

Terwillegar Towne Neighbourhood Area Structure Plan

Office Consolidation June 2021

Prepared by:

**Development Services
Urban Planning and Economy
City of Edmonton**

Bylaw 11056 (as amended) was adopted by Council in September 1995. In June 2021, this document was consolidated by virtue of the incorporation of the following bylaws, which were amendments to the original bylaw.

| | |
|-------------|---|
| Bylaw 11056 | Approved September 8, 1995 (To adopt the Terwillegar Towne NASP) |
| Bylaw 11320 | Approved August 12, 1996 (Addendum to Ch.7 regarding special area status) |
| Bylaw 12258 | Approved March 14, 2000 (Modify land use in eastern portion of NASP) |
| Bylaw 13124 | Approved July 8, 2002 (Add private open space and remove portion of a collector roadway) |
| Bylaw 13359 | Approved May 12, 2003 (Reconfigure school/park site and update land use plan) |
| Bylaw 13455 | Approved September 15, 2003 (Alter NASP southern boundary) |
| Bylaw 17611 | Approved April 18, 2016 (To redesignate land used for an existing playground from Street Oriented Residential to Private Open Space and to redesignate an area of Private Open Space to Public Open Space (Non-Municipal Reserve [Non-MR])) |
| Bylaw 19725 | Approved June 8, 2021 (PLAN REPEALED) |

Editor's Note:

This is an office consolidation edition for the Terwillegar Towne NASP Bylaw 11056, as approved by City Council on September 8, 1995. This edition contains all amendments and additions to Bylaw 11056. For the sake of clarity, 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. All text changes are noted in the right margin and are italicised where applicable. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws.

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
Urban Planning and Economy**

Terwillegar Towne NASP

As Amended by Bylaw 17611 April 18, 2016

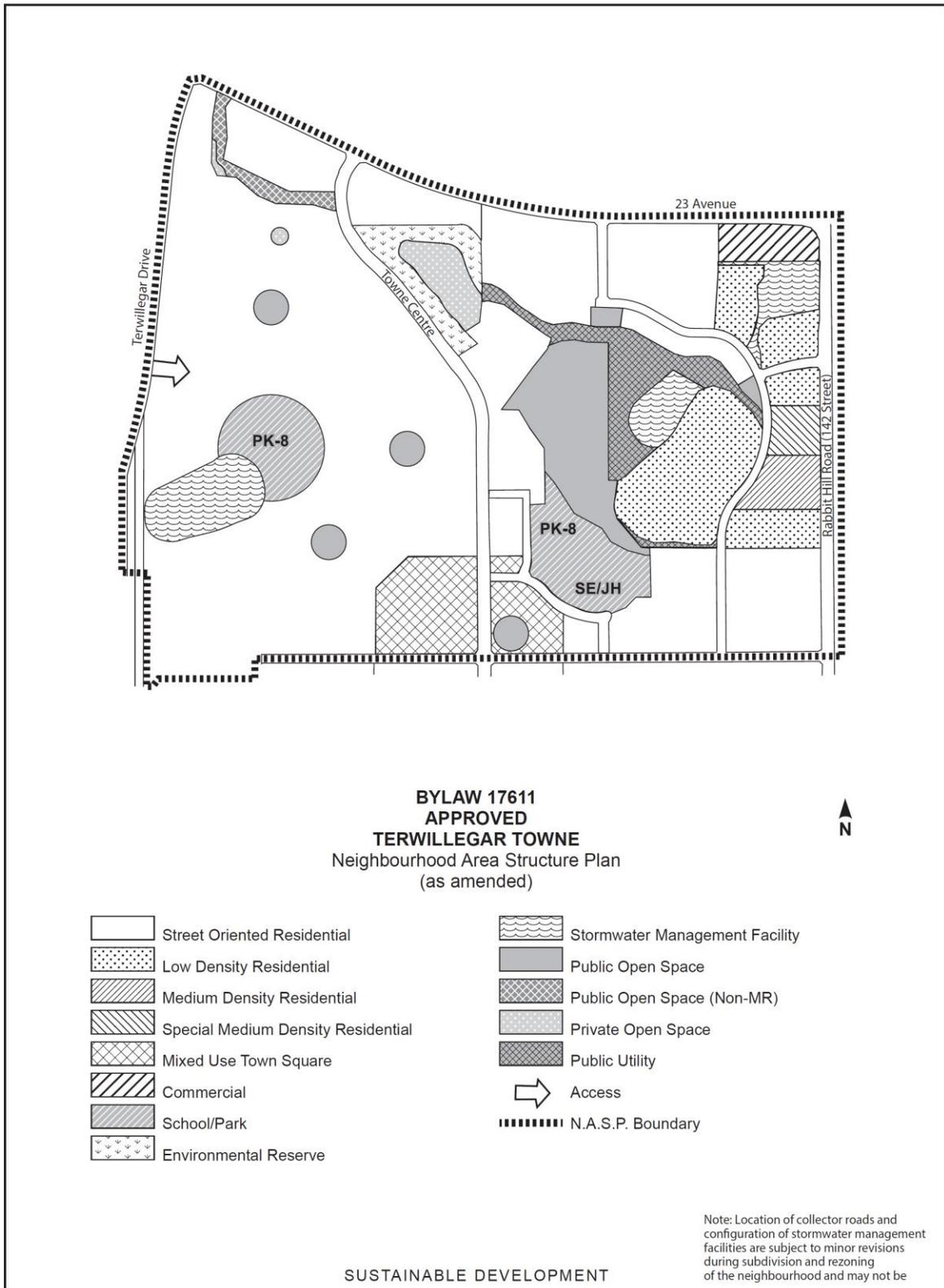


TABLE OF CONTENTS

| | |
|---|----|
| CHAPTER 1 - A Neo Traditional Perspective | 4 |
| CHAPTER 2 - Discovering the Land | 8 |
| CHAPTER 3 - Strategic Design Opportunities | 20 |
| CHAPTER 4 - Enabling Legislation | 25 |
| CHAPTER 5 - Housing and Development Paradigms | 41 |
| CHAPTER 6 - The Infrastructure | 55 |
| CHAPTER 7 - Implementing the Plan | 64 |
| Appendix - Land Use Statistics | 67 |
| Bibliography | 69 |

LIST OF ILLUSTRATIONS

| | |
|---|----|
| Figure 1 Context Plan | 14 |
| Figure 2 SCDB Development Cells | 15 |
| Figure 3 Existing Site Features | 16 |
| Figure 4 Contour Plan..... | 17 |
| Figure 5 Surrounding Land Use Districts..... | 18 |
| Figure 6 Land Ownership | 19 |
| Figure 7 Land Use Concept..... | 51 |
| Figure 8 Community Recreation Facility..... | 52 |
| Figure 9 Linkage Plan..... | 53 |
| Figure 9A Pedestrian Linkage..... | 54 |
| Figure 10 Storm Servicing | 58 |
| Figure 10A Storm Servicing/Water Management | 59 |
| Figure 10B Storm Servicing/Water Management..... | 60 |
| Figure 11 Sanitary Servicing..... | 61 |
| Figure 11A Sanitary Servicing..... | 62 |
| Figure 12 Staging Plan..... | 63 |

CHAPTER 1 - A Neo Traditional Perspective

Suburban Residential Communities have been evolving in North America for decades. Ebenezer Howard's Garden City model of 1898 was a catalyst for this evolution. Throughout North America, people desired to reside in a quiet rural setting away from, but accessible to, the sources of employment with the daily shopping, education, and recreational needs being met within their communities. Industry and technology had an effect on neighbourhood design, however. With the evolution of the automobile, and subsequent need to accommodate it, highways were born, residential streets became wider pedestrians became subservient to vehicles and, eventually, streetscapes had evolved to produce conflicts between pedestrians, homes and vehicles.

This document will re-examine this evolution and will focus on ways to return to town planning design principles that reintroduce the people back to the streets. In Terwillegar Towne, new design paradigms have been explored and the principles of neo-traditional planning are proposed; roadways will be constructed so as to encourage pedestrian usage, houses will be situated closer to the street to encourage interaction among residents, vehicular traffic will be dispersed throughout the neighbourhood to eliminate the need for high volume collector roadways, neighbourhood parks, schools and a Towne Square will become the foci for the community and the natural environment will be incorporated into the open spaces whenever possible.

These elements, once very dominant in traditional residential communities, will become the building blocks of the neo-traditional planning paradigms for Terwillegar Towne.

The Developer Perspective

The developer has been an active developer of residential communities in Edmonton since 1972 and in Alberta since 1958.

*Amended by Editor
(FOIP)*

In Edmonton, *a private Corporation* is currently developing master-planned communities in two southwest locations. Also in Southwest Edmonton, *the developer* is proposing a new community, Terwillegar Towne. The conceptual plan to facilitate the development of Terwillegar Towne has been prepared and is based on new-traditional planning principles. *The developer* is committed to these principles and will take the lead role and endeavor to have these principles settled in place in the early part of the community development. *The developer*, with its strength as an active developer, will be the catalyst for the early beginnings of the Towne Square, a school and

*Amended by Editor
(FOIP)*

certain amenities within the Towne.

In summary, *the developer* is committed to these principles and believes that a neo-traditional plan will meet the following:

*Amended by Editor
(FOIP)*

- The changing paradigms of lifestyles trends as they relate to housing, community, workplace and recreational activities.
- A diversity of uses which will result in a strong overall neighbourhood identity.
- The promotion of pedestrian and bicycle traffic in favour of a reduction in excessive intra-neighbourhood vehicular traffic.
- The incorporation of concepts and principles into the community which will allow the development of a heterogeneous housing community.
- The integration of several housing and lifestyle products which meet a broad economic strata and which are currently not offered by conventional subdivisions.
- An emphasis on streetscape for people rather than cars.
- Development of the land in an environmentally sensitive manner.
- The maximization of open space opportunities.
- The efficient utilization of existing infrastructure available for Terwillegar Towne.

The Community

Terwillegar Towne will be a community where different lifestyles and housing forms will be integrated with recreational, commercial, institutional and employment opportunities. Introducing efficiencies in land uses and servicing will allow this integration of uses to occur.

Open spaces are distributed throughout the community thereby allowing residents secure and convenient access to these areas and their associated uses. Active and passive recreation opportunities will be provided, and in all cases the open space will be a micro focus to the community. The natural elements and topography of the land will be incorporated into these open spaces wherever possible in order to allow unique land forms to be developed. The creation of natural parks and open space will help to create that sense of community.

The neo-traditional neighbourhood will accommodate all forms of transportation in unity with each other; public transit, private vehicles, cyclists and pedestrians. Pedestrian and cyclist movement will replace some of the community trips previously met by vehicles with the development of extensive open space connections and convenient access through all parts of the neighbourhood. Transit service and routing will evolve as the community matures. Vehicle movement will be accommodated in compatibility with pedestrians and will fulfill requirements to go outside the community.

The hierarchy of traditional roadway systems has been challenged and reorganized. The major roadways become main entryways to and from the community in a very direct manner. The local roads will have several connections to the main entryways allowing traffic to be dispersed throughout the neighbourhood, thus giving alternative traffic patterns within the community. Through proper design, traffic calming measures such as reduced curb return radii and narrower street widths will be introduced to reduce vehicle speed and increase pedestrian safety.

Portions of the existing sand pits, will become public and private community parks providing a community level of facilities. Parks will be developed into active and passive open spaces which are linked by the walkway networks throughout. The walkways will utilize existing Rights-of-Way, parks and amenities and will also be incorporated into streets by design.

Amended by Editor

Redevelopment of the original natural drainage patterns will create greenways throughout which will provide passive recreational opportunities and amenities and, as well, serve as part of the stormwater management system. Stormwater management will focus on water quality rather than on quantity control only. The greenways combined with open space created by utility corridors will become part of community linkage to focal points and community facilities.

Terwillegar Towne will have a Towne Square which will become the major focus of the community. This square will feature the Towne Main Street, and will provide for retail, civic, educational and religious components which will create a healthy environment and atmosphere of activity and focus. Associated with and integrated into the Square will be medium density housing. The Towne Square will become a very vibrant and central element of the community.

The First Step

This NASP document captures the Developer's vision and feel for this new community. This NASP not only focuses on the policy and regulatory requirements but it outlines the important elements of neo-traditional

planning and how they will be incorporated into Terwillegar Towne.

The plan has been designed to be flexible to changing markets, demographic trends and economic and social changes and identifies the basic principles which will be used to guide development. Terwillegar Towne will have a strong sense of community and *the developer* is committed to its principles.

*Amended by Editor
(FOIP)*

Report Format

The Terwillegar Towne Neighbourhood Area Structure Plan is divided into eight chapters:

- Chapter 1 Provides an introduction of the plan with relevant background concerning its development and an overview of the general concepts used in the development of the plan.
- Chapter 2 Identifies the existing physical constraints and man-made features within and abutting the plan area and their effect on the plan area.
- Chapter 3 Outlines the development objectives for the neighbourhood.
- Chapter 4 Details the relevant statutory and non-statutory planning documents in place and how the Terwillegar Towne Neighbourhood Area Structure Plan will comply with them.
- Chapter 5 Describes the proposed Land Use Concept.
- Chapter 6 Deals with the identification and location of the proposed major utility infrastructure components.
- Chapter 7 Provides direction with respect to the implementation of the plan, including the development of a Statutory Plan Overlay for the first area of development. The overlay will provide detailed information regarding the integration of all housing forms into the Terwillegar Towne concept.

The Statutory Plan Overlay implementation tool was replaced by the application of Special Area Zoning for Terwillegar Towne, as applied in Bylaw 11320, approved August 12, 1996.

Amended by Editor

CHAPTER 2 - Discovering the Land

One of the prime considerations in the development of any neighbourhood is the land itself. *The developer* and other owners are committed to responsible stewardship and considers the natural environment as a very important element in the development process. The Terwillegar Towne Neighbourhood must appear to grow out of the land and follow the terrain. Elements of the plan will include involving surficial water management techniques which will treat all water as a resource of the site and use it to its maximum benefit. To this end, several studies have been commissioned to evaluate the natural environment in Terwillegar Towne and assist in the preparation of the plan.

*Amended by Editor
(FOIP)*

1. A Physical Characterization Environment Study was performed by Sentar Consultants Ltd. which summarizes pertinent physical features of the site including location, climate, vegetation, geology, soils and a brief discussion of the sand pits.
2. A Historical Resources Inventory and Assessment Study was performed by Sentar Consultants Ltd. which evaluates the historical and archaeological significance of the site.
3. A Phase I Environmental Assessment of the neighbourhood was performed by Sentar Consultants Ltd. which identified any potential for contaminated materials and/or other non-compliance issues on farm sites and in the sand pits within and around Terwillegar Towne.
4. An Environmental Evaluation of the sand pits was performed by Sentar Consultants Ltd. which determined the characteristics of the sand pits with the intention of providing recommendations for their future development.
5. A Hydrogeological/Geotechnical Investigation was performed by A. D. Williams Engineering Ltd. with the intention of determining the hydrogeological / geotechnical impediments to development.

*Amended by Editor
(FOIP)*

*Amended by Editor
(FOIP)*

These reports and the issues raised in them were used in the preparation of the land use plan presented in this NASP and can be made available as required.

Location

Terwillegar Towne is located in one of the most desirable areas of Edmonton (Figure 1). It is bounded by 23 Avenue to the north, the future extension of Terwillegar Drive to the west and the extension of Rabbit Hill Road to the east. *The south boundary was determined to be along the Terwillegar Boulevard, to create a logical boundary between this NASP and the South Terwillegar NASP.* This NASP encompasses Cell 2B in the amended Servicing Concept Design Brief (SCDB) for Terwillegar Heights (Figure 2).

*Bylaw 13455
September 15, 2003*

The Landscape

The Terwillegar Towne landscape can be divided into two separate components. The first and most striking component of the site is the two sand pits that have been excavated, one throughout the central portion of the NE ¼ Sec. 35-51-25-4 and the second in the northeasterly portion of the NW ¼ Sec. 35-51-25-4 (see Figure 3). These pits are located in a glacial kame mound and have been excavated to a depth of approximately 20 metres over the past 30 years. The base of the *NE 35* pit has been left in an uneven state with several high ridges and mounds ranging in height of up to sixteen metres throughout the pit.

*Amended by Editor
(FOIP)*

The *NW 35* pit has been left with an essentially flat base. Both pits have steep side slopes. Observations by Sentar Consultants Ltd. indicate that the decommissioned areas conform to the reclamation requirements of maximum 4:1 gradient.¹ These pits present a unique opportunity for the Terwillegar Towne development and so incorporation of these pits is an essential component of the plan.

The second component is a long ridge located in the north central portion of the plan area which is also a result of the kame. From this feature, the land generally slopes from the edge of the pit excavation to the southwest with slopes ranging from 9% in the immediate vicinity of the kame mound to 2% in the central western portion of the neighbourhood. The extreme northwest and northeast areas slope gently to the west and to the east respectively, providing striking views of the southwest countryside and City skyline (Figure 4).

¹ *Sentar, November, 1993. p.5.2.*

The Foundation

Two main types of soils exist in the area. In Terwillegar Towne the dominant soil is classified as the silty loam to silty clay loam. This series is described as fairly well drained, eluviated black soil developed on a slightly saline lacustrine material. This type is typically found in the basin-like areas where glacial laking has occurred.

