

The Town of Rimbey Johnson Estates Area Structure Plan

Bylaw 884/13

A BYLAW OF THE TOWN OF RIMBEY, IN THE PROVINCE OF ALBERTA, FOR THE PURPOSE OF ADOPTING THE JOHNSON ESTATES AREA STRUCTURE PLAN.

WHEREAS, Part 17 of the Municipal Government Act permits the Council of a municipality to enact an Area Structure Plan to provide a framework for subsequent subdivision and development of an area of land within the municipality; and;

THEREFORE; the Council of the Town of Rimbey deems it advisable to adopt the Johnson Estates Area Structure Plan; and

COUNCIL OF THE TOWN OF RIMBEY, ALBERTA, ENACTS AS FOLLOWS:

1. That this bylaw is to be cited as the "Johnson Estates Area Structure Plan" set out for Lot 6, Block 1, Plan 042 3721.
2. That schedule "A" attached hereto is hereby adopted as part of the bylaw.

AND FURTHER THAT this Bylaw shall take effect on the date of third and final reading.

READ a first time this 8 day of April, 2013.


MAYOR

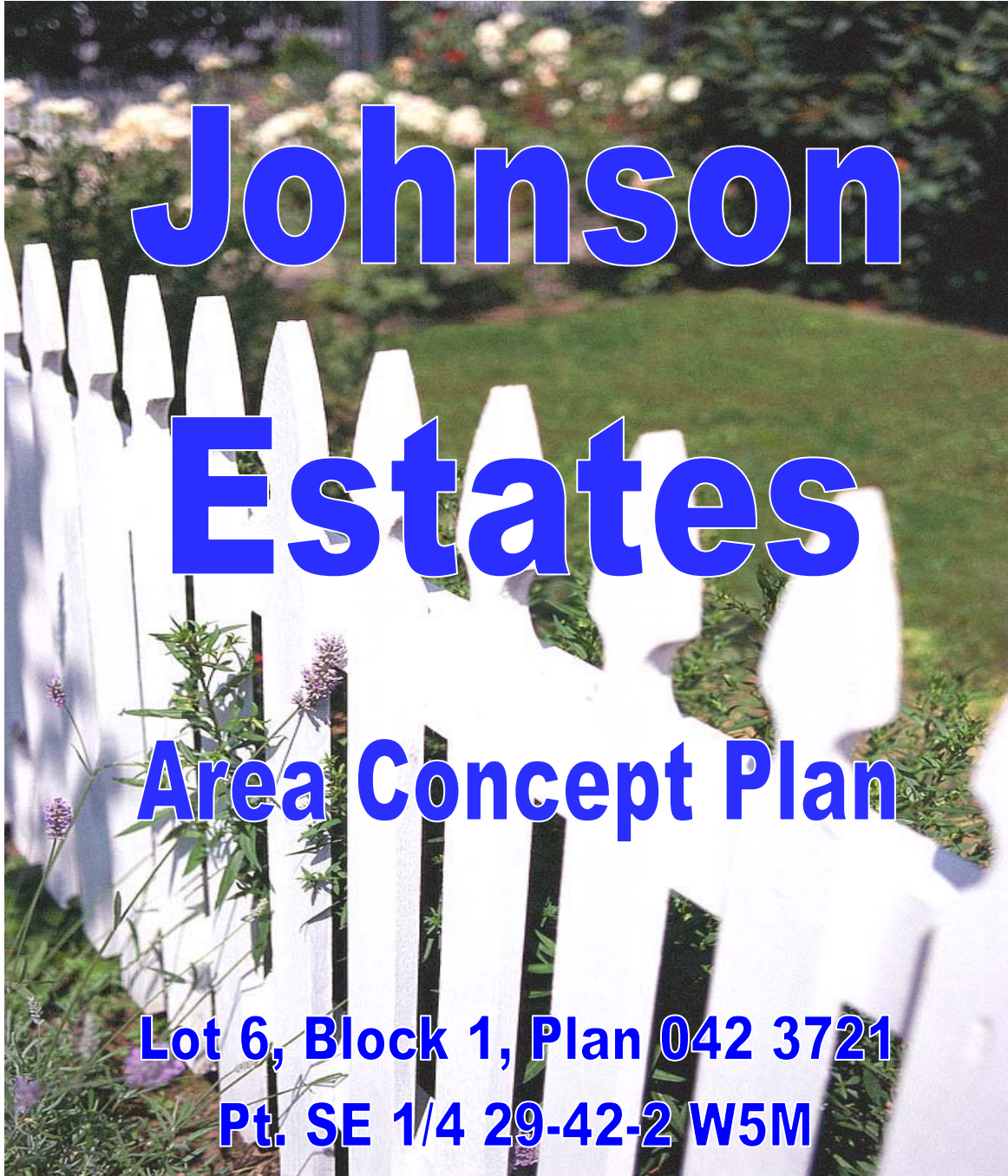

CHIEF ADMINISTRATIVE OFFICER

READ a second time this 29 day of April, 2013.

READ a third and final time this 29 day of April, 2013.


MAYOR


CHIEF ADMINISTRATIVE OFFICER



Johnson

Estates

Area Concept Plan

Lot 6, Block 1, Plan 042 3721

Pt. SE 1/4 29-42-2 W5M

Town of Rimbey

Hoskin Planning & Development Services Inc.

AL-TERRA
Engineering Ltd.

June 2008
Revised April 2013

Bylaw 884/13 – Schedule A

Johnson Estates
Area Concept Plan

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1. Introduction

1.1 Purpose

This concept Plan has been prepared to provide a framework for the subdivision and development of Lot 6, Block 1, Plan 042 3721, Pt. SE 1/4 29-42-2 W5M and located in the west central quadrant of the Town of Rimbey. The Plan Area comprises of approximately 25.94 hectares (64.09 acres) and will be developed primarily as a low to medium density residential neighbourhood.

The Johnson Estates Concept Plan meets the requirements of Section 633 of the Municipal Government Act, and complies with the Town of Rimbey's Municipal Development Plan Bylaw 672/97 and Town of Rimbey's Areas Structure Plan Bylaw 839/09. As such, it describes future land uses and density, potential population levels, traffic circulation, municipal servicing, reserve dedication and staging of development.

1.2 Location Context

The Johnson Estates area is located in the northwest quadrant of Rimbey and is defined by:

1. The Smithsonian International Truck Museum, Pas-Ka-Poo Historical Park and future single family residential development to the north;
2. Existing single family residential (Drader Crescent); Rimbey Community Centre, Public School Site, Provincial Building and hospital to the east;
3. Highway 53, to the south; and
4. Agricultural land to the west.

Figure 1 shows the boundaries of the Plan Area and its location within the Town.

1.3 Land Ownership

With the exception of the church parcel, located in the southeast corner of the Plan Area, the Plan Area is currently owned by Johnson Estates Corporation representing a number of local and Central Alberta residents.

2. Existing Conditions

2.1 Surrounding Land Uses

Existing uses surrounding the Plan Area are shown on Figure 1 and are described as follows:

To the north, the lands are currently in agricultural crop production and are zoned Urban Expansion District "UX".

To the northeast, the area is zoned Institutional and Public Uses "IPU" and Low Density Residential "R-1". The area is currently developed as a museum park and residential development.

Directly east, lands are zoned Institutional and Public Uses "IPU" and developed as for school, community centre, hospital and provincial administration offices. There is one single family residential lot, located in the Urban Expansion District, which was recently subdivided from the subject parcel.

To the south, across Highway 53 is primarily Urban Expansion District "UX" and is in agricultural production. The existing development is zoned Medium Residential District "R-3", with additional of recently approved commercial, single family and medium density residential.

To the west, lands are currently in agricultural production and zoned General Agriculture District "AG" by Ponoka County's Land Use Bylaw.

The Johnson Estates Concept Plan will result in a neighbourhood that will be compatible with the surrounding land use pattern.

2.2 Existing Land Use

The Plan Area is cleared. Until recently, the land was used for agriculture crop production. A portion of the subject property was developed as a 9-hole golf course, which remained until recently. The land has now been converted to agriculture until such time as it is developed. As indicated above, the farmstead was recently subdivided from the subject parcel prior to sale. A church site, located in the southeast corner of the Plan Area, was also subdivided and sold from prior to purchase. The site is currently undeveloped.

2.3 Natural Features

The Alberta Soils Correlation Map identifies Rimbey and area as being located in Soils Correlation Area (SCA) 10. An area of Thick Black/Dark Gray-Gray Soil found in Central and East-Central Alberta. Soils in this area are medium textured loams, underlain by Glaciolacustrine deposits, forming the foundation for some of the best agricultural lands in Alberta. The Plan Area is generally sloping to the southwest, with elevations ranging from 927 metres (above sea level) in the south and west to about 940 metres (above sea level) in the north and east. The site drains primarily southwest, to Highway 53 and then west to Blindman River. See Figure 2 which illustrates existing Plan Area conditions.

Excepting planted coniferous and deciduous trees, and native shrubs adjacent the north property line, no tree cover exists within the Plan Area.

2.4 Pipelines

There are no pipeline right-of-way easements through the Plan Area, however, there is an Easement Right-of-Way, registered to the Town of Rimbey, for the purpose of stormwater management. The right-of-way extends from the east central portion of the Plan Area toward the northwest corner, to an existing manmade dugout.

2.5 Historical and Archaeological Features

A review of historical data on the Town's website suggests there are no historically or archaeologically significant landmarks on the subject lands. The subject lands are located immediately southwest of Pas-Ka-Poo Park the Smithson International Truck Museum and Centennial Pavilion.



