Outline Plan
for
Pt W1/2-31-53-5-W5

Parkland County

April. 2013

Poplar Springs

RV Condominium Recreation Resort

by

Three M Poplar JV Inc.

Amended October 2013

The Norcan Group Inc.

Acknowledgements

This Outline Plan has been prepared on behalf of
Three M Poplar JV Inc. c/o Mr. R. Mosher
Land Owners & Development Proponent

by The Norcan Group Inc.

Norcan Consulting Group Inc.
Principal Contributor - Frank Florkewich
- Project Manager and Functional Planning
- Technical design & Construction Management

North Star Planning Inc.
Principal Contributor - Richard Neufeld, B. Sc.
- Land Use Planning & Municipal Policies

Altime Engineering Ltd.
Principal Contributor - Ron Andriuk, P. Eng.
- Civil Engineering (Road drainage & utility)

Western Topographic Surveys
Principal Contributor - Dave Coulston
- Topographical, Construction and Control Surveys

SD Consulting Group Inc.
Principal Contributor - Shane Sparks
--Hydrogeology, Environmental Sciences and Waste Water

Hagstrom Geotechnical Services Ltd.
Principla Contributor - Merle Hagstrom, P.Eng.
- Geotechnical Investigations & Engineering

D & A Paulichuk Consulting Ltd.
Principal Contributor - Darcy Paulichuk P. Eng.
-Transportation Engineering

Beckingham Environmental Ltd.
Principal Contributor - Caroline Martel P. Eng.
- Biophysical Assessment

POPLAR SPRINGS
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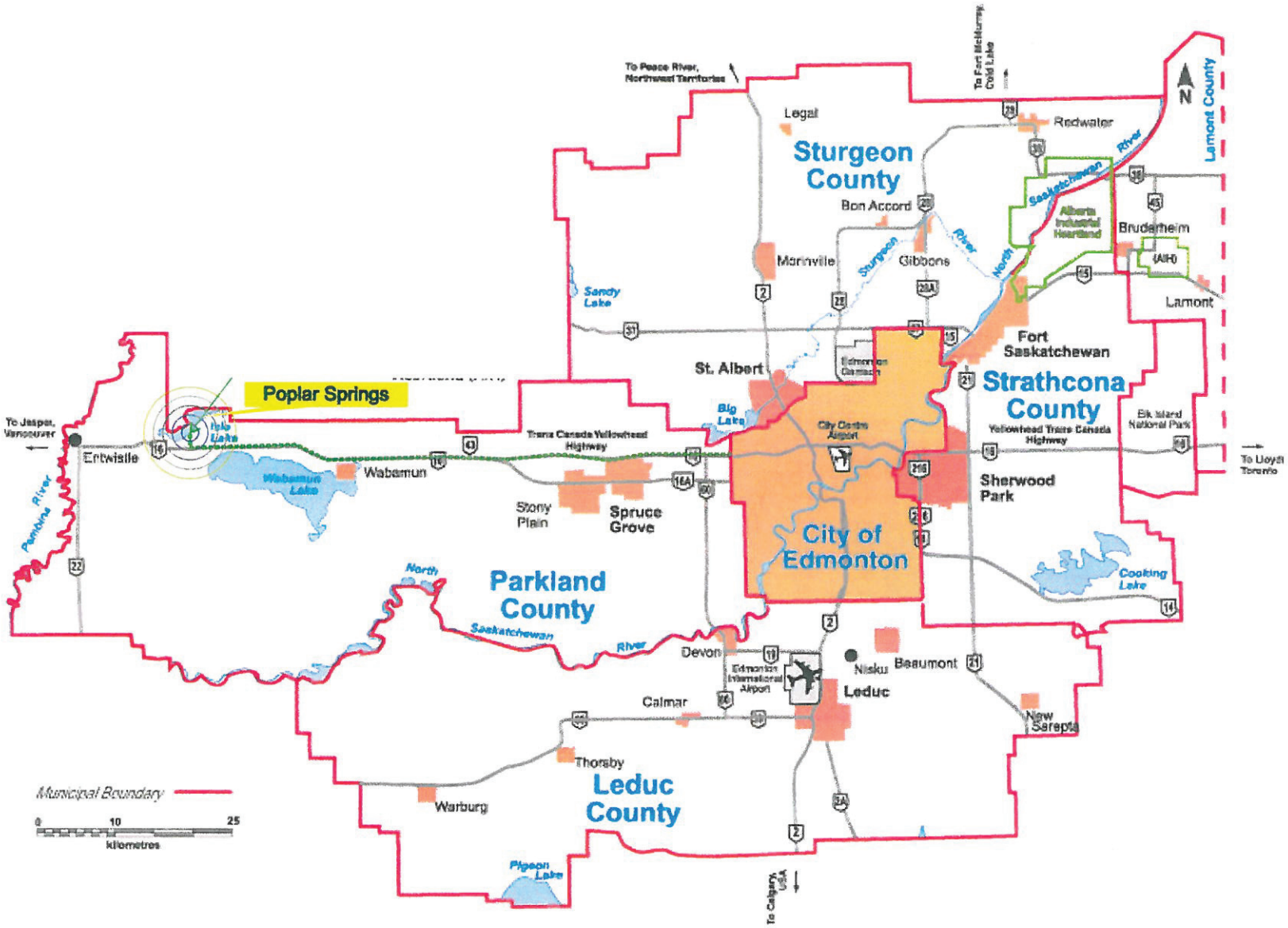
Map # 1

