BY-LAW NUMBER 2009/12

BY-LAW NO. 2009/12 is a by-law of the County of Wetaskiwin No. 10 in the Province of Alberta, to authorize the adoption of an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of the area known as Wildwood Estates Area Structure Plan (NE 2-47-2-W5M) in accordance with Section 633 of the Municipal Government Act, Chapter M-26.1, Revised Statutes of Alberta 2000, and amendments thereto.

WHEREAS: at the requirements of County Council, as per Policy 6606, an Area Structure Plan has been prepared for NE 2-47-2-W5M.

AND WHEREAS: the proposed Area Structure Plan has been widely circulated and discussed within the County pursuant to Section 230, 606(1), and 633(1) of the Municipal Government Act, 2000, Chapter M-26.1, and amendments thereto.

NOW THEREFORE: the County of Wetaskiwin No. 10, duly assembled, hereby enacts as follows:

(a) The document attached to this By-law as "Appendix A", together with accompanying maps, is hereby adopted as "*Wildwood Estates Area Structure Plan in* (*NE 2-47-2-W5M)".*

2. This by-law comes into effect on the date of third reading.

READ: A First time this 12th day of February, A.D., 2009.

READ: A Second time this 12th day of February, A.D., 2009.

READ: A Third time and finally passed this 12th day of February, A.D., 2009.

REEVE

SECRETARY-TREASURER

Appendix A

Wildwoods Estates

Area Structure Plan

December 2009

FOCUS

Table of Contents

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List of Figures

Appendices

1 Introduction

1.1 Background

The County of Wetaskiwin, a largely rural district encompassing one city, one town, a group of summer villages and mostly rural agricultural lands has experienced growth within the last number of years, in suit with the Province's growing economy. There have been large increases in population in the city of Edmonton and surrounding communities, and with this, also an increasing demand for housing within rural settings, outside of city limits. There is also, arguably, a noticeable increase in disposable income amongst Alberta residents and with this, an increased number of residents purchasing non-primary dwellings or summer cottages.

Wildwoods Estates is a parcel of land approximately 75 acres in size ideally situated near the shores of Pigeon Lake, a popular spot for weekend retreats, summer vacations and retirement alike. The rise in demand for rural residential housing and the consistent demand for property in the Pigeon Lake area, among other attributes, make it an ideal location for the development of a country residential neighborhood. There is a need for a comprehensive planning framework to adequately address all planning issues for the area, and hence the following report has been prepared.

1.2 Purpose

This report is an Area Structure Plan (ASP) that has been prepared on behalf of the Kremmadine family of Deen Foods, Hobbema, owner of lands legally described as the NE¼ Sec.2-Twp.47-Rge.2-W5M within The County of Wetaskiwin, Alberta. The planning area comprises the north half of the NE ¼ of Section 2 and is named Wildwoods Estates (See Figures 1 and 2).

The overall objective of this ASP is to provide a development framework for a small country residential style neighborhood within the above-mentioned parcel. It will address land use planning issues for this particular development in order to effectively plan for efficient lot layout, service and infrastructure design, open space planning and preservation of natural features. It will also, most importantly, address any issues brought forth by the County of Wetaskiwin and the public at large. The goal of this ASP is to encourage sustainable and economically efficient land development and to maintain a naturally preserved rural area through the development of a low density country residential neighborhood.

2 Development Area

2.1 Location & Rural Context

This ASP deals with a single un-subdivided parcel of land approximately 30.2 hectares (74.6 acres) in size. It is legally described as the north half of the NE ¼ Sec.2-Twp.47-Rge.2-W5M excepting thereout Certificate of Title No. 072 486 777 (a 61 by 342 meter parcel in the north east corner). The parcel is bounded on the east by secondary highway 771 and lies approximately one kilometer north of township road 470. Pigeon Lake's western shores lie approximately one kilometer to the east north-east while Pigeon Lake Provincial Park is situated immediately east of the parcel, across highway 771. The site is surrounded by vacant agricultural lands to the south and primarily forest and meadow with bush to the north and west.

A natural rural setting, this parcel is ideally located a quiet distance from various summer villages surrounding Pigeon Lake (Figures 1 and 2); namely Poplar Bay, Ma-Me-O Beach and the hamlet of the Village at Pigeon Lake. It is also within comfortable driving distance of various urban communities including the Town of Millet (approximately 55 kms), the City of Wetaskiwin (approximately 60 kms), the City of Leduc (approximately 75 kms) and the City of Edmonton (approximately 95 kms). A number of local schools populate the area including Lakedell School, Pigeon Lake Regional School and Falun School to name a few. There are also various community halls, churches and recreational centers in close proximity and the nearest hospital is located in the City of Wetaskiwin.

2.2 Topography and Vegetation

The site is gently sloping both east and west from a natural break located approximately a third of the parcel's width from the east boundary (as shown in Figure 3). The total change in elevation is approximately 12 meters with the maximum slopes occurring in small isolated areas only. The relative flatness of much of the parcel will require only minimal grading within the developable areas and therefore allow the developer to minimize the overall impact on the natural soils and vegetation.

The site is within the Pigeon Lake drainage basin and is also tied into drainage networks to the west and east as shown in Figure 3. Storm water and drainage is discussed further in Section 6.

Approximately forty percent of the site is covered by a mix of evergreen and deciduous vegetation, the remainder being largely tall native grasses and small bushes (See Figure 3). It is encouraged to preserve as much of the natural vegetation as possible.

2.3 Soils

The western Pigeon Lake area generally lies within a region characterized by grey wooded soils; those which tend to develop under mixed deciduous and evergreen vegetation. The overall general soil profile for the property is surface topsoil, clay, clay till and bedrock (Parkland GEO, 2008). The surface topsoil generally covers the site at a depth of approximately 10 centimeters except in one low lying area that was found to have a depth of approximately 90 centimeters. Clay till is the next layer found throughout most of the site and generally has an optimum soil moisture content. Silty clay exists under the topsoil in some small low lying areas of the site and has relatively high moisture content. There is also some dense sand underlying the clay till in certain areas that has acceptable soil moisture content. The final soil layer, sandstone bedrock, is found throughout the site between depths of approximately 2 to 6 meters.

Farmland assessment ratings on this quarter section range from 0.11 to 0.39, with the majority of the good farmland (above 0.30) located in the undeveloped southern portion of the quarter section.

2.4 Ownership and Legal Interests

The NE ¼ Sec. 2 has had one parcel of 61 by 342 meters (2.09 hectares) subdivided from it. This parcel is owned by Rosemarie Creighton and contains a single residence. Redevelopment of this site has not been contemplated for this development project and has therefore not been included in this ASP. The remainder of the quarter section is owned by Deen Foods of Hobbema (owned by the Kremmadine family). The southern half of the quarter section is intended to be left in its current state, which is agricultural pasture land. It is for this reason that it is not included within the ASP planning boundaries.