2.6 Municipal Policy and Regulatory Provisions

2.6.1 Town of Rimbey Municipal Development Plan Bylaw #672/97

The following policies for the Municipal Development apply:

Land Use Concept	<p><i>Policy 3.1 By law there is no right of access to a primary highway. Access is controlled by Alberta Transportation to preserve primary highways as high speed travel corridors.</i></p> <p><i>Policy 4.6 Identifies a number of regional and local community services available in the Town, including the hospital, schools, recreation and cultural amenities and the commercial sector.</i></p> <p><i>Policies 5.1-5.4 Identifies goals for residential development based on the provision of a range of affordable housing, with a variety of housing types and densities, and ensuring pre-planned developments that “fit”, logically and economically with existing development.</i></p> <p><i>Section 6 – Identifies the Town’s desire to retain Rimbey’s downtown core as the primary commercial centre. Indicates Council support for streetscape improvements along 50th Avenue.</i></p> <p><i>Policy 6.12 suggests Council may support commercial development on Highway 53, west of the hospital.</i></p> <p><i>Policy 11.9(b) Anticipated uses are predominantly residential. The determination of arterial and collector road alignments, municipal services and utilities and future road, service and utility connections to adjoining quarter sections will be crucial. There is no obvious way to route the arterial back to 51st Street/Highway 20.</i></p>
Policy Framework	<p><i>Policy 11.9 supports area structure plans as a means of preplanning the Town’s future growth and development.</i></p>
Servicing Concepts	<p><i>Policy 3.7 Within present Town boundaries topography is not a constraint because land slopes down in all directions. If, as suggested in this Plan, the land between the west boundary and the Blindman River were annexed, the topography (i.e. the floodplain) would be a constraint.</i></p> <p><i>Policy 4.4 Suggests that existing municipal infrastructure is in good shape overall. The lifespan of the lagoon is between 30-40 years. No significant upgrades to the municipal water system is anticipated in the short-term, however, a second reservoir may be needed in the northwest part of the Town. The existing water tower is not in use at this time.</i></p> <p><i>Policy 4.5 Indicates most developable land within the Town will be serviced by gravity flow servicing.</i></p> <p><i>Policies 5.9-5.10 Requires the extension of servicing by the developer, with the construction of same to the Town’s standards.</i></p> <p><i>Policy 6.15 Council may require service roads to provide controlled access.</i></p>

Policy 7.10 New subdivision may be developed as laned subdivisions.

Policy 8.3 The existing water supply system has sufficient capacity for the immediate future (5-10 years). An additional reservoir may be required in the northwest part of Town.

Pedestrian Linkages

Policy 5.12 Encourages municipal infrastructure that improves access opportunities to seniors, including sidewalks, crosswalks and wheelchair ramps.

Policy 6.10 supports enhancing pedestrian linkages to the downtown core.

Parks and Open Space

Policies 9.3-9.5 School facilities are adequate to service Rimbey and the surrounding area. Council does not intend to acquire land, by dedication or purchase for this purpose.

Policy 9.6 The Town does not require additional parks or recreation facilities in the foreseeable future. Parks should be developed to serve as many users as possible. Parks should be located adjacent school properties.

Policies 10.3 Municipal Reserve dedication shall require the developer to provide 10% of the net parcel of land that is the subject of the application for reserves, and dedication may be provided in the form of land, cash-in-lieu or a combination of both.

Housing Mix

Policies 5.12 – 5.13 Supports development aimed at older adult and seniors markets.

Policies 5.16 – 22 The Town welcomes medium and high-density residential developments subject to acceptable standards, and may require transitional uses between high density and low density residential uses. Innovative housing developments are also welcome and self-contained suites and home based business within single family areas may also be acceptable. Lands immediately to the west may have the potential for low density country residential use.

Tenure Mix

Policy 5.15 Medium and high-density residential developments such as duplexes, townhouses, multi-plex residential units and apartments are welcome in Rimbey subject to acceptable standards including but not limited to lot size and coverage, parking standards and access. Council may require medium and high-density residential developments to provide a transitional land use between the development and any adjacent low density residential uses which include but are not limited to roads, lands, utility lots, or reserve parcels.

Area Structure Plan

Policies 11.9 – 11.11 Council supports Area Structure Plans as a means of pre-planning the Town's future growth and development. In the years to come Council will require Area Structure Plans in the following areas, as shown on Map 1 (Appendix A):

b) The remainder of SE 29-42-2-W5M. Anticipated uses in this area are predominantly residential. Pre-planning will be necessary to determine arterial and collector road alignments, municipal services and utilities, and future road, service and utility connections to adjoin quarter sections. This last point is crucial with respect to his land. With respect to the generalized arterial road alignment shown on Map 2 (Appendix B) at the north end of the quarter, there is no easy or obvious way to route the arterial back to 51st Street/Highway 20.

11.10 Council expects that developers in the private sector will pay for Area Structure Plans. However, Council may decide that it will be in the greater public interest to have an Area Structure Plan in place for a particular area. In this case, Council will budget for this project and will contract with West Central Planning Agency or another planning agency to do the work.

11.11 Any Area Structure Plan presented for Council's consideration and adoption may be required to address a list of topics, including, but not limited to:

- a) proposed new land uses in relation to adjacent existing land uses;
- b) land use densities with the planning area (e.g. single family vs. medium or high density residential);
- c) population densities arising from the proposed land uses;
- d) road types, alignments, and right-of-way standards;
- e) utility corridors;
- f) connection of proposed road alignments and utility corridors with existing similar uses on adjacent land;
- g) provision of municipal services, such as water, sewer and storm water drainage, as well as utilities;
- h) school, community facility or church sites;
- i) pedestrian facilities (e.g. walkways, sidewalks, pedestrian crosswalks, school crossings) and circulation;
- j) park spaces;
- k) site constraints, such as floodplain or contaminated site;
- l) proposed standards, such as architectural controls;
- m) phasing of development.

The Concept Plan complies with all provisions of the Municipal Development Plan. The Town has indicated it will be adopting this Area Concept Plan as an Area Structure Plan.¹

2.6.2 Town of Rimbey Land Use Bylaw 762-04

The Plan Area is zoned Urban Expansion District "UX" by the Town's Land Use Bylaw. The purpose of this district is to *identify land which in future will probably be converted to urban use, but which can be used for agriculture as long as the owner elects to do so*. An outline plan acceptable to council must be prepared before the land will be considered for reclassification to another use.

The developer intends to make application to reclassify the lands to that show in the concept plan. (figure 3)

2.7 Implications for Future Development

The existing conditions result in the following implications for future development.

1. The medium and low density development that abuts the Plan Area on the south and east sides, and the Town's Municipal Development Plan policies supporting a range of affordable housing, with a variety of housing types and densities, suggests that a mix of residential densities in Johnson Estates is appropriate. Similarly, a commercial site located directly north of Highway

¹ Johnson Estates Corporation: January 2013

- 53, and west of the hospital, in the southwest corner of the Plan Area is compatible with adjacent uses and the goals of the Municipal Development Plan.
2. Until subdivision proceeds, the Plan Area has been converted to, and will be retained as agricultural.
 3. There are no significant natural features in the Plan Area.
 4. The development concept addresses the existing stormwater management utility right-of-way in a responsible manner and improves existing stormwater management conditions resulting from adjacent development.
 5. The Town's Municipal Development Plan suggests municipal servicing is adequate for short-term needs. A new water reservoir was recently developed in the northwest quadrant of the Town to meet long-term needs.
 6. This Concept Plan has addressed the alignment of future infrastructure for adjacent lands.

The foregoing implications are acknowledged in the Development Concept that is shown on Figure 3.

3. The Development Concept

3.1 Development Objectives

The primary development objective of the Johnson Estates Concept Plan is to create a viable, comprehensively designed residential neighbourhood that focuses on curvilinear design with a combination of laned and laneless development opportunities and includes a 9.81 acre site for the creation of a 200 room senior housing complex².

The existing museum, Pas-Ka-Poo Park and Centennial Pavilion, to the northwest, the school, community facility, and the hospital to the east, provide ideal amenities for a mix of housing densities and styles that support single family residential use, the senior housing complex³, as well as multiple housing opportunities aimed at attracting Rimbey's aging population. These facilities are connected to the Plan Area with traditional sidewalks and a low impact bio-swale network. The development concept that is shown on Figure 3 reflects the following objectives:

1. To create opportunities for a residential neighbourhood that is linked to the balance of the Town to allow for community interaction.
2. To provide a *meaningful* choice of housing options catering to a range of incomes, ages and social groups as well as types of tenure.
3. To provide for a high standard of amenities, including provisions for low impact green infrastructure to serve the dual purpose of stormwater management for the Plan Area and the adjacent Drader Crescent residential development as well as a natural trail system.
4. To provide for a seamless transition between adjacent developed portions of the Town and future development.
5. To provide for a functional and safe internal circulation system based on a hierarchy of collector and local residential roads.
6. To provide for safe and efficient linkages to the Town's arterial road system.
7. To encourage residential densities that are compatible with existing adjacent land uses and meets the Town's future growth needs.
8. To accommodate commercial development in the vicinity of Highway 53.

The foregoing policy objectives compliment and support the relevant policies of the Town's Municipal Development Plan. Relevant Land Use Bylaw standards will be applied at the time of subdivision and development.

3.2 Land Area Breakdown

Table 1 provides a summary of the land use breakdown by area proposed for the Development. Figure 3 illustrates the proposed land use concept for the Plan Area.

² Johnson Estates Corporation: January 2013

³ Johnson Estates Corporation: January 2013

Table 1 – Area Breakdown

Land Use	Hectares	% of GDA
Gross Development Area	25.94	100
Storm Water Management/Open Space	2.66	10.3
Circulation	5.88	22.7
Highway widening	0.25	1.0
Low Density Residential (R1)	7.63	29.3
Low Density General Residential (R2)	0.42	1.6
Medium Density Residential (R3)	3.07	11.8
High Density Residential (R4)	1.10	4.2
Commercial	0.46	1.8
Institutional & Public Uses (IPU)	4.47	17.2 ⁴

Note: The areas shown in Table 1 are approximate, and will be verified at the time of detailed survey

3.3 Design Elements

The Development Concept shown on Figure 3 incorporates the following design elements:

1. Curvilinear roadways combined with a limited number of cul-de-sacs to create a more interesting streetscape with encouraging privacy;
2. A mix of lots served by lanes, to accommodate off-street parking and satisfy the desires of the community; and development without lanes, to accommodate overland stormwater drainage and a trail network for the community;
3. “Green” or low impact bio-swale infrastructure to direct stormwater flow and provide pedestrian circulation routes which link residential areas to public and commercial uses, could be developed as asphalt trails in the future, if the Town so desires. Trails can be offset from the flow concentration areas of the swale so the asphalt isn’t impacted by water. The stormwater management feature will provide an amenity feature for residents of Johnson Estates and the Town of Rimbey;
4. A commercial or mixed use component adjacent to Highway 53.