Regional Orientation Map



PART I: INTRODUCTION

1.1) PURPOSE

This Outline Plan has been prepared to assist with the further development of the parcel of land legally known as the southwest quarter of Section 31, Township 53, Range 5, West of the Fifth Meridian. This Plan provides for a Bare land seasonal recreational resort within the Lake Isle area in compliance with the requirements of the Parkland County Municipal Development Plan and Land Use Bylaw. Map No. 1: Regional Orientation Map on the previous page provides a regional context to Poplar Springs. Map No. 2: Location Map on the following page provides a description of the location of Poplar Springs in relation to other nearby Lake Isle landmarks.

1.2) PLAN AREA

Poplar Springs has a land area of 58.51 hectares (144.7 ac.) under title and includes approximately 1,877 metres (6,158 feet) of shoreline on Lake Isle. The land is wholly under a single certificate of title within Parkland County. Of note is the manner in which part of the title is crafted, allowing the property line to vary with the shoreline of Lake Isle.

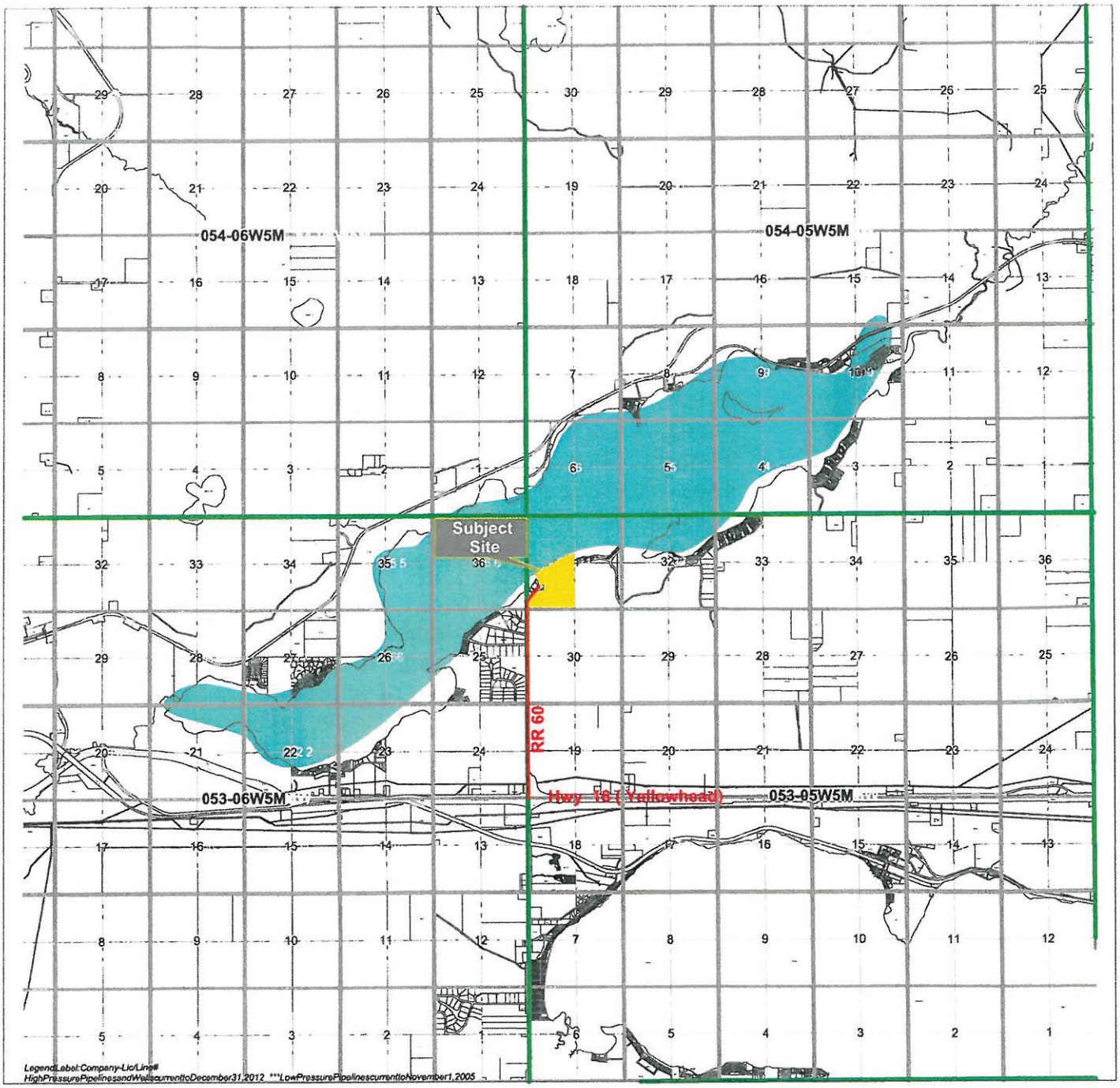
1.3) HISTORICAL DEVELOPMENT

Poplar Springs has been in operation for several decades and currently features a variety of recreation vehicle, cabin with added roof enclosures, decks, sheds and other constructs. The property also has several old and recent manufactured/mobile homes in various locations.

Poplar Springs has been in operation since 1972 under Development Permit No. 23-D-72[1]. The Development Permit allowed for 50 serviced stalls,

[1] The permit information and timeline in this section of this Outline Plan has been provided by Parkland County through letter dated September 26, 2013.