There is currently a single family dwelling and six farm buildings located in the south east corner of the developable area (See Figure 3). These buildings are not intended to be preserved in the development of the neighborhood.

The following registered interests affecting the extent of the parcel include the following:

- A Surface Lease and Pipeline Right of Way (under Caveats) held by MEC Operating Company for a well site, access road and oil pipeline situated in the southern half of the quarter section as shown in Figure 3
- A Utility Right of Way held by AltaGas Utilities for residential gas services (located in the eastern region of the property – tying into the existing residence)
- A Utility Right of Way held by Petroglobe Inc. for a natural gas pipeline located within Right of Way (R/W) Plan 062 2974.

These encumbrances have been defined and shall be accounted for in the design of this development (see Figure 4). For example, the boundaries of R/W Plan 062 2974 were

incorporated into the design of the new lots and the well site location was used to set a 100 meter buffer zone as prescribed by the Subdivision and Development Regulations.

2.5 Environmental Site Assessment

Parkland GEO completed a Phase 1 Environmental Site Assessment (ESA) during the winter of 2007-2008. As part of the assessment an inspection of the property was performed on December 28, 2007 and also historical analysis of the property and surrounding areas was completed. Parkland GEO concluded that the level of environmental risk associated with the property is low and that no further site investigations are required. A copy of the ESA is located in Appendix A.

2.6 Geotechnical Report

Parkland GEO completed a Geotechnical Engineering Report (GER) that consisted of a drilling program of 14 boreholes and analysis of soil samples and groundwater measurements (The GER is found in Appendix B). As discussed in subsection 2.3 the general soil profile is surface topsoil, clay, clay till and bedrock. The report finds that the subsurface conditions are suitable for the proposed development. It states that the subsurface soils are well-suited for conventional footings for house construction and also are relatively stable for road embankment construction. The report does warn that the relatively low permeability of the soils does not provide ideal conditions for private septic fields without modifications, but it states that further design can be done to determine appropriate private septic service infrastructure.

The groundwater level for the property was determined to be near the anticipated seasonal average and is considered relatively shallow. Because of the groundwater level and soil types the report identifies a potential for frost heave in certain areas. The report also indicates a high concentration of water soluble sulfate which may have negative affects on buried concrete that is in contact with the soil.

These findings do not pose significant impediments to the proposed development and shall be accounted for in the engineering design. The GER will serve as a tool for completing the safe and effective design of the overall development.

2.7 Domestic Groundwater Evaluation

An Aquifer Evaluation (September 2009) was completed by Sabatini Earth Technologies Inc. to determine whether sufficient groundwater underlies the site to service the 46 lot country residential development (Report in Appendix C). The evaluation involved installation of a 61 metre (200 foot) well in July 2009. Groundwater from this well was obtained from a sandstone aquifer at a depth of 46 to 55 metres (150 to 180 feet) below grade.

The evaluation determined that sufficient water supplies are available from the well to provide 1250m^3/year for the proposed development. This rate meets the guidelines stipulated under Section 23(3) of the Water Act. The evaluation determined that static water levels appear stable and that no indications of aquifer dewatering are apparent. Furthermore, the groundwater supply source was determined to not be under the influence of surface water and as such there is minimal likelihood of contamination from nearby surface water. Lastly, the quantity of water required for the proposed use should not interfere with nearby household, registered or licensed users. It should be noted that the pH and turbidity levels of the water slightly exceed the CCME Drinking Water Quality Guideline limits however a filter can be used to bring the pH and turbidity levels back within acceptable guidelines.

Note: The Aquifer Evaluation referred to above, and included in Appendix C, replaces a previously completed Domestic Groundwater Evaluation completed by Sabatini Earth Technologies Inc. in January 2009

3 Policy Factors

3.1 General

The ASP will provide an overall policy framework for the development of this specific parcel of land within the County. It is therefore necessary for the ASP to be consistent with the County of Wetaskiwin's Municipal Development Plan (MDP) and its Land Use Bylaw (LUB). As prescribed by the County's Policy #6606 Requirements for Area Structure Plans "...[the ASP] once adopted and passed through bylaw, further applications, including rezonings, subdivisions and development permit applications, are guided by the area structure plan, which is required to be consistent with the Municipal Development Plan and the Land Use Bylaw." The MDP and LUB policies specific to this development shall be addressed in the following subsections.

3.2 Municipal Development Plan

The MDP for the County of Wetaskiwin provides the broad land use planning framework for the entire County with the following overall goals (MDP, 1998):

- To maintain a clean environment
- To support and encourage economic growth in the County
- To support a high quality of life in the County

The plan divides the county into 11 different land use districts. The development area is currently zoned partly Rural Conservation (RCV) and partly Agricultural (AG). The proposed Wildwoods Estates development area will be rezoned to a Country Residential – Multi Parcel land use district (CR) to allow for a low density residential development. The purpose of the RCV district is to "preserve existing tree and vegetation cover..." while the purpose of the CR district is to "... allow for the subdivision and development from poor

agricultural land, of non-farm single family residences compatible with adjacent land uses." (MDP, 1998) As the existing RCV zone does not allow for multi-parcel subdivision and is used for the purposes of protecting tree cover and vegetation, it is important that the characteristics of this zone be incorporated into the plan. Although the planning area will be zoned CR, it is the intention of this development to preserve and enact the goals of both the CR and RCV districts together, harmoniously.

It is the objective of this ASP to guide development that is consistent with the policies set for both land use districts. The policies pertinent to this development are addressed herewith:

CR District:

- Section 8.2
  Poor agricultural land may be subdivided and developed for multi-parcel country residential uses to allowable densities in accordance with the Land Use Bylaw.

  - The southern half of the quarter section is to remain as agricultural land. The northern half of the quarter has not had significant agricultural use in the past as it is largely covered by trees and there is sufficient space in the southern half of the parcel for the current farming uses. The productivity assessment for the developable property ranges from 8.5% to 33% with a small area rated at 45.4%; an overall average rating of approximately 25-28%. Poor agricultural land is classified as being below a 30% rating.

- Section 8.3
  Multi-parcel country residential developments are not expressly limited in terms of density where the developer can prove an increase in density will not negatively impact surrounding areas and infrastructure, and where the developer can prove the existence of a sufficient water supply. Council may, at their discretion, require other tests to satisfy that an increase in density is warranted.