⁴ AL-Terra Engineering (Red Deer) Ltd.

3.4 Residential

The Development Concept provides for a mix of residential densities and forms as per the Municipal Development Plan policies.



3.4.1 Low Density Residential

Most of the Plan Area will be developed as single family housing with a mixture of laned and laneless development. Based on input provided by local residents and builders, laned subdivisions are considered desirable, however, lanes add maintenance costs for the Town. The Town does not support abutting lots in laneless developments. The Area Concept Plan provides a mix of lanes and stormwater management/open space in response to the needs of residents and the Town. The residents of Drader Crescent support the incorporation of a lane between the existing and proposed development, with a preference for single family detached housing immediately adjacent to Drader Crescent.

2006 Canada Census data for the Town of Rimbey indicates an average household size of 2.3 persons/unit. Projected population for the single detached dwelling component of the Plan Area is 317 persons⁵.

The R2 Low Density General Residential District as per the Town's Land Use Bylaw will also be applied. The purpose of the R2 district is to *provide land for smaller detached houses and side-by-side duplexes*. Lot dimensions will be confirmed at the time of detailed design. The Johnson Group is currently considering additional architectural controls, beyond what is established through the Town's Land Use Bylaw, which would be developed in consultation with the local builders.

3.4.2 Medium Density Residential

Medium density residential sites are proposed along the south collector roadway, within close proximity to amenities, including the Smithsonian International Truck Museum and Pas-Ka-Poo Park and the stormwater management facility in the southwest corner of the Plan Area. Additional medium density sites are proposed around the perimeter of the proposed senior housing complex as well as at the north end of the Plan Area.⁶ The purpose of the R3 district is to *provide land for medium density housing in the form of town housing, row housing, and fourplexes. Duplexes and detached houses are also allowed. This district does not allow apartments or any type of housing with more than two floors above grade.*

It is anticipated that the Medium Density housing component of the Plan Area will be comprised of single family dwellings, duplex dwellings and row housing. It is expected a significant portion of the medium density residential district will attract a mix of young families and 50+ or seniors market.

⁵ AL-Terra Engineering (Red Deer) Ltd.

⁶ AL-Terra Engineering (Red Deer) Ltd.

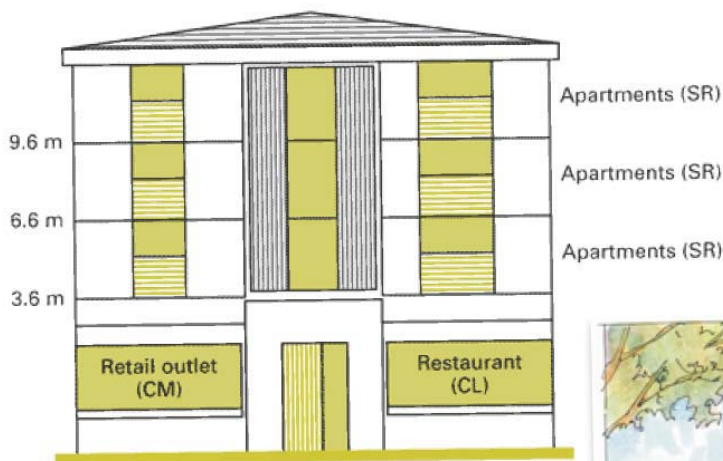
3.4.3 High Density Residential



The High Density Residential component will be in the form of higher density housing, including apartments as per the R4 High Density Residential District of the Land Use Bylaw. There has been interest by a local builder for approximately 0.6 hectares north of the existing church property for the construction of an apartment building. The Town has also suggested a need for this type of higher density development in the community. In the event there is not a market for a High Density Residential District at this location, the site is

suitable for commercial or mixed use development as it is located immediately adjacent the Highway 53 service road and has excellent access.

Recently, Alberta Infrastructure initiated negotiations with the Town of Rimbey for future road widening. A service road has been incorporated into the Plan Area to enhance access/egress to Highway 53 from the Plan Area, resulting in a significant reduction in the size of the commercial component. This area can accommodate commercial or mixed use, however, in the event, this use does not materialize within a reasonable timeframe, the site can also accommodate multifamily residential.



Number of Units and Population

Population and number of unit estimates for the Johnson Estates area are summarized in Table 2. Based on the foregoing factors, the total number of dwelling units is estimated to be 518 and the population is projected to be 1001. Overall density of the Plan Area will be 20 units per hectare, which is typical of many communities in Central Alberta. In the event the commercial component of the Plan Area is eventually developed as mixed use, this density may increase, though not dramatically.

Table 2 – Number of Residential Units and Population Estimates⁷

District	Hectares	Number of Units*	Population**
R1	7.63	130	298
R2	0.42	8	19
R3	3.07	92	165
R4	1.10	88	158
IPU	4.47	200	360
Total	16.69	518	1001

*For R1, assumes 17 units/net ha. For R2, assumes 20 unites/net ha. For R3, assumes 30 units/net ha. For R4 assumes 80 units/net ha.

**For R1 and R2, assumes 2.3 persons/unit. For R3 and R4, assumes 1.8 persons/unit.

3.5 Commercial

There is a small fragment of land located north of Highway 53 which has been severed from the remnant by the introduction of a service road. The site has excellent visibility and access, making neighbourhood or highway commercial use compatible. The Town is sensitive to drawing existing businesses from the downtown area, but recognizes this location in the Municipal Development Plan as being appropriate for additional commercial development. Mixed use commercial or multi-family residential development is also compatible. There are two multi-family residential lots northeast⁸ of the Church and service road. These lots were incorporated into the original design at the request of a local builder for the construction of an apartment complex, however, the sale is as yet unconfirmed. Because of its location adjacent the service road and institutional amenities, these lots could also accommodate neighbourhood commercial or mixed use development.



⁷ AL-Terra Engineering (Red Deer) Ltd.

⁸⁸ Johnson Estates Corporation: January 2013

3.6 Institutional and Public Uses (IPU) District

The 9.81 acre parcel zoned for IPU is being purchased by the Ponoka County and ultimately used for a 200 room senior housing complex to be built in two stages. This is compatible with surrounding uses being located in a residential area but bordering or being near the schools, hospital, parks and other public community services. The staff required to operate the facility would have parking space provided on location and would not be a disruption to the surrounding neighbours in terms of parking or traffic volume.⁹

3.7 Open Space

The school and church sites and community centre are linked to the neighbourhood pedestrian system through the dry stormwater management bio-swale system which serves the dual purpose of a low impact linear park. This open space component can be aesthetically enhanced through the use of rain gardens to serve both a public utility function and a visual amenity feature.



Low impact “green” infrastructure provides the following benefits:

1. reduces pollutants from reaching local waterways;
2. reduces flooding; providing habitat for beneficial birds and insects;
3. replenishes local ground water;
4. provides a low-maintenance trail network¹⁰, and;
5. provides an attractive, creative landscaping component.

⁹ Johnson Estates Corporation: January 2013

¹⁰ AL-Terra Engineering (Red Deer) Ltd.

The Town's policy in regard to municipal reserves has been flexible to allow the Town to exercise preferred options when the opportunity arises. It is common for overland stormwater management systems to be incorporated into the lots and protected by way of an easement, often resulting in enforcement issues and remediation for the Town when private landowners mistakenly recontour or fill the swales.

The Johnson Development Group will provide new stormwater management facilities to accommodate offsite flows from adjacent developments as part of the Johnson Estates development. The stormwater facilities will also contribute to opportunities for recreation and open space. The Johnson Development Group considers the additional costs which will be incurred in upgrading the stormwater management system comparable to costs associated with the provision of municipal reserves¹¹. The Town subdivision authority's decisions on reserves are to balance the needs of the Town while avoiding decisions which hinder or prevent development. The Town feels that this development has special circumstances in regards to the IPU lot and agrees that the public utility lots created for the stormwater management system will be accepted as Municipal Reserve and no further dedication of municipal reserves is required for this development.⁹ The public utility lots can be identified as municipal reserve or the lots can be redesignated and the bio-swale protected by way of an easement.

4. Municipal Services¹²

4.1 Water Distribution Concept

The proposed water distribution system will connect to the existing Town of Rimbey water supply network at the south end of the site north of Highway 53, on 55 Street. This distribution main will eventually connect through the site to the existing water reservoir near Drader Crescent. The water mains will be extended to adjacent properties to allow for future adjacent development. All public mains within the site will have a minimum diameter of 200 mm.

As the phases of this project are developed, minor systems will be looped to prevent any dead end portions of the water lines. A new reservoir has been constructed to the northeast of the Plan Area and will ensure adequate peak hour pressure and fire flow for the area. The developer's consultant in conjunction with the Town's Engineers will assess water main pressure and flow for each proposed phase of construction and evaluate whether or not the north loop (from the new reservoir) will be required earlier than the anticipated (Phase 4) connection.

The proposed water distribution concept is shown on Figure 4.

4.2 Sanitary Sewage Concept

There are two existing sanitary sewer connection points to this subdivision, a 200 mm main on 55 Street at the south end of the development and a 200 mm main on Drader Crescent. The north-easterly 1/4 of the site will flow via gravity main to Drader Crescent and the balance of the site will flow via gravity main to 55 Street.

¹¹ AL-Terra Engineering (Red Deer) Ltd.

¹² AL-Terra Engineering (Red Deer) Ltd.

All deep utility installations within the Johnson Estates development will comply with current Town of Rimbey and Alberta Environment guidelines and specifications.

The developer will provide sanitary sewer stubs to adjacent properties to allow for future developments. There may be opportunities to oversize sanitary mains within the Johnson Estates development to accommodate future Town of Rimbey growth. The developer's consultant will coordinate with the Town of Rimbey when sizing mains.

The sanitary sewer concept is shown on Figure 5.

