Magrath Heights Neighbourhood Area Structure Plan

Office Consolidation October 2008

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

Bylaw 13559 was adopted by Council in December 2003. In October 2008, this document was consolidated by virtue of the incorporation of the following bylaws:

Bylaw 13559  Approved December 9, 2003 - to adopt the Terwillegar 4B Neighbourhood Area Structure Plan (NASP)
Bylaw 13995  Approved May 25, 2005 - to adjust the boundaries of low and medium density residential, and commercial development within the Terwillegar 4B NASP and to rename the NASP the Magrath Heights NASP
Bylaw 14988  Approved September 17, 2008 – to expand the north SWMF and eliminate the south SWMF, expand the area by which EKOS (a mixed use area) applies, increase MR dedication and redesignate lands from LDR to MDR

Editor’s Note:
This is an office consolidation edition of the Magrath Heights Neighbourhood Area Structure Plan, Bylaw 13559, as approved by City Council on December 9, 2003.

This edition contains all amendments and additions to Bylaw 13559. For the sake of clarity, new maps and a standardised format were utilised in this Plan. All names of City departments have been standardised to reflect their present titles. Private owners’ names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws. All text changes are noted in the right margin and are italicised where applicable.

This office consolidation is intended for convenience only. In case of uncertainty, the reader is advised to consult the original Bylaws, available at the office of the City Clerk.

City of Edmonton
Planning and Development Department
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Density: 27.9 units / net residential ha
Housing Mix: 50.2 % Low Density Residential / 49.8 % Medium Density Residential
1.0 Introduction

1.1 PURPOSE

The purpose of this Neighbourhood Area Structure Plan is to establish the land use framework and development objectives for the Magrath Heights Neighbourhood, consisting of approximately 120 hectares (see Figure 1.0 - Context Plan). The plan area is located north of the Transportation and Utilities Corridor (TUC) and east of the North Saskatchewan River Valley within the southwest sector of the City of Edmonton. The Magrath Heights NASP has been prepared on behalf of a private developer. The plan represents a framework for decision-making that is meant to foster the future development and orderly growth of the community.

The NASP will provide the statutory policy to guide the development of the Magrath Heights Neighbourhood and implement a general land use pattern by identifying the following:

- residential, open space and commercial land uses, including the location, form and intensity of development for such uses;
- the transportation network as it relates to the area, the top-of-bank public roadway and overall transportation objectives;
- unique environmental areas and natural features;
- provision of utility services and infrastructure; and
- implementation and phasing of development.

This plan has been prepared in conformance with The City of Edmonton Municipal Development Plan, the Terwillegar Heights Servicing Concept Design Brief and other relevant municipal policy documents as explained in Section 2.0. Through the submission and approval of plans of subdivision, the detailed design of each of phase of development will implement the concepts presented in the NASP to yield a high quality of urban form and character.

1.2 DEFINITION OF PLAN AREA

The Magrath Heights Neighbourhood Area Structure Plan is comprised of a number of parcels within the northwest, northeast, southwest and southeast ¼ Sections of 36-51-25-4. The total area for the NASP is approximately 120 hectares. As shown on Figure 1.0 - Context Plan, the NASP is defined by the following boundaries:
Figure 1* Context Plan

*Bylaw 13559 December 9, 2003 as amended by Editor
• **Northern Boundary** – 23 Avenue
• **Western Boundary** – *Rabbit Hill Road*
• **Eastern Boundary** – Whitemud Creek
• **Southern Boundary** – North of 9 Avenue (Terwillegar Boulevard)

The *Magrath Heights* NASP boundaries conform with the area identified in the Terwillegar Heights Servicing Concept Design Brief (SCDB) for the preparation of the NASP.

### 1.3 SITE CONTEXT

#### 1.3.1 Topography & Vegetation

The topography of the lands within the *Magrath Heights* NASP is generally rolling terrain rising in the south central portion and dropping to the east and southwest with overall elevations ranging from 672m to 716m. (See Figure 2.0 - Site Contours)

The City of Edmonton’s Inventory of Environmentally Sensitive and Significant Natural Areas (1993) identifies one Local Environmentally Sensitive Area within the *Magrath Heights* Neighbourhood, the Southwest Highland (SW 86). The site represents the highest point in the City of Edmonton.

The underlying geology of this area consists of glaciolacustrine deposits underlain by lacustro-till, glacial sand and gravel, glacial till and bedrock. The soil conditions do not present any major impediment to urban development and are currently under cultivation.

#### 1.3.2 Existing Land Uses

As shown on *Figure 3.0 – Opportunities and Constraints*, there is a 1.21 ha portion of the northwest quarter section containing a single dwelling, garage and fenced R.V. parking lot. The remaining portions of the quarter section consists of an abandoned homestead with a number of grain bins, three aboveground storage tanks, two motor homes used as living quarters, a rented trailer on skids, two rented outbuildings and agricultural land.

A yard site is also located in the southeastern portion of the plan area and contains an number of structures.

The remainder of the lands are undeveloped agricultural land. None of these uses pose any particular constraints to future urban development. However, development of properties within the neighbourhood is at the option of the respective landowners.
Figure 2* Site Contours

*Bylaw 13559 December 9, 2003 as amended by Editor
Figure 3* Opportunities and Constraints

*Bylaw 13559 December 9, 2003 as amended by Editor
1.3.3 Environmental Site Assessment

Stantec Consulting Ltd. was retained by a private developer to conduct a Phase I Environmental Site Assessments (ESA) on the NW ¼ Section 36, Township 51, Range 25, W4M as part of the preparation of the Magrath Heights NASP. The objective of the Phase I ESA was to identify potential environmental concerns and or liabilities associated with the subject property. This report was submitted under separate cover.

The subject property has a largely agricultural history. It is likely that application of chemical of fertilizers and pesticides to agricultural crops have been used and it is assumed that normal agricultural treatment protocols have been followed.

Areas of environmental concern identified within the Phase I ESA on or in the vicinity of the subject property include:

- Potential for fluorescent light ballasts in the building located on the 1.21 ha portion of the property to contain PCBs. Should the ballasts remain in good condition they pose a low potential for impacting human health.