  - The proposed density achieved by this development is to be approximately 0.6 lots per acre. This is not expected to negatively impact surrounding infrastructure as lots will be serviced privately (water and sanitary) and traffic volumes will not increase substantially.

- Section 8.4
  Where a proposed subdivision will create six or more lots on a quarter section and there is no municipal water system, the applicant must supply an engineer's report showing that there is sufficient groundwater without depleting existing wells.

  - The Aquifer Evaluation (September, 2009), prepared by Sabatini Earth Technologies Inc., indicates that there is sufficient water supply within the parcel to service the future 46 lots.

- Section 8.6
  Future urban expansion, mineral extraction, sensitive environmental lands and wildlife habitat will be considered in relation to any proposed multi-parcel country residential use.

  - The EIA completed by Parkland GEO indicates that there is no environmental risk at this time. Mineral extraction already exists in the area (as discussed in section 2.5) and may continue in co-existence with the residential development. As mentioned, effort shall be made to preserve trees within the development area.

- Section 8.7
  Multi-parcel country residential developments must be serviced by an internal subdivision road to minimize direct accesses to County roads.

  - As shown in the development concept plan (Figure 4), an internal road shall service the entire proposed development and all new lots.

RCV District:

- Section 9.1
  The purpose of this district is to preserve existing tree and vegetation cover in the County.

  - As shown in the Development Concept and Aerial Photo plan (Figure 5), a large majority of the trees and vegetation within the parcel are going to be protected by a large 4.3 hectare MR/Park Lot. This parcel amounts to an over dedication of MR space (10% = 3.02 ha) and provides total protection of the treed areas. Also, it is the objective of the developer to preserve as many trees and natural features throughout the entire site.

- Section 9.2
  Land which is to be considered for Rural Conservation zoning must be substantially tree-covered to begin with. A minimum of 60% coverage is the standard required by Council.

  - The portion of the Wildwoods site that is currently zoned RCV is the easterly 13.56 hectares of the parcel. Approximately 6.79 hectares of this area is covered by trees (50%), less than the required amount. It is the objective of this ASP to allow for a large park space within the existing tree covered areas to give total protection of the densest natural vegetation and also allow for the development of the non-treed or lightly treed areas into CR lots.

- Section 9.3
  Land clearing restrictions shall apply to Rural Conservation parcels to preserve tree and vegetation cover and sensitive environmental terrain.

- It will not be necessary to comply with RCV clearing restrictions as the large MR parcel will provide the necessary tree protection. Additional restrictions may be imposed on individual CR lots with significant tree cover though the form of development agreements or restrictive covenants.

3.3 Land Use Bylaw

As described in section 3.2, the development area currently falls under two land use districts; RCV and AG. The easterly 13.56 ha is zoned RCV while the westerly 16.69 ha is zoned Agricultural (AG). The future development will fall under the CR land use district but will maintain some of the characteristics of the RCV district.

The County of Wetaskiwin's LUB defines the purpose of the RCV district as "...to preserve existing tree and vegetation cover in the County." It also states that the minimum parcel size is 4 ha (10 ac) and that Council may not consider an application for subdivision under the RCV district unless the "...proposed lots are designed to include a minimum of 60% of tree covered land."

The easterly 13.56 ha that is currently zoned RCV contains approximately 50% tree cover (6.79 ha). The proposed Wildwoods development will create a large park space (greater then 4 ha) within the existing treed area that will protect at least 60% of the vegetation. There will be no development within this MR space.

The LUB defines the purpose of the Country Residential (CR) District as "...to allow for the subdivision and development on poor agricultural land of non-farm dwellings compatible with adjacent land uses." Furthermore it defines good agricultural land as:

- Land with a farmland assessment value of 30% or more
- Grey-wooded soil producing hay, forage or other crops: and
- Bush-covered soil with agricultural potential

The bylaw also defines a range of lot sizes permissible within this district:

- Maximum parcel size is 2.02 ha (5 acres)
- Minimum parcel size is 0.40 ha. (1 ac.)

As mentioned above, the natural areas within the developable area are to be preserved as much as possible. This goal applies to both the park area, as well as the CR areas. This parcel has not had significant agricultural use in the past, largely due to the tree cover and the fact that the southern portion of the quarter section provides sufficient space for the owner's current agricultural uses. As explained in subsection 3.2 the average farmland assessment value of the parcel is 25-28%, classifying it as poor agricultural land. Furthermore it is not expected that a small scale, low density development of this type would have significant impact on the overall agricultural potential of the quarter section or surrounding areas. The lot sizes within Wildwoods Estates shall be designed to comply with the LUB.

4 Development Concept

4.1 Overview

The Concept Plan for Wildwoods Estates (Figure 4) provides for the development of approximately 46 CR lots with 1 large public park space, 2 storm water management facility lots and an internal road design that provides an aesthetically appealing circular layout combining efficient use of space, easy lot access and interconnectivity. The overall density of the proposed development shall be approximately 0.6 lots per acre.

4.2 Goals & Objectives

The overall goal of the Wildwoods Estates development is to create an appealing acreage style neighborhood within a natural rural setting. The following objectives have been identified as necessary elements to achieving this goal:

A. Maintain a large MR lot and park space in the eastern area of the developable area to preserve trees and vegetation
B. Develop large country residential style lots 1 to 3 acres in size that will have private, on-site water and sanitary servicing
C. Maintain and preserve the natural and physical characteristics of the property as much as possible through the course of development
D. Encourage tree preservation and tree planting
E. Provide large open spaces to preserve natural features and benefit future residents
F. Provide practical and effective storm water management facilities, servicing designs and transportation routes
G. Develop lots in accordance with the LUB

4.3 Residential Spaces

Being a small scale development the majority of the land within Wildwoods Estates is proposed for residential purposes. It is intended to be a small neighborhood with large lots and large open spaces. The proposed MR parcel will maintain a large natural space at the entrance to the development. The proposed Country Residential zoning allows for detached dwellings or new modular dwellings of similar construction standard. It is expected that 46 dwellings will accommodate 135 people providing an approximate density for the entire neighborhood of 4.5 people per gross developable hectare.

4.4 Open Spaces

The large sized residential lots and MR parcel will provide open natural space throughout the development. Tree preservation and tree planting is encouraged in single lot development as is the use of green infrastructure and green building techniques throughout the neighborhood.

In addition to the open space within the individual lots, public park space is to be provided, as shown in the development concept (Figure 4). The large park space is situated within the natural forested area in order to preserve the natural vegetation and allow for both passive and active recreation for future residents. This park space will serve as the neighborhood's central feature or focal point, as it is situated at the main entrance; providing close access to all lots and pleasing views to visitors.