4.3 Storm Water Management Concept

The Johnson Estates stormwater management concept serves six primary purposes:

1. prevent the likelihood of flooding to properties within the development by directing stormwater runoff to a reliable collection system and by accommodating runoff from larger storm events through the use of overland drainage routes;
2. reduce the impact to downstream water courses by restricting post development runoff flows to predevelopment rates per Alberta Environment stormwater management guidelines;
3. reduce the impact to downstream water courses by settling runoff pollutants within the stormwater management facilities per Alberta Environment stormwater management guidelines;
4. eliminate the existing storm water management easement and redirect existing stormwater flow from adjacent undeveloped lands to the proposed stormwater management facilities;
5. address the Town's current stormwater management concern at the southwest corner of Drader Crescent;
6. provide a low impact trail network and green space features throughout the Plan Area.



There is an existing stormwater management pond located toward the northwest corner of the subject site which has been serving as an additional water supply for the previous golf course use. An easement is registered from Drader Crescent to the storm pond. The Town will discharge the easement for the existing stormwater management facility, in favour of the new storm water management concept, which more aptly fits with the contours of the land as well as providing an attractive amenity feature. The Johnson Estates stormwater management concept will limit the peak discharge from the Plan Area to predevelopment rates through the use of stormwater detention facilities. The stormwater management system will also provide stormwater detention storage for 5.7 hectares of existing off-site development which currently makes use of the existing storm pond to restrict flows.

Bio-swales are a form of "low impact development" which results in reduced runoff volumes; groundwater replenishment; reduced sediment and nutrient runoff; and provides aesthetic value to the neighbourhood. The swale is designed as a dry stormwater management facility; therefore, the bottom of the channel can also be used for pedestrian circulation.

Al-Terra Engineering (Red Deer) Ltd., in consultation with Tagish Engineering Ltd., has determined that the storage system of pond and swale should restrict the post development flow of a 1:100 year storm event to predevelopment rates. A predevelopment release rate of 13.1 Litres/second/hectare was used to determine the size of the storage facilities. The maximum storage volume required is 13,400 m³ which would comprise of an area of 1.13 ha with a water depth of 1.5 m and a 0.6 m freeboard. These volumes have been distributed over two ponds and conveyed by the bio-swales.

Further to the stormwater detention facilities shown within the Plan Area, the proposed 4 hectare senior's living complex (IPU) within the development will also be required to restrict stormwater runoff to the 1:5 year post development rate through the use of on-site detention.

Runoff from minor storm events (1:5 year storms) will be conveyed to stormwater management facilities via a network of catchbasins and storm mains.

The storm water management system is identified on Figure 6.

4.4 Franchise Utilities

Power, telephone, cable, television and gas will be provided to the area by the extension of existing facilities. Figure 7 illustrates the proposed shallow utility alignments within the Plan Area.

4.5 Circulation

A Traffic Impact Assessment (TIA) has been completed by Johnson Estates Corporation for this proposed subdivision and is available upon request. This study addresses the intersection of 55th Street and Highway 53 only and assumed that all traffic at the full build out stage of this site will use this intersection. This is a conservative approach for the development. The conclusions from the TIA are that no intersection upgrades or signal lights are warranted.

Johnson Estates will be accessed from five points: the extension of 55th Street provides access from the southeast while the extension of 56th Avenue provides access from the northeast. The extension of 56th Avenue, west through the Plan Area supports future development to the north and northwest, while the

addition of a minor collector road in the southwest quadrant of the Plan Area supports future development to the southwest. The service road alignment to 55th Street will also facilitate vehicular traffic from Highway 53. Further, the Town has advised that there are plans to put a north-south arterial road in the land to the west of this development and hence the provision of two east-west collector roads within the Plan Area. On June 2010, Alberta Transportation with the assistance of Delcan Corporation prepared the "Highway 53 Planning Study No. R-1101". It recommends that the Hwy 53 Bypass be considered in future planning work by the Town of Rimbey, as it would serve to make land available for future development. The Bypass would also serve as a possible arterial road option for large vehicles, who wish to Bypass the Town. The Town of Rimbey Area Structure Plan Bylaw 839/09 A.5.3.d indicates that the Town of Rimbey shall be responsible for required Traffic Impact Assessments (TIA) as they relate to the intersection of Highway 53 and 55th Street. The Town has indicated that intersection upgrades, as determined by the TIA's, will be the responsibility of the Town to construct.

Figure 8 illustrates the proposed vehicular and pedestrian circulation plan for the Johnson Estates development.

The Plan Area will include several natural (low impact) trails for pedestrian circulation. The combination of trails and sidewalks will add a variety of pedestrian circulation alternative.

Lastly, as was indicated earlier, the volume of traffic created by staff working at the senior housing complex and required by residents, would be no greater than that created if the area was zoned R1. Further, parking for staff will be provided onsite so as to not interfere with the local neighbourhood.¹³

4.6 Grading

The Johnson Estates development will be graded in accordance to current Town of Rimbey standards and construction Best Management Practices, and grading will be consistent with existing topographical slopes and directions. Longitudinal road grades and landscaping grades will be in the range of 0.6% to 4.0%. With the exception of walk-out lots adjacent to the southwest stormwater management facility, low and medium density lots will be graded in a split drainage yard pattern where runoff is directed towards the lane or swale in the back yard and towards the street in the front yard.

Topsoil on the site will be stripped during each phase of development to reduce the overall potential for erosion and sedimentation. Topsoil will be stockpiled on site and will be used as landscaping material for open spaces and by builders at residential lots. Erosion and sedimentation control measures will be implemented throughout the course of construction to reduce the impact of construction on adjacent properties and water courses.

The Developer will ensure that appropriate measures are taken to control dust during the course of construction activities.

The existing stormwater facility on the site will be filled to accommodate residential lots. Structures constructed in deep fill areas (fill equal to or in excess of 1.2m) will require that builders obtain bearing certificates from an approved geotechnical consultant.

¹³ Johnson Estates Corporation: January 2013

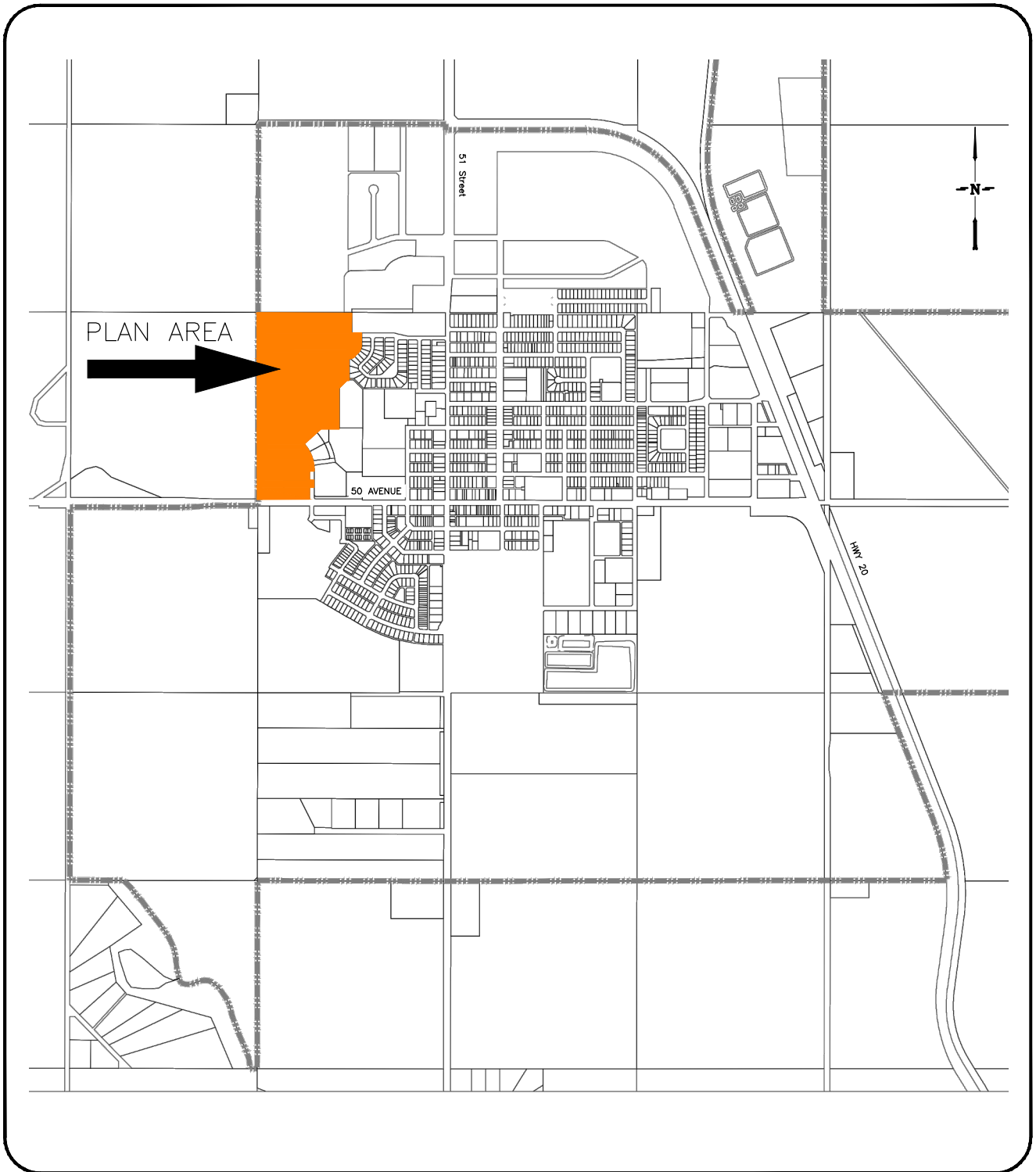
The Johnson Development Group and Ponoka County have agreed that the cost to construct the east bio-swale / stormwater management facility, southwest stormwater management facility, grassed trail network throughout the Plan Area (necessary for proper drainage of the IPU lot and surrounding area) and any necessary grading to allow proper drainage of the swale will be borne by the County of Ponoka.¹⁴

5. Phase Implementation

Figure 9 shows a conceptual staging sequence that is based on the extension of municipal services as described above. Phases will generally be completed from south to north. As mentioned in the servicing text, the north water main connection may be required earlier than shown on the Phase Implementation Plan if analysis proves inadequate pressure or flows during the detailed design of Phases 1 to 3.

The staging concept is subject to change based on market conditions. The Developer may modify the staging concept without amending this Concept Plan.