- Potential for the floor and ceiling tiles to contain asbestos, due to the age of the buildings. Proper procedures must be followed if removing these tiles. If asbestos is present in the floor tiles, another form of floor covering or laminate may be used to cover and limit their potential impact.

- The possibility that lead based paints may have been used on the building walls. If these walls are to be removed, sanding or any other technique used where dust particulates could develop, special care and caution should be taken to protect workers from the dust.

- Dumpsites located on the property contain various debris including old refrigerators, stoves, furniture, cardboard, vehicles, farm equipment and scrap metal. It is unknown how long dumping has occurred on the property or other areas that have been covered over time. Depending on the materials, these areas are a potential hazard. Proper care, caution and disposal of materials being removed should be observed. Disposal should include proper separation and sorting of materials with soil testing upon removal. Copies of removal or waste management manifests will be required to determine what soil testing is required.

- Old refrigeration equipment noted in the dumpsites may contain CFC’s. Care and caution should be taken if removing these materials and proper disposal should be undertaken. Soil testing should take
place after removal of debris to determine if any residual contamination exists.

- Earthen mounds of material noted on-site may contain previously buried debris, animal manure, silage or other matter. Care and caution should be taken if removing these materials and proper disposal should be undertaken. Soil testing should take place after removal of debris to determine if any residual contamination exists. Copies of removal or waste management manifests will be required to determine what soil testing is required.

- Three aboveground storage tanks with staining beneath were centrally located on the 63.5 ha farmstead. Any stained surficial soils should be removed and disposed of and underlying soil tested to determine if any residual contamination exists.

Prior to rezoning and future development of the affected areas, these environmental concerns must be addressed through a Phase 2 Environmental Site Assessment.

A Phase I ESA was conducted by CT and Associates for lands within the NE and SE ¼ Section 36, Township 51, Range 25, W4M. This report has been submitted under separate cover. Follow up items identified by the ESA shall be addressed prior to the rezoning of the subject lands.

Phase 1 Environmental Assessments are required for all other lands and will be submitted to the City of Edmonton prior to rezoning.

1.3.4 Environmental Resources

The City of Edmonton’s Inventory of Environmentally Sensitive and Significant Natural Areas (1993) identifies one Local Environmentally Sensitive Area within the Magrath Heights Neighbourhood.

The site represents the highest point in the City of Edmonton, and, as shown on Figure 3.0 – Opportunities and Constraints, the area is located in the south central portion of the neighbourhood and is adjacent to an existing farmyard site and is referred to as the Southwest Highland (SW 86) in the Inventory document.

According to the City of Edmonton’s Inventory of Environmentally Sensitive and Significant Natural Areas (1993) the vegetation consists of a unique combination of young seral and pioneer shrubland communities with the west-facing slope consisting of pioneer shrubland snowberry (result of clearing of native vegetation over 10 years ago and letting land revert to natural conditions) and young seral aspen communities with dense understories of Saskatoon occur on east and north-facing slopes.
This site has been designated with a “High” sensitivity rating stating that any removal of the exiting vegetation at this site will result in severe erosion problems due to steep nature of the slopes and the coarse-texture of the parent materials. A Natural Area Management Plan for this area will be required and will be prepared and submitted concurrently with detailed Landscaping plans for the entire central MR area. This concurrent preparation and submission will ensure that detailed information is available, from both a Landscape and Engineering perspective, and reflected in the Management Plan thus ensuring appropriate mitigation and management recommendations are considered, having regard to each other.

_A Geotechnical Investigation Report has been conducted for the Top-of-Bank interface by Thurber Engineering (February 2006). All developments including Stormwater Management Facilities, residential developments, etc. are required to be setback from the top of bank line in accordance with the recommendations made in the Thurber Engineering (February 2006) report and the Thurber Engineering Supplementary Report (April 2008)._ Bylaw 14988 September 17, 2008

1.3.5 Archaeological and Historical Resources

Alberta Community Development have advised that pursuant to previous historical studies completed in 1994 by Sentar Consulting and the long cultivated and agricultural history of the plan area, further historical study is not required.

_A Historical Resource Impact Assessment (HRIA) for lands within the NE and SE ¼ Section 36, Township 51, Range 25 W4M has been submitted under separate cover. Follow up items identified by the HRIA shall be addressed prior to rezoning of the subject lands._

Bylaw 14988 September 17, 2008

However, pursuant to Section 31 of the Historical Resources Act, development proponents and their representative are required to report the discovery of any archaeological, historic period, or paleontological resources, which may be encountered during construction.

1.3.6 Pipelines and Oil Well Sites

A review of information provided by the Alberta Energy & Utilities Board (AEUB) has indicated that a pipeline carrying natural gas exists along the northern edge of the subject property. There are no registered oil wells within the boundary of the plan area.

Amended by Editor (private corporation’s name removed)
2.0 Statutory Plan & Policy Context

The *Magrath Heights* NASP was prepared having regard to the relevant policies and development principles of the Terwillegar Heights Servicing Concept Design Brief (SCDB), the City of Edmonton Municipal Development Plan (MDP), the City of Edmonton Suburban Neighbourhood Design Principles and other relevant municipal planning policy documents. The following table (as Amended by Editor) summarizes key objectives from the above-noted policy documents applicable to the design of *Magrath Heights* NASP, and illustrates the principles that have been incorporated in the NASP to achieve these objectives.