Map # 2
Location Map



Poplar Springs

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100 unserviced (tenting) stalls, picnic area, camp shelter, beach area, pier, a boat launch and other recreational activities.

An application (Development Permit 73-D-78) to expand the park in 1978 by an additional 50 serviced stalls was refused by Parkland County.

In 1982 a one year approval was granted under Development Permit No. 16-D-81 by Parkland County for warehouse storage of coffee and tea. A renewal of this permit was never applied for.

In 1985 a Building Permit was granted under BP#31-5246 for a single family dwelling with an attached garage. In the same year an approval for a gun range was approved under Development Permit No. 59-DP-85 with the requirement that an annual renew would be required to continue the use. The last renewal was granted in 1987.

A Development Permit and Building Permit for a shed was granted under DP#98-D-119 and BP#31-9952 respectively.

It was in 1998 that the Poplar Springs Development was determined by Parkland County to be non-conforming as the campground was within 304.8 metres (1,000 ft.) of a multi-parcel subdivision.

Finally, some gravel was harvested from the site over several years. A pit was not created as the gravel was removed from a surface deposit. This area is to be re-developed as part of the Development Concept presented in this Outline Plan.

Map No. 3: Current Land Disturbance (following page) and Figure No. 1: Existing Site Development provides an overall view of the current development footprint of Poplar Springs. This map clearly shows the extent (red colour) of the clearing and development within Poplar Springs.