¹⁴ Johnson Estates Corporation: January 2013



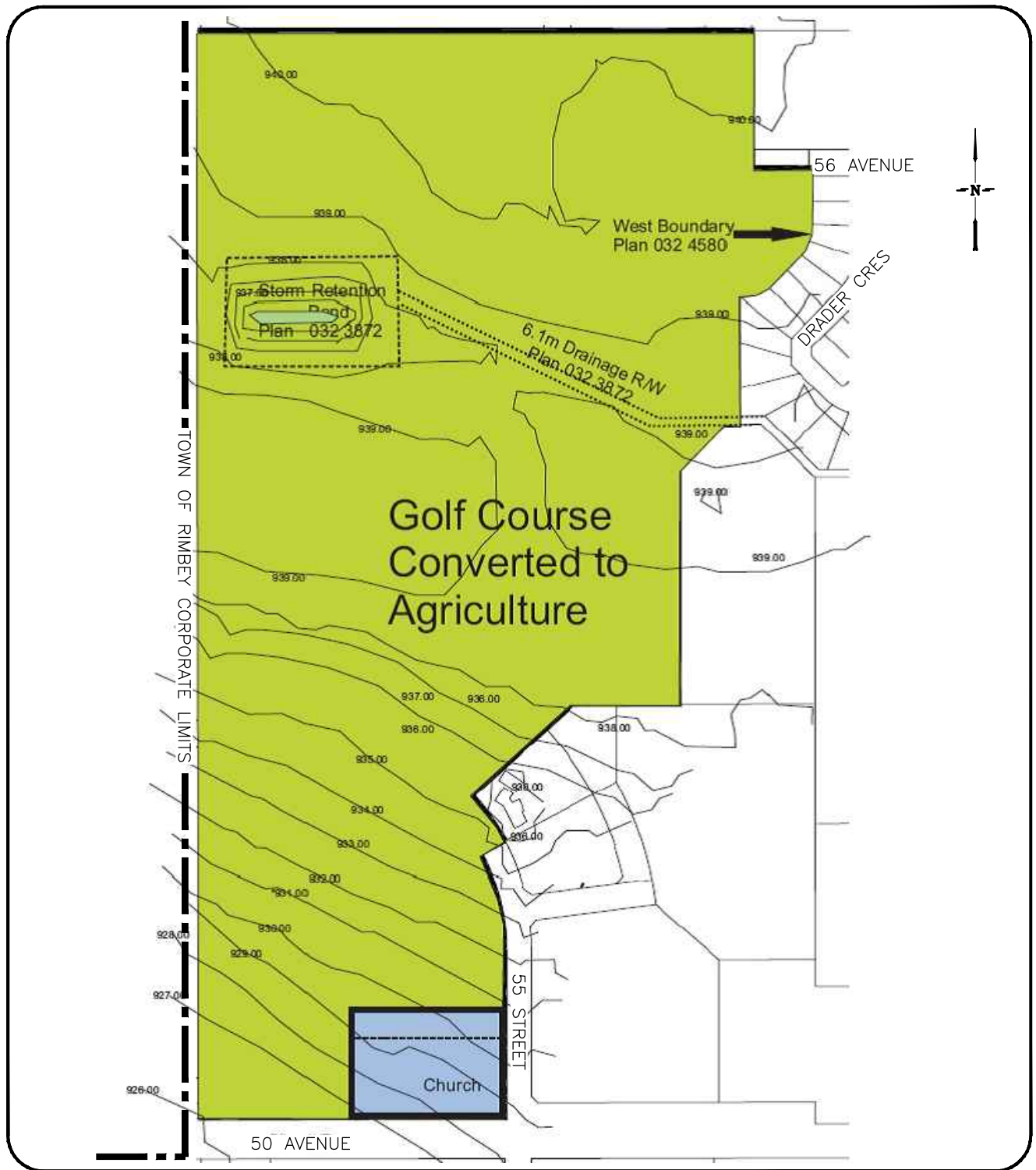
JOHNSON ESTATES, RIMBEY
FIGURE 1 - LOCATION PLAN

PLAN NOT TO SCALE

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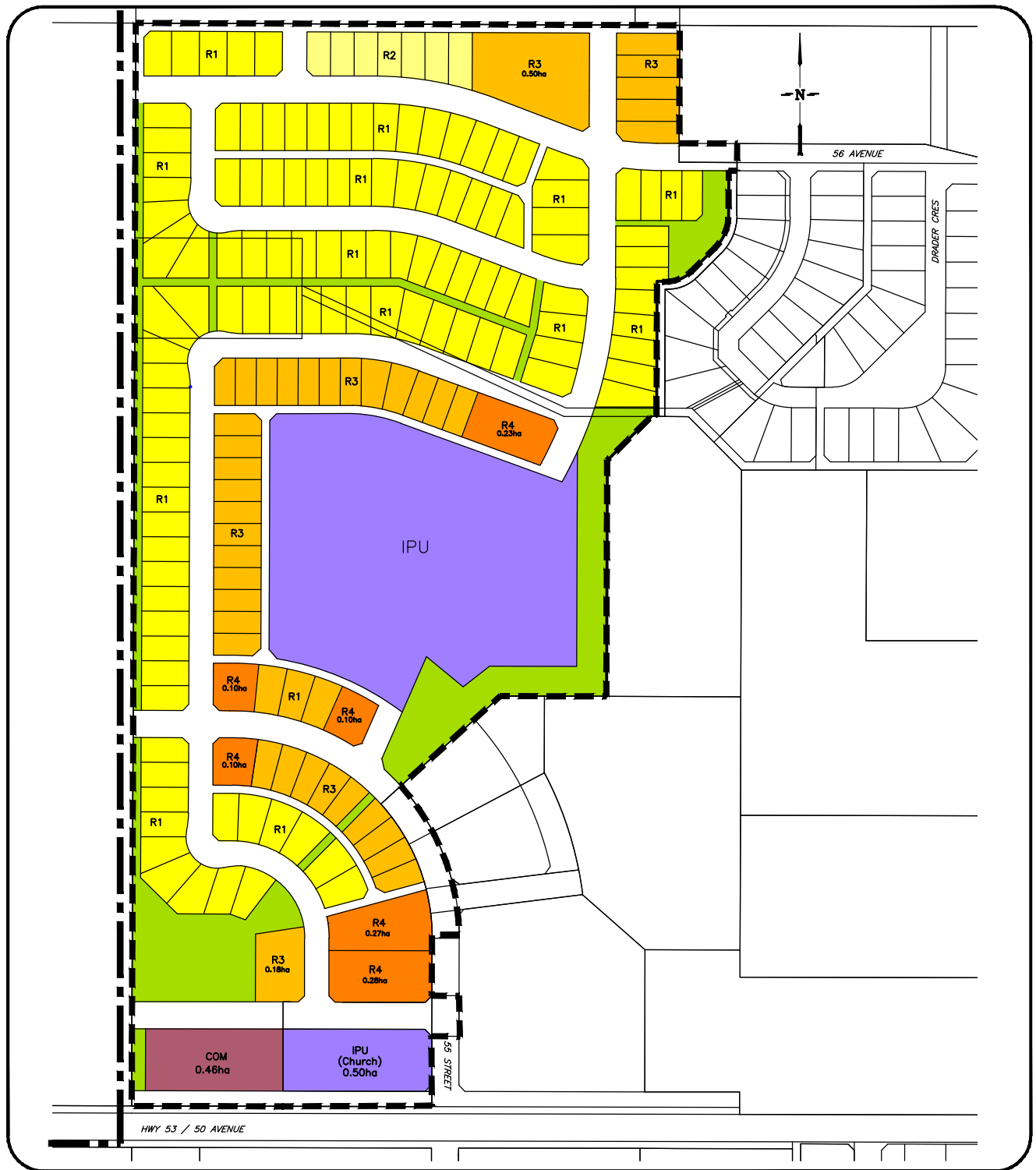
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FIGURE 2 - EXISTING CONDITIONS

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





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FIGURE 3 - DEVELOPMENT CONCEPT PLAN

PLAN NOT TO SCALE

Plan Area 25.94ha

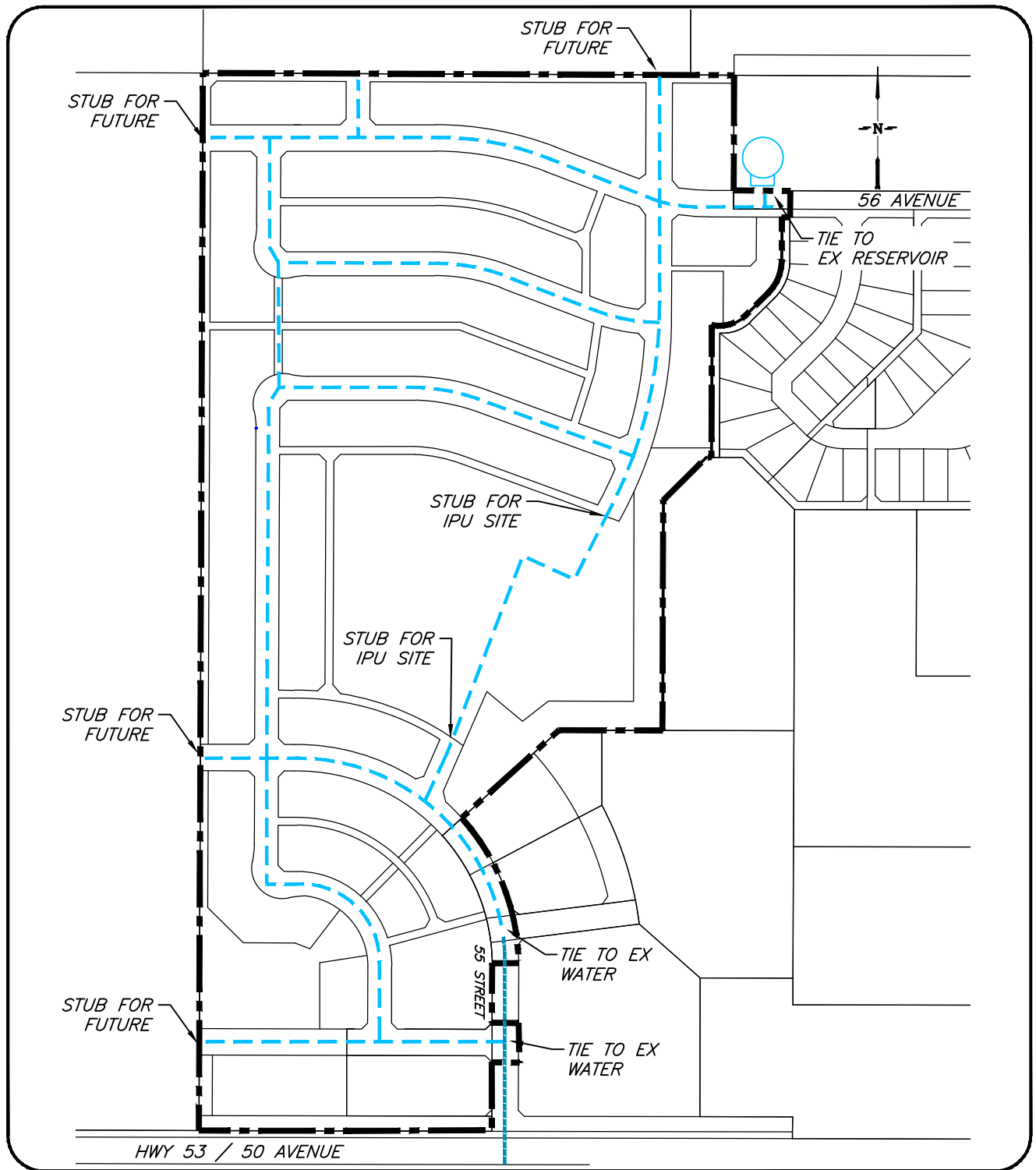
	LDRI (R1)	7.63ha		IPU	4.47ha
	LDR (R2)	0.42ha		C2	0.46ha
	MDR (R3)	3.07ha		PUL/SWM	2.66ha
	HDR (R4)	1.10ha		Circulation	5.88ha