The second major soil type in the area is Carvel loam to sandy loam. This soil is described as well drained dark gray wooded developed on a pitted delta. This type has typically formed from the melting of buried ice blocks in deltaic sediments. This type of sedimentary environment creates a knob and kettle type topography where mounds and depressions of fine grain, sand and silt are deposited.² These subsoils underlay the malmo silt loam to silty clay loam which is primarily clay, silt and clay till with minor intervals of sand and gravel.

The soils and groundwater conditions are suitable for residential development using normal design and construction practices.³

Flora and Fauna

Six different natural vegetation regions occur in Alberta which include grassland, parkland, foothills, boreal forest, rocky mountains and the Canadian Shield. Edmonton is located within the parkland region, which is a transitional region between the grasslands to the south and the coniferous forest of the boreal region to the north. Much of the natural vegetation in Terwillegar Towne has been altered by human settlement. Large amounts of the area are under cultivation with the exception of some remnant wetland features. Although wildlife is not abundant on the lands today, the re-creation of the natural areas should evolve a habitat for many species to return. It should be noted that no significant natural areas have been identified within the Terwillegar Towne area in the City of Edmonton Inventory of Environmentally Sensitive and Significant Natural Areas prepared by Geowest Environmental Consultants in 1993. The only trees in the plan area are within a few hedgerows (see Figure 3). The hedgerows are of poor quality and will be removed as development occurs.

Existing Features

The study area boundary encompasses approximately 181 hectares of land throughout portions of six quarter sections of land. Several site features

*Bylaw 13455
September 15, 2003*

² *Sentar Consultants Ltd., November 1993, Pg. 4.1*

³ *A. D. Williams Engineering Ltd., October 1991, p.16*

have been identified as being significant for the development of Terwillegar Towne.

As previously mentioned, the first and most obvious feature of Terwillegar Towne is the sand and gravel pit located in the NE ¼ Sec. 35-51-25-4 (Figure 3). A former sand and gravel pit which lies in Sec. 2-52-25-4 is owned by the City of Edmonton and has been backfilled and reclaimed. It is presently at approximately the natural finished grade. Two geotechnical studies have been undertaken by Hardy BBT Limited on behalf of the City with respect to this pit. According to the 1987 Hardy BBT report, the backfilling occurred as early as 1962. However, no specific compaction effort was directed on the backfill material until about 1985. After 1985, nominal compaction has occurred at the cliffs. It is not clear whether any field density tests were taken. The maximum depth of the fill is expected to be in the order of 20 to 22 metres and settlements of .4 to 1.3 metres could be expected. Some of that settlement has likely already taken place. Ongoing geotechnical monitoring is taking place on the fill areas. Results of this monitoring will ultimately determine the extent of development potential.

At the time of Bylaw 11056 approval, the owner of the pit had no commitment to develop any of the lands owned including the excavated areas. Due to the lack of information on development feasibility, the planning process deemed the pit lands appropriate for passive recreation purposes only. As the City's Municipal Reserve entitlements were already met the majority of pit lands were designated as Private Open Space.

*Bylaw 12258
March 14, 2000*

Since approval of Bylaw 11056, lands in the east portion were acquired by owners who undertook detailed studies on the development viability of the "private open space" lands. Through these studies which included geotechnical and environmental assessments, it has been determined that approximately 10.8 hectares could be brought into development.

To enable this, the following commitments are made:

- the existing fill material in the east half of the pit will be regraded and compacted to accommodate low density use;*
- the side slopes are to be regraded from their current 3:1 and 4:1 slopes to the 6:1 to 7:1 range;*
- slopes reconstruction and regrading is to occur to levels recommended in geotechnical studies.*

The final development overall will be not unlike that found in other areas with topographic relief. The 6:1 to 7:1 slopes are similar to the slopes seen in lots backing onto storm water management facilities.

The 23 Avenue and 156 Street Government Road Allowances will be closed and incorporated as developable land. The realignment of 23 Avenue to its

permanent location has already been completed. The residual Government Road Allowance can therefore be closed at any time. However, 156 Street is currently being used as a north-south thoroughfare and will continue to be used until such time as Terwillegar Drive and Anthony Henday Drive (future ring road) have been constructed. It is anticipated that this existing roadway will be dedicated to emergency and construction access to the development until such time as it is closed.

An existing farmstead remains in the area in the SE ¼ Sec. 35-51-25-4. Sentar Consultants Ltd. have completed a Phase I Environmental Assessment, which includes a review of the noted farmstead. This review identified certain materials such as waste oil and grease drums, herbicide and other chemical containers, automobile batteries, paint and primer cans and stored fuel. Sentar recommended only that these items be cleaned up prior to any development occurring there. In addition, certain water wells were registered within the study area and should be located and abandoned according to Alberta Environmental Protection Act regulations.

There is a gas line right-of-way running adjacent to the 156 Street Government Road Allowance. This right-of-way will be incorporated as part of the open space system for this and future neighbourhoods.

*Amended by Editor
(FOIP)*

Surrounding Land Uses

The plan area is bordered by agricultural lands which will form future residential neighbourhoods within the Terwillegar Heights area. To the west and north, the Hadow, Leger and Hodgson neighbourhoods have all received NASP planning approval. The surrounding land uses, both present and future, will not negatively impact or be impacted by the subject plan (See Figure 5).

Accessibility

To the north, 23 Avenue has been constructed to a two lane rural standard with ditches and will provide permanent primary access to Terwillegar Towne. Located on the eastern boundary, the future extension of Rabbit Hill Road will provide a connection to 23 Avenue and the future ring road and will offer additional access to Terwillegar Towne.

Natural History

An Historical Resources Inventory Assessment was performed by Sentar Consultants Ltd. which included an archaeological review. The assessment determined that no historically or archaeologically significant features were present on the site and that no further historical review is necessary at this time. Alberta Culture has reviewed the study and is satisfied with the

findings.

Land Ownership

Lands within the Terwillegar Towne boundary are owned by several different entities (see Figure 6). All owners with substantial land holdings in Terwillegar Towne have been contacted for their initial comments on the plan and have identified support for the proposal.

*Amended by Editor
(FOIP)*

Figure 2 SCDB Development Cells

Bylaw 11056 September 8, 1995

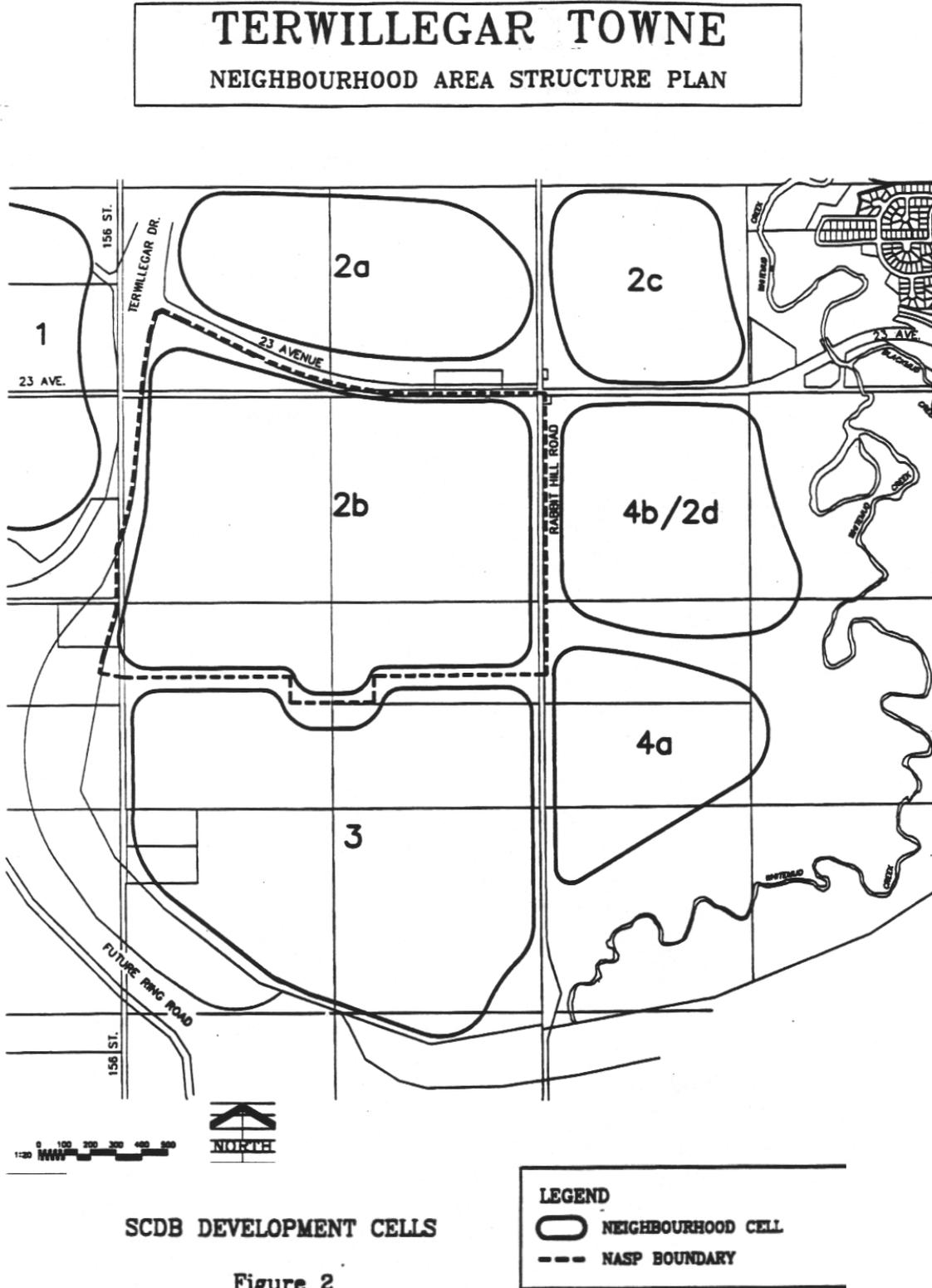


Figure 3 Existing Site Features

Bylaw 11056 September 8, 1995 (as amended by Editor)