Two storm water management facilities are to be provided in the southwest and northeast corners of the planning area in order to conform to the natural drainage patterns within the parcel and thus limit the amount of grading required. These facilities (Public Utility Lots - PUL) will also serve as open spaces. Both are to be wet ponds; the one in the northeast corner doubling as a fire pond, for fire protection. The pond in the southwest corner is to be connected by a small PUL lot, providing access for residents and also a necessary drainage channel to the pond (see section 6 for more discussion on storm water management).

5 Transportation

5.1 Overview

Effective planning of transportation networks is a critical component of any land development project. The following subsections provide information on the planned transportation infrastructure, access points, and pedestrian connections.

5.2 Transportation Goals & Objectives

The main goal of the transportation design is to provide an aesthetically pleasing, safe and convenient roadway to access the lots and park spaces within the neighborhood. To achieve this goal the following transportation objectives have been identified:

A. Provide a wide road right of way to accommodate 2 way traffic and pedestrian access
B. Provide one access point onto highway 771 to minimize traffic turning onto the highway
C. Provide vehicular and pedestrian access to public park spaces
D. Provide an aesthetic road design to increase the appeal of the neighborhood

E. Provide future connection to both the southern portion of the quarter section and the quarter section to the north

5.3 Traffic Impact Assessment

A Traffic Impact Assessment (TIA) was prepared by the Focus Corporation to outline the transportation requirements and identify and assess any potential impacts on the existing road network from the proposed development (See Appendix D).

The TIA recommends the internal subdivision roads be developed as minor residential collectors with 11 meter carriageways and 20 meter rights of way. The investigation found that the impact of the proposed development on the overall road network is minimal and that there are no concerns for the capacity or safety of the network. The TIA will be used to inform Alberta Transportation during the subdivision process and as a guide for the engineering design of the internal roadways.

5.4 Internal Roadways

The property is to be accessed from secondary highway 771. Highway 771 being the main route on the west side of Pigeon Lake forms part of an important connection between highways 13 and 39, and is a full grade asphalt road. It is proposed that the neighborhood entrance be situated approximately 60 meters north of the existing driveway. This would give sight lines of approximately 800 meters to the north and 1 kilometer to the south. It is anticipated that the existing driveway (to the south) will be closed and access will be shifted to connect to the proposed main internal roadway for the development. Land parallel to highway 771 will be dedicated to ensure the access is provided.

The internal roadway shall have a right of way width of 20 meters and the carriage way and ditches shall be constructed to the County of Wetaskiwin's engineering standards. Five meter wide rights of way shall be provided at the road frontage of all lots for necessary easements for road grading or drainage. It is anticipated that the carriage way shall be approximately 11 meters wide (TIA, Appendix D). The plan allows for the potential requirement to widen the surface of the access road to allow for greater mobility of emergency service vehicles. Parkland GEO's Geotechnical Report (Appendix B) provides recommendations for road design and construction. Based on a CBR (California Bearing Ratio) of 4 they propose a flexible pavement section consisting of 200 mm of sub-base gravel, 150-250mm of crushed 20mm base gravel and 90mm of asphalt concrete pavement (ACP). The report also outlines pavement material requirements and recommends aggregate specifications. This information will be used as a guideline in the internal road design. The Development Agreement, to be formulated during the time of subdivision, will provide specific standards for road design and construction.

Road rights of way for future connections to the adjacent north and south properties are to be provided during subdivision as per the requirements of Alberta Transportation.

5.5 Emergency Access

The proposed road configuration only allows for one access to the development to limit the amount of traffic turning onto highway 771. Given the low density that is proposed (46 Lots), it is not anticipated that an additional emergency access be required.

5.6 Pedestrian Connections

Pedestrian connections are to be provided within the road rights of way. Public access should be provided to public lands within the parcel. Should there not be road access to a public parcel, access should be provided by way of walkway or public utility lot.

6 Servicing

6.1 General

The proposed development is to institute private sanitary and water servicing for each individual lot. Provision of these services will not be the immediate responsibility of the developer. The developer is to complete roadway and utility design (including electricity, gas and telephone) and storm water management design. Details of the proposed servicing plan are outlined in the following subsections.

6.2 Servicing Goals & Objectives

The main goal of this development in terms of servicing is to provide a sound plan that will allow for the effective design and construction of roadways, utility corridors, grading patterns and sanitary and water services. The objectives identified to achieve this goal are:

A. Ensure that any service designs are completed by a professional engineer licensed in the province of Alberta
B. Implement services that are feasible and practical for this development
C. Ensure that all necessary background studies have been performed before implementing designs
D. Ensure that servicing design and construction are in compliance with the County of Wetaskiwin engineering standards.

6.3 Sanitary Service

There is currently no sewer service to the site. Due to the isolated character of the site, sewer service extension is not feasible at the present time. Based on the geotechnical report, the land has been found to have satisfactory physical characteristics for sustainable on-site wastewater management. The report indicated that further design would be required to implement septic fields, and that septic holding tanks with pump outs are better suited to the local soil conditions.

In order to achieve consistent servicing throughout the neighborhood, and to lessen the overall environmental impact of the development, Restrictive Covenants will be placed on each new lot to require the installation of septic tanks with pump-outs. Each lot will have its own private septic system that shall be installed in accordance with the Alberta Private Sewage System Standards of Practice Handbook. Adequate separation of the septic system and water supply shall be provided, as specified in the above standards. It is likely that the municipality will be constructing a low pressure pipeline just west of highway 771 in the near future. Therefore in anticipation for this to occur the developer is required to construct a dry line within the Plan Area that would, in the event that municipal sewer service became available, eventually connects to the future low pressure system to the west.

The individual land owners shall ensure that each individual system is maintained and operated within its design parameters, and that sewage effluent is properly disposed of and transported to the municipal treatment centre.

6.4 Water Service

The subject lands are not currently serviced with potable water. Due to the isolated nature of the site, water service extension to the Wildwoods Estates development is not feasible at the present time.

Each of the proposed lots is to have its own private groundwater well dug and operated in accordance with the Standards & Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems in Alberta. An Aquifer Evaluation was completed by Sabatini Earth Technologies in September 2009 (see Appendix C). The calculations and pump test data of this evaluation determined that sufficient groundwater underlies the site to service the proposed 46 lot country residential development and that the water supplies available can provide 1250m^3/year in accordance with Section 23(3) of the Water Act. The groundwater supply source was determined to not be under the influence of surface water and that there is minimal likelihood of contamination from nearby surface water. The report states that the pH and turbidity of the water slightly exceeds the CCME Drinking Water Quality Guideline limits but that this issue can be addressed through filtering.