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--- TOWN OF RIMBEY CORPORATE LIMITS --- PLAN AREA

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FIGURE 4 - WATER DISTRIBUTION CONCEPT

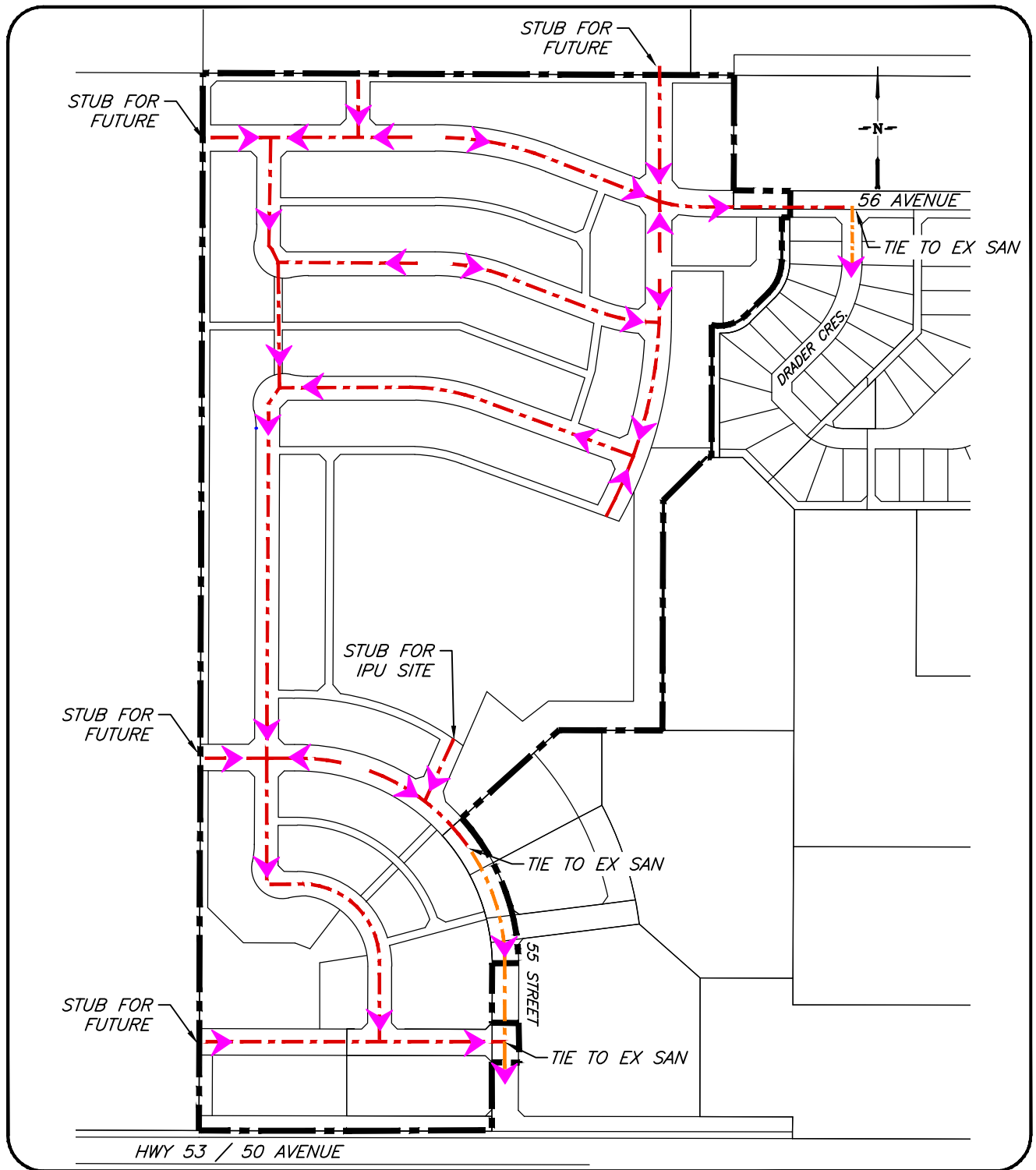
PLAN NOT TO SCALE

- - - - - WATER MAIN
- - - - - EX 150mm WATER MAIN

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FIGURE 5 - SANITARY SEWER CONCEPT

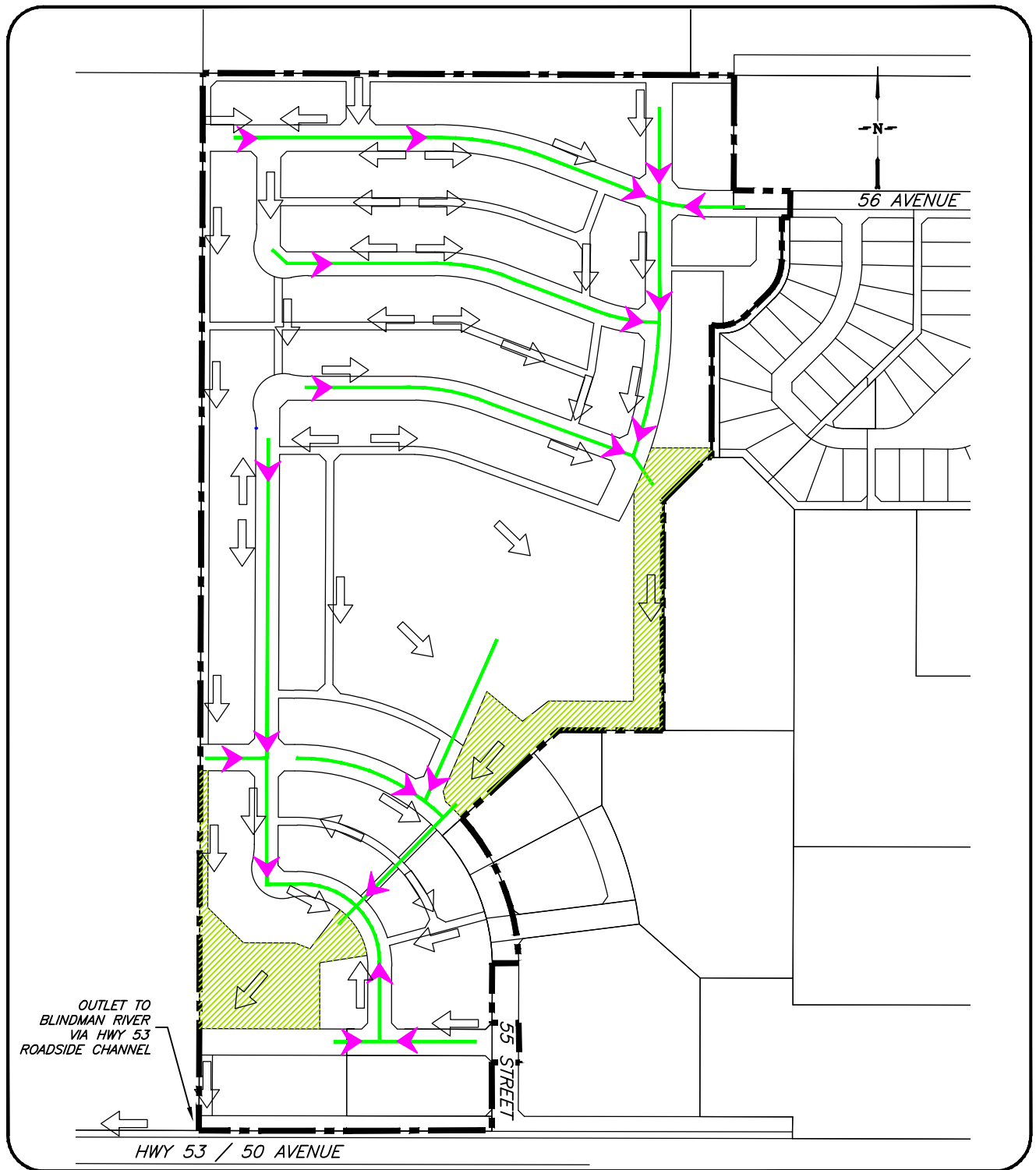
PLAN NOT TO SCALE

- - - - - PROPOSED GRAVITY SANITARY MAIN
- - - - - EXISTING GRAVITY SANITARY MAIN
- ▶ FLOW DIRECTION

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FIGURE 6 - STORMWATER MANAGEMENT CONCEPT

