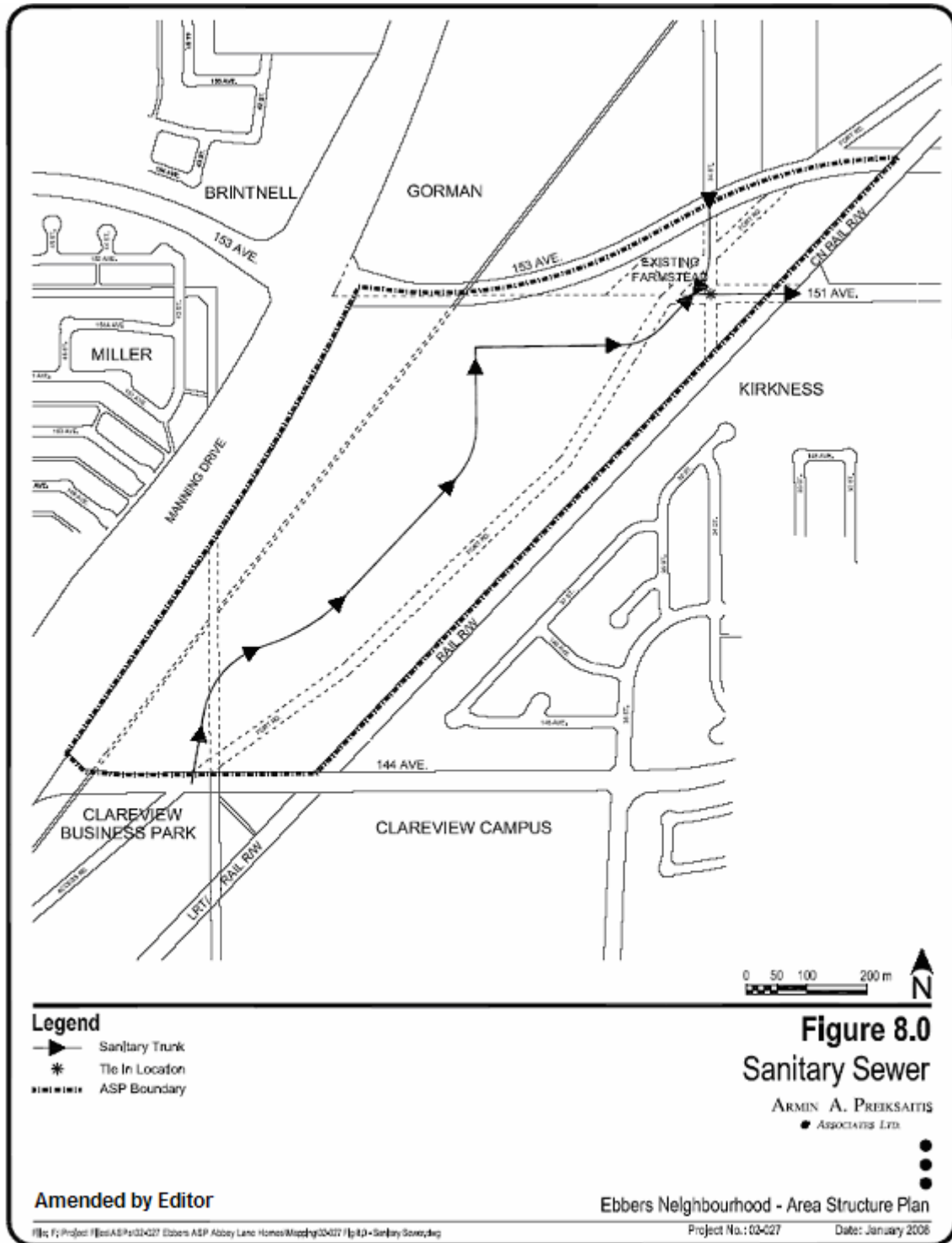
The Ebbers neighbourhood can be serviced by power, telephone, gas and cable from existing utilities adjacent to the site. Specific requirements for public utility lots and easements would be determined prior to subdivision.