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<th>OBJECTIVES</th>
<th>NEIGHBOURHOOD DESIGN PRINCIPLES</th>
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| Variety and choice of housing types (MDP Strategy 1.7.2, and Development Principle from Terwillegar Heights SCDB) | • The *Magrath Heights* NASP provides opportunities for low and medium density residential development of different forms and densities.  
• The plan will provide flexibility for innovation in housing type and form, especially in the eastern portion of the plan area. |
| Provide opportunity for increased residential densities (Suburban Neighbourhood Design Principle 12 - Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points.) | • Medium density residential parcels have been located in the northwest part of the plan alongside the external roads to support commercial and employment uses in this area.  
• It is intended that a range of creative housing forms of higher density and mixed use developments will be constructed within the eastern portions of the *Magrath Heights* NASP.  
• Opportunities for innovative site design and building siting will be pursued, for *portions of NE ¼ 36-51-25-W4, SE ¼ 36-51-25-W4*, through the rezoning (perhaps requiring site specific (DC2) zoning regulations) and subdivision processes with the intent of maximizing environmental efficiency and accommodating alternative lifestyles. |
| Provide neighbourhood activity focus (Development Principle from *Southwest Highland*) | • The Southwest Highland, a significant natural feature representing the highest point in southwest Edmonton, is preserved in its natural state as park/open space and provides a beautiful view of the City of Edmonton.  
• The commercial area will serve as a major activity centre for the neighbourhood. Linkages to this site from within the neighbourhood. |
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<th>OBJECTIVES</th>
<th>NEIGHBOURHOOD DESIGN PRINCIPLES</th>
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<td>Terwillegar Heights SCDB</td>
<td>shall be provided.</td>
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| **Environmental protection and enhancement** (Development Principle from Terwillegar Heights SCDB) | • A management plan for the **Southwest Highland** will provide recommendations for the preservation of existing vegetation which will be implemented concurrently with detailed landscape plans. A linkage from this area to the Whitemud Creek is also provided.  
• Access is provided to the Whitemud Creek natural areas and the top of bank roadway. |
| **(City of Edmonton Top-of-the-Bank Public Roadway Policy)** | • A pedestrian circulation system links these key viewpoints, park areas and development nodes, without compromising top of bank and upland setback areas.  
• The area along the Whitemud Creek ravine is intended to be preserved in accordance with the City’s Top-of-the-Bank policies.  
• The three stormwater management facilities are designed as naturalized wetlands, which, in addition to improving the quality of runoff, would provide some habitat for birds and other animal species.  
• Policies in the plan ensure that the appropriate environmental impact assessments are conducted in conjunction with stormwater outfalls into Whitemud Creek and that all development is in accordance with the recommendations and requirements of Hydrogeological and Geotechnical Investigations. |
| **Provide transportation alternatives** (Development Principle from Terwillegar Heights SCDB) (Suburban Neighbourhood Design Principle 5 - Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.) | • Walking and cycling to key destinations, including into adjoining neighbourhoods and Whitemud Ravine, through the provision of pedestrian and bicycle paths shall be incorporated into future subdivision design.  
• Connections shall be designed to provide safe movement, minimize walking distances in residential areas and provide access for all residents to future transit stops.  
• Medium density housing shall be planned beside collector and arterial roadways to further encourage transit use.  
• Additional, pedestrian-only walkways and other open space corridors shall be provided which link major nodes and view points.  
• Each site shall be easily accessed by pedestrian, bicycle, transit and vehicular traffic as well as located in close proximity to the central park and commercial site. |
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<th>NEIGHBOURHOOD DESIGN PRINCIPLES</th>
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| Environmentally and sustainable housing forms  | • Developers shall be encouraged to implement innovative, technologically advanced designs and alternative servicing methods subject to meeting the requirements of all approving authorities.  
• More ecologically responsible residential forms that promote “green” elements and practices such as energy conservation measures, new utility infrastructure, and overall, a more sustainable pattern of development shall be encouraged. |
| (Suburban Neighbourhood Design Principle 15 - Provide opportunity through the residential zones of the Land Use Bylaw for the intensification of housing forms and for alternative site design and building siting.) |                                                                                                                        |
| Provide public access to the North Saskatchewan River Valley System. (Top of the Bank Public Roadway Policy) | • Ample viewing areas to Whitemud Ravine will be provided, and confirmed at the subdivision stage, at various points via the walkway.  
• These viewpoints will be easily accessible from the collector and local roadway network and also easily accessed by pedestrians via walkway’s and public utility lots.  
• The public roadway or walkway, where appropriate, will ensure that the upland area will be kept in its natural state by prohibiting encroachment by residential uses to the top-of-bank area. |
| Accommodate growth in an orderly, serviced and cost-effective manner (MDP Strategy 1.7.1) | • Magrath Heights is located immediately south of the existing Hodgson NASP and east of the Terwillegar Towne NASP residential neighbourhoods which are in the latter stages of development.  
• From both a land use and serving perspective, the development of Magrath Heights represents a continuation in southwest Edmonton for the development of residential land uses. Given the developing Hodgson and Terwillegar areas, and its location relative to the Anthony Henday Drive Outer Ring Road and Terwillegar Drive, services can be extended into this area in a cost-effective manner.  
• This development proposes the extension of services from the existing Terwillegar Towne and Hodgson Neighbourhoods with major service connections made along Rabbit Hill Road and 23rd Avenue. |
3.0 Development Concept

The following section outlines the development concept for the Magrath Heights NASP and is based largely on the development objectives and principles outlined in this document, and in accordance with City of Edmonton statutory plans. The Magrath Heights NASP has been prepared as a comprehensively planned residential neighbourhood taking advantage of the existing topography, natural amenities and locational attributes of the area.

In response to an analysis of current and anticipated residential market demands in the Edmonton region, as well as the aspirations of the various landowners in the plan area, the Magrath Heights NASP has been prepared to determine:

- the development of the plan with respect to the type, size and location of various land uses;
- anticipated amenity needs of residents; and
- implementation of existing City of Edmonton planning & design policy to form the development objectives and guidelines.

Development considerations in this plan are designed to highlight the distinctive topography of the Magrath Heights area and cultivate an attractive relationship between the built form and natural beauty of the neighbourhood. The focal points of this residential community are the elevated park/open space in the central plan area, the community commercial site and the preserved upland areas adjacent to Whitemud Creek. Through a comprehensive planning approach to preserve these natural amenities, the development of built form is guided well-integrated, connected and non-intrusive manner so as to enhance these natural features and provide equal access for residents of the community to benefit from.