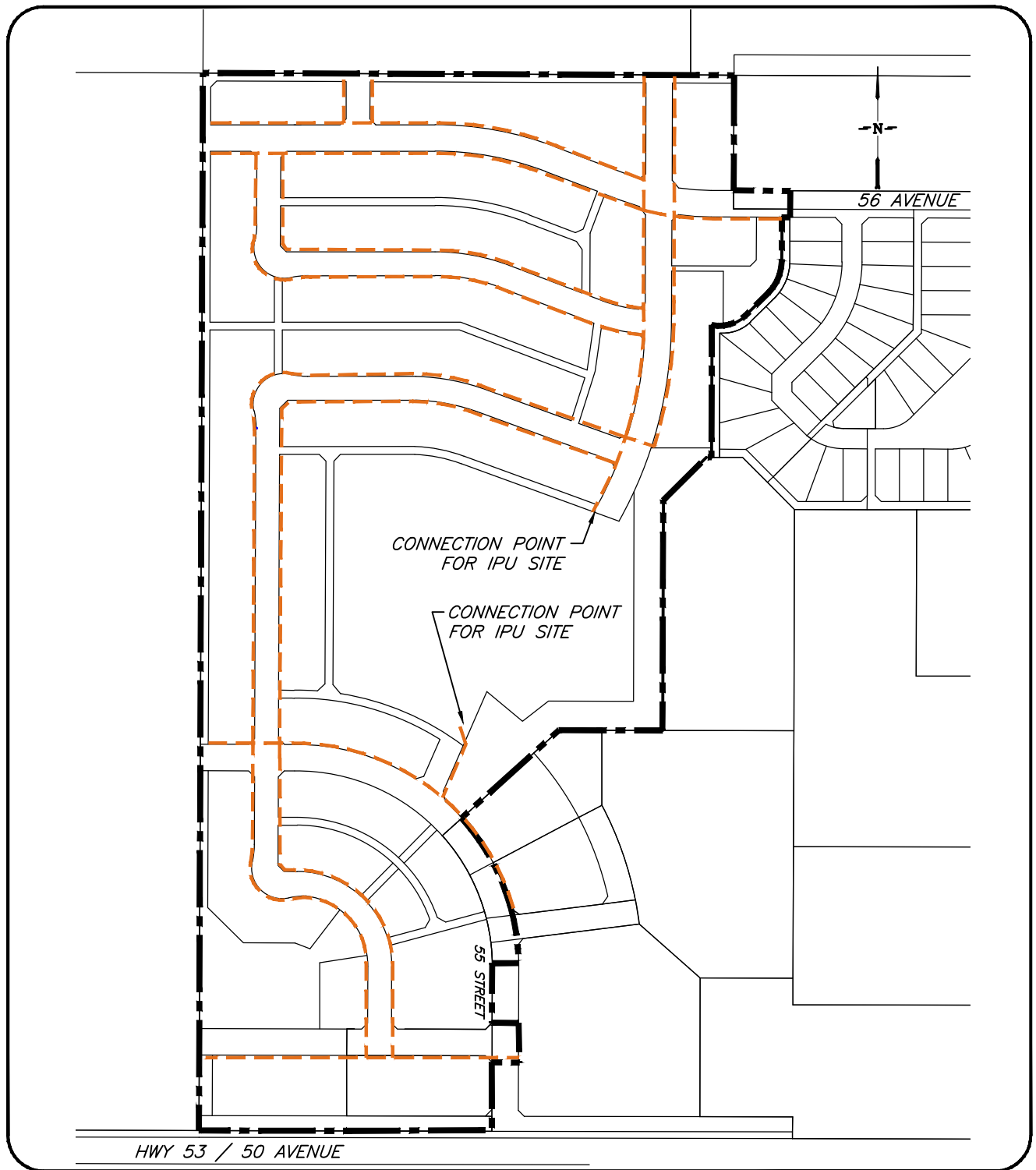
PLAN NOT TO SCALE

- PROPOSED STORM MAIN
- ▶ PIPE FLOW DIRECTION
- ➡ OVERLAND FLOW DIRECTION
- ▨ STORMWATER MANAGEMENT FACILITY

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FIGURE 7 - SHALLOW UTILITY CONCEPT