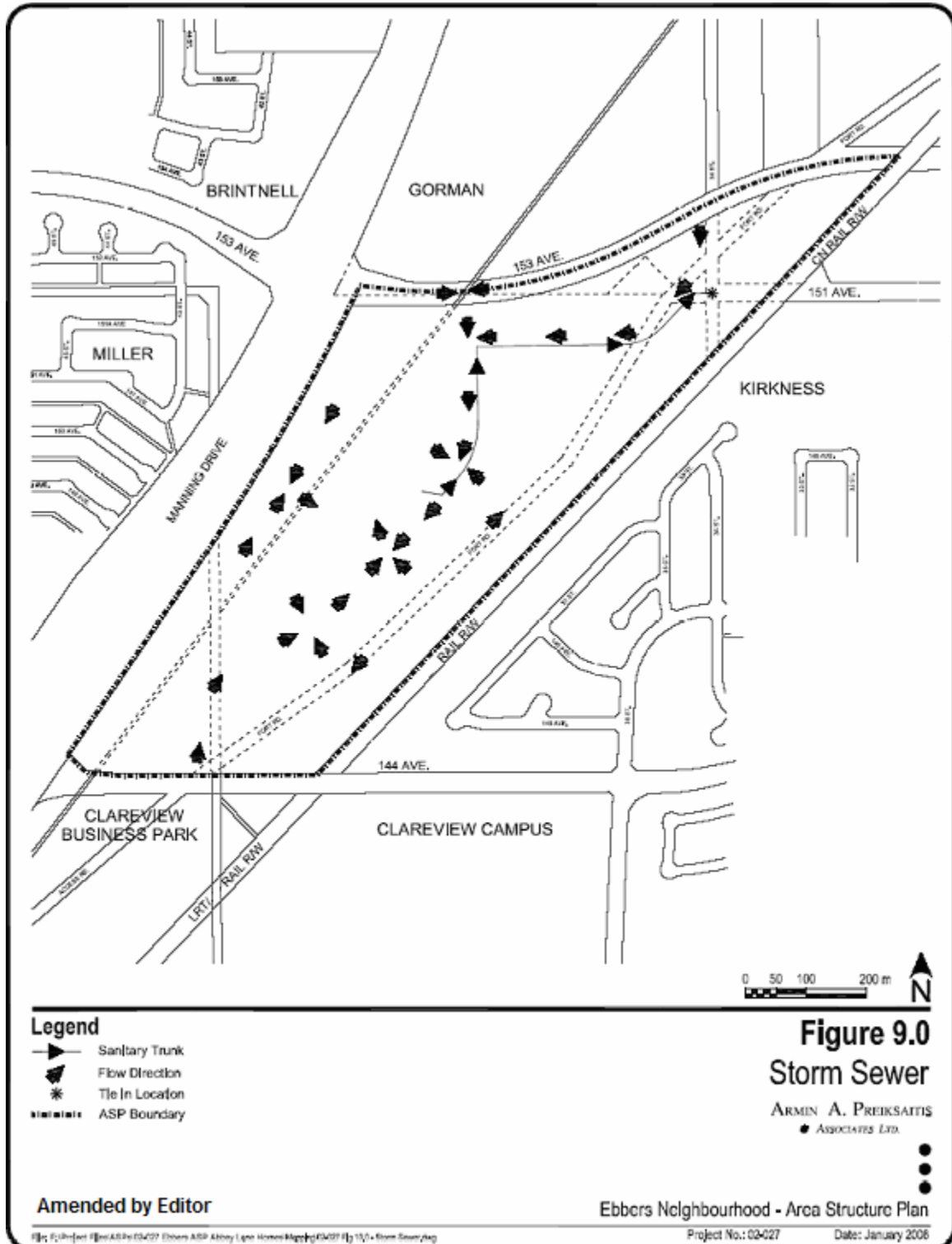
*A private corporation (gas pipeline)* requires a 30m x 40m site adjacent to the existing *gas utility* right-of-way with road access, within the vicinity of 34 Street and 153 Avenue for the installation of a new gate station. Additionally, a 3.0m right-of-way connecting the site to 153 Avenue for a new gas main feeder is required.