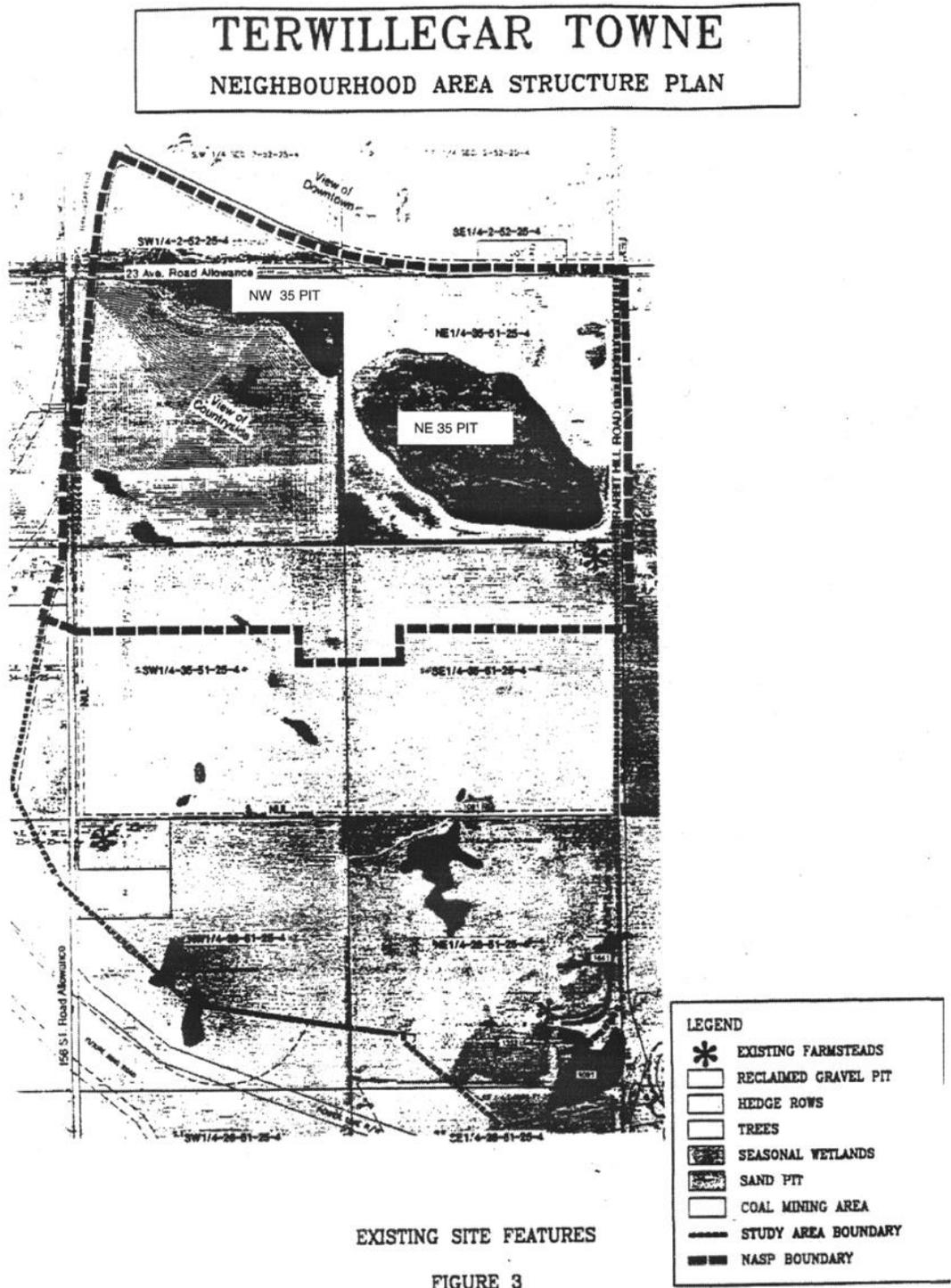


Figure 4 Contour Plan

Bylaw 11056 September 8, 1995

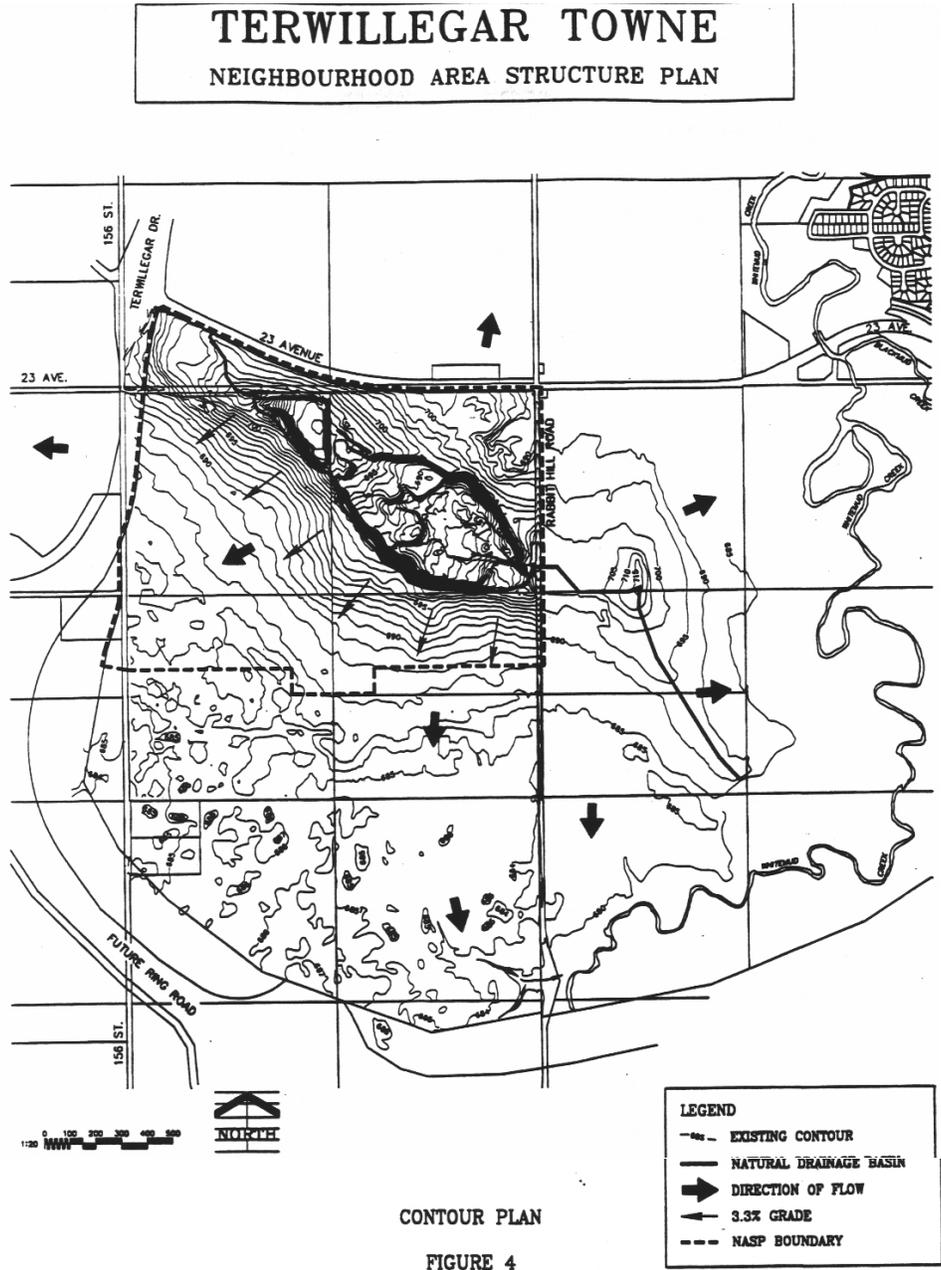


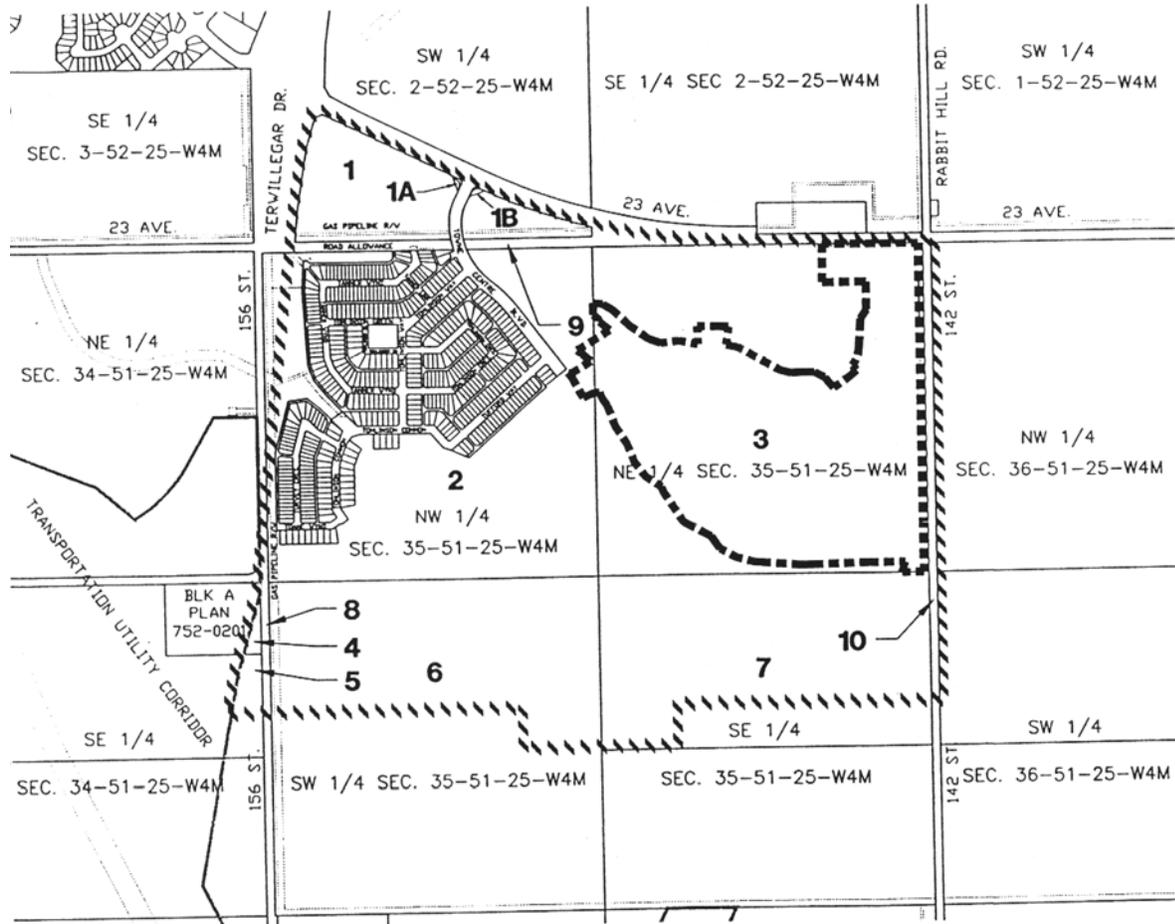
Figure 5 Surrounding Land Use Districts

Bylaw 11056 September 8, 1995



Figure 6 Land Ownership

Bylaw 12258 March 14, 2000 (As amended by Editor)



KEY
NO. LEGAL DESCRIPTION

- 1 SW1/4 SEC. 2-52-25-W4M
- 1A LOT A, PLAN 982-3897
- 1B LOT B, PLAN 982-3897
- 2 NW1/4 SEC. 35-51-25-W4M
- 3 NE1/4 SEC. 35-51-25-W4M
- 4 BLOCK A, PLAN 752-0201
- 5 N1/2-SE1/4 SEC. 34-51-25-W4M
- 6 SW1/4 SEC. 35-51-25-W4M
- 7 N1/2-E 1/4 SEC. 35-51-25-W4M
- 8 156 STREET (TO BE CLOSED)
- 9 23 AVENUE (TO BE CLOSED)
- 10 142 STREET

REGISTERED OWNER

- THE CITY OF EDMONTON
- PRIVATE CORPORATE
- PRIVATE CORPORATE
- PRIVATE CORPORATE
- PRIVATE CORPORATE
- PRIVATE NON CORPORATE
- INSTITUTIONAL
- PRIVATE CORPORATE
- PRIVATE CORPORATE
- CROWN - GOV. ROAD ALLOWANCE
- CROWN - GOV. ROAD ALLOWANCE
- CROWN - GOV. ROAD ALLOWANCE

AREA
(Ha)

| | | |
|-------|--------|----|
| 1 | 11.44 | ** |
| 1A | --- | |
| 1B | --- | |
| 2 | 61.56 | |
| 3 | 64.29 | * |
| 4 | 0.33 | |
| 5 | 0.60 | |
| 6 | 24.55 | |
| 7 | 24.55 | |
| 8 | 1.00 | |
| 9 | 2.30 | |
| 10 | 2.26 | |
| TOTAL | 192.88 | |

* INDICATES TITLED AREA

** INCLUDES KEY NO.'s 1A AND 1B

TERWILLEGAR TOWNE

NEIGHBOURHOOD AREA STRUCTURE PLAN AMENDMENT

LAND OWNERSHIP

EXHIBIT 2

LEGEND

- NASP BOUNDARY
- PROPOSED AMENDMENT AREA
- RESTRICTED DEVELOPMENT AREA (R.D.A.) / TRANSPORTATION UTILITY CORRIDOR (T.U.C.)



CHAPTER 3 - Strategic Design Opportunities

Terwillegar Towne will incorporate values consistent with complete communities. The Terwillegar Towne plan recognizes the importance of integration of housing form, variety of housing, recreational opportunities, retail and commercial opportunities, pedestrian orientation, neighbourhood focus, and of the natural environment. All of these values have been incorporated into these Terwillegar Towne objectives:

Overall Design Objectives

- To develop a primarily residential neighbourhood which will provide for a variety of housing types and encourage an awareness of the environment and one's personal health and well being.
- To provide the integration and incorporation of the sand pits into the community as an essential component of the open space system.
- To create an identity for the community.

*Amended by Editor
(FOIP)*

Neo-Traditional Objectives

- To promote the integration of various forms of street-oriented dwelling units throughout the neighbourhood.
- To design pedestrian friendly streets and create compatibility between all levels and modes of transportation.
- To develop a neighbourhood focus within a five minute walk of every household and a smaller sub-neighbourhood micro-focus to be immediately and conveniently accessible to all residents. These foci will be in the form of open space areas, institutional and community buildings and commercial centres.
- To provide numerous opportunities for dispersion of traffic throughout the neighbourhood and reduce the dominance that collector roadways may otherwise impose.
- To establish the development of an overall community focus in a Towne Square.

- To promote the retention and integration of the natural environment into the neighbourhood wherever possible.

Residential Objectives

- To offer the opportunity to develop a range of dwelling types which will satisfy the demands of the public.
- To create a neighbourhood which will respond to change in subsequent planning stages dependent upon current market conditions.
- To allow for appropriate integration between differing land uses.
- To provide for adequate integration of low and medium density housing by the incorporation of specific neighbourhood design guidelines.
- To accommodate new design regulations for residential dwelling units through the use of a Statutory Plan Overlay for the neighbourhood.

Commercial Objectives

- To provide a mixed-use Towne Square which will serve the day-to-day commercial needs of Terwillegar Towne residents and provide ancillary opportunities such as cultural, civic, religious and educational land uses in conjunction with medium density residential uses all combining to provide the major focal point of the community.
- To provide a Towne Square that will afford efficient and convenient access for pedestrians, bicycles, public transit and vehicles.
- To provide opportunities for office, retail, institutional and employment generators which will serve the sub-regional commercial needs of the residents of Terwillegar Towne and surrounding neighbourhoods, and provide for local employment opportunities in accordance with the provisions of the Terwillegar Heights Servicing Concept Design Brief (SCDB) in the area adjacent to 23 Avenue and Rabbit Hill Road.



Educational Objectives

- To provide for the public kindergarten to grade eight and separate elementary and junior high school needs of the respective school boards.
- To provide for appropriate school/park sites within the 10% Municipal Reserve requirement of the *Municipal Development Plan*.
- To reduce the land allocations traditionally accepted for school sites recognizing the opportunities available for sports fields in the *sand* pits.
- To facilitate the early development of a school and park site.

Amended by Editor

*Amended by Editor
(FOIP)*

Open Space Objectives

- To encourage interaction between people and the environment.
- To recognize the *sand* pits for their open space potential.
- To provide a community athletic facility within the *sand* pits sufficient to accommodate the community level needs typically provided for within public and separate school sites.
- To accommodate the active and passive recreational needs of the residents of Terwillegar Towne.

*Amended by Editor
(FOIP)*

- To develop small sub-neighbourhood parks for direct and convenient use by Terwillegar residents.
- To recognize a natural environment which previously accommodated surface drainage and to re-create these areas wherever possible so as to incorporate them into the stormwater management and open space system for Terwillegar Towne.
- To provide a privately owned recreation facility for the convenience and enjoyment of the Terwillegar Towne residents.

Transportation Objectives

- To create an efficient circulation system which puts back into balance the relationship between pedestrians, bicycles, public transit and the private vehicle.
- To accommodate the private vehicle within the neighbourhood without the hierarchy of roadways while ensuring the safety of the other modes of transportation.
- To design the roadway system in a fashion which results in a lower vehicle speed through the neighbourhood and promotes and encourages pedestrian activity throughout the neighbourhood.
- To provide boulevards within the road right-of-way and incorporate landscaping features into the public boulevard spaces.
- To encourage convenient and efficient intra-neighbourhood traffic movements.
- To provide an efficient and economical transit service which meets the needs of Terwillegar Towne residents.

Utility Objectives

- To integrate, within the plan area, where possible, the existing utility rights-of-way.
- To provide a servicing system and phasing system based on the extension of City services and utilities which is economical and efficient.
- To re-create the natural drainage patterns of the lands and utilize this natural pattern to provide storm drainage service to the

urban environment.

- To perform minimal grading to ensure the natural topography is maintained to the fullest extent.

Existing Use Objective

- To allow for the continuation of existing uses until such time as the land is required for development.

CHAPTER 4 - Enabling Legislation

In May 1995, the 1977 Planning Act was repealed and replaced with the Municipal Government Act. Under the new legislation, the General Municipal Plan had to be replaced with a Municipal Development Plan before September 1, 1998. Plan Edmonton, Edmonton's Municipal Development Plan (Bylaw 11777, as amended) was approved by City Council on August 31, 1998.

Amended by Editor

The following sections on the Edmonton Municipal Development Plan and the Suburban Neighbourhood Design Guidelines were taken from Bylaws 12258 and 13359; amendments to the Terwillegar Towne NASP Bylaw 11056, and refer to the specific amendment area(s) but can be generally applied to the whole neighbourhood.

Edmonton Municipal Development Plan

*Bylaw 12258
March 14, 2000*

The Edmonton Municipal Development Plan sets out priorities and strategies to accommodate the development of the City. The following are priorities and strategies specific to this proposed development.

Priority: Land Development Philosophy

Strategy 1.1.3 - *Use and promote urban design principles and guidelines that enhance the quality of the urban environment.*

The amendment allows the reintegration of a decommissioned extraction facility into the development fabric of the community. Through the amendment, lands with no specific function will be developed following the community level urban design guidelines to be established by the developer.

Developer initiated landscape enhancements will be introduced including community gateways, co-ordinated fencing and street furniture and development themeing.

Lands not in development will be landscaped in consultation with the City's Community Services Department.

Priority: Managing Resources Wisely

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

The amendment promotes effective and efficient use of the land and infrastructure. The lands are contiguous to existing development to the west and north. Infrastructure is in place which has been built to accommodate these lands. The plan brings more land into development rather than leaving them in the unplanned and undefined "Private Open Space" designation.

The amendment provides for the most efficient and functional configuration of the school/park site, accommodating existing and future development.

*Bylaw 13359
May 12, 2003*

Priority: Use of Effective Planning Processes

Bylaw 12258
March 14, 2000

Strategy 1.1.17 - Plan for and protect transportation corridors required to implement the City of Edmonton Transportation Master Plan.

The amendment protects the transportation corridors required to implement the Transportation Master Plan including major arterials. It also utilizes existing road right-of-ways so as to not disrupt existing traffic and land holdings.

Priority: Utilization of Existing 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 amendment facilitates "full development" of the Terwillegar Towne area. Development ties into existing roads and pipes which have been previously sized and built to accommodate this development.

Priority: Managing Suburban Growth

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

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

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

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

The amendment accommodates contiguous orderly, serviced and cost effective growth. Development is a continuation of adjacent development to the west (Terwillegar Towne and Riverside) and north (Leger).

The NASP allows for development of a range of housing product within the single family/ multi family guidelines of Council.

The amendment identifies recreational opportunities and open spaces, access to these opportunities and their configuration.

The amendment responds to the above noted strategy by proposing a school/park site that creates opportunities for public access via walkways and public utility lots.

Bylaw 13359
May 12, 2003

Municipal Reserves

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.

Bylaw 12258
March 14, 2000

Strategy 1.9.5 - *The amount of municipal reserve to be dedicated will be equivalent to ten percent (10%) of the gross developable area of a parcel of land that is the subject of a proposed subdivision, which is the minimum amount necessary to augment other city resources to provide the basic levels of schools, parks and public recreational facilities acceptable to the citizens of Edmonton.*

The amendment identifies locations for parks, open spaces and schools which are developed on municipal reserves. The amendment does not preclude cash-in-lieu of the statutory land dedication

Suburban Neighbourhood Design Guidelines

*Bylaw 12258
March 14, 2000*

The suburban neighbourhood design principles were developed as an initiative of the City of Edmonton to help guide the development of future suburban areas of the City. The following are design principles applicable to the amendment:

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

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

Principle 3 - *Design arterial and central collector roads along a grid pattern.*

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

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

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

Principle 16 - *Use current population projections and student generation formulas when planning facilities for a neighbourhood.*

The proposed NASP meets the above noted design principles as follows:

Principles 1, 2 & 10 - *the number of school sites and locations have previously been rationalized with the school boards to maximize the opportunity for inter-neighbourhood catchment and access. Stormwater management lake locations reflect the City's Master Drainage Plan for the area;*

The configuration of the municipal reserve lands takes advantage of the location of adjacent public utility land uses for walkway connections and passive recreation use.

*Bylaw 13359
May 12, 2003*

Principle 3 - the major arterials are orientated in a grid running east/west. Major collectors tie into arterials consistent with City policy, taking into account the unique topographic conditions;

Principles 5 & 11 - pedestrian/bicycle access is provided through the open space system through the amendment area, with opportunities to link to points outside the amendment area;

Principle 16 - current population projections and student generation formulas have been applied

Original Enabling Legislation

Amended by Editor

The Terwillegar Towne Neighbourhood Area Structure Plan (Bylaw 11056, as amended) was approved in September 1995 and as a result was prepared in accordance with the 1977 Planning Act and thus the General Municipal Plan. Therefore the following section on the Edmonton General Municipal Plan represents the legislation in place at the time and how the Terwillegar Towne NASP met those requirements.

The Alberta Planning Act is the enabling legislation, which allows for the facilitation of orderly, efficient and economic patterns of human settlement. The Act requires that development comply with existing statutory plans which includes the Edmonton General Municipal Plan. The plan meets this requirement.

Edmonton General Municipal Plan

The Edmonton General Municipal Plan (GMP) identifies this area as suitable for the preparation of local plans. The Terwillegar Towne Neighbourhood Area Structure Plan has been prepared in accordance with those objectives outlined in Section 2, Suburban Area, of the General Municipal Plan.

Objective 2A

Objective 2A of the General Municipal Plan states:

“To accommodate growth, serviced in an orderly and economic fashion, in all suburban areas of the City”.

The Riverbend area to the north has been developing in six neighbourhoods by eight different developers over the past 10 years and is nearing completion. It is now appropriate to accommodate another level of growth in this sector of the City south of the *utility* powerline right-of-way. Terwillegar Towne is the fourth neighbourhood in Terwillegar Heights to accommodate this growth.

*Amended by Editor
(FOIP)*

The use of staged utility infrastructure will ensure a low cost solution to the servicing of this neighbourhood. Permanent arterial roadway access is available from 23 Avenue. Demands placed on the water system will not necessitate any expenditures beyond those which have been already approved. By utilizing the existing infrastructure in this sector, long-term benefits which were originally anticipated with the infrastructure installation can be fully realized without further costs to development or to the City in this sector. Growth in this sector must continue to be accommodated in order to prevent a market drift to other south area sectors such as Sherwood Park, Leduc, Beaumont, etc.