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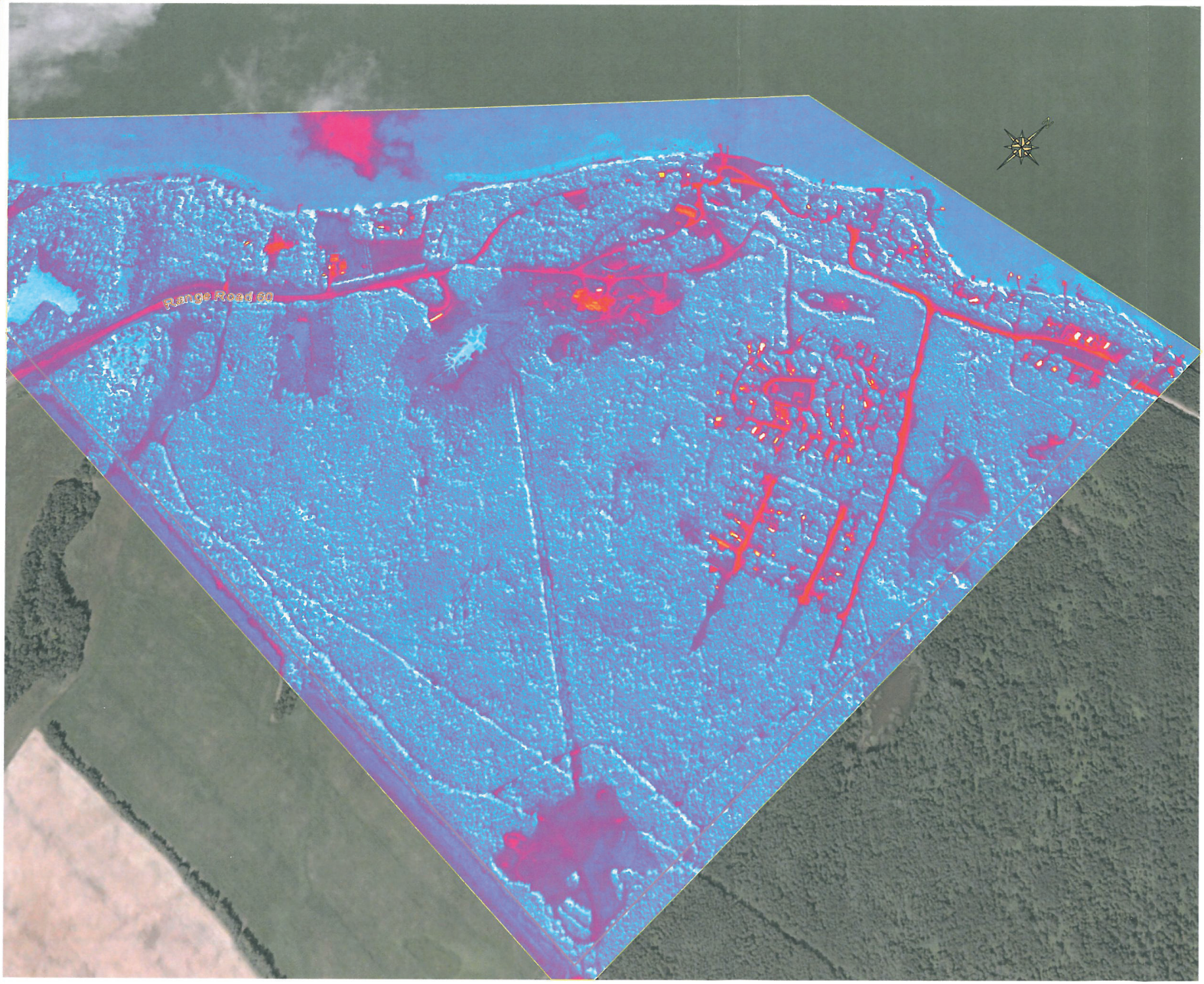
Map # 3