The fire flow requirements of the development will be covered by one of the two on-site storm water management facilities. An all-season internally accessible dry-hydrant built to

County specifications will be located in the proximity of the SWM pond adjacent to highway 771. The pond shall be located a minimum of 40 meters from highway 771 and will be accessed from the internal roadway of the subdivision, as per the requirements of Alberta Transportation.

Note: The Aquifer Evaluation referred to above, and included in Appendix C, replaces a previously completed Domestic Groundwater Evaluation completed by Sabatini Earth Technologies Inc. in January 2009

6.5 Storm Water Management

Storm water management (SWM) is an important design feature of any land development project. It is important that a new development retain drainage water and only release drainage at a rate equivalent to pre-development rates.

The ridge that cuts across the site breaks the drainage into two natural drainage basins, east and west. Figure 6 shows the proposed drainage boundaries for the development. The proposed roadway system and lot grading will generally follow the existing topography. Rural road cross-sections are to be utilized such that the minor and major storm water flows from the subject lands will drain via swales, culverts and ditches to the proposed SWM facilities. The offsite runoff from the remainder of the quarter-section will be re-directed to the ponds as shown in the figure.

The SWM concept consists of two wet ponds, servicing the east and west drainage basins. The design of these facilities will take into account the existing topography of the areas, soil conditions and discharge locations and will follow the County of Wetaskiwin Design Guidelines and Construction Standards for Subdivision Developments.

Both SWM facilities will be designed to contain the 1:100 year 24 hour storm and will release at predevelopment flow rates. They will also be provided with an overflow and/or adequate freeboard to accommodate the storms in excess of the design event.

The design of the storm water collection and management system will include features to improve water quality. Wet ponds and wetlands are generally preferred for providing the required storm water quality management for waters discharged to receiving water courses. Storm water conveyance through grassed road-side ditches will also help improve the water quality.

The two storm basins are relatively small and the storage requirements for each basin are summarized below.

- **East Basin**

  The wet pond for this basin will be located along the Secondary Road 771, north of the access road to the Wildwoods Estates development. The pond (a wet pond) will service a contributing area of 11.6 ha consisting of rural residential lots park space

and will cover the fire flow requirements of the residential development at 4,000 UK gallons per household, as specified by Wetaskiwin County.

- **West Basin**

  An existing low spot located on a natural drainage course crossing the southwest corner of the development was chosen for sitting this proposed storm water management facility. The pond (a wet pond) will service the remainder of the property, consisting of 18.6 ha of rural residential lots and will discharge to the existing creek.

7 Public Input

A very important component to any land development project is public input. With the ultimate goal of sustainability within our communities, land use planning must consider public input at an early stage to include the community at large and resolve any issues or concerns that may arise. In light of this, Focus hosted a public information session for the proposed Wildwoods Estates development on June 19th 2008 at the Lakedell Agricultural Society. Members of the community and the public at large were invited to come and see the proposed plans and discuss ideas or issues they may have.

The open house, held in conjunction with the Willow Greens Area Structure Plan open house, occurred from 4PM to 730PM on June 19th and attracted a variety of visitors. The event was advertised in the Pipestone Flyer for 2 full weeks and also with a sign erected on the development parcel. A total of 6 guests visited the Wildwoods Estates section of the open house including all of the immediate neighbours to the development parcel. Please see Appendix E for copies of the advertisement and attendance list. A point form summary of the comments received at the open house is listed below.

- Visitors commented that they liked the size and location of park spaces
- Visitors commented that they were happy that most of the trees would remain
- Visitors commented that they liked the overall look of the plan
- Certain visitors had questions as to the location of the Alta Gas line on the east side of the parcel – as they had seen it installed a few years ago
- The neighbours from the 5 acre parcel to the north (Larry and Rose Creighton) raised concern over the proposed access road to the northern quarter section.

The only concern with the proposed development that was brought forth at the open house was the access road to the north. This road was requested by Alberta Transportation to provide access for future development to the quarter section to the north. The Creighton's stated that they had invested a lot of time and money into the construction of their driveway and front yard and did not want to destroy that in place of a new road. To address their concern, this Area Structure Plan intends that this proposed access road be developed only when future access is required to the northerly quarter section. The physical road will not be constructed during the development of this subdivision as this access is not currently required.

The other comments and discussion received from the community members who attended were of a positive nature and provided encouragement to proceed with the Area Structure Plan bylaw process. Public input will continue to be received and addressed through that process.

8 Implementation

Upon completion of the Area Structure Plan, and acceptance into bylaw, an application for redistricting shall be made to the County to convert the zoning from AG (Agricultural) and RCV (Rural Conservation) to CR (Country Residential). Once the redistricting is completed, an application for subdivision will be made to create the new country residential lots in compliance with the Land Use Bylaw. Both the redistricting and subdivision applications may be completed in advance and are to be submitted to the County concurrently with the Area Structure Plan.

It is anticipated that the entire development be completed in one construction stage. The developer shall enter into a development agreement with the County at the subdivision stage to outline any municipal development levies and construction requirements. The developer shall have the internal road, storm water management and utility systems designed by a professional engineer in compliance with the County engineering standards. Private sanitary and water services are to be the responsibility of future lot owners and shall be regulated through individual development permits.