Policy 2.A.1

“Encourage new development to be contiguous with the existing development”.

The Riverbend area north of *utility* powerline right-of-way has been substantially completed. As a result the Haddow, Leger and Hodgson Neighbourhoods have been approved for development. Terwillegar Towne is immediately adjacent to all of these neighbourhoods and to the first stage of development in Haddow. Development in Haddow is approved and is expected to commence immediately. Furthermore, Terwillegar Towne is less than 600 m from the existing development in Falconer Heights, 300 m of which include the Terwillegar Drive and a *utility* rights-of-way. Furthermore, a portion of the intervening development lands in Leger are designated as a campus facility and will remain as open space. Terwillegar Towne is therefore contiguous with development in the area.

*Amended by Editor
(FOIP)*

Policy 2.A.2

“Allow the location of new suburban residential development to be guided by the demands of the housing market for choices in housing types and location and the availability of municipal services”.

The southwest Edmonton market has enjoyed a variety of housing alternatives in the past decade. However, they have been essentially within the same economic stratum. With development concluding in Riverbend, the development industry must react and create opportunities with the same intensity and diversity which was previously demanded in this market sector. Terwillegar Towne will participate in meeting this demand with the inclusion of various market segments including starter home, move-up and move-down markets, accommodated by different housing forms.

Policy 2.A.3

“Ensure the orderly and efficient extension of municipal services and discourage the inappropriate use of temporary services”.

Municipal services will be provided in an efficient manner and in accordance with the Servicing Standards Manual. As identified in Section 6.0, no temporary services will be required as a result of the development of Terwillegar Towne. Staged permanent servicing and existing infrastructure will be utilized wherever it is appropriate to do so.

Policy 2.A.4

“Allow market forces to determine the timing, location, extension of servicing in newly developed areas but require developer to pay for all onsite services and where appropriate specific offsite services”.

The market forces dictate that the development of Terwillegar Towne is required to meet the demand for both entry level and move up housing which is either unavailable or currently being depleted in the Riverbend area. Development of all onsite services will be the responsibility of the developer and where appropriate development of specific offsite services will be provided in accordance with policies existing at the time of development and the Permanent Area Contribution system utilized within the City of Edmonton.

Policy 2.A.6

“Ensure the use and protection of the natural topography and the unique elements of the natural environment in the design and servicing of new suburban development”.

The plan makes provision to protect the unique areas of natural topography, drainage and vegetation in accordance with the Planning Act, with the City of Edmonton requirements and with *the developer's* requirements for an environmentally sensitive and sustainable development. The most unique elements within Terwillegar Towne are the sand pits located in the north-central portion of the area. The plan proposes to incorporate these pits into the overall development concept as a recreational facility for use by the community. In addition, the plan proposes to reintroduce natural drainage areas into the plan concept so as to maximize the natural topography and environment wherever possible.

*Amended by Editor
(FOIP)*

Policy 2.A.7

“Encourage development proposals which lead towards the completion of neighbourhoods and meet the service and amenity needs of residents within a reasonable time frame”.

Terwillegar Towne will be developed so as to expedite its efficient completion. 23 Avenue, a major arterial, currently exists along the north boundary. Direct access will be provided off of 23 Avenue and will constitute the main entrance for Terwillegar Towne. Development of Terwillegar Towne is intended to emulate a neotraditional style of development that will include a pedestrian oriented neighbourhood which is cognizant of the environment and which encourages interaction between residents. This development proposal will include such amenities as a Towne Square, a community athletic facility, early school construction and a sector employment facility which will contribute to the expeditious completion of Terwillegar Towne and meet the service and amenity needs of residents within a reasonable time frame.

Objective 2B

Objective 2B of the General Municipal Plan states:

“Encourage flexibility in creating attractive and functional neighbourhoods”.

The plan will use a Statutory Plan Overlay to implement the policies and objectives of the NASP through the use of siting and design guidelines.

The use of general land use indicators such as street-oriented residential (SOR), medium density residential (MDR) and Towne Square (TS) encourage flexibility. In the SOR category, a range of uses will be permitted which will range from single detached residential units to row housing and stacked row housing with each individual unit being oriented to and having primary access to public roadways. Within the MDR category, uses range from row housing to low-rise apartments and will be developed on a comprehensive project basis. TS uses, while generally associated with commercial, will also include civic, institutional, religious assembly and medium density residential uses. The commercial component will be limited to 70,000 sq.ft. so as to remain a vibrant and viable asset to the Terwillegar Towne community. Specific details of regulations concerning use and development will be contained in the Statutory Plan Overlay for Terwillegar Towne.

Policy 2.B.1

“To provide planned integrated neighbourhoods as the basis for new suburban residential developments, accommodating flexibility in neighbourhood size, population and geographic extent, and recognizing the need for municipal services and transportation facilities to be efficiently supplied”.

Terwillegar Towne is a planned, integrated neighbourhood which contains a variety of land uses to meet the residential, commercial, recreational and educational needs of the residents. The plan identifies that a range of housing types may be accommodated within the street-oriented and medium density residential component. Furthermore, the plan proposes that municipal services and transportation facilities will be efficiently supplied.

Small sub-neighbourhood level parks will be provided throughout the community and will provide a micro focus for each of these sub-neighbourhood units. These parks will total 2.5 ha and will be situated so as to provide direct and convenient access to open space for all Terwillegar Towne residents.

Policy 2.B.2

“Ensure neighbourhoods have adequate and timely access to neighbourhood level services including municipal services, parks and commercial facilities, while recognizing that a school may not have to be provided in each neighbourhood”.

Terwillegar Towne will have adequate and timely access to neighbourhood level services. It is anticipated that early development of parks, the Towne Square and possibly a school, will provide the residents of Terwillegar Towne with the early benefits of these facilities and assist in the efficient and orderly development of the neighbourhood.

Policy 2.B.3

“Allow flexibility in the type of central focus for each neighbourhood using a range of community and private facilities to service the residents needs”.

Terwillegar Towne includes a variety of foci for each sub-neighbourhood which may take the form of a school, park facility, possibly a fountain, a symbolic statue or maybe even a significant tree. Each unit will have a focus or central organizing sub-neighborhood feature. The pit, the schools and the Towne Square will provide a larger scale focus for the neighbourhood.

Policy 2.B.4

“Promote linkages between communities through the design and location of open spaces, community facilities and activity centres”.

The plan encourages open space linkages between the future neighbourhoods south of Terwillegar Towne via the inclusion of the *utility* pipeline right-of-way as an open space corridor and the natural drainage facilities as additional open space connectors. Adequate connection will be maintained throughout the community with all neighbourhood sectors being pedestrian accessible to the community athletic facility, the Towne Square, and as well to the district campus facility located in the Leger Neighbourhood.

*Amended by Editor
(FOIP)*

Streets will be designed to encourage pedestrian and vehicular compatibility and will form part of the overall pedestrian linkage system.

Objective 2C

The third objective of the General Municipal Plan, Objective 2C, relating to suburban growth states:

“To provide a range of housing types and density opportunities in each residential neighbourhood”.

Neo-traditional town planning encourages integration and heterogeneity of various housing types. Terwillegar Towne is a neotraditional neighbourhood and will provide for a range of low and medium density housing opportunities, including various forms of single detached, semi-detached, row housing, stacked row housing and apartment housing.

Policy 2.C.1

“Encourage heterogeneous communities by planning for a variety of housing types including multi family in each residential neighbourhood”.

The plan provides for a variety of housing types that range from low density, single family residential to medium density residential. Housing forms could include a range of single detached home styles with either front attached, rear attached or rear detached garages, semi-detached homes, row housing and stacked row housing within the street-oriented residential component (SOR), all being oriented to and having direct access to public roadways and designed in such a manner so as to ensure compatibility with one another. Details of the siting and development regulations to ensure compatibility will be the subject of a Statutory Plan Overlay.

Multi-level housing within the medium density residential component will be provided on a site by site basis with each project ensuring overall compatibility within the sites and with adjacent land uses. Details of siting and development regulations will be contained within the Statutory Plan Overlay.

Policy 2.C.2

“Encourage ground related multi family sites to be designed as an integral part of each neighbourhood on small blocks of land”.

The plan provides for development of ground related multi family opportunities throughout the plan area. It is envisioned that the built form will be integrated with the single family residential and could serve as integrated uses between low density housing and multi-level housing in the Towne Square and employment centre. Design guidelines will be incorporated into these sites through the Statutory Plan Overlay where necessary in order to assist in minimizing any negative externalities.

Policy 2.C.3

“Utilize detailed design guidelines in Neighbourhood Area Structure Plans for large concentrations of medium and high density multi family development”.

The plan provides for development of moderately high concentrations of medium density residential opportunities in the vicinity of the Towne Square. Design guidelines will be incorporated into a Statutory Plan Overlay which will provide for the transitional requirements necessary to ensure compatibility with surrounding land uses.

Suburban Investment Strategy

The Suburban Investment Strategy prepared by the City of Edmonton evaluates the principles and actions associated with accommodating suburban growth in the City of Edmonton. Relevant neighbourhood principles identified in the strategy are as follows:

1. That new neighbourhoods be contiguous with adjacent completed neighbourhoods.
2. That new neighbourhoods are necessary in order to meet servicing forecasts in the appropriate sector.
3. That funding be in place to provide for the required infrastructure or that the developers of the neighbourhoods are responsible for all costs associated with the required infrastructure.
4. That adjacent neighbourhoods be completed prior to development of new neighbourhoods

Terwillegar Towne addresses the above criteria in the following manner:

1. **Contiguous With Existing Development** - Development has been occurring at a vigorous pace within the Riverbend area over the past decade. Henderson Estates, Rhatigan Ridge, Falconer Heights, Bulyea Heights, Ogilvie Ridge and Carter Crest have all contributed to a competitive market environment.

Riverbend is approaching completion, however, and with only 42 ha remaining out of an original 515 ha development is now transcending the *utility* powerline corridor in order to continue to meet the housing demands in the southwest sector.

*Amended by Editor
(FOIP)*

The Servicing Concept Design Brief identifies Cell 2B (Terwillegar Towne) as contiguous with Cells 1 (Haddow) and 2A (Leger)⁴. Servicing for Terwillegar Towne exists immediately adjacent to Haddow on Riverbend Road. The first stage of Haddow has been approved for development and will extend servicing to within 300 m of Terwillegar Towne, half of which includes crossing the Terwillegar Drive right-of-way.

In addition, development is completed adjacent to and north of Leger and Hodgson. Within the westernmost portion of Leger, the intervening lands are approved to include primarily open space in the form of a regional campus facility. Stage 1 of Terwillegar Towne is adjacent to this facility and constitutes the next logical area for development to proceed. In the context of existing development patterns in Riverbend, Terwillegar Towne, together with Haddow, Leger and Hodgson, is contiguous with the substantially complete Riverbend area and would assist in supporting the development of the campus site and other district level facilities in the area.

2. **Necessary in Order to Meet Servicing Forecasts** - Development in Riverbend has occurred in six separate neighbourhoods and is nearing completion with approximately two years of development remaining. Market forces will continue to determine the performance in the three approved Terwillegar Heights neighbourhoods. However, it is unreasonable to expect that these neighbourhoods will be able to satisfy the demand for diversity which presently exists.

Servicing forecasts for the southwest sector indicate that 50 ha of land (500 lots) will be required annually for development, including the Twin Brooks and Blackburne Neighbourhoods. Terwillegar Towne is therefore required in order to ensure that the forecasts are satisfied with the same variety of developers and builders that was previously available in this sector. The addition of the market segment envisioned with the neo-traditional concepts identified in this development serve to prevent the drift that could otherwise occur to other municipalities such as Beaumont, Leduc or Sherwood Park. Terwillegar Towne is necessary in order to ensure sufficient availability and variety of serviced land is maintained in this sector.

3. **Required Infrastructure** - Funding is in place to provide required infrastructure services for new neighbourhoods.
 - a) Transportation/Roadways: Terwillegar Drive extends south

⁴ SCDB p. 69

to 23 Avenue. 23 Avenue provides a link across the Whitemud Creek to 119 Street. 23 Avenue will be enhanced through the development of Terwillegar Towne to ensure channelization is provided for the additional two lanes based on City of Edmonton policies. Presently, 23 Avenue is under-utilized and development of Terwillegar Towne will not exceed acceptable volumes.

With the construction of Terwillegar Towne, the west two lanes of Rabbit Hill Road will also be constructed from 23 Avenue to the south boundary of the neighbourhood as an arterial roadway.

Terwillegar Drive will be constructed southward to the Haddow/Terwillegar Towne link at such time as access is required for Terwillegar Towne. Further construction southward is not anticipated until the development of the ring road occurs.

Development of arterial roadways necessary to service Terwillegar Towne will be provided at the cost of the developers as development proceeds.

- b) Transportation/Transit: Terwillegar Towne Neighbourhood is designed to efficiently accommodate public transit. The necessity of funding for public transit will be addressed when population levels are sufficiently adequate to support transit service in the neighbourhood. With the development of Terwillegar Towne as a neotraditional concept, public transit can be accommodated at a low cost and high efficiency by creation of the “Towne Square” as a central hub for public transit. Other sub-hubs can be created in the Terwillegar Towne Neighbourhood and in subsequent neighbourhoods to the south to ensure that an efficient method of drop-off and pick-up is built into the public transit system.

The developer will work with the City to encourage early development of transit service for Terwillegar Towne, dependent on the needs and priorities established by Edmonton Transit, including the potential for the introduction of small buses into Terwillegar Towne.

- c) Transportation/Drainage: All trunk extensions and onsite requirements will be the responsibility of the developers of the Terwillegar Towne Neighbourhood. Terwillegar Towne will be developed and serviced with the existing sewer on Riverbend Road. Any extension of utilities will be front-

ended by the Terwillegar Towne developers and will form part of the Permanent Area Contribution system of the City of Edmonton.

With development of the Terwillegar Towne Neighbourhood, extension of these utilities will result in the previous costs that have been incurred by other developers as well as the City of Edmonton being refunded. Debt that has been outstanding for approximately 15 years will finally be retired.

- d) Water: The Terwillegar Towne Neighbourhood is presently serviceable from the existing City of Edmonton water system with extensions to the neighbourhood. These extensions may also require the extension of 600 mm water transmission mains and construction of water booster stations. If this infrastructure is required and not budgeted for in the current Capital Priority Plan, the developers will construct the required facilities and recover the costs when the project reaches the Capital Priority Plan. If temporary facilities are installed, the total cost of the temporary facilities will be borne by the developer.
 - e) Parks and Recreation: The Terwillegar Towne Neighbourhood will create a large opportunity for open space and for the creation of a major consolidated recreational area with both private and public recreational opportunities. This concept is further discussed in Section 5.0 of this document. The development of the public/private recreational facility is a key element to the success of Terwillegar Towne. The developer will take the lead role to encourage its early construction by providing grade, level and seeding of the pit open space. As well, the early financing of schools and park sites will be encouraged, so as to allow immediate enjoyment by the residents of Terwillegar Towne.
4. **Completion of Adjacent Neighbourhoods** - The Riverbend area to the north is rapidly approaching completion. The SCDB identifies Cell 2B (Terwillegar Towne) to be contiguous and developed simultaneously with Cells 1 (Haddow) and 2A (Leger). This would form a comprehensive development area which would be contiguous and consistent with development in Riverbend. The plan therefore complies with this principle.

Servicing Concept Design Brief

A Servicing Concept Design Brief was adopted in 1992 and subsequently amended in 1995 as a resolution by Edmonton City Council. The SCDB evaluates the long-term servicing and development constraints of the Terwillegar Heights area. The SCDB identifies Terwillegar Towne as Neighbourhood 2B and includes a community commercial site, two school sites and the *sand* pits as recreational opportunities. The SCDB further identifies Cell 2B to be contiguous with Cells 1 (Haddow) and 2A (Leger). The plan conforms to the provisions of the SCDB as amended with respect to staging, servicing, transportation, parks, schools and the general development concept.

*Amended by Editor
(FOIP)*

Public Consultation

The developer has implemented a public consultation program for Terwillegar Towne. The program includes two parts; one to detail the concerns of property owners within and around Terwillegar Towne, and the second to obtain general information about consumer demands from three separate and distinct market segments.

*Amended by Editor
(FOIP)*

Major property owners were separately contacted by *the developer* for comments on the plan. All owners indicated support for the proposal.

The second component of public consultation included a series of focus group sessions in order to obtain a general opinion about the plan concepts from the public at large. Different than a market analysis, respondents were not necessarily interested in purchasing a new home, but were representative of the demographic characteristics of three new home market segments; the move-up home buyers, the move-down home buyers, and the first-time home buyers. Results from the sessions indicated a positive response to the overall concept of a pedestrian oriented heterogeneous neighbourhood with strong community values. More work will be required to deal with specific details of site sizing, building setbacks, street geometrics and such details as the inclusion of rear access lanes, etc. and will be included within subsequent steps in the planning process including the Statutory Plan Overlay.

CHAPTER 5 - Housing and Development Paradigms

The following discussion is with respect to the individual elements, various residential types and densities, school park site sizes, location of commercial opportunities, development of private and public community recreation facilities, and the proposed transportation network. The plan has been developed to provide a heterogeneous community which will meet the varying needs of Terwillegar Towne residents (see Figure 7).