Current Land Disturbance



Color Legend

Blue area - vegetated
Red Area - non vegetated

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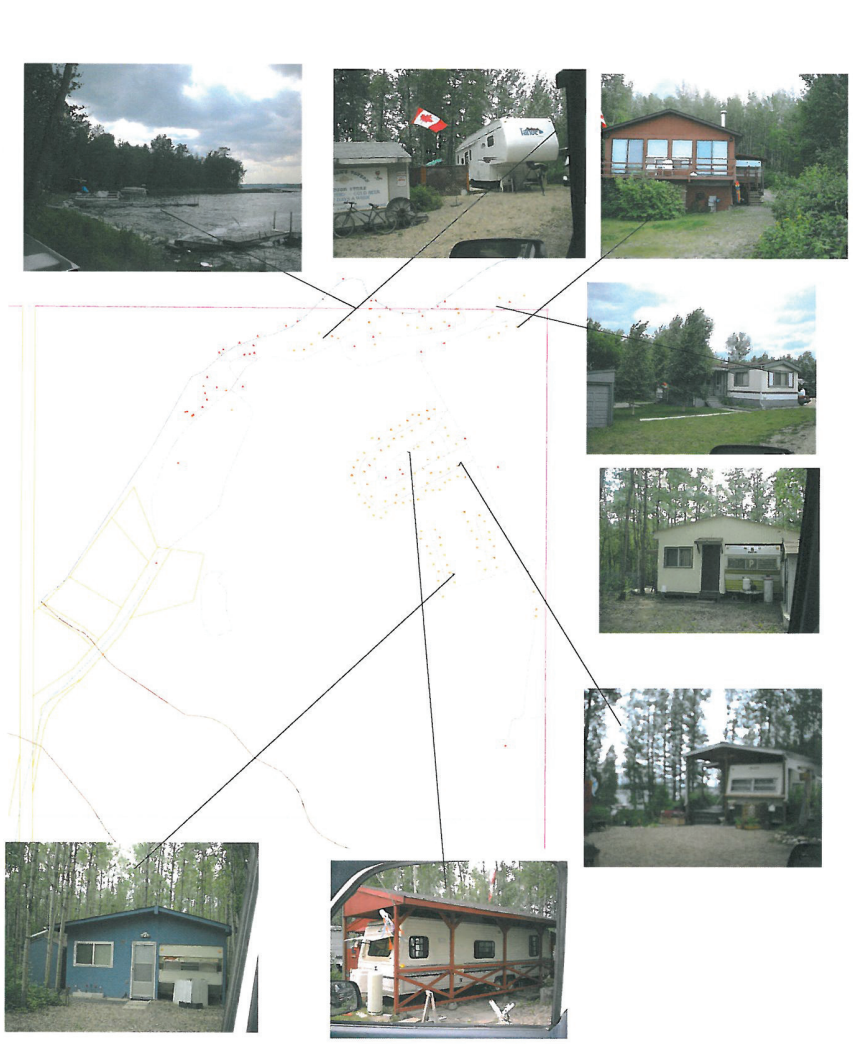
Figure #1

Exisiting Site Development (1972-2013)



Poplar Springs Resort

Pictoral "as is" 2004

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1.4) DEVELOPMENT CONCEPT

With the implementation of this Outline Plan, Poplar Springs will be modernized with expanded utility services and amenities. Land Use will also be converted to conform with Parkland County's BRR- Bare Land Recreational Resort District.

Greater protection of critical shoreline habitats will also be provided as part of a re-developed Poplar Springs.

The full implementation of the Poplar Springs Development Concept will include the removal of all non-conforming development from the site. This subject is discussed in further detail throughout this Outline Plan document.

Finally, some of the currently undeveloped land within Poplar Springs will be planned for future development in conformance with the BRR- Bare Land Recreational Resort District. The development of additional lands within Poplar Springs will be offset by the creation of various environmental protection areas.

A detailed description of the Development Concept for Poplar Springs is provided in Part III of this Outline Plan.

1.5) LEGISLATIVE REQUIREMENTS

This Plan has been prepared in accordance with the provisions and requirements of the following municipal bylaws and regulations and relevant provincial legislation.

Parkland County Municipal Development Plan (MDP):

Poplar Springs will be re-developed in a manner consistent with the policy requirements of the Parkland County Municipal Development Plan #37-2007. When reviewing and comparing the Poplar Springs Development Concept with applicable

provisions of the Parkland County Municipal Development Plan, the following policies are highlighted as particularly important:

(Environmental Impacts) Objective #6 of the MDP mandates efforts to reduce the impact of development on the natural environment.

A goal of Poplar Springs is to greatly reduce the impact on the natural environment and Lake Isle in particular. These efforts include:

- restoration of partially developed shoreline areas to a natural state through the removal of all existing improvements within proximity to the lake,
- complete restoration of all lands that are to be dedicated for environmental protection (Environmental Reserve Lots and Easements),
- establishing protected areas for wetlands and drainage courses, and
- installation of private communal water and waste-water utilities and the treatment of the waste-water on-site through an approved and regulated system.