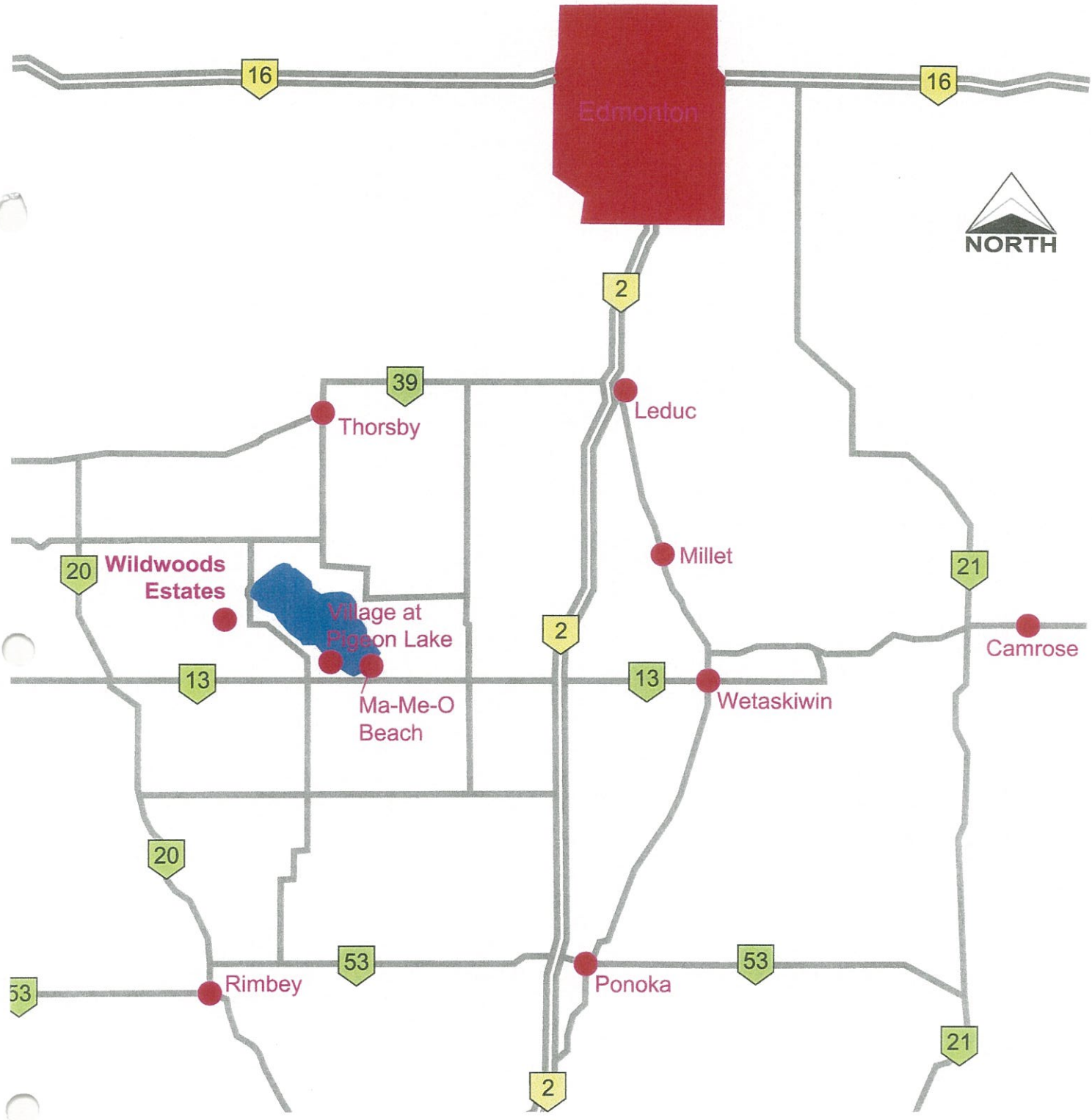

FIGURE 1
Regional Location Plan

WILDWOODS ESTATES
AREA STRUCTUE PLAN

FOCUS

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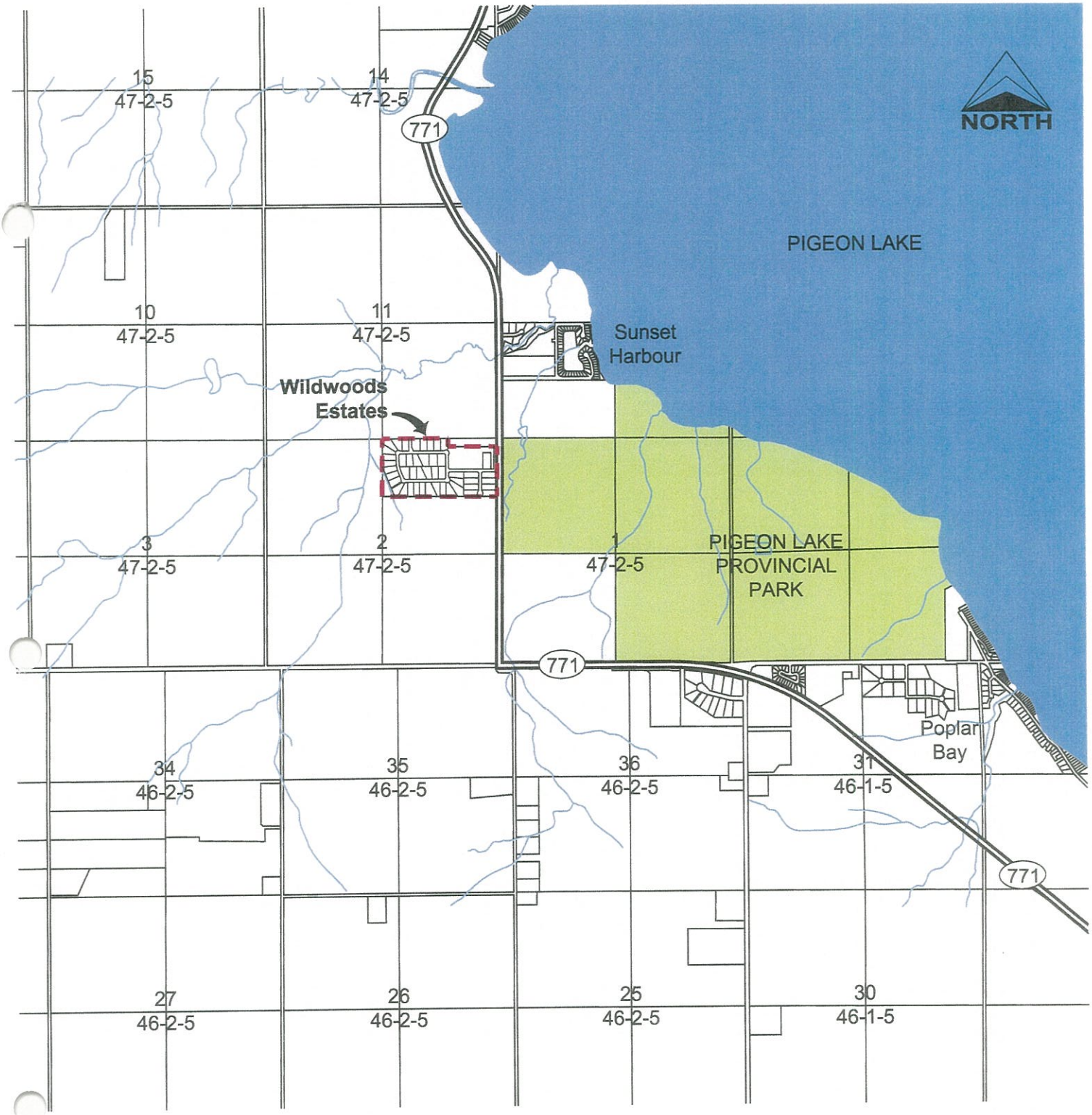