Amended by Editor









## 7.0 STAGING AND IMPLEMENTATION

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Staging of specific rezoning and subdivision will be determined by the availability and orderly extension of existing municipal services and market demand. *Figure 10.0 – Development Staging* illustrates a recommended staging for development of the Ebbers neighbourhood.

At this time, the Owners Group has not decided if the Stage 1 development area will take access to 144 Avenue or to 153 Avenue. Market conditions and utility servicing schemes will be more thoroughly investigated prior to a decision being made.

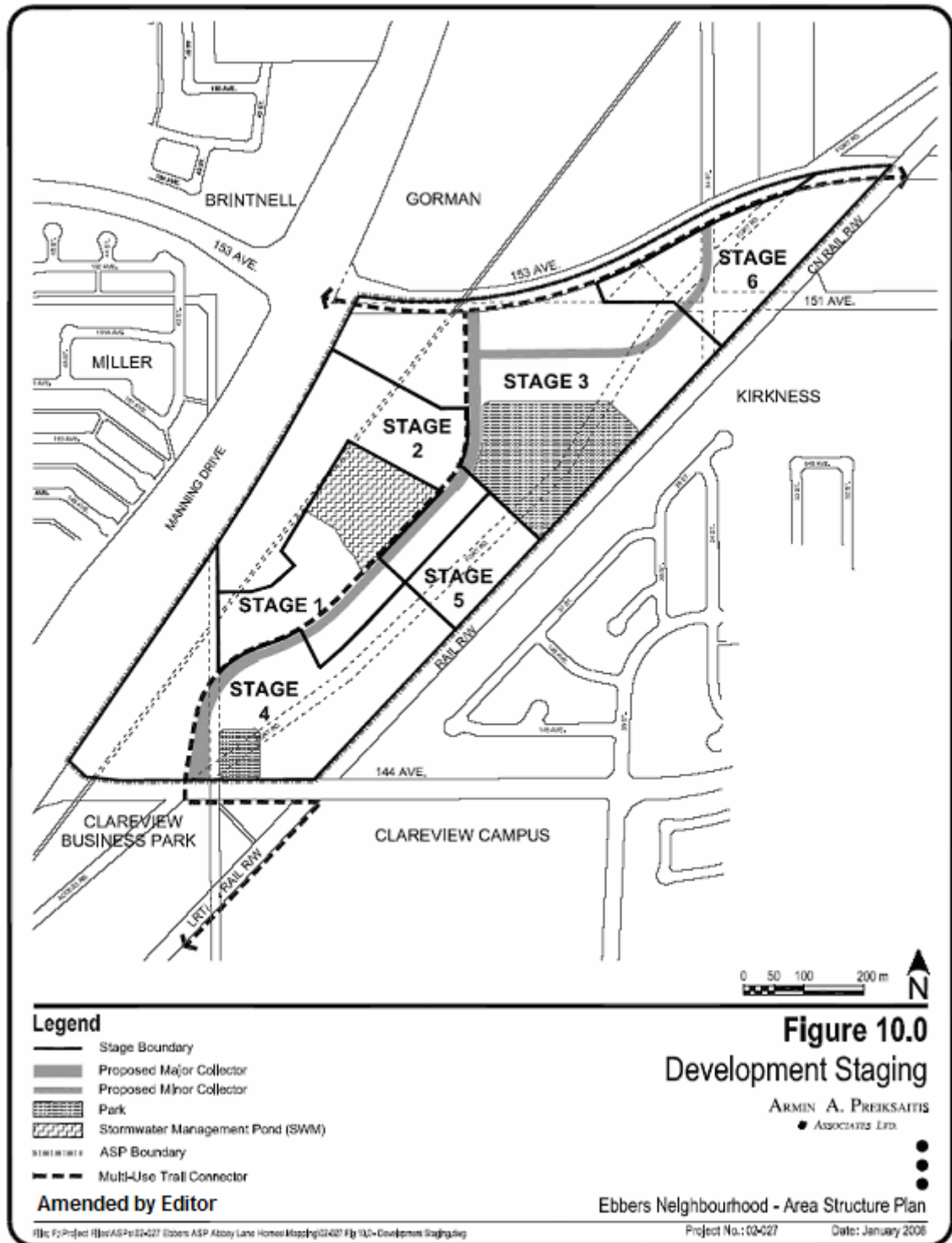
Should the decision be made to provide access into the Stage 1 development area from 144 Avenue, the Spine Road between 144 Avenue and the Stage 1 area will be completed. In addition, given the proximity of the Spine Road intersection to 144 Avenue with the Fort Road / 144 Avenue, the Fort Road intersection with 144 Avenue will be closed. A temporary connection between the Spine Road and the existing Fort Road will be completed. This will provide continuity of Fort Road through the plan area. Fort Road would continue to operate as a truck route. In this staging scenario, there would be no change in the roadway system for the development of Stage 2 except that the Spine Road would be extended into Stage 2.