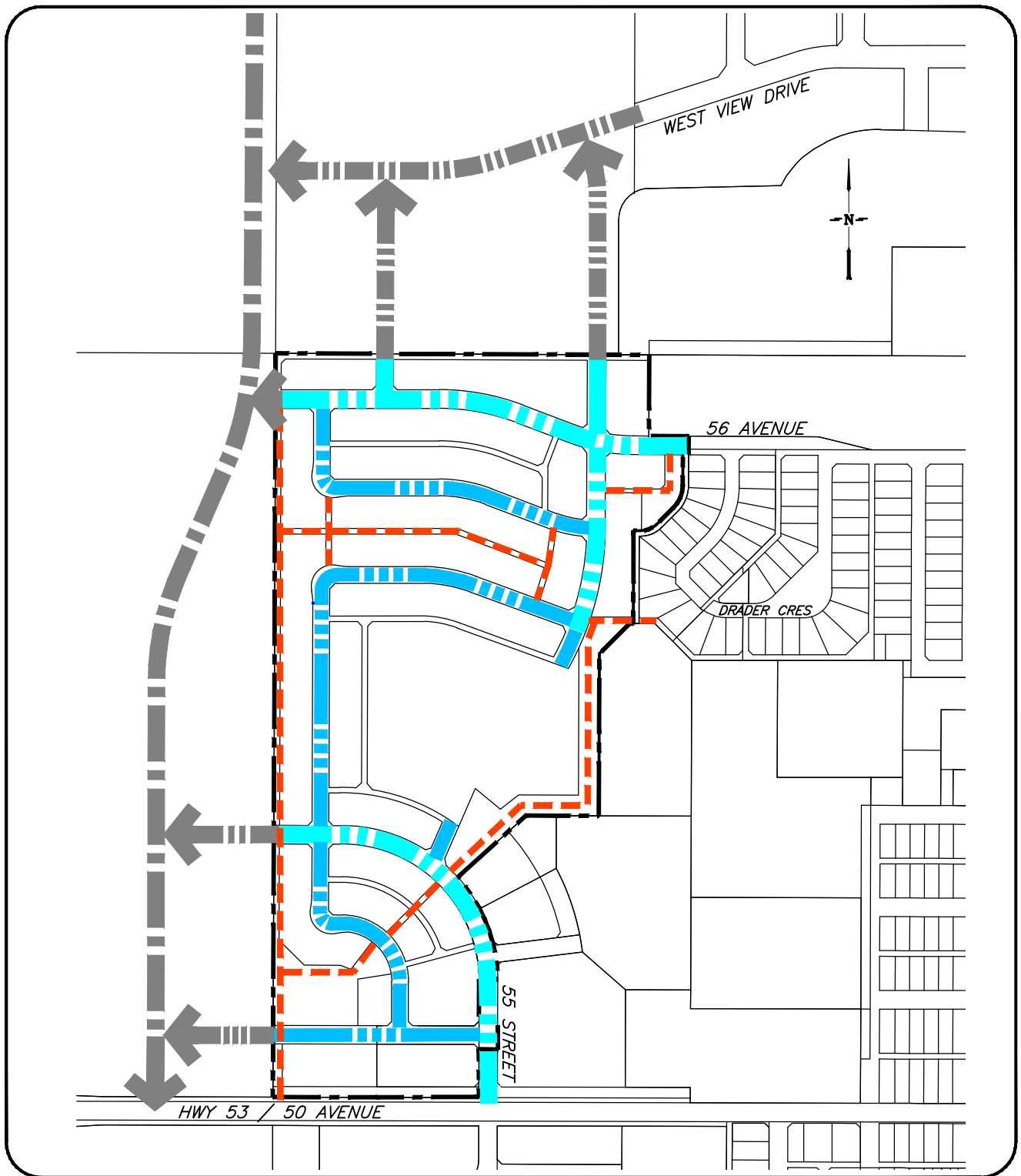
PLAN NOT TO SCALE

----- POWER / GAS / COMMUNICATIONS

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FIGURE 8 - VEHICULAR & PEDESTRIAN CIRCULATION

PLAN NOT TO SCALE

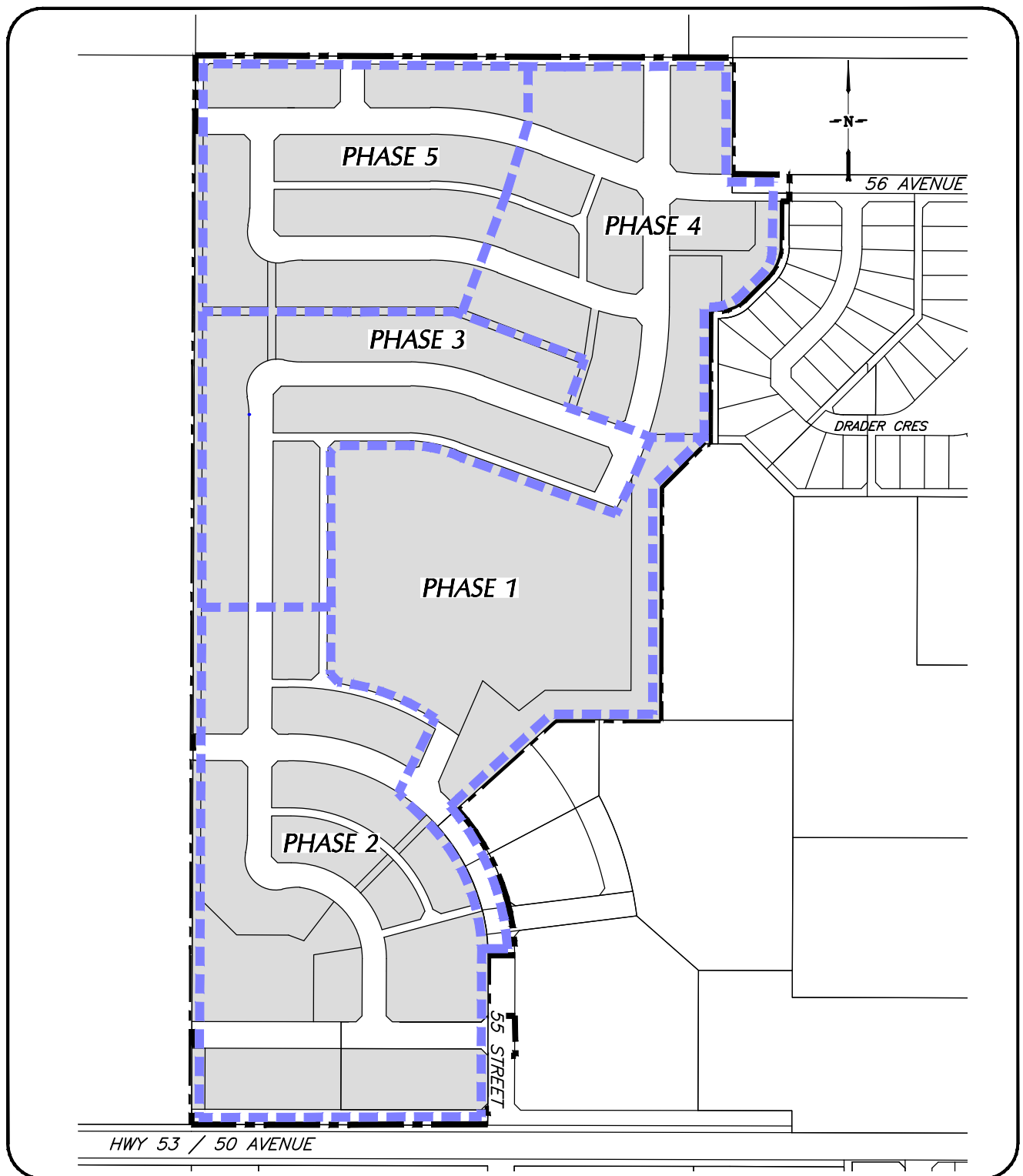
- PLAN AREA LOCAL
- PLAN AREA COLLECTOR
- PEDESTRIAN TRAIL

- FUTURE LOCAL
- FUTURE COLLECTOR
- FUTURE ARTERIAL

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HWY 53 / 50 AVENUE

56 AVENUE

DRADER CRES

55 STREET

JOHNSON ESTATES, RIMBEY
FIGURE 9 - PHASE IMPLEMENTATION PLAN

PLAN NOT TO SCALE

--- PHASE BOUNDARY

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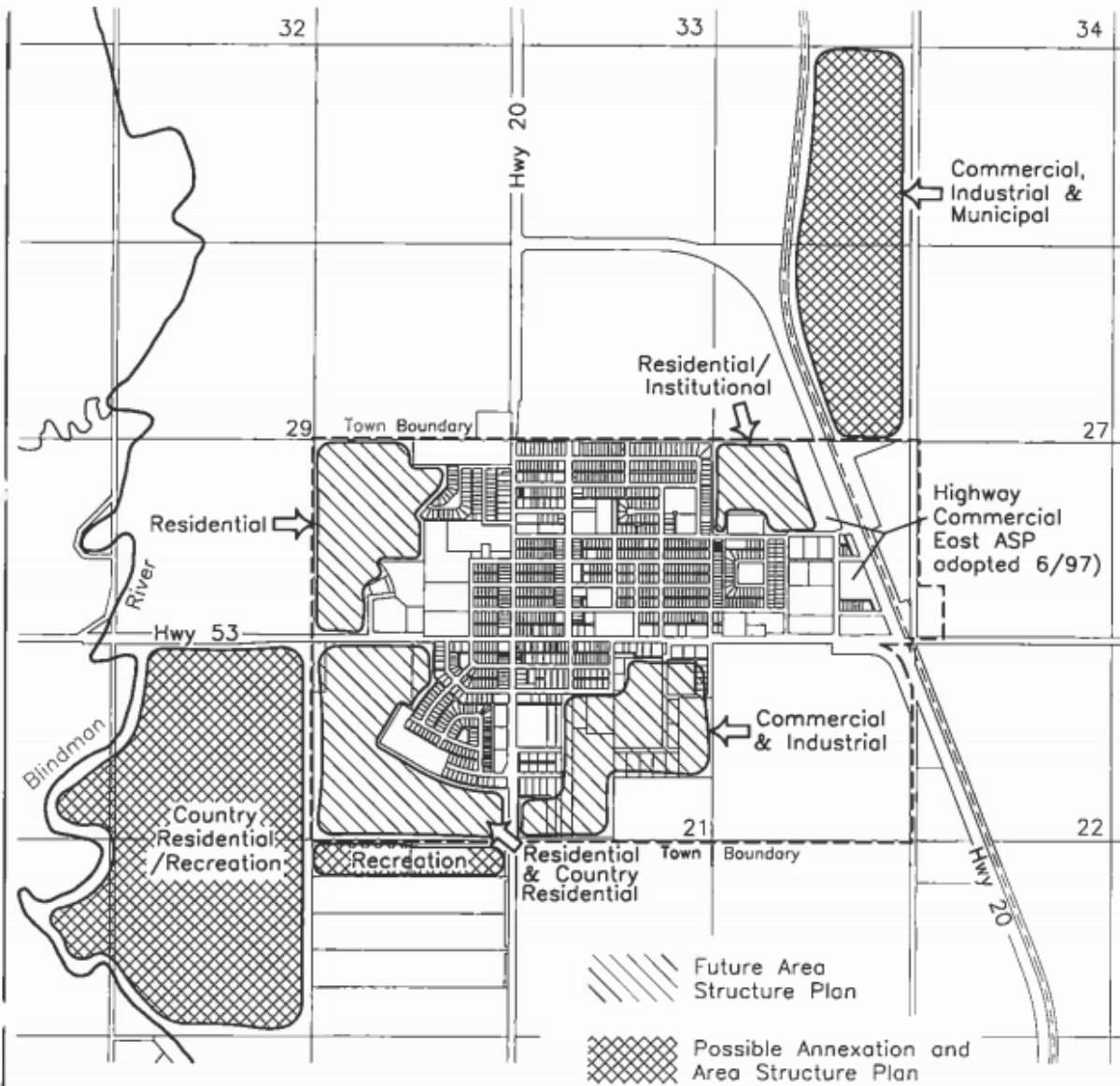
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APPENDIX A

Town of Rimbey Municipal Development Plan - Map 1- Long Term Land Use

Town of Rimbey Municipal Development Plan

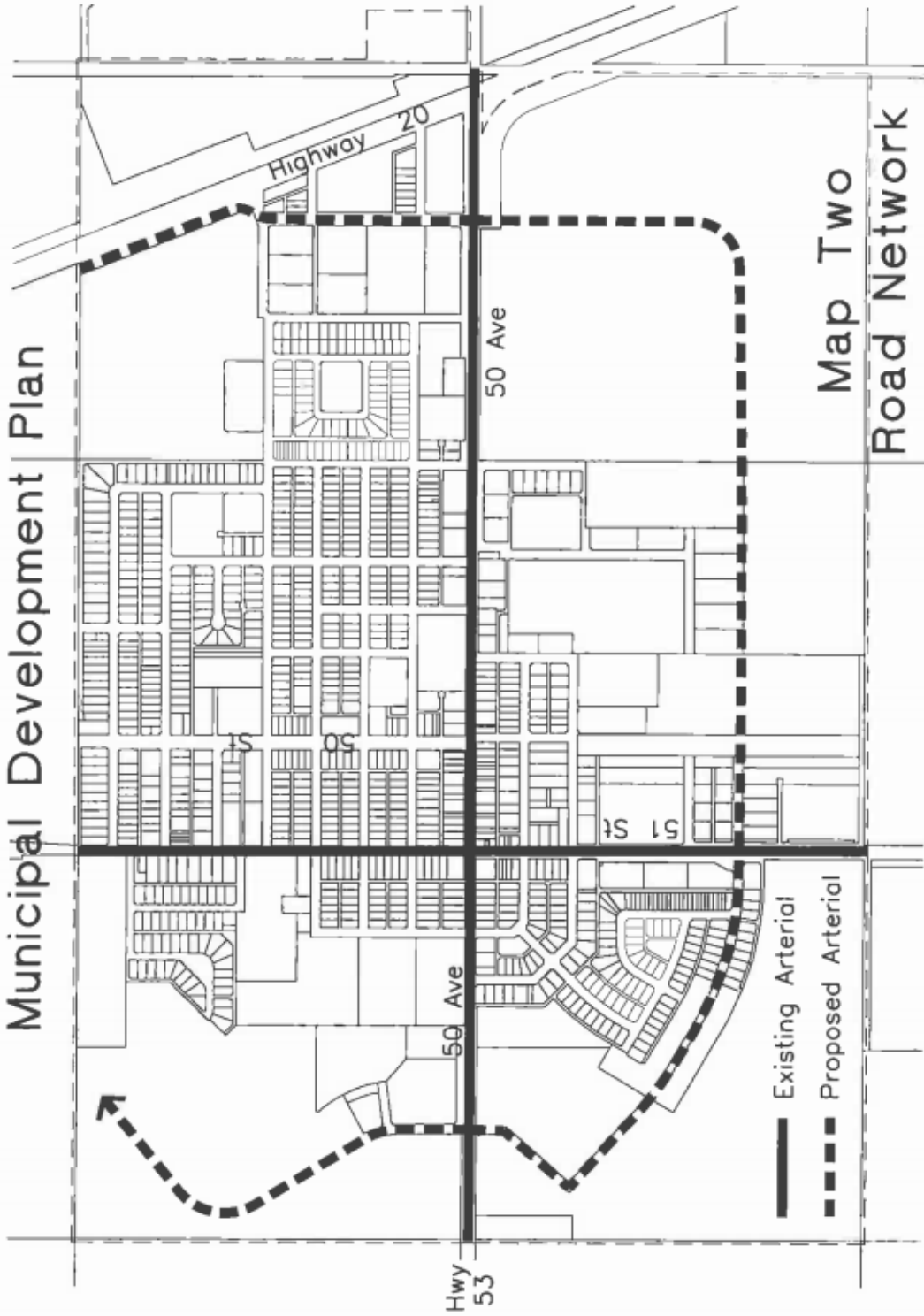


Map One Long Term Land Use

APPENDIX B

Town of Rimbey Municipal Development Plan - Map 2- Road Network

Town of Rimbey Municipal Development Plan



Map Two

Road Network