The majority of land within Magrath Heights is intended for residential development as shown on Figure 4.0 – Development Concept. The following Development Objectives provide the framework for the Development Concept:

3.0.1 GUIDING DEVELOPMENT OBJECTIVES

- to develop a plan consistent with the policies, general intent and purpose of the City of Edmonton Municipal Development Plan, the
Figure 4 * Development Concept

BYLAW 14988
APPROVED
MAGRATH HEIGHTS
Neighbourhood Area Structure Plan
(as amended)

Low Density Residential
Medium Density Residential
Commercial
Park
Natural Area
10m Walkway
20m Local Road R/W

Open Space (No MR Credit)
Stormwater Management Facility
Roadway Access
Top of Bank
Walkway / Walkway Access
Possible Future Parking/Staging Area
Boundary of NASP

*Bylaw 14988, September 17, 2008
Terwillegar Heights Servicing Concept Design Brief and other applicable City of Edmonton development guidelines;

- to provide a framework in response to the current market to deliver a high quality, comprehensively planned residential area by defining the general pattern and composition of land uses, linkages, servicing designs and development staging;

- to encourage the implementation of innovative, technologically advanced design methods and alternative servicing where possible;

- to integrate and conserve the natural features of the plan where feasible;

- to address and accommodate the surrounding, existing land uses affecting the plan;

- to ensure the implementation of the plan facilitates growth in an orderly, staged manner.

3.1 RESIDENTIAL

A range of low and medium density residential dwelling units is proposed and will be implemented based on market conditions and consumer preferences at the time of development. Lands in the eastern portion of the Plan (owned by a private corporation) are intended to be developed using environmentally sustainable planning concepts and are also to include some mixed use forms of development. These ideas are further described in section 3.1.3. The objectives for residential development are as follows:

3.1.1 Residential Objectives

- Encourage residential development within the Magrath Heights NASP to allow for a variety of housing forms and options.

- Establish sufficient overall residential densities within the Magrath Heights NASP to help support the efficient provision of neighbouring educational facilities, recreational facilities and municipal services including public transit, in a timely fashion.

- Provide an opportunity for lands in the eastern portion of the Plan to be developed in an ecologically sustainable manner that embrace a variety of housing forms using innovative environmental and ecological design principles.

- Encourage pedestrian connectivity and provide direct and safe pedestrian linkages between community nodes such as residential areas, parks & open spaces, commercial amenities, and stormwater management facilities.

Amended by Editor
Configure medium density residential development adjacent to the commercial site and collector and arterial roadways to be accessible and to act as a transitional land use, gradually decreasing the intensity of development into the neighbourhood.

Ensure that the integrity of the top of bank interface is protected by separating residential land uses from the top of bank along the Whitemud Ravine.

### 3.1.2 Low Density Residential

Low density residential development will be planned in clusters/cells to provide a greater sense of identity, to create a safe pedestrian environment and to encourage relationships with immediate neighbours within the various residential sub-areas. As shown on Figure 4.0, low density residential development is configured in proximity to activity areas in order for residents to take full advantage of the natural amenities (park space, walkways and stormwater management facilities). Within the low density residential areas identified in the plan, a range of housing forms will be possible within the RPL, RSL, RF1 and RF4 land use zones. The estimated land area, number of dwelling units and population attributed to low density residential development is shown in Appendix 1.

### 3.1.3 Medium Density Residential

Opportunities exist within the Magrath Heights NASP for a variety of Medium Density Residential (MDR) housing forms and densities including townhouses, row housing, stacked townhouses and low-rise apartment buildings. These housing forms will be designated primarily with RF5 and RA7 Land Use Zones; however, specific development circumstances and design factors may require that Direct Control Zones be employed to ensure compatibility with surrounding land uses and/or to facilitate development of innovative building forms and siting.

Three (3) Medium Density Residential areas are planned in the northwest part of the plan adjacent to 23 Avenue and Rabbit Hill Road with direct access to these roadways to ensure efficient traffic circulation and to reduce the impact on internal local roads.

A fourth area of MDR use is proposed in the south eastern portion of the plan area adjacent to the collector roadway an in proximity to the future school site in Terwillegar Heights Neighbourhood 4A.

These MDR areas are positioned to serve as a transitional land use between low density residential development and the commercial site and major roadways. In addition the greater population intensity generated by multi-family developments will benefit from the proximity to commercial
amenities and future transit. Options for the configuration of MDR parcels include both a self-contained site, or, less enclosed, more-street oriented designs. Research indicates that there are opportunities to incorporate adult-living developments or assisted-living apartment complexes. In order to provide appropriate transitioning, these areas will host sensitive streetscape designs, appropriate landscape treatments and will be integrated adjacent to low density residential housing.

The MDR areas are intended to be developed with a maximum allowable density of 125 units per hectare although a blended rate of 50 units per hectare is used in anticipation that there may be a mix of housing forms in the two areas. The estimated net area, number of dwelling units and population attributed to medium density residential areas are also shown in Appendix 1.

3.1.4 Mixed Use Residential - “EKOS”

North EKOS will be developed with lower density housing forms due to the limitations of the site’s narrow configuration and geotechnical constraints. The significant elements in the north are:

- Expansion of the existing SWMF;
- Open space pars;
- Trail connections to the SWMF and to the top-of-bank trail;
- Park and trail head at the north portion;
- Vista and top-of-bank access at the north entrance;
- Low density residential development (single, semi-detached and street oriented town housing forms) due to geotechnical and access limitations associated with the configuration of the land

Central EKOS will be developed at low and medium densities and will accommodate a range of housing forms including single and semi-detached housing; street oriented townhousing; and three to six storey multi-family developments (within Parcel A). Development of Parcel A will be regulated by (DC2) Site Specific Development Control Provisions, with the potential of mixed use and work/live components. Overall density in Parcel A will be a maximum of 82 units per residential ha. The significant elements in Central EKOS are:

- Major trail connectors to the Magrath Heights Natural Management Area;
- Central park and staging area for the Whitemud Ravine Trail system;
- Top-of-bank park, and two walkways, providing public access to the top of bank walkway as identified in Figure 4;
- A range of housing forms and densities; and
- Commercial and/or retail that may be integrated with multi-family development (an update to the Transportation Impact Assessment (TIA) may be required).