Residential

Terwillegar Towne will provide housing opportunities different from any other new neighbourhood in Edmonton. *The plan lends itself to the creation of a number of residential precincts, each of which can be developed with its own character and image. These precincts are defined by a combination of perimeter boundaries, including local and collector roads, green spaces, walkways and the changes in elevation.*

*Bylaw 12258
March 14, 2000*

The majority of the land within the neighbourhood is designated for residential development (94.58 ha). When completely developed it is predicted that the neighbourhood will contain approximately 8,433 people. *Low density housing forms will predominate and be developed to reflect the range of densities permitted in the City of Edmonton Zoning Bylaw. Low Density Residential (LDR) and Street Oriented Residential (SOR) types of development will occur. Approximately 67% of the total number of dwelling units within Terwillegar Towne are to be located within the area designated on Figure 7 as SOR. This area will allow a range of single family detached housing including front attached, rear attached and rear detached garages, as well as semi-detached and row housing (of maximum 4 dwelling units per building). This designation ensures that each unit developed in the SOR area must have direct access and frontage on a public roadway thereby assisting in the integration of the various housing forms. It is estimated that approximately 5% of the SOR units will be in the form of multi-family row housing.*

*Bylaw 13455
September 15, 2003*

*Bylaw 12258
March 14, 2000*

*Bylaw 13455
September 15, 2003*

Multiple family housing is identified in the east portion of the neighbourhood. Row housing and apartment developments are expected to comprise the multiple family component of the housing in the eastern area. These housing forms are proposed at the edge of the neighbourhood in locations where good transportation access is available as well as pedestrian/bicycle access to the area's amenities.

*Bylaw 12258
March 14, 2000*

Demographic projections by the City of Edmonton confirm that the City's population is aging. To accommodate the special needs of an aging population a location for special needs housing, which could include senior apartments, lifestyle communities, assisted living development or a long term care facility, has been identified.

Project style developments will be limited to the medium density residential (MDR) category. This category could include a range of uses from row housing to stacked row housing, as well as low rise apartment housing. Adequate siting and development regulations concerning the integration of these projects with the community will be developed in the Statutory Plan Overlay.

An area in the extreme north west corner of the plan area does accommodate a “project” type development under the RF5 zoning. A condominium project type development allows for a reduced roadway right-of-way which can accommodate lots on both sides of the private road.*

*Bylaw 13124
July 8, 2002*

The variety of housing product provided will be suited to a range of household incomes and will attract first time purchasers, moderate move-up buyers, empty nesters and luxury purchasers. Land use districts within the SOR area will be applied to maximize the densities adjacent to the Towne Square and along main penetrator roadways, while still providing for suitable transitions to lower density housing on the periphery of the neighbourhood. Standard land use districts will be utilized according to the anticipated use. However, adjustments to development regulations within these districts will be undertaken in the Statutory Plan Overlay which will serve to exemplify the neo-traditional principles noted previously.

It is envisioned that all street-oriented housing will be moved closer to the streets with the intention of increasing the community interaction. Garages will be de-emphasized and people will take more prominence on the streetscape. Where practical, lanes will be introduced to remove the vehicular access from the front and eliminate the disruption of ubiquitous double wide driveways. Development of front yard “people places” such as courtyards, verandas and balconies will be encouraged.

Built form will play a significant role in the success of Terwillegar Towne. Architects and builders will instill an “Olde Towne” theme in every building in Terwillegar Towne. This theme can best be described by relating to the predominant architectural character of buildings. Steep roofs, dormers, window orientation and architectural details will play a significant role in promoting this theme. Details of the regulations necessary to promote the development of this “Olde Towne” theme will be developed further in the Statutory Plan Overlay. Although the Olde Towne theme will have certain requisite guidelines, creativity will be encouraged for each architect or builder to demonstrate his opinion of what “Olde Towne” means.

A variety of opportunities for medium density multiple family residential developments have been provided for within the plan area. Medium density housing will include multi-level housing on a project development basis with built-out densities of up to 125 units per hectare in the area adjacent to the northeast employment centre. It is envisioned that medium density

housing will take the form of up to four storey walk-up apartment buildings also built to maximum 125 units per hectare located in and around the Towne Square. The residential component will be located around the periphery of the Towne Square and will provide a transition between the non-residential Towne Square uses and the balance of the community. Architectural treatment will be consistent with the “Olde Towne” theme developed for the other Terwillegar Towne buildings. Parking will be screened from public view as much as possible or even incorporated into the buildings.

Additional medium density residential dwelling units will be provided within the Towne Square as part of the mixed use component. They will be located above the commercial/institutional uses and will again be designed so as to reflect the “Olde Towne” character of Terwillegar Towne.

To enhance the integration of developments east of Towne Centre Boulevard, design elements and architectural details from the western portion of the Plan area will be carried forward, wherever practical, to complement the neo-traditional theme of Terwillegar Towne.

*Bylaw 12258
March 14, 2000*

Commercial

The plan provides for two commercial components to meet the commercial needs and provide for employment opportunities for the Terwillegar Towne residents.

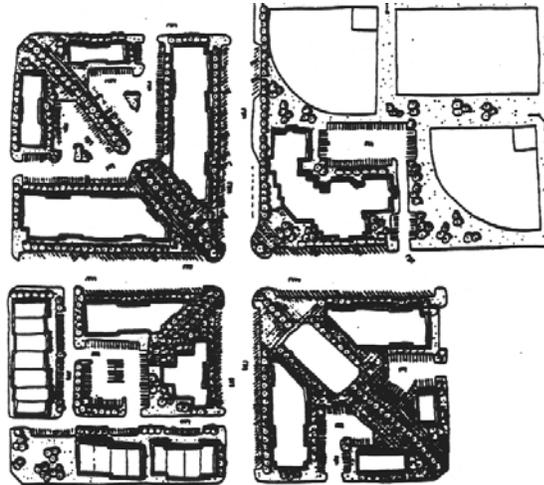
Firstly, the plan proposes that a Towne Square be developed. The Towne Square will be comprised of a variety of uses, including some day to day commercial needs, a park, possibly a religious assembly, and a community league facility. The Towne Square will be located in the south-central portion of the plan between Rabbit Hill Road and the future Terwillegar Drive. Both main entrance roadways will feed directly into the Towne Square as well as numerous neighbourhood pedestrian connectors encouraging penetration and activity into it. The commercial component of the Towne Square will be limited to approximately 70,000 sq.ft. of retail space and primarily oriented to the two main entrance roadways.

The architectural theme for the Towne Square will continue to emphasize and enforce the Olde Towne theme with special attention to architectural details, window orientation, building materials, and vertical and horizontal scale. Developers Architectural Guidelines and the Statutory Plan Overlay will together ensure that the integrity of the Olde Towne theme is maintained.

Angle or parallel front street parking will be encouraged along the Main Street. Additional parking will be screened from public view at the rear of buildings. Emphasis will be on activity and convenience. Pedestrian and

bicycle access will be encouraged through the abundance of walkway connectors, pedestrian oriented shops, bicycle storage facilities, etc.

Example of a Towne Square



The second commercial area identified in the plan is the employment centre located in the northeast sector at 23 Avenue and Rabbit Hill Road. This site is 2.18 ha in size and is in accordance with the 2.0 ha local Employment Centre identified in the SCDB. *The site was reconfigured to better comply with the City's transportation plan for the 23 Avenue/142 Street intersection.* It is intended to provide local employment opportunities for area residents. These opportunities could be in the form of professional services, merchandising, communications, etc. This centre will survive by opportunities presented from the district as a result of its location on 23 Avenue and Rabbit Hill Road. It is not intended to emulate the Terwillegar Towne theme but may provide convenient employment opportunities for Terwillegar Heights residents.

*Bylaw 12258
March 14, 2000*

Institutional

The plan provides for a variety of institutional sites to meet the needs of the community. The majority of the institutional lands take the form of school and park sites. The public K-8 school site has been sized at 4.0 ha. The majority of the playfields commonly associated with evening community use will be accommodated in the *NE 35 pit* (see Figure 8) rather than at the school site. This 4.0 ha area has been carefully reviewed and is comprised of 3.0 ha for the school building and school related play fields and 1.0 ha for a dual use arrangement combining dry pond stormwater management on school playing fields. The developer will take the lead role in arranging early financing and/or cost sharing of a school building and associated site development. Details of this arrangement would be developed at the time

*Amended by Editor
(FOIP)*

of subdivision.

A 12.88 ha school/park site is proposed in the east sector of the Neighbourhood to accommodate a public K-8, separate elementary/junior high school and sports fields. The roads in front of the schools and connecting to the neighbourhood's primary intersecting streets – Towne Centre Boulevard and Terwillegar Boulevard – would be collector roadways in order to accommodate the traffic that would be associated with two schools and the adjacent playing fields.

*Bylaw 13359
May 12, 2003*

The other institutional components would be located within the Towne Square. It is envisioned that a small religious assembly use housing approximately 300 seats will provide a community focus at this location. In addition, a community league facility will be developed in the park space in the Towne Square. As with all other buildings in Terwillegar Towne, development of a building for the purpose of religious assembly and community league facility will follow the “Olde Towne” theme established and previously identified for Terwillegar Towne.

Open Space

The open space elements of Terwillegar Towne are extensive.

- The existing gravel excavation pits provide an active recreational opportunity but also fulfill a passive open space opportunity that will serve a large sector of the southwest area of Edmonton. In order to accommodate proposed school site sizes, the community athletic facility is proposed in the pit which will contain sufficient ball diamonds, soccer fields, tennis courts, etc. to satisfy the recreational needs of the Terwillegar Towne area. Private and public recreational uses proposed are suitable for the present condition of the site. In order to assist in the funding of new growth, the Developer will grade, level and seed the public open space in the pit area designated as Municipal Reserve (MR).
- Side slopes of the pit excavation provide an opportunity for enhancement of the natural vegetation common to the area. *A portion of the side slopes of the NW 35 pit will be dedicated as Environmental Reserve (ER) (Figure 8) with the actual limits of the top-of-bank and bottom-of-bank being determined prior to zoning. These areas allow for natural experiences which are not contemplated within the community recreation facility but which are important to the overall environmental sustainability of the plan. In order to ensure the environmental sustainability of these areas, the Developer will re-naturalize and/or re-stabilize the side slope areas noted as ER, to the satisfaction of the City of Edmonton Community Services Department, with the*

Amended by Editor

Amended by Editor

Amended by Editor

specific areas and extent to be determined prior to redistricting. *After regrading the NE 35 pit, the remaining side slopes did not meet the definition of Environmental Reserve (ER). These side slopes were designated Public Utility (PU) in most areas and residential development was extended in the northwest corner of the NE 35 pit.*

*Bylaw 12258
Bylaw 13359
May 12, 2003*

- Existing rights-of-way (N.U.L.) and small P.U.L.'s will interact with a series of walkways to link various residential cells with each other, as well as all other elements of the plan. Adequate and logical public access (pedestrian/bicycle links) will be provided through the private open space areas in order to complete these connections.
- The stormwater elements of the Terwillegar Towne Neighbourhood will be integrated into the open space elements. The stormwater facilities will be recreated to emulate the historical drainage patterns of the area and renaturalized to create a natural habitat. This will provide a facility that produces recreational amenities for passive activities and educational opportunities. These sites will be integrated into the school sites and school curriculums, thereby providing a setting for science and nature interpretation. In order to assist in the funding of new growth, the Developer will grade, level and seed as well as provide natural vegetation and trees for the dual use areas up to the 1:100 year storm level.
- *Approximately 2.45 hectares (ha) of Private Open Space is located in the neighbourhood. Approximately 0.8 ha of linear parkway that follows a fault line area in the northwest portion of the Plan area was transferred to the City of Edmonton and is designated as Public Open Space (Non-MR). Approximately 0.1 ha of this linear parkway continues to be privately owned and is designated as Private Open Space. The result is an amenity with easy access for the use and enjoyment of area residents and an appropriate buffer between single family development and the fault line. An additional 0.1 ha of Private Open Space is found south of the fault line for use as a pocket park. The remaining 2.25 ha of Private Open Space is found in a park just east of Towne Centre Boulevard bordered by Environmental Reserve (ER).*
- Six dispersed parks totaling approximately 3.2 ha will be provided throughout Terwillegar Towne. Although the size and location of these parks will be determined in the Statutory Plan Overlay, one of these parks will be located in the Towne Square and will include the Community League facility. The parks will serve as micro foci for small sub-neighbourhood units in close proximity to them. The parks could be developed as either active or passive recreational opportunities. Linkages from these parks will be provided to all other open space elements of the plan, as well as connections with future neighbourhoods to the south.

*Amended by Editor
Bylaw 13124
Bylaw 17611
April 18, 2016*

*Bylaw 12258
March 14, 2000*

- The northeast residential area of this plan may require the provision of an additional dispersed park site. The size, location and the method of acquiring this park will be determined as development occurs.
- The streets in Terwillegar Towne will introduce boulevard separated sidewalks to encourage pedestrian traffic. All streets will become part of the walkway linkage system. Wherever possible, streets will contain a landscaped island in addition to the boulevard, to enhance the character of Terwillegar Towne.

Transportation Network

Terwillegar Towne recognizes the current dominance of the automobile in the market place and the realities of accommodating the two car family. Yet, consistent with the neighbourhood's commitment to being more complete and the desire to capture the feel of older, more traditional neighbourhoods, the transportation priorities of Terwillegar Towne are as follows:

1. Pedestrian
2. Bicycles
3. Public Transit
4. Private Automobiles

In general, the neo-traditional grid roadway network provides multiple opportunities for intra-neighbourhood traffic movement and eliminates the need for a hierarchical loop road system. Traffic calming measures will reduce speed and promote safety on streets. These principles proposed for Terwillegar Towne are major components of the plan to address these priorities. The following sections describe how the Terwillegar Towne Neighbourhood will accommodate these modes of transportation in more detail.

Pedestrians

In Terwillegar Towne the focus of the overall neighbourhood is the Towne Square while other local focus points are also provided (Figure 9). In keeping with providing a vista termination along roadways the roadway pattern is orientated towards the Towne Square and other focal points. Pedestrian links along these roads will provide a relatively direct link to major pedestrian destinations. Where roadway patterns require pedestrians to walk more than one-half block out of the way, mid-block pathways will be provided.

Pedestrian access is provided to connect all portions of the area east of Towne Centre Boulevard and the adjacent development west of Towne Centre Boulevard through local and collector roads and walkways to the school/park site.

*Bylaw 12258
March 14, 2000*

Pedestrian access through the provision of pedestrian walkways is provided to the

stormwater management facilities in accordance with City policy. The slopes between upland and lowlands will accommodate pedestrian/bicycle paths. They will meet walkways to the school/park site and the stormwater management facilities allowing for an integrated pedestrian/bicycle system. Figure 9A highlights the park, open space and pedestrian/bicycle circulation system for the area east of Towne Centre Boulevard.

Amended by Editor

For increased pedestrian safety, sidewalks separated from the adjoining roadway by tree-lined boulevards will be used. The boulevard width will be adequate to permit planting of trees to increase the sense of separation from the roadway and provide adequate space for snow storage without the stored snow infringing on the sidewalk.

Curb return radii on local roads will be kept to a minimum in order to minimize roadway crossing distances and to reduce traffic speeds. On major roads well delineated crosswalks will be provided with consideration given to narrowing the roadway at any desired mid-block crossings in order to minimize roadway crossing distances and increase pedestrian visibility.

Bicycles

Planning for bicycles has traditionally centred on the recreational role of the bicycle. With the adoption of the City of Edmonton Bicycle Transportation Plan in 1992 additional efforts are being made to enhance the role of the bicycle as a means of commuting. The Terwillegar Towne Neighbourhood will be developed in accordance with the planning principles outlined in that plan.

The layout of the proposed roadway network and additional pathways, where required for pedestrian linkages will facilitate direct routes to the dispersed parks which will evolve to be neighbourhood focal points. Bicycle parking facilities will be provided at all focal points. At major focal points such as the schools and Towne Square, where there is the potential for transit service, the possibility of providing bicycle lockers or covered parking will be explored.

Pathways for joint pedestrian and bicycle use will be provided through open space areas primarily for recreational purposes. Where practical these pathways will be orientated to facilitate bicycle commuter desire lines. Linkages to the neighbourhood transit commuter system will be provided. In accordance with current City policy a Class I bicycle facility will be provided along arterial roads abutting Terwillegar Towne. Direct linkages between the internal neighbourhood bicycle system and the Class I system will be developed.

Many of the features proposed for the pedestrian system, such as reduced curb return radii and road crossing distances of major roadways are consistent with improving bicycle safety. Implementation of these features

as well as specific cyclist concerns with other engineering details, such as recessing catch basins beyond the curbline, will be explored as Terwillegar Towne is developed.

Public Transit

The Terwillegar Towne Neighbourhood is built on the concept of a number of focal points which provide natural hubs for public transit service. At the larger focal points such as the schools and the Towne Square, transit will be brought in towards the centre of the focal point and covered waiting facilities for transit passengers will be integrated into the focal points.