FIGURE 2

Location Plan

ASP Boundary

WILDWOODS ESTATES
AREA STRUCTUE PLAN

FOCUS

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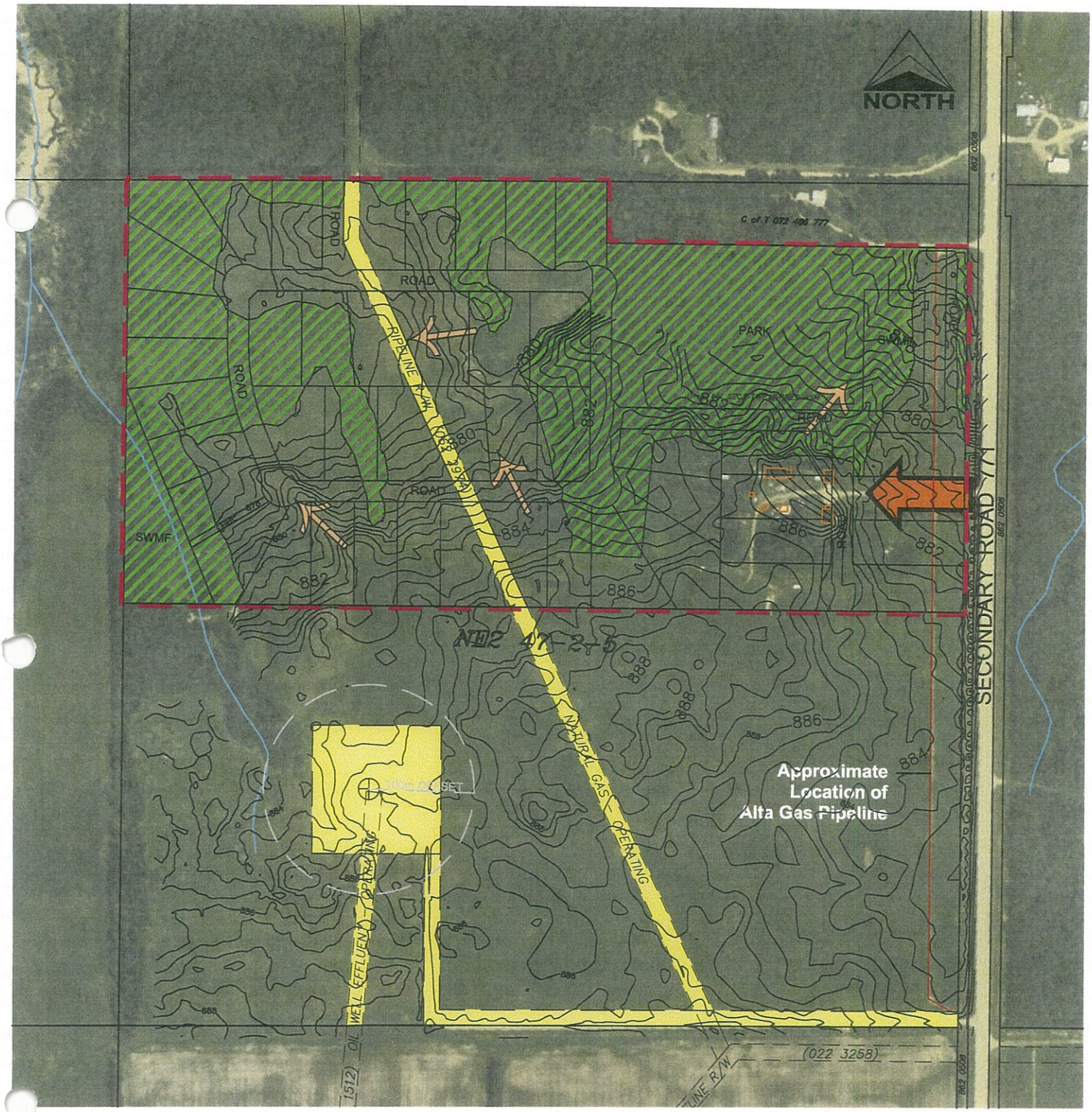

FIGURE 3

Existing Conditions

- ASP Boundary
- Treed Area
- Pipeline / Wellsite Lease
- Existing Buildings
- Existing Access
- Direction of Overland Drainage

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WILDWOODS ESTATES
AREA STRUCTURE PLAN

FOCUS

FIGURE 4
Development Concept

Boundary
Park
Public Utility Lot
Residential
Stormwater Management Facility

WILDWOODS ESTATES
AREA STRUCTURE PLAN

FOCUS

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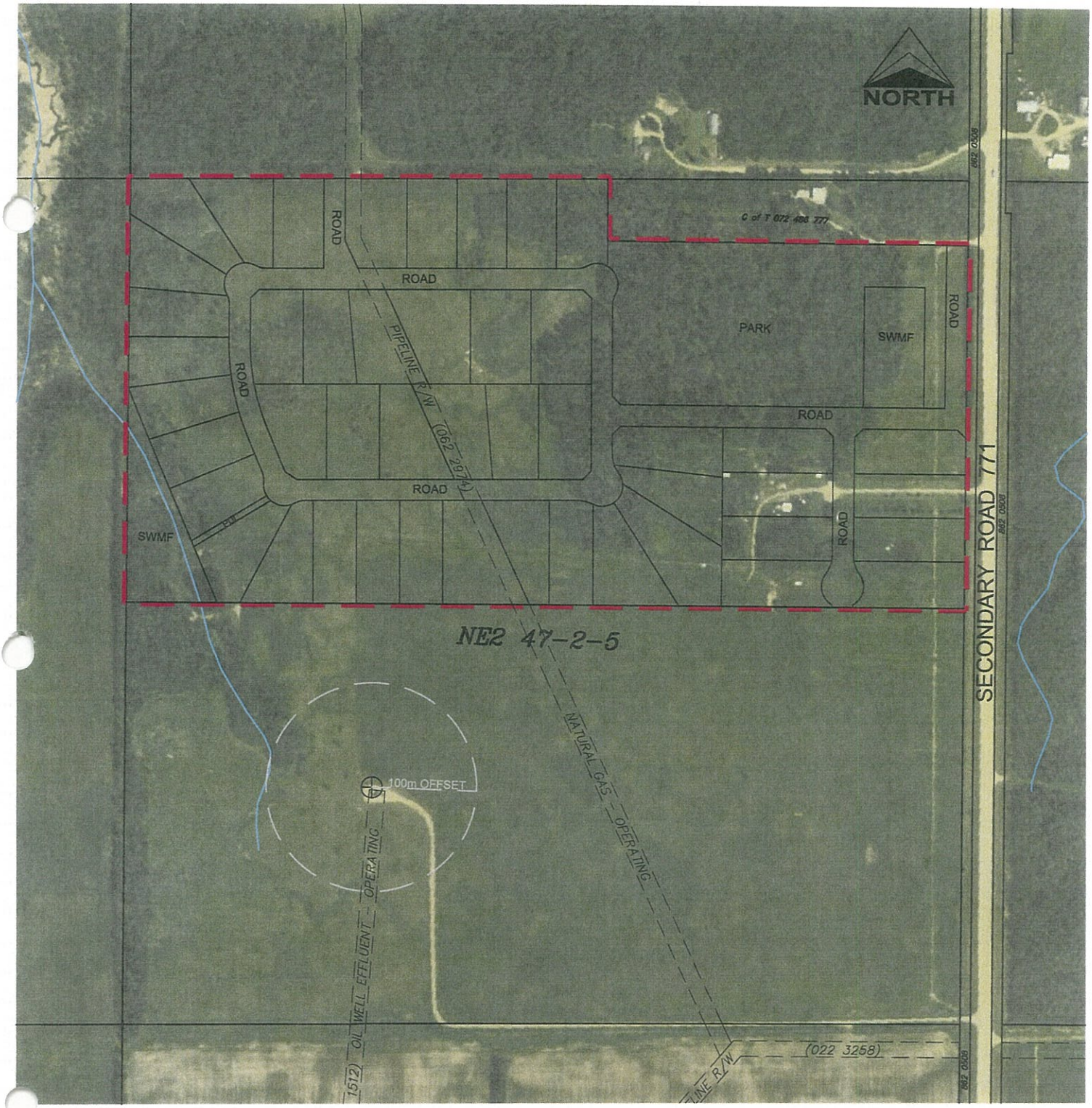