South EKOS will be developed at low to medium densities and will accommodate a range of housing forms including single and semi-detached housing; street oriented townhousing; and three to six storey multi-family developments (within Parcel B). Development of Parcel B will be regulated by (DC2) Site Specific Development Control Provisions, with the potential of mixed use and work/live components. Overall density in Parcel B will be a maximum of 82 units per residential ha. The significant elements in South EKOS are:

- A south ravine oriented park for residents with access to the ravine trail system;
- Top-of-bank open space that will accommodate a top-of-bank walk and a southerly look-out over the MacTaggart sanctuary;
- Land Developments to encourage streetscapes that present elements of neo-traditional development;
- A range of housing forms and densities;
- Commercial and/or retail that may be integrated with multi-family development (an update to the Transportation Impact Assessment (TIA) may be required).

- 6.0 m wide right of way, 3.0 m asphalt walkway, from collector roadway to top of bank walkway at northern portion, to the satisfaction of Administration, as shown in Figure 4; and
- Two walkways providing public access to the top of bank walkway in the southern portion, as identified in Figure 4.

As identified in Figure 3, two sites, Parcels A and B will be developed under a (DC2) Site Specific Development Control Provision. Given the size of the sites, the range in built form types and related densities, and the objective to fully integrate the site as one comprehensive development, it is necessary to define the scope of the Provisions at the Plan stage to clearly establish parameters for detailed preparation of the Direct control Provisions and ultimately implementation. A detailed DC2 is required with a complete set of graphical appendices which when combined with text will accurately describe the ultimate development. The appendices should include, but not exclusively, the following:

Site Plan
Surface Parking and Vehicle Circulation
Underground Parking
Pedestrian Circulation with walkways to top of bank walkway, under Direct Control site
Landscaping and Open Space
Building Elevations

Parcel A is located within Central EKOS, with frontage on the enhanced local roadway on the west and the Whitemud Ravine on the east.

Parcel B is located within South EKOS, with frontage on the enhanced local roadway, the Whitemud Ravine and the Mactaggart Sanctuary.

Summary of Development Guidelines

<table>
<thead>
<tr>
<th>DC2 Site</th>
<th>Site Area</th>
<th>Building Height, Density and Massing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcel A</td>
<td>4.23 ha</td>
<td>Parcel A can accommodate a mix of dwelling types including semi-detached, row housing, stacked row housing and apartment housing. Row housing and semi-detached dwellings will be limited to a maximum height of 10.0 m or 2 ½ storeys. Stacked row housing will be limited to a maximum height of 14.0 m or 4 storeys. Apartment housing will be limited to a maximum height of 23.0 m or 6 storeys. A maximum density of 82 units/ha and a maximum number of units of 346 will be allowed.</td>
</tr>
<tr>
<td>Parcel B</td>
<td>3.54 ha</td>
<td>Parcel B can accommodate a mix of dwelling types including semi-detached, row housing, stacked row housing and apartment housing. Row housing and semi-detached dwellings will be limited to a maximum height of 14.0 m or 4 storeys. Apartment housing will be limited to a maximum height of 23.0 m or 6 storeys. A maximum density of 82 units/ha and a maximum number of units of 290 will be allowed.</td>
</tr>
</tbody>
</table>

The (DC2) Site Specific Development Control Provision shall be based on, but not limited, to the following design objectives and guidelines which will be stated as design objectives in the DC2:

SITE PLANNING AND DESIGN

1. Establish a walkable, mixed use development with opportunities to live, work, shop and play;
2. Design the site so it creates an attractive and cohesive visual identity;

3. Orient buildings to emphasize views and viewpoints to the Whitemud Creek Ravine;

4. Site buildings to maximize open space;

5. Create lively streets by providing active frontages;

6. Ensure compatibility between land uses to mitigate conflicts;

7. Allow for transition between building forms to mitigate the impact of height and massing on surrounding buildings and open space;

8. Apply Sun Shadow Impact Studies to ensure that shadow impact from buildings on adjacent developments, the Whitemud Creek Ravine and open space is minimal;

9. Design sufficient setback distances to address safety issues and site amenities, adjacent to the Whitemud Creek Ravine and the Mactaggart Sanctuary; and

10. Design focal points at each entrance to create interest and to tie the development together.

**BUILT FORM**

1. Develop high quality architecture and urban design by creating a built form that is distinctive, attractive and urban in character;

2. Create opportunity to develop commercial uses such as restaurants and cafes, office space, etc. as a secondary component within residential developments;

3. Provide mixed use developments that incorporate street level retail commercial uses with active pedestrian oriented storefronts as well as office and residential uses located at the rear or upper floors;

4. Design buildings to minimize perceived height and massing through building setback variations at the upper levels, building articulation, building orientation, roof treatments and by adding interest through the choice of exterior materials and colours;

5. Minimize massing at upper levels of apartment housing by using step back design techniques to minimize impact on adjacent developments and the ravine, and to provide a visually interesting skyline;

6. Design building facades, to include design elements, finishing materials and articulation that will reduce the linear effect and massing of large buildings, and to add architectural interest; and
7. Use high quality exterior wall finishing materials to promote compatibility with the architectural style established for the area, including building style, form, materials and colours.

CIRCULATION

1. Develop a pedestrian oriented site with linkages to transit and commercial uses, and amenity areas such as the Whitemud Ravine, park and trail systems;
2. Facilitate safe, convenient and attractive pedestrian linkages within the site as well as to surrounding areas;
3. Enter into public access easements and develop pedestrian walkways to a standard to the satisfaction of Administration, at the locations shown in Figure 4;
4. Design interior roadways and walkways to promote contiguous and logical circulation patterns for safe pedestrian and vehicle movement throughout the site and between the site and surrounding development and uses;
5. Ensure access to the site that is compatible with the neighbourhood roadway network; and
6. Develop underground parking for medium density housing and surface parking in locations that are either behind or in the interior of a block.