(Slopes) Section 6.7 requires slope protection for slopes in excess of 15%. It is noted that slopes with these characteristics do exist in Poplar Springs. As discussed further in this Outline Plan, geotechnical analysis and sustainable planning will be performed to ensure that these slopes are not adversely impacted by the development concept. A detailed "constructability report" is discussed in Section 2.6 of this Outline Plan.

(High Water Mark) As required in Section 6.6 of the Parkland County Municipal Development Plan, a property line setback will be established from the high water mark of Lake Isle. This setback will include all flood prone lands and sufficient habitat to provide for small mammals, birds and fish species. An elevation of 730.82 m A.S.L. is used as it is the highest recorded level for Lake Isle.

(Future Land Use) It is noted that the Parkland County Municipal Development Plan Future Land Use Map shows multiple designations for the land under title for Poplar Springs. Part of the land is designated for agricultural use (south portion) while the shoreline lands are regarded as an environmentally significant area.

It is recognized that an amendment from the AGG-Agricultural General District of the Land Use Bylaw to the BRR-Bare Land Recreational Resort District will be required as part of the implementation of this Outline Plan.

(Bare land Resort) Under Bylaw 41-2009 a number of policies were added to the MDP to allow for Bare land Recreational Resorts. The objective was to allow for R.V. resorts within the context of a bare land condominium thereby allowing property ownership and a private communal piped water and sewer service.

As described in the Poplar Springs Development Concept Plan, Poplar Springs will be fully compliant with the BRR-Bare Land Recreational Resort District. Transitioning from the existing land use pattern to a compliant land use pattern will be a challenge. Transition issues are discussed further in the Phasing Section (3.6) and as applicable throughout this Outline Plan.

As part this Outline Plan, a redistricting (rezoning) application will be submitted to amend the land use district from the AGG-Agricultural General District to the BRR- Bare Land Recreational Resort District.

Lake Isle Area Structure Plan:

The Lake Isle Area Structure Plan was in force when this project was initiated, but has since been rescinded within the corporate boundaries of Parkland County. In response to the change in direction shown by Parkland County all references to

the Lake Isle Area Structure Plan outside of this section have been removed from this Outline Plan.

Land Use Bylaw:

Section 5.9 of the Parkland County Land Use Bylaw #20-2009 includes a Bare Land Recreational Resort District. The purpose of the district is as follows:

> *"To provide for condominium recreational vehicle resort development in association with amenity features, and in compliance with an approved plan in accordance with the County's statutory plan hierarchy."*

(Allowable Uses) It is noted that under the Bare Land Recreational Resort District; convenience services, existing homes, park models and R.V.'s are listed as permitted and discretionary uses.

Also noted is that numerous non-compliant structures are located within Poplar Springs. This includes (not exclusively):

- fence structures higher than normally allowed without permit approval,
- enclosures or buildings constructed around an R.V.,
- structural R.V. shelters,
- attached decks,
- structures too close to proposed property lines,
- full residences,
- structures within future environmental reserve land, and
- shoreline disturbance.

Map No. 4: Consolidated "As-Built" Mapping, on the following page, provides a geographical reference and a recent aerial view with detailed description of the placement of all major improvements within Poplar Springs.

These issues are discussed in detail in Part III & IV of this Outline Plan.