FIGURE 5

Development Concept & Aerial Photo

ASP Boundary

WILDWOODS ESTATES
AREA STRUCTURE PLAN

FOCUS

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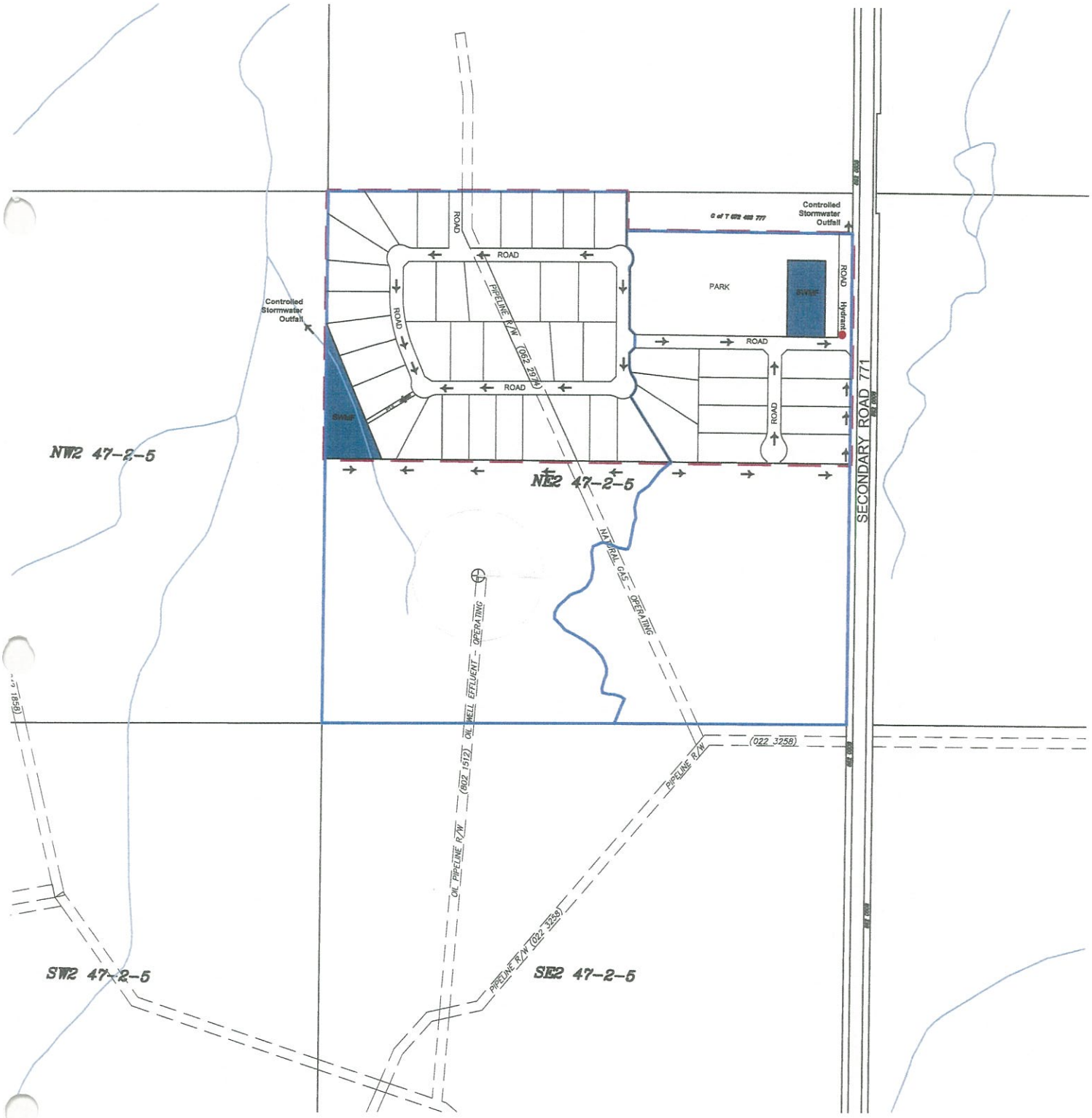

FIGURE 6

Stormwater Servicing

ASP Boundary

Drainage Boundary

Direction of Flow

Proposed Hydrant

Stormwater Management Facility

WILDWOODS ESTATES
AREA STRUCTURE PLAN

FOCUS

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Appendix A: Environmental Site Assessment

Attached under separate cover -
Environmental Site Assessment (March 2008)
Prepared by Parkland Geo (Project RD2765)

Appendix B: Geotechnical Report

Attached under separate cover -
Geotechnical Report (April 2008)
Prepared by Parkland Geo (Project RD2744)

Appendix C: Aquifer Evaluation

Attached under separate cover -
Aquifer Evaluation (September 2009)
Prepared by Sabatini Earth Technologies Inc. (File: E0805-1997)

Appendix D: Traffic Impact Assessment

Attached under separate cover -
Traffic Impact Assessment (March 2009)
Prepared by Focus Corporation (File No: 020100103)

Appendix E: Public Information Session – Open House

Attached under separate cover