In combination with Stage 3, the Spine Road would be connected to 153 Avenue and 153 Avenue would be developed as an urban two lane roadway between Manning Drive and Fort Road. At this stage of development, Fort Road would be closed and would no longer serve a truck route. The temporary connection between Fort Road and the spine road would be eliminated. Truck access into the development area would be taken from the nearest truck route link.

Should the decision be made to provide access into the Stage 1 development area from 153 Avenue, the Spine Road between 153 Avenue and the Stage 1 area will be completed. At this time, 153 Avenue between Manning Drive and the north south Spine Road would be required. Fort Road could continue to operate through the plan area as a truck route. There would be no change in this access scheme with the completion of Stage 2. In combination with Stage 3, access into the development area will require the connection of the Spine Road to both 144 Avenue and 153 Avenue. In addition, 153 Avenue will be constructed between the north-south spine road and Fort Road. At this stage of development, Fort Road would be closed and would no longer serve a truck route. Truck access into the development area would be taken from the nearest truck route link.

The fourth stage of development will consist of commercial, low and medium density residential, and the 0.6 ha park space. Low density residential adjacent to the *private corporate* Rail line will be constructed in the fifth stage and the office commercial development in the north east of the plan area will occur in the sixth and final stage.

Amended by Editor



**TABLE 1 - LAND USE AND POPULATION STATISTICS  
EBBERS NEIGHBOURHOOD AREA STRUCTURE PLAN**

	Area (ha)	% of GDA			
GROSS AREA	48.2				
Gas Right-of-Way	0.5				
Water Right-of-Way	0.5				
GROSS DEVELOPABLE AREA	47.2	100.0%			
Stormwater Management Facility	2.4	5.1%			
Municipal Reserve	4.7	10.0%			
Collector Roadway	5.2	11.0%			
Local Roads	2.4	5.1%			
Net Developable Area	32.5	68.9%			
NON-RESIDENTIAL LAND USE ANALYSIS					
Office Commercial	4.7	10.0%			
Commercial	3.9	8.3%			
	8.6	18.2%			
RESIDENTIAL LAND USE ANALYSIS					
	Area (ha)	Density (units/ha)	Units	Persons/Unit	Population
Low Density Residential	10.4	20	208	3.5	718
Medium Density Residential	13.5	50	675	2.5	1701
TOTAL	23.9		883		2419
Student Generation					
	Elementary	Junior High	Senior High	TOTAL	
Public	196	75	68	339	
Separate	84	32	29	145	
TOTAL	280	107	98	484	