LANDSCAPING

1. Design landscaping to a high quality, consistent with building form and site development;
2. Design hard and soft landscaping to act as an integrating feature of the site, tying together the site with built form;
3. Ensure that hard and soft landscaping integrates the site with the adjacent top-of-bank and ravine;
4. Promote a naturalized landscape by using landscape materials, their placement and treatment in a manner that is complementary to the natural features of the site and adjoining ravine system;
5. Use natural landscaping materials to minimize environmental and economic costs associated with their maintenance;
6. Apply landscaping materials that are attractive to local birds and wildlife; and
7. Provide hard landscaping such as benches, fountains, and public art that will encourage passive recreation and enjoyment of open space.
3.2 COMMERCIAL

A 3.25 hectare commercial site is located at the southeast corner of 23 Avenue and Rabbit Hill Road. This peripheral location will ensure convenient access to residents while maintaining appropriate traffic patterns and volumes in and around the neighbourhood. The commercial site is intended to serve the immediate needs of the neighbourhood as well as the needs of neighboring communities, and will likely be developed under the provisions of the CSC district. Consideration may be warranted, however, for Direct Control Zone(s). The proposed commercial site is to be developed using the following Objectives:

3.2.1 Commercial Objectives

- Provide for neighbourhood convenience development opportunities within Magrath Heights to serve the immediate and surrounding areas.
- Locate and orient the commercial area along external roadways to ensure high visibility and to provide safe and convenient access opportunities.
- Integrate commercial developments into the fabric of the neighbourhood without causing negative impacts on surrounding land uses through the orientation of land uses and the application of setbacks/buffering available through the Zoning Bylaw.
- Provide safe and convenient pedestrian access to the commercial developments.

3.3 PARKS & OPEN SPACE

A variety of park and open space is provided in the plan as shown on Figure 4.0. The park areas have been provided based on required 10% municipal reserve dedication.

3.3.1 Parks/Open Space Objectives

- Provide open space and natural area preservation within the neighbourhood through the dedication of municipal reserves.
- Where possible and economically viable and sustainable, utilize the Stormwater Management Facilities to provide pedestrian linkages and open space recreational opportunities part of the open space system.
- Retain the Southwest Highland via the designation of Municipal Reserve.
- Incorporate open spaces into compatible land uses such as the Stormwater Management Facilities and utility corridors.

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

- Ensure that the appropriate environmental impact assessments are conducted in conjunction with storm water outlets into Whitemud Creek. Careful attention is to be paid to ensure impact on the environment is kept to a minimum.

- Promote the development of open spaces and walkway linkages for pedestrian, bicycle and other multi-use travel, and connect them to the surrounding areas.

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

- Preserve the integrity of the Whitemud Ravine through access management and a 7.5 m public upland setback from the Top of Bank.

A major park is located in the central part of the neighbourhood that has been designed to offer high visibility and accessibility via the intersection of collector roadways in proximity and linking the pedestrian circulation system through the park space. This area is noted as being a Locally Environmentally Sensitive Area and as such is intended to remain in its natural state.

The northern portion of the central park area has been configured with a regular shape to allow for active recreation should it be deemed appropriate via the detailed design stage. In addition to the central park area there are several viewpoint parks provided along the Top of Bank.

A small “pocket park” is located mid point between the central highland and the commercial / MDR node in the northwest corner of the plan area. This space will serve two purposes: First it will provide an open space opportunity for the residents in the northwest corner of the plan area and, secondly, will provide a linkage node between the commercial center and the central highland.

There is a potential opportunity for the development of community gardens in the Magrath Heights Neighbourhood. The location of the community garden must comply with all technical reports, including the Geotechnical report (Thurber, February 17, 2006) and supplementary report (Thurber, April 29, 2008) to ensure that the garden plots will not affect the stability of the adjacent slope. The supplemental report outlines
and recommends requirements to restrict water use at or near the top of bank. The location as proposed may not be acceptable.

Any proposal for a community garden within public lands is subject to review and approval by Asset Management and Public Works – Parks Branch and the community league who will be required to enter into a license of occupation to permit the use of parkland for the garden plots. Garden plots are not a base level of service provided by the City.

### 3.3.2 Lands Below Top of Bank

To ensure preservation of the environmentally significant and sensitive lands located below the top of bank, there is agreement in principle between the landowner and Administration to the following:

- At the time of subdivision, lands are to be dedicated as Environmental Reserve to the City of Edmonton;
- The lands are to be rezoned from (AG) Agricultural Zone to (NA) Natural Area Zone; and
- A Conservation Easement is to be registered on title in favour of the Edmonton and Area Land Trust. The terms of the Conservation Easement are to be negotiated between the City, landowner and Edmonton and Area Land Trust.

### 3.4 TRANSPORTATION

The transportation network bordering and within the Magrath Heights NASP will consist of a system of arterial, collector and local roadways and walkways to accommodate the movement of automobiles, transit vehicles, pedestrians and bicycles.

#### 3.4.1 Transportation Development Objectives

- Provide a logical, safe and efficient transportation system within the plan area to address pedestrian, bicycle and other multi-use modes, and the transit / vehicular transportation needs of residents moving to, from and within the Magrath Heights NASP as well as adjacent areas.
- Integrate linear corridors into the neighbourhood along existing windrows and make use of their walkway and linkage potential having regard for safety and ease of movement.
- Provide pedestrian circulation system via sidewalks and walkways that link key viewpoints, park areas and development nodes, without compromising top of bank and upland setback areas.
- Ensure that a common theme of integration is established for the neighbourhood via entrance treatments, walkways and linkages.
- Provide opportunities for pedestrian and bicycle access into adjoining neighbourhoods and Whitemud Ravine.
- Minimize walking distances by creating an interconnected street network and providing walkways where roadway connections are not feasible.
- Adhere to the Top of the Bank Policy along the Whitemud Creek to act as a buffer to residential land uses.

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

Alternative opportunities for circulation throughout the neighbourhood are provided via a walkway network connecting key nodes in Magrath Heights. Convenient linkages between open space, higher density residential and commercial areas are provided. These linkages provide easy access for pedestrians and cyclists. Local streets should be interconnected where possible.

A Transportation Impact Assessment submitted concurrently provides details and recommendations regarding the traffic of the Magrath Heights Area. The report also states that the Magrath Heights neighbourhood will be participating in the construction of roadways to service the Terwillegar Area via the Arterial Roadway Assessment program. The TIA report also, in Section 2, states that the full development of the Terwillegar Area will require additional upgrading of 23rd Avenue and Rabbit Hill Road.