The roadway layout for Terwillegar Towne is developed around providing direct links between focal points with the focal points acting as termination vistas. This will assist in providing direct routing between major transit stops. Mini-buses are seen as a possible cost-effective alternative for providing service in the neighbourhood and they are less visually intrusive in the neighbourhood. This will allow them to be more publicly acceptable on more of the neighbourhood roadway network and permit more flexibility in transit routing. Details for the possibility of using mini-buses will be explored further through the implementation stages of Terwillegar Towne.

Public Transit will run along the arterials and collectors following City policy and all residential areas are to be within walking distance of transit service as defined by City policy.

*Bylaw 12258
March 14, 2000*

Private Automobiles

Arterial access to the Terwillegar Towne Neighbourhood will be via 23 Avenue and Rabbit Hill Road. An initial transportation assessment focusing on the adjacent arterial roadway and neighbourhood access requirements was undertaken. The assessment determined that with access to 23 Avenue, Terwillegar Drive and Rabbit Hill Road, the neighbourhood will be adequately served from an arterial access point. Some upgrading of 23 Avenue and construction of Rabbit Hill Road to an appropriate standard will be required to accommodate the full development of the neighbourhood. This work will be undertaken by the Developer in accordance with City policies as development proceeds. A connection to the Haddow Neighbourhood including an eventual northbound only connection to Terwillegar Drive will be provided in the northwest portion of the plan area. The connection is intended to facilitate convenient transit routing, pedestrian and bicycle access to the river valley system and to alleviate some traffic congestion on 23 Avenue.

Access to 23 Avenue, a major thoroughfare, will be from one major access point located such that the intersection spacing is consistent with current

City policy. Access to Rabbit Hill Road will be consistent with neo-traditional planning principles and be via several local roadway connectors. Where possible, this will spread traffic across a number of roadways and avoid concentration of traffic volumes on one or two east-west roadways.

Internally, the Terwillegar Towne Neighbourhood will accommodate the private automobile in a manner compatible with a pedestrian friendly environment. This means a finely spaced network of local roads with some larger roads connecting focal points. It also means exploring the use of traffic calming principles including narrower roadway cross-sections, boulevard tree planting, reduced building setbacks, smaller curb return radii, traffic circles, raised table intersections and reduced visibility triangles at intersections. These techniques will be used where appropriate with due consideration to potential concerns relating to emergency vehicle access, transit vehicle access, snow clearing and on-street parking requirements.

Figure 7 Land Use Concept

As amended by Bylaw 17611, April 18, 2016

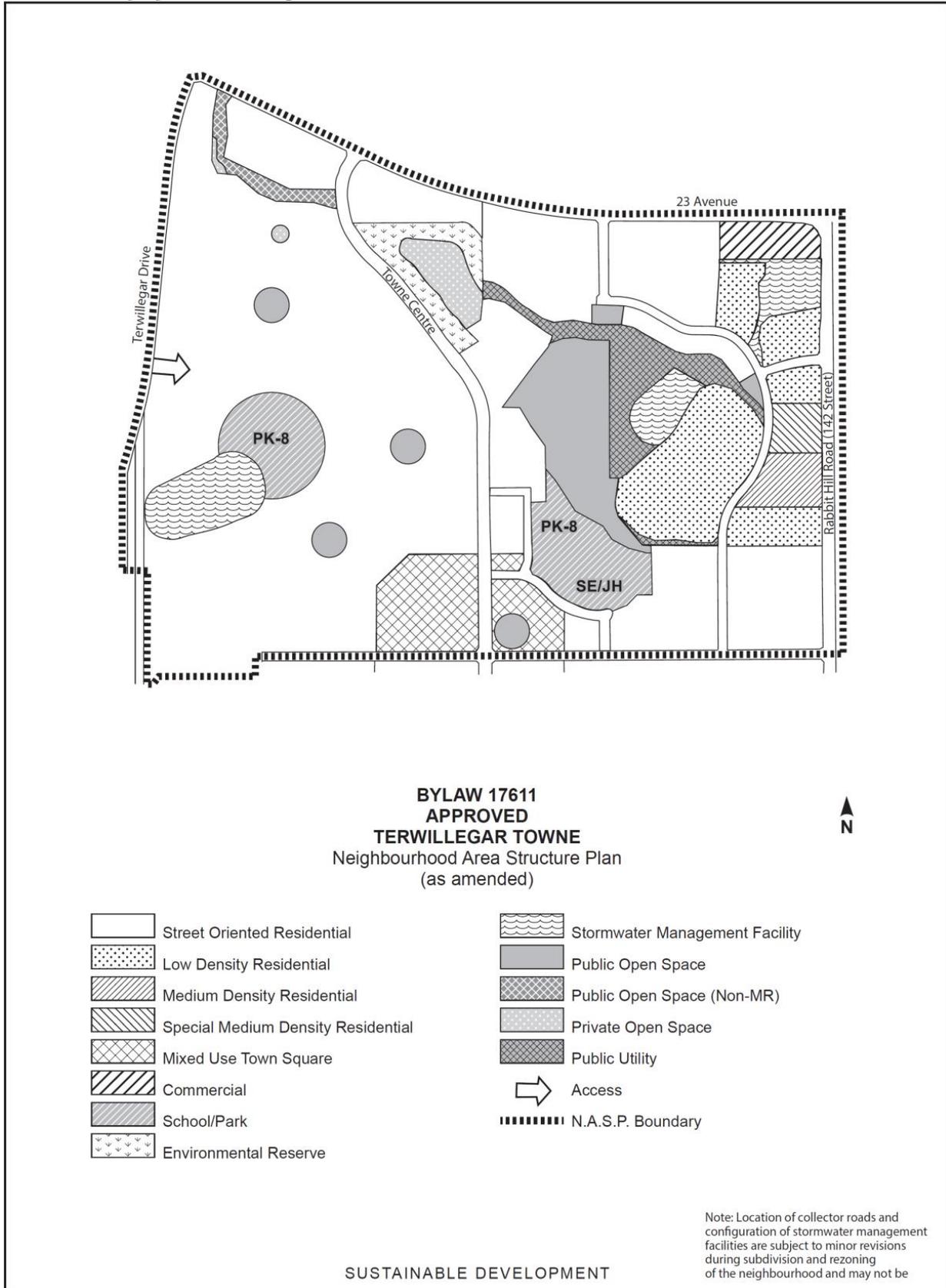
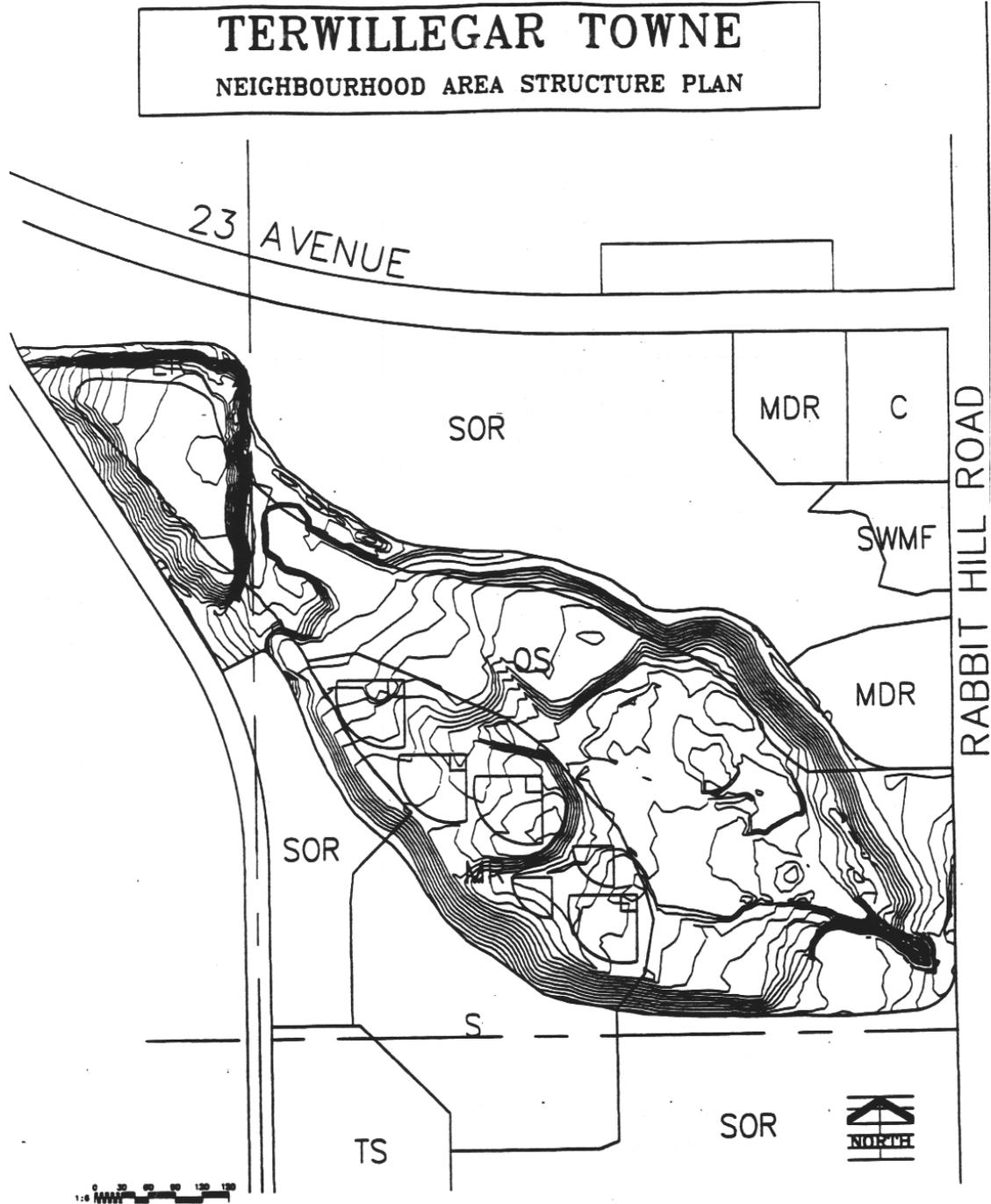


Figure 8 Community Recreation Facility

Bylaw 11056 September 8, 1995



COMMUNITY RECREATIONAL FACILITY

FIGURE 8

Figure 9 Linkage Plan

Bylaw 11056 September 8, 1995

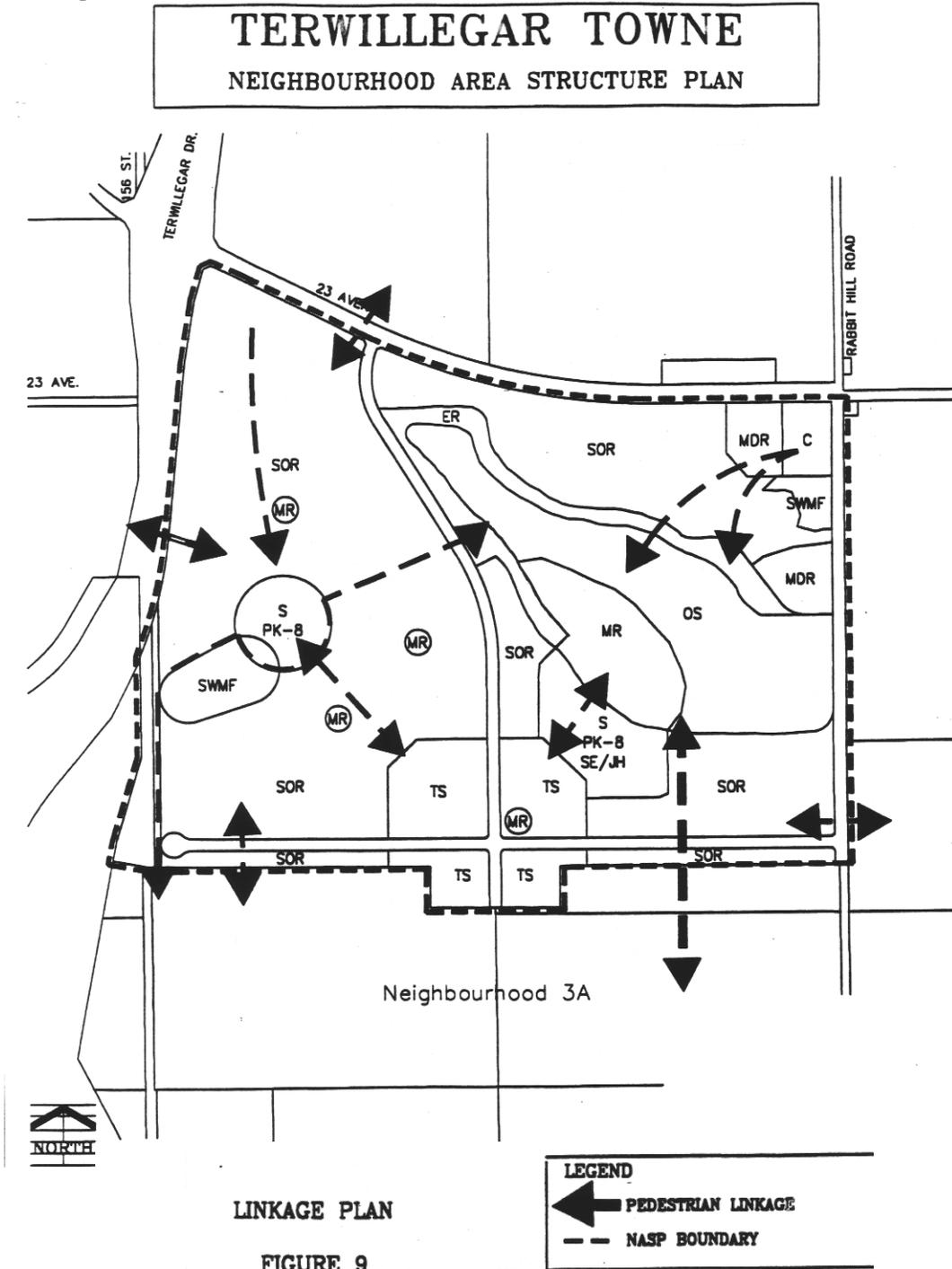
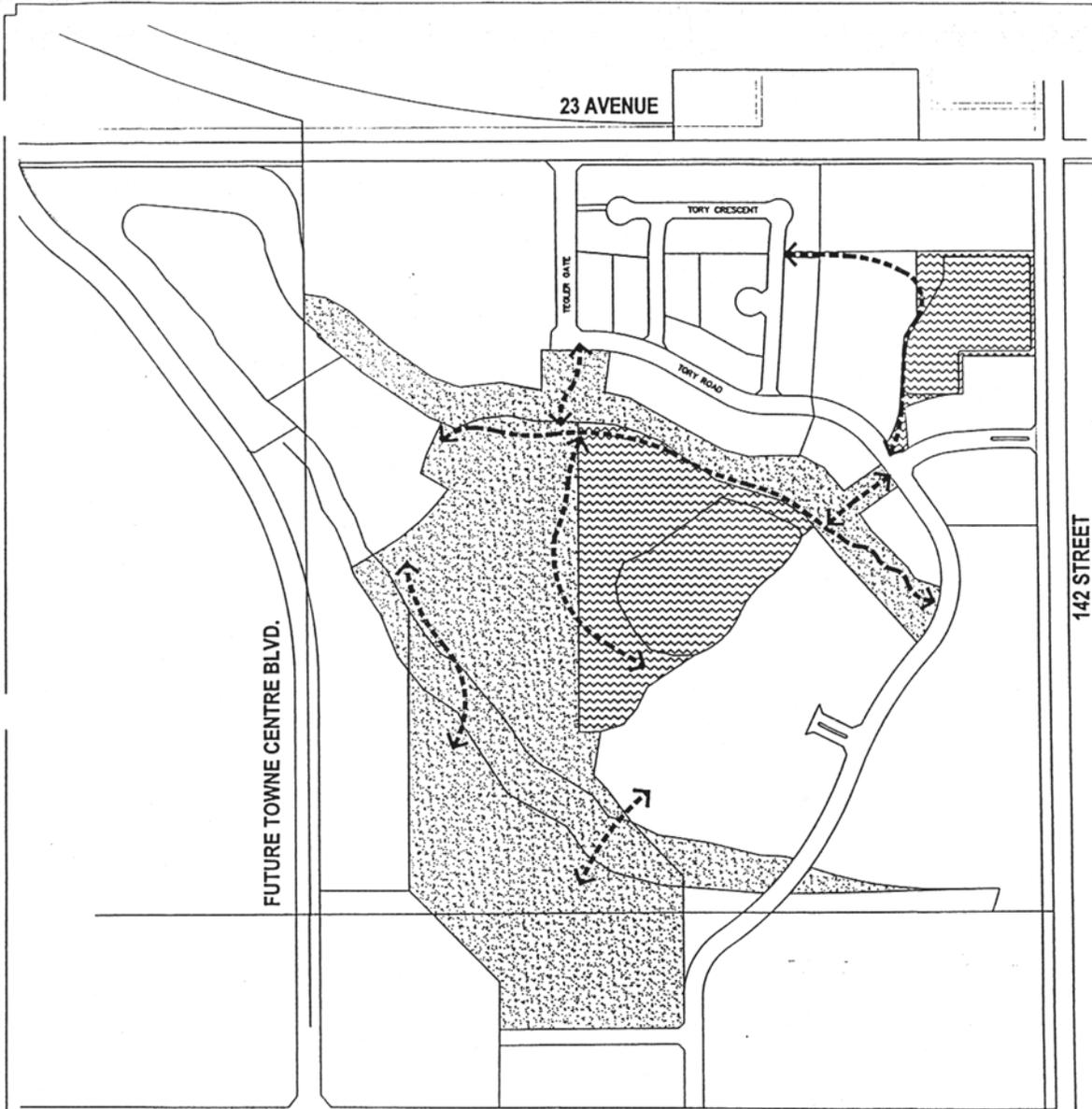


Figure 9A Pedestrian Linkage

Bylaw 12258 March 14, 2000



TERWILLEGAR TOWNE
NEIGHBOURHOOD AREA STRUCTURE PLAN AMENDMENT

PEDESTRIAN LINKAGE LEGEND
EXHIBIT 5

-  MAJOR PEDESTRIAN AND/OR BICYCLE LINKAGE
-  SCHOOL PARK SITE/OPEN SPACE
-  STORM WATER MANAGEMENT /PUL



CHAPTER 6 - The Infrastructure

The success of a neighbourhood is dependent upon the efficiency of its infrastructure; both in its ability to service the neighbourhood as well as in the ease with which it is maintained in the future. The following is a brief outline that describes the method in which the infrastructure in the area will provide services to Terwillegar Towne. A more detailed analysis of the servicing issues is discussed in the Neighbourhood Designs Report (Storm and Sanitary Sewers), the Water Network Analysis and the Traffic Impact Assessment.