### 3.4.2 Roadway Network

As shown on Figure 5.0 – Circulation System, the future residents of the Magrath Heights neighbourhood will benefit from the accessibility to Rabbit Hill Road and 23 Avenue. A looping collector roadway will provide access off the arterial roadway network into the neighbourhood and onto the local roadway network. Two access points into the neighbourhood off Rabbit Hill Road and one from 23rd Avenue have been planned, based on existing and future anticipated intersections on the opposite side of the respective roadways.

Access to individual lots will generally be from local roads although opportunities exist for residential development with direct access off the collector roadway system. The local roadway pattern in the plan will develop in the form of typical suburban curvilinear streets and cul-de-sacs.
Access to the commercial site and associated roadway requirements will be determined at the zoning and subdivision stages to the satisfaction of the Transportation & Streets and Planning and Development Departments.
Figure 5* Circulation

*Bylaw 13995 May 25, 2005 as amended by Editor
Figure 6 * Open Space

Bylaw 14988, September 17, 2008, as amended by Editor
3.4.3 Roadway Staging

A roadway staging plan was prepared as part of the review and approval process for this NASP which addresses the planned upgrades that will be undertaken to 23rd Avenue and Rabbit Hill Road.

Bylaw 13995
May 25, 2005

23 Avenue is currently a two-lane arterial and the main east-west roadway servicing the development area.

Long term plans for 23 Avenue include a five lane cross section. Short term plans for 23 Avenue include a four lane cross section beginning approximately 300 metres west of Rabbit Hill Road and ending approximately 600 metres east of Rabbit Hill Road.

Rabbit Hill Road is currently a two lane arterial and connects to 23 Avenue at a signalized intersection. Rabbit Hill Road currently provides access to the East Side of the Terwillegar Towne neighborhood.

Ultimately, Rabbit Hill Road will connect to Anthony Henday Drive with a grade-separated interchange. In the short term Rabbit Hill Road will connect to Anthony Henday Drive as a right-in/right-out.

Bylaw 13995
May 25, 2005

Other collector and local roadways will be constructed in concert with subdivision development in the neighbourhood.

3.4.4 Transit Service

Future transit routes will follow the internal collector roadway between Rabbit Hill Road and Terwillegar Boulevard and will be established on the basis of the proportion of trips expected to be generated from within the neighbourhood and adjacent areas. The bus route will be designed in accordance with City specifications.

Based on this routing, and the routes along both 23 Avenue and Rabbit Hill Road, The looping collector road within Magrath Heights provides an opportunity for transit service to access within a reasonable 400 m walking distance of all residential areas in the Neighbourhood.

Bylaw 13995
May 25, 2005

3.4.5 Pedestrian & Bicycle Circulation

The walkway system and/or sidewalks will serve to link all park nodes with internal and adjacent residential areas and amenities such as Whitemud Ravine, Ekos Area, stormwater management facilities, park facilities and the commercial area. A major linear corridors follow existing windrow provide linkage from the Central Highpoint eastward to Whitemud Creek.
The bicycle circulation system for *Magrath Heights* is designed to follow collector and local roadways within the neighbourhood area. Bicycle routes will be clearly marked via appropriate signage and markings. This system will minimize conflicts between cyclists and pedestrians in the neighbourhood.

### 3.4.6 Parking

Parking for vehicles will generally be provided off-street in conjunction with residential development applications.
4.0 ENGINEERING & SERVICING

Details regarding servicing for the Magrath Heights NASP are provided in the associated Neighbourhood Designs Report submitted under separate cover.

4.1 SANITARY SERVICING

As shown on Figure 7.0 - Sanitary Services for Magrath Heights will follow the internal roadway network and associated public utility lots. The sanitary sewer system is divided into three separate catchment areas. The north west comprised of commercial and MDR land uses will tie into an existing sewer at Rabbit Hill Road. The central area will connect to the existing sewer north of 23 Avenue, while the east area will require the use of a sanitary lift station which connects to another sewer in Hodgson.

4.2 STORMWATER SERVICING

As shown on Figure 8.0 - Stormwater Servicing, three stormwater management facilities are designed within the Magrath Heights NASP. These facilities have been located based on the natural drainage patterns of the area.

The concept for the area will involve the development of conventional trunk and lateral pipes out-falling to Whitemud Creek upstream of the 23rd Avenue bridge. The two Storm Water Management Facilities will limit peak flow discharge rates to maximum allowable levels prior to discharging into Whitemud Creek.

4.3 WATER SERVICING

As shown on Figure 9.0 – Water Servicing, Water servicing is proposed to connect existing 450 mm lines at the intersection of the neighbourhood collector roadways with 23rd Avenue and Rabbit Hill Road. Water servicing within the neighbourhood will be designed to provide peak hour flows and fire flows for low density and medium density uses. Water looping will be provided in accordance with the requirements of Aqualta. A Water Network Analysis will be submitted to Aqualta for review and approval.

Bylaw 13995
May 25, 2005
4.4 SHALLOW UTILITIES

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

4.5 MODIFIED DEVELOPMENT STANDARDS

To assist in achieving the EKOS concept of sustainable development, the opportunity for modified development standards may be explored. Any proposal to modify development standards will require consultation, review and approval from City Administration, including but not limited to the transportation Department and AMP – Parks Branch and Drainage Branch.

Potential changes to development standards include:

1. Incorporating shrub beds into the boulevards of collector and local roadways to provide greater bio-diversity of plan species and lower maintenance costs;

2. Modified road cross sections, such as reduced paved surface widths and sidewalks on one side of the road only to reduce stormwater runoff and lessen the amount of infrastructure required;

3. Reduced lighting levels to decrease energy consumption;

4. Use of recycled material in road structure; and

5. Incorporating a drainage interceptor to allow overland flow to be intercepted for park use.
Figure 7* Sanitary Servicing

*Bylaw 14988, September 17, 2008, as amended by Editor
Figure 9* Water Servicing

Bylaw 14988, September 17, 2008, as amended by Editor
5.0 Implementation

5.1 DEVELOPMENT STAGING

Figure 10.0 – Staging Plan shows the anticipated sequence of development for Magrath Heights.