Storm Sewers

Stormwater runoff from the Terwillegar Neighbourhood will be treated as a resource. Attenuation of stormwater runoff is a prerequisite to development in the Terwillegar area. However, this requirement to attenuate water can be done in a manner that provides an opportunity to the neighbourhood to utilize the water retention to enhance the natural environment. Wetlands and natural areas will be enhanced with the stormwater runoff to provide an opportunity for the residents of Terwillegar Towne to interact with nature.

The concept for stormwater management in Terwillegar Towne conforms to the recommendations provided in the Terwillegar Area Master Plan completed in conjunction with the amendment of the Servicing Concept Design Brief for Terwillegar Heights. Terwillegar Towne is essentially broken into two basins. The southwest basin, which covers a majority of the development area in Terwillegar Towne, drains to a stormwater management facility located at the south westerly boundary of the area. This stormwater management facility will then convey runoff to an existing storm sewer located at the terminus of Riverbend Road at the *utilities* corridor (see Figure 10). All costs associated with the stormwater management facility, and the outlet sewers necessary to connect to the existing infrastructure, would be at the cost of the Terwillegar Towne developers.

*Amended by Editor
(FOIP)*

The northeast basin, comprising a small portion of Terwillegar Towne at the extreme northeast corner, drains north along Rabbit Hill Road through Leger and Haddow located north of Terwillegar Towne. A stormwater management facility in this area will recreate a small wetlands detention facility. This wetlands facility will retain stormwater runoff prior to conveyance to an existing sewer within the Ogilvie Ridge Neighbourhood.

The upper basin will be drained via a network of underground sewers to a stormwater management facility generally located within a low area adjacent to 142 Street. This facility will be designed to operate as a Dry Pond with flows released into the downstream system at a predefined rate. The facility will connect to an existing 675 mm storm sewer stub located at the north side of 23 Avenue west of 142 Street. This existing storm sewer ultimately discharges into a 5100 mm tunnel located north of the utility right of way at Ogilvie Boulevard. (see Figure 10.A)

*Bylaw 12258
March 14, 2000*

Amended by Editor

The area within the gravel pits, will take advantage of the pervious subsurface and drain internally as there is little additional runoff expected.

*Amended by Editor
(FOIP)*

To enable development of the lowlands area, an additional storm water management facility will be constructed in the lowlands. This SWMF will be sized to accommodate runoff generated by major storm events. The facility will accept flows via overland flow routes and the underground storm sewer network. The lake will be drained via a pumping system into the upland storm sewer network which is connected to the upper Dry Pond.

*Bylaw 12258
March 14, 2000*

All stormwater management facilities in the Terwillegar Towne Neighbourhood will be developed in existing low areas. In a historical review of air photos, it was determined that numerous small detention areas existed in the 1940's in the Terwillegar Towne area. Over time these facilities were eliminated by the farmers in the area to maximize their cultivation of the lands. These will be recreated as stormwater detention wetlands.

Flows from the overall development will be controlled to a previously defined discharge rate such that the downstream storm system is not affected by the introduction of the lower development. Previous analysis of the lower basin indicated the area was to "drain internally". Figure 10.A depicts the proposed storm servicing system for the north east portion of the neighbourhood.

*Bylaw 12258
March 14, 2000*

Amended by Editor

Sanitary Sewers

Sanitary servicing for the Terwillegar Towne Neighbourhood is accommodated in a traditional fashion in conformance with the Terwillegar Heights Area Master Plan approved as part of the Servicing Concept Design Brief for the Terwillegar area. The southwest portion of Terwillegar Towne will utilize gravity sewers and a lift station to convey sanitary flows to an existing sanitary trunk located on Riverbend Road at the *utilities* right-of-way.

*Amended by Editor
(FOIP)*

Two small areas at the north boundary of the Terwillegar plan will convey sanitary drainage northwards into Leger. Once Leger develops up to these areas, sanitary service would be available for these areas to develop.

Sanitary servicing of the upper basin area will be provided via a gravity operated

*Bylaw 12258
March 14, 2000*

underground piping system. Pipes will be designated to transport sanitary flows to an existing 250 mm sanitary service stub located north of 23 Avenue and west of 142 Street. Figure 11A depicts the proposed sanitary servicing system for the north east portion of the neighbourhood.

Amended by Editor

All infrastructure necessary to convey sanitary flows from Terwillegar Towne to the existing sanitary trunk would be at the cost of the developers of the Terwillegar Towne Neighbourhood. The City of Edmonton will not be required to fund any portion of infrastructure for storm or sanitary sewers for this neighbourhood (see Figure 11).

Water

The Terwillegar Towne Neighbourhood water design will conform to the approved Water Network Analysis prepared by the City of Edmonton for the Terwillegar area. This may necessitate the extension of a 600mm transmission main and construction of a booster station.

The proposed water network will include a 300 mm PVC water main connected to the existing 450 mm watermain located within 23 Avenue. An additional 450 mm watermain will be extended from the existing 600 mm stub located at the intersection of 23 Avenue and 142 Street. As well there will be a third connection to the future development to the south of Terwillegar Gardens as depicted in Figure 10B.

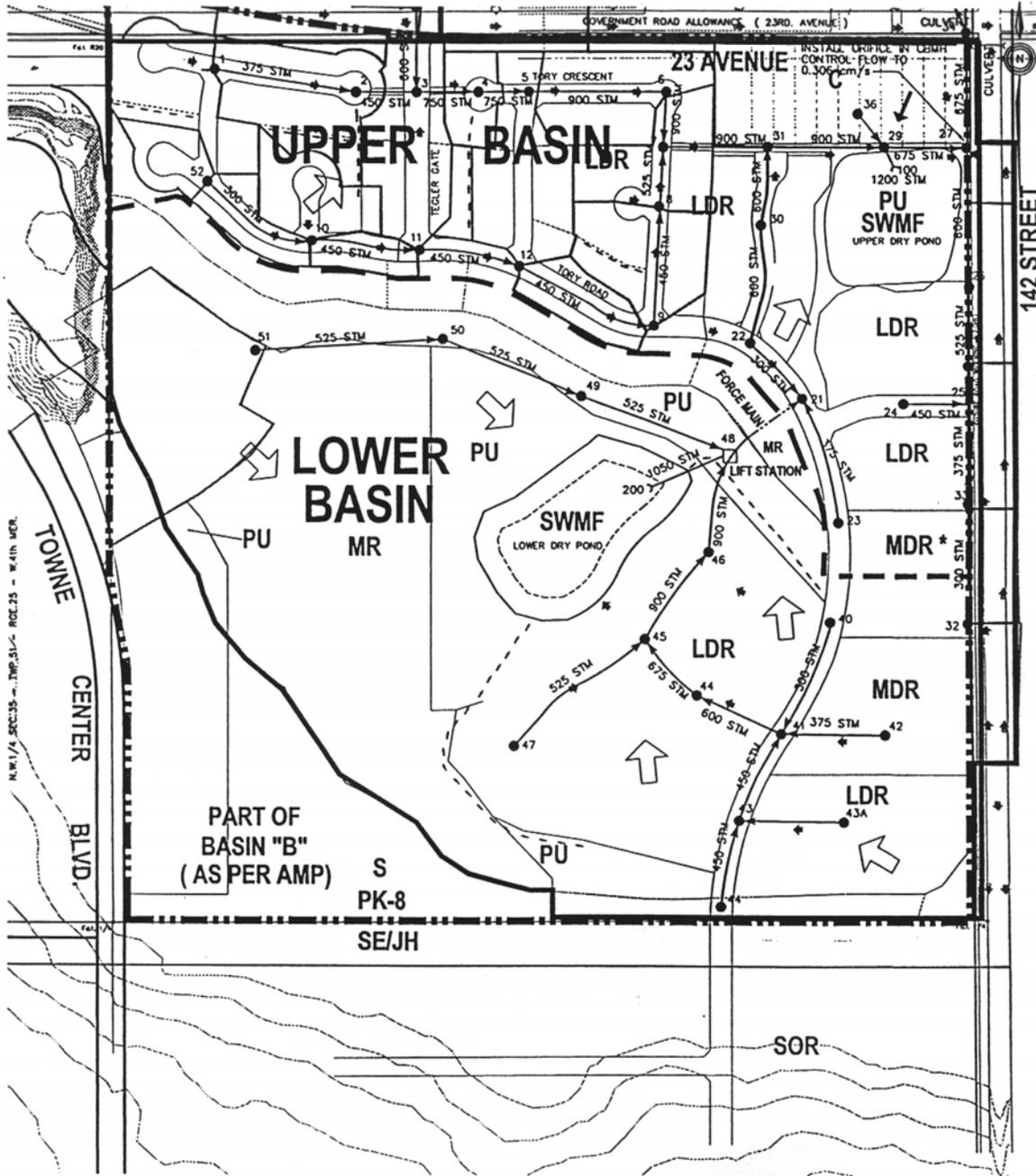
*Bylaw 12258
March 14, 2000*

Amended by Editor

One key element for providing water services to the Terwillegar Neighbourhood will be the Terwillegar Towne's requirements of all builders within the neighbourhood to conform to the City of Edmonton's desire to conserve water. Terwillegar Towne will take a step forward with respect to ensuring water conservation in the neighbourhood by requiring each builder to install all the required water saving devices necessary to reduce consumption in an average house by a minimum of 15%. This number can be achieved and will be enforced by the guidelines set forward by the developers of Terwillegar Towne.

Figure 11 Storm Servicing/Water Management

Bylaw 12258 March 14, 2000



TERWILLEGAR TOWNE
 NEIGHBOURHOOD AREA STRUCTURE PLAN AMENDMENT
 STORM SERVICING/WATER MANAGEMENT

NOT TO SCALE

EXHIBIT 8

- CATCHMENT BOUNDARY
- EXISTING STORM
- PROPOSED STORM NETWORK
- ⇨ DIRECTION OF FLOW
- PROPOSED SWALE

Figure 12 Storm Servicing/Water Management

Bylaw 12258 March 14, 2000

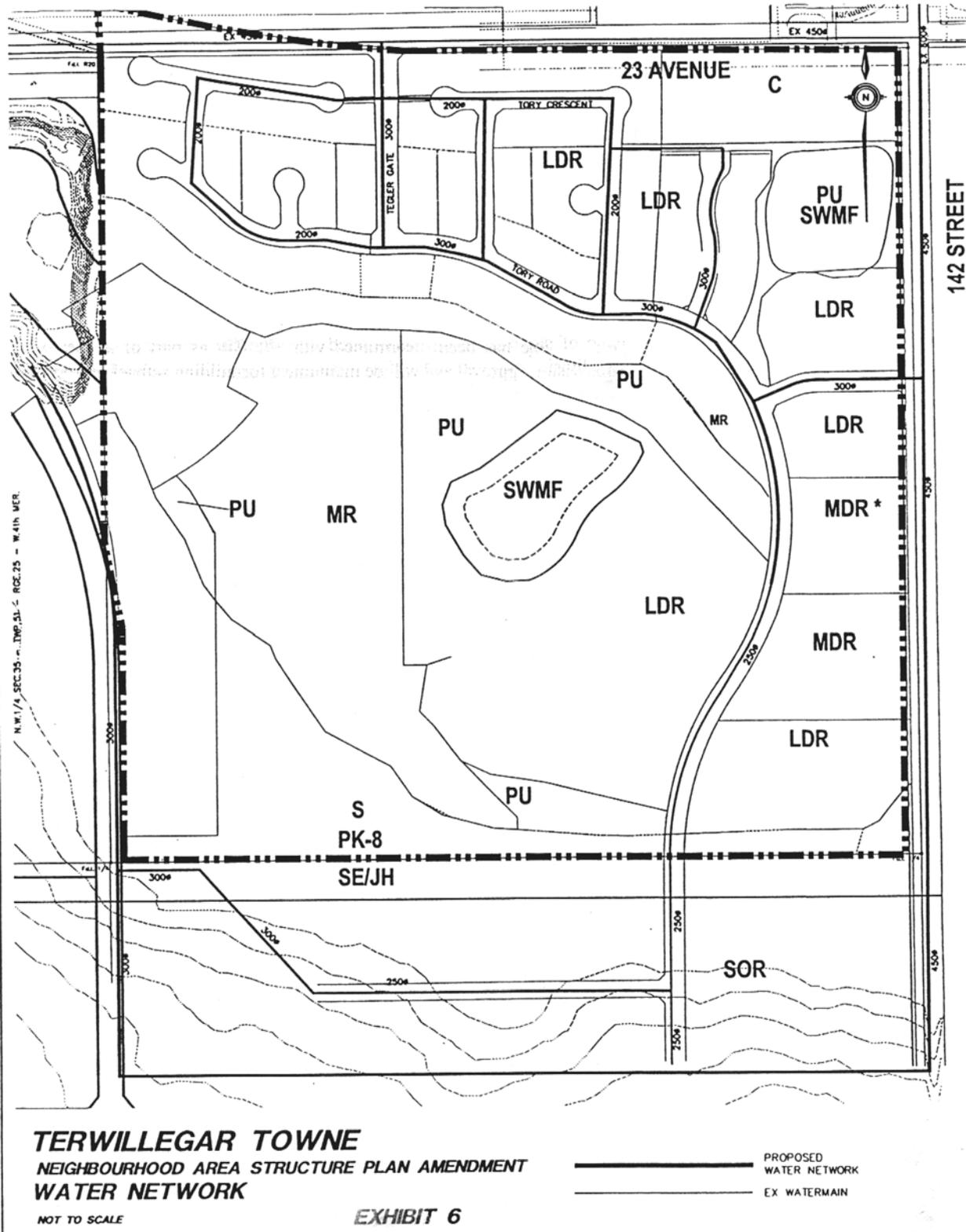


Figure 13 Sanitary Servicing

Bylaw 11056 September 8, 1995

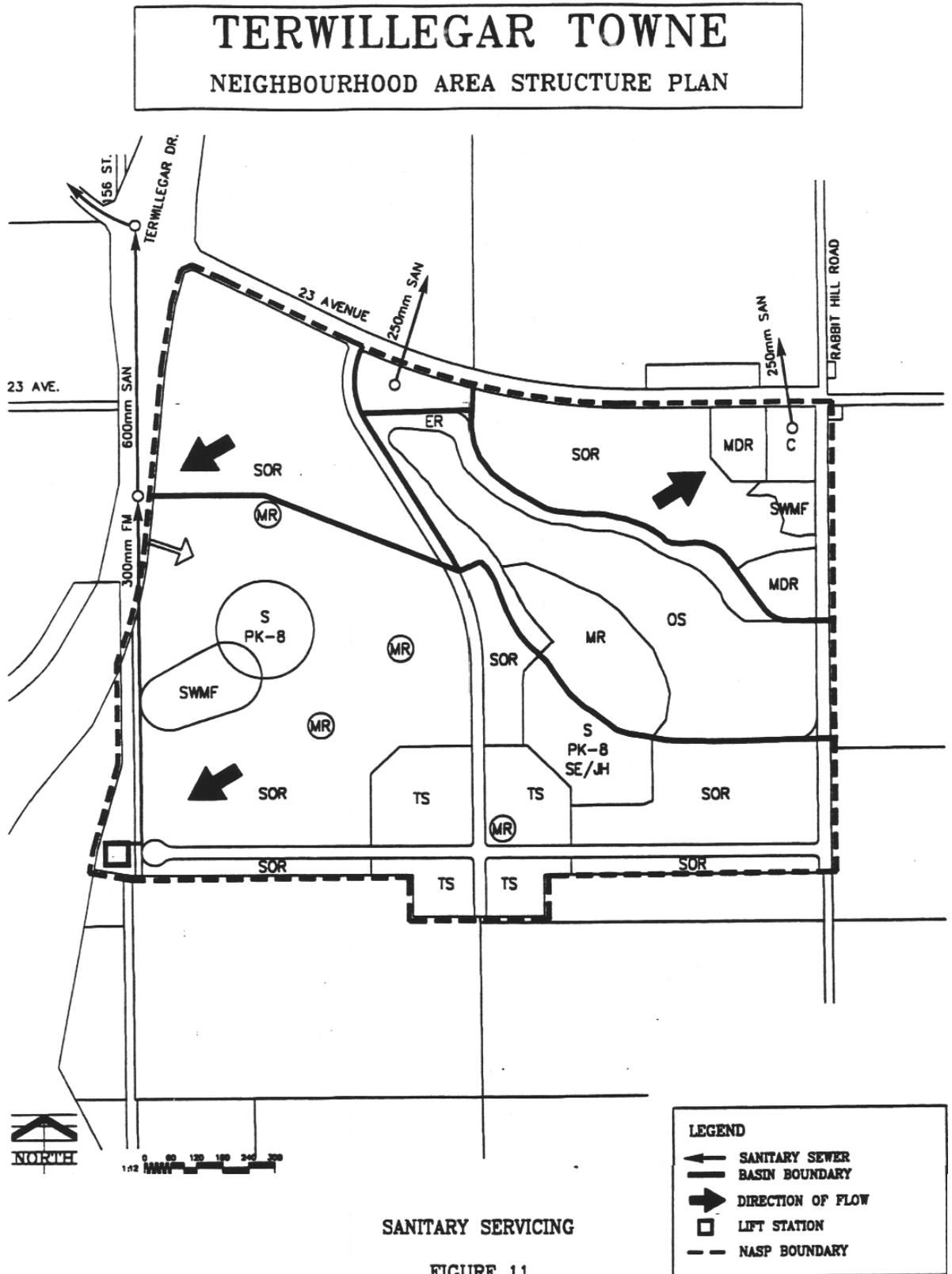
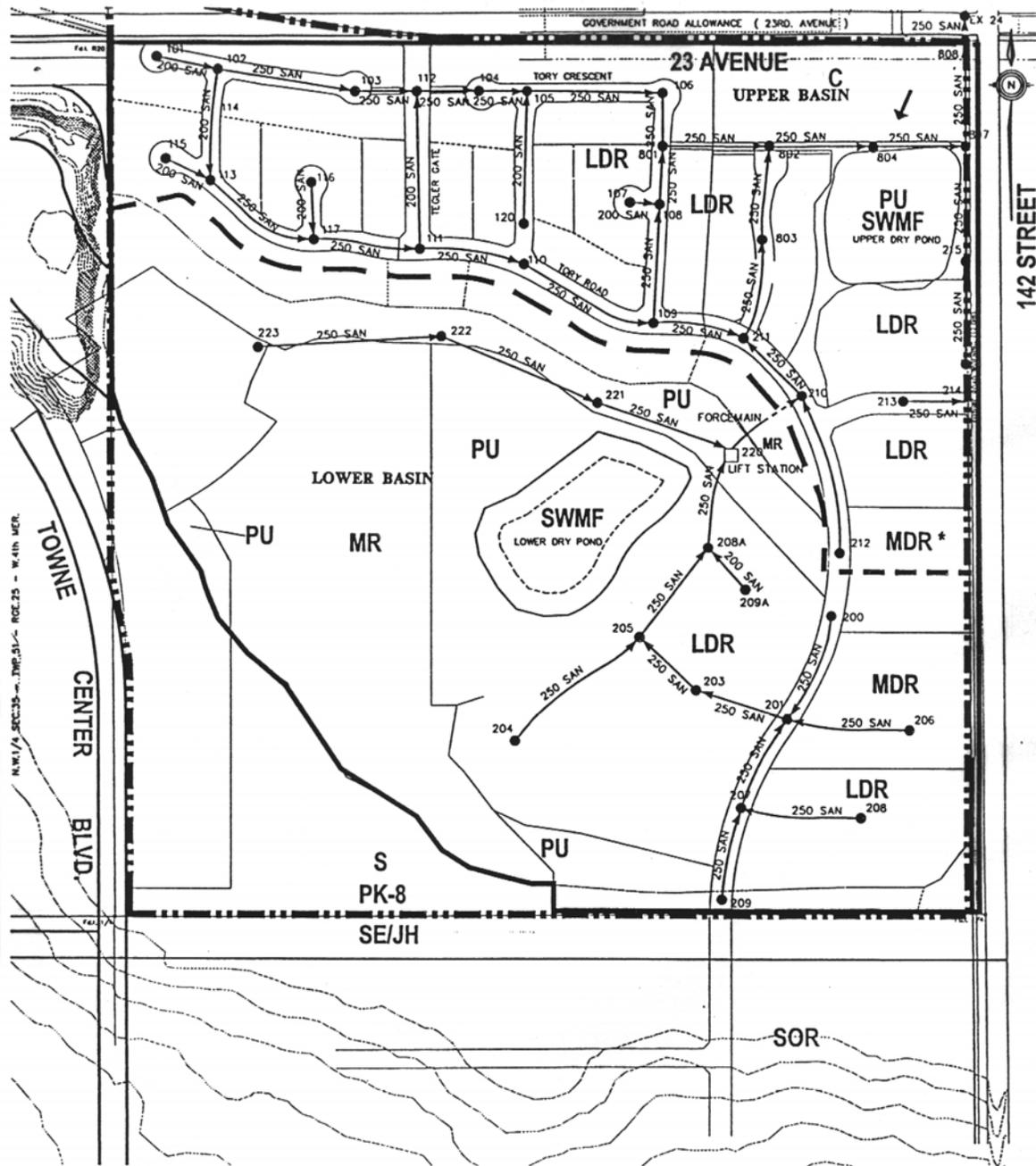


Figure 14 Sanitary Servicing

Bylaw 12258 March 14, 2000



TERWILLEGAR TOWNE
 NEIGHBOURHOOD AREA STRUCTURE PLAN AMENDMENT
 SANITARY SERVICING

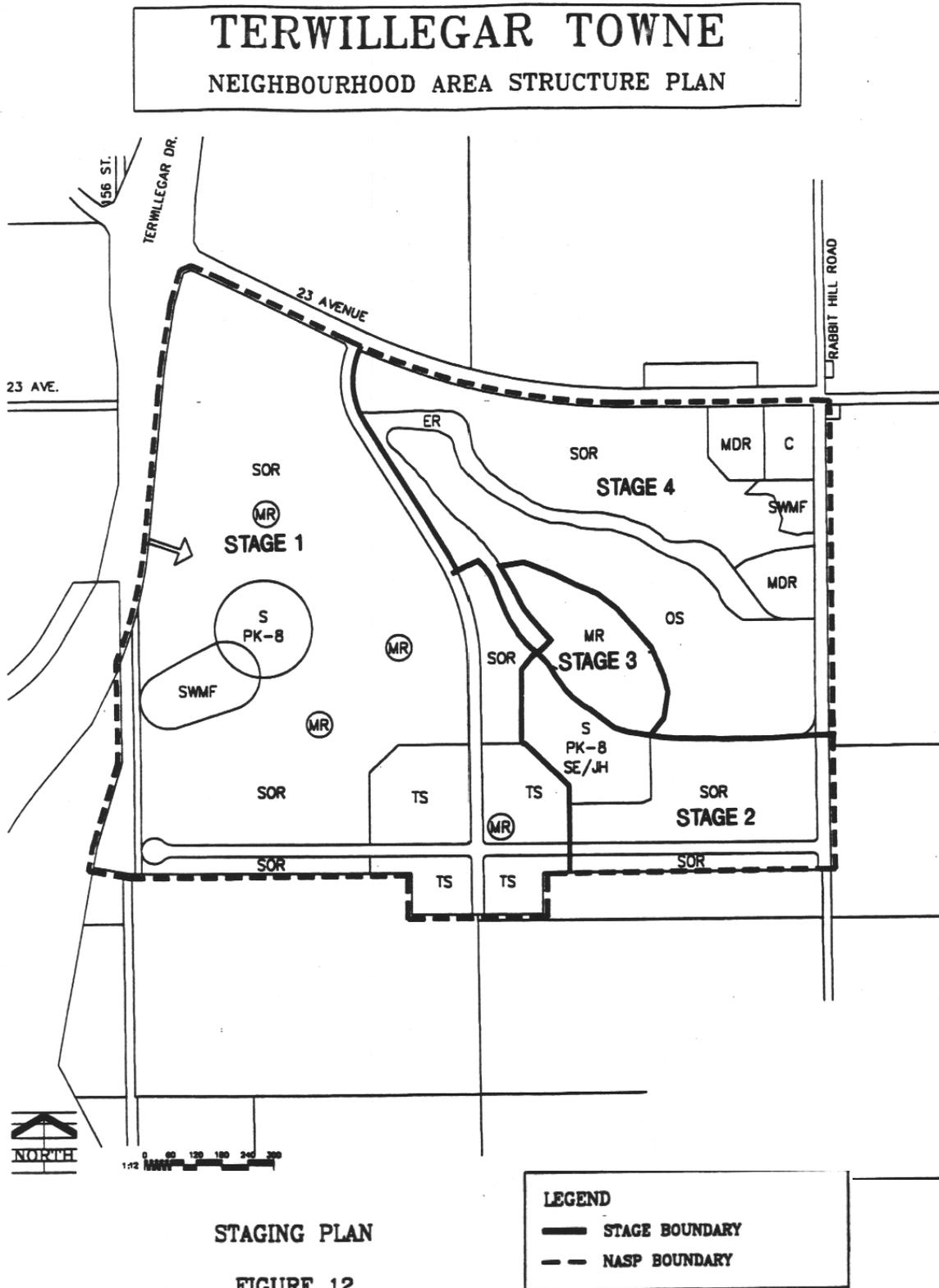
NOT TO SCALE

EXHIBIT 7

- CATCHMENT BOUNDARY
- PROPOSED SANITARY NETWORK
- - - EX SANITARY SEWER

Figure 15 Staging Plan

Bylaw 11056 September 8, 1995



CHAPTER 7 - Implementing the Plan

Terwillegar Towne Neighbourhood can be readily serviced and easily phased. It is intended to initiate development in 1996 and it is anticipated that development of the first sector of the neighbourhood will take approximately four to five years.

Major Roadway Staging

Terwillegar Towne is serviced by 23 Avenue which exists to its entrance. Terwillegar Towne is not dependent on development of Terwillegar Drive for access. Terwillegar Towne will utilize that access as a secondary access once it is constructed. However, a need is not anticipated until substantial development is completed in both Terwillegar Towne and Haddow. Improvements to Rabbit Hill Road will be done by the Developer in accordance with City policy as the lands adjacent to Rabbit Hill Road develop.

Development Staging

Terwillegar Towne represents a logical extension of development opportunities from the Riverbend area in conjunction with other neighbourhoods adjacent to it. Staging is driven by the logical extension of storm, sanitary, water and access. Stage 1 will provide the primary access to the neighbourhood and feed down to the first neighbourhood focus, the public K-8 school site. Development will spread southward to the Towne Square. When the northwest sector has been primarily completed, development will extend eastward and southward into the eastern sector of the neighbourhood (see Figure 12). Development of Stage 4 will occur following the completion of the neighbourhood to the south and west of the pits, or in conjunction with development in Hodgson and Leger.

Statutory Plan Overlay and Districting

In order to implement the concepts identified in the plan, a Statutory Plan Overlay will be utilized. The overlay is intended to provide specific direction regarding development regulations for residential and commercial development in Terwillegar Towne. The overlay will alter non-use regulations for Permitted and Discretionary uses within the standard land use districts as they apply to Terwillegar Towne, and will be in accordance *the City of Edmonton Zoning Bylaw 12800* as amended. Primary adjustments to the regulations will include building setbacks, garage siting, permitted heights, etc. and will be developed so as to ensure that the integrity of the

*Amended by
Editor*

neo-traditional concept is continued through the housing phase of development.

Initially only Stage 1 of the neighbourhood will be included in the Statutory Plan Overlay. It will then be amended as development of Terwillegar Towne continues in order to incorporate additional areas into the overlay. This evolution will provide a vehicle through which changing market demands can be accommodated, while still permitting appropriate public participation through the Bylaw process.

Districting for Stage 1 will occur in conjunction with the adoption of a Statutory Plan Overlay.

Subdivision

Subdivision will follow in accordance with the provision of the Planning Act having regard to efficient and orderly servicing. Each phase of subdivision or redistricting will comply with the proper planning processes.

Addendum Regarding Special Areas Status

Bylaw 11320
August 12, 1996

Since passing of the NASP Bylaw in September 1995, the City has amended the Land Use Bylaw to provide for the creation of "Special Areas". Section 900 of the Land Use Bylaw provides that Special Areas may be designated in order for the use, design and extent of development within specific geographic areas of the City to be regulated in a manner that allows the special or unique attributes of the area or the development to be addressed. Special Areas are to be applied when these special or unique attributes cannot be satisfactorily addressed through conventional land use districts or statutory plan overlays.

While it was originally anticipated that the neo-traditional planning principles proposed in this NASP would be implemented through the use of a Statutory Plan Overlay, discussions between the City and the developer during the initial redistricting process for lands within the Terwillegar Towne Neighbourhood have led to the conclusion that the Terwillegar Towne Neighbourhood should be designated as a Special Area. The development of custom land use districts through the use of Special Area status is considered preferable to the direct control approach. This will allow the creation of new land use districts that will only be applied to lands within the Terwillegar Towne Special Area. Such new districts will allow for the development of Garage Suites in conjunction with single detached housing development in selected areas of the neighbourhood. Designating Terwillegar Towne as a Special Area will also permit changes to the development regulations of standard land use districts in order to achieve the street orientation principles outlined in the NASP. These will include a reduction to front and side yard setbacks as well as reduced setbacks for rear garages with lane access.

Further Studies

The following outlines further information and studies which are required for Terwillegar Towne as development proceeds.

| Study | Timing |
|---|--|
| Geotechnical monitoring of city pit | Prior to redistricting application of City owned lands |
| Monitoring of Carma and Toole pit re: contamination | Prior to redistricting application of pit lands |
| Inspection of MR lands in pit | Prior to subdivision of affected lands |
| Phase II Environmental Assessment or clean-up | Prior to redistricting application of Toole lands |
| Detailed geotechnical evaluation of school building sites by School Boards | Prior to development of school building |
| NDR approval | Prior to submission of any redistricting application |
| Top-of-bank and bottom-of-bank survey and stabilization / rehabilitation plan | Prior to redistricting application |

Appendix - Land Use Statistics

**TERWILLEGAR TOWNE NEIGHBOURHOOD AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS**

As Amended by Bylaw 17611 April 18, 2016

| | Area (ha) | % of GDA |
|--|---------------|--------------|
| Gross Area | 181.25 | |
| Environmental Reserve | 3.55 | |
| Gas Pipeline ROW | 0.46 | |
| 142 Street arterial widening | 3.34 | |
| Gross Developable Area | 173.90 | 100.0 |
| Roadways (@ 20% of GDA) | 34.78 | 20.0 |
| Stormwater Management Facilities | 8.89 | 5.1 |
| Municipal Reserve / Schools | 21.98 | 12.6 |
| Public Open Space (Non-MR) | 0.8 | 0.5 |
| Private Open Space | 2.45 | 1.4 |
| Public Utility Slopes | 2.66 | 1.5 |
| Business Community Employment Centre | 2.18 | 1.3 |
| Towne Square (non-residential portion) | 3.87 | 2.2 |
| Net Developable Area | 96.29 | 55.4 |
| Net Residential Area | 94.43 | 54.3 |
| Street Oriented Residential | 71.82 | 41.3 |
| Low Density Residential | 14.93 | 8.6 |
| Towne Square (medium density res. portion) | 4.35 | 2.5 |
| Medium Density Residential | 1.96 | 1.1 |
| Special Medium Density Residential | 1.37 | 0.8 |

| | Units | % of Total Units | Population |
|-------------------------------|-------------|---------------------|-------------|
| Street Oriented Housing | 1796 | 66.6 | 6214 |
| Low Density Residential | 284 | 10.5 | 983 |
| Towne Square (Medium Density) | 348 | 12.9 | 696 |
| Medium Density Residential | 157 | 5.8 | 314 |
| Special Medium Density Res. | 110 | 4.1 | 219 |
| Total Residential | 2695 | 100.0 | 8426 |

Population Density: 89.2 persons per net residential hectare
Unit Density: 28.5 units per net residential hectare

Bibliography

- Doesburg, M. "Lot and Housing Survey". Volume 14, Survey 2. February, 1994.
- HBT Agra Limited. "Geotechnical Assessment, Rabbit Hill Pit Infilling, Terwillegar Drive & 23rd Avenue". August 5, 1993
- Lynch, Kevin. Site Planning, Second Edition. Seventh Printing. Cambridge Massachusetts and London England: the MIT Press. June 1979.
- Sentar Consultants Ltd. "Carma Developments Terwillegar Property Physical Characterization". November 1993.
- Sentar Consultants Ltd. "Phase 1 Environmental Assessment, Terwillegar Neighbourhood". June 1994.
- Sentar Consultants Ltd. "Historical Resources Inventory and Assessment Study, The proposed Terwillegar Subdivision, SW 2-52-,N1/2 and SE 26 and 35-51-25-W4M". June 1994.
- Sentar Consultants Ltd. "Environmental Evaluation of Sand Pits for Terwillegar Towne Concept". August 1994.
- The City of Edmonton. "Edmonton General Municipal Plan Bylaw 9076". November 1990.
- The City of Edmonton. "Terwillegar Heights Servicing Concept Design Brief (SCDB)". March 1992.