Infrastructure to service the area covered by the NASP will initially be extended into the neighbourhood from 23 Avenue and Rabbit Hill Road. Each successive stage will be developed with the logical and economical extension of these municipal services, with the intent of meeting the needs of the regional and local housing market.

Development in the first part of the NASP is anticipated to begin from the northwest and proceed to the south and east. The development of individual phases may vary from the actual zoning and subdivision applications and as well portions of separate phases may be developed concurrently if there is sufficient demand and/or if the engineering design is made more efficiently as a result.

5.2 ZONING & SUBDIVISION

For the LDR and MDR areas rezoning and subdivision applications to conform to the land use designations described in the NASP will be undertaken as necessary. Guided by the City of Edmonton’s MDP, the SCDB and the intent of this NASP, zoning and subdivision applications will be required to adhere to the Edmonton Zoning Bylaw.

Given the unique opportunities presented by the Ekos Area as detailed in Section 3.1.4, zoning for the area will take the form of site specific Direct Control zoning (DC2). This will allow for maximum flexibility and innovation resulting from future discussions with the City of Edmonton.

5.3 FURTHER STUDIES REQUIRED

The following informational requirements will also be required prior to rezoning and future development of the affected areas:
<table>
<thead>
<tr>
<th>Study Required</th>
<th>Area of Application</th>
<th>Stage of Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2 Environmental Site Assessment</td>
<td>NW ¼ 36-51-25-W4 – areas identified in Phase 1 Study</td>
<td>Prior to rezoning</td>
</tr>
<tr>
<td>Natural Area Management Plan</td>
<td>Southwest Highland (SW86)</td>
<td>Prior to rezoning</td>
</tr>
<tr>
<td>Phase 1 Environmental Assessment</td>
<td>for all other lands</td>
<td>Prior to rezoning</td>
</tr>
</tbody>
</table>
Figure 10* Staging Plan

Bylaw 14988, September 17, 2008, as amended by Editor
APPENDIX 1 LAND OWNERSHIP

Land within the *Magrath Heights* NASP is held by a number of owners. Current land ownership is shown on Figure 11.0 - *Land Ownership*. A listing of the legal parcels is provided on the following Table 1 - Land Ownership.

<table>
<thead>
<tr>
<th>Titled Owner</th>
<th>Legal Description</th>
<th>Area (ha) in NASP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 <em>Private Corporation</em></td>
<td>Ptn NW 36-51-25-W4</td>
<td>1.16</td>
</tr>
<tr>
<td>2 <em>Private Developer</em></td>
<td>Ptn. NW 36-51-25-W4</td>
<td>63.30</td>
</tr>
<tr>
<td>3 <em>Private Corporation</em></td>
<td>Ptn. NE ¼ 36-51-25-W4</td>
<td>15.15</td>
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<tr>
<td>4 <em>Private Corporation</em></td>
<td>Ptn. SE ¼ 36-51-25-W4</td>
<td>9.58</td>
</tr>
<tr>
<td>5 <em>Private Corporation</em></td>
<td>Ptn. SE ¼ 36-51-25-W4</td>
<td>8.04</td>
</tr>
<tr>
<td>6 <em>Private Owner (s)</em></td>
<td>Ptn. SW 36-51-25-W4</td>
<td>23.07</td>
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<tr>
<td><strong>Total Area</strong></td>
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<td><strong>120.31</strong></td>
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</table>
Figure 11* Land Ownership

*Bylaw 13559 December 9, 2003
as amended by Editor
### APPENDIX 2 Land Use and Demographic Profile

#### MAGRATH HEIGHTS NEIGHBOURHOOD AREA STRUCTURE PLAN

**LAND USE AND POPULATION STATISTICS**

**BYLAW 14988** (As amended by Editor)

<table>
<thead>
<tr>
<th>Area (ha)</th>
<th>% of GDA</th>
</tr>
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<tbody>
<tr>
<td><strong>Gross Area</strong></td>
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<tr>
<td>Arterial <em>(Rabbit Hill Road)</em></td>
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<tr>
<td><strong>Gross Developable Area (GDA)</strong></td>
<td>119.3</td>
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<tr>
<td>Stormwater Management Facilities</td>
<td>5.8</td>
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<td>Park (MR Credit)</td>
<td>8.95</td>
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<tr>
<td>Open Space (No MR Credit)</td>
<td>2.30</td>
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<tr>
<td>Walkways</td>
<td>1.90</td>
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<tr>
<td>Top of Bank Walkway</td>
<td>1.60</td>
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<tr>
<td>Circulation</td>
<td>23.86</td>
</tr>
<tr>
<td><strong>Net Developable Area</strong></td>
<td>74.89</td>
</tr>
<tr>
<td>Commercial</td>
<td>3.7</td>
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<tr>
<td><strong>Net Residential Area</strong></td>
<td>71.19</td>
</tr>
<tr>
<td>Low Density Residential</td>
<td>44.26</td>
</tr>
<tr>
<td>Medium Density Residential</td>
<td>5.76</td>
</tr>
<tr>
<td>EKOS Low Density Residential</td>
<td>10.02</td>
</tr>
<tr>
<td>EKOS Medium Density Residential</td>
<td>11.15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area (ha)</th>
<th>Units/ha</th>
<th>Units</th>
<th>% of Total</th>
<th>Pop / Unit</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Density Residential</td>
<td>44.26</td>
<td>18</td>
<td>797</td>
<td>40.1%</td>
<td>3.46</td>
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<tr>
<td>Medium Density Residential</td>
<td>5.76</td>
<td>50</td>
<td>288</td>
<td>14.5%</td>
<td>2.60</td>
</tr>
<tr>
<td>EKOS Low Density Residential</td>
<td>10.02</td>
<td>20</td>
<td>200</td>
<td>10.1%</td>
<td>3.46</td>
</tr>
<tr>
<td>EKOS Medium Density Residential</td>
<td>11.15</td>
<td>63</td>
<td>702</td>
<td>35.3%</td>
<td>2.60</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>71.19</td>
<td>1,987</td>
<td>100%</td>
<td>6,024</td>
<td></td>
</tr>
</tbody>
</table>

Density: 27.9 units / net residential ha

Housing Mix: 50.2 % Low Density Residential / 49.8 % Medium Density Residential