Map # 4

Consolidated "As Built " Mapping

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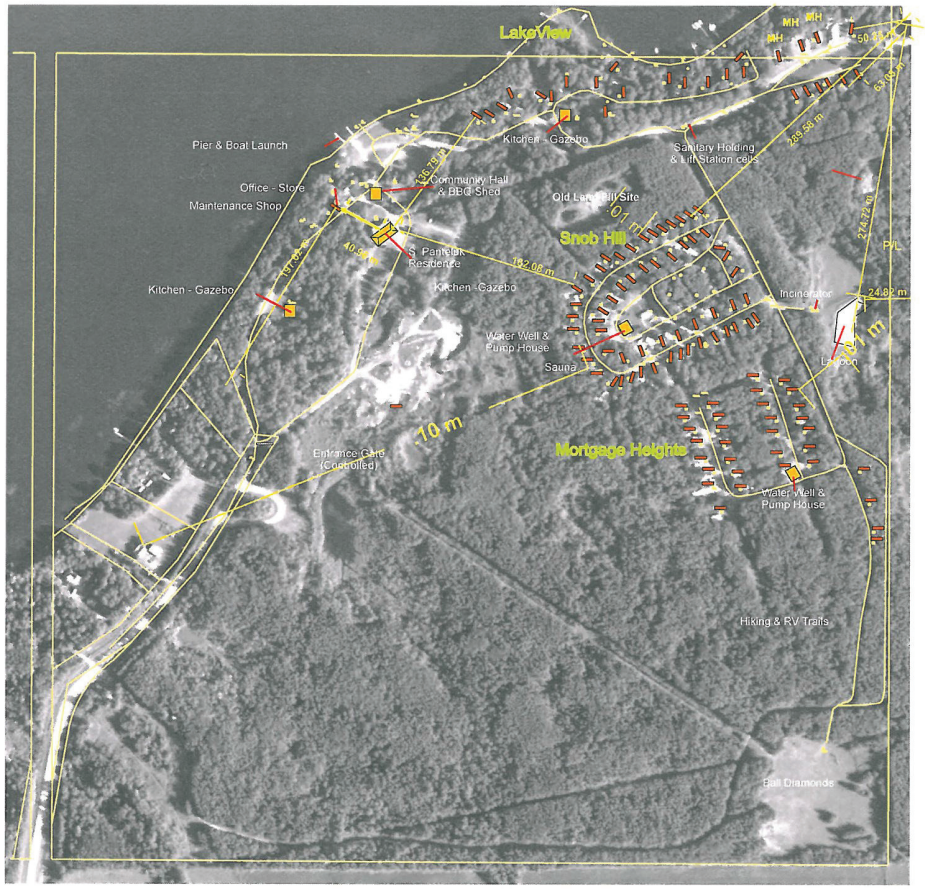


"as built" Survey & Plot 2005

"as built" Survey & Plot 2012

Municipal Government Act (MGA):

This Outline Plan is not a formal statutory plan and as such, is not applicable for adoption under the provisions of the Municipal Government Act. An amendment to the Parkland County Land Use Bylaw will be required and will be performed in accordance with the provisions of Part 17 of the MGA.

Water Act:

Poplar Springs uses on-site private communal potable water, private communal waste-water (sewage) and storm-drainage systems. As part of the implementation process for Poplar Springs, a commercial water license and a storm water license will be required.

Public Lands Act:

Public Lands Act approval is normally required for shoreline disturbance or restoration programs. As part of this Outline Plan consultation is taking place on an on-going basis on these issues.

Safety Codes Act:

As required, Safety Codes Approvals will be acquired for existing development that is to remain to ensure that all remaining development is to current safety code standards.

Shoreline Disturbance:

The Development Plan for Poplar Springs includes the design and construction of a private marina. Typically, an approval for a lakeshore marina will require separate approvals from the following agencies:

- Parkland County (land Use)
- Alberta Sustainable Resources (shoreline disturbance)
- Alberta Environment (water resources)
- Environment Canada (water resources)
- Fisheries and Oceans (lake habitat)
- Canadian Coast Guard (Navigable waters)

Once approved in principal, work will commence on obtaining the necessary approvals for the marina.

Lagoon/Landfill:

Discussed in more detail further in this document, Poplar Springs currently includes a landfill and a lagoon.

The landfill was reclaimed in 2013. A sign-off letter from Alberta Health Services is included at the conclusion of the Borehole at Nuisance Grounds - Tab 7, attached as an appendix to this Report.

The Norcan Group is currently working with Alberta Environment to conform to their requirements for the reclamation.

The lagoon is to be reclaimed to the satisfaction of Alberta Environment, Alberta Health and Parkland County as part of the initial (Phase I) development of Poplar Springs.

PART II: DETAILED DEVELOPMENT SUITABILITY ANALYSIS

2.1) LOCATION & CONTEXT

Poplar Springs is located on the south shore of Lake Isle within Parkland County. The site is accessed off of Range Road 60 and the Seba Beach overpass on Highway No. 16.

The property includes approximately 1877 metres of shoreline on Lake Isle (north boundary).

The property is bounded on the northeast by the lakeshore community of Sunset Beach. To the east the land is currently undeveloped except for an extension of Range Road #55 (He Ho Ha Road) that supports Sunset Beach. Poplar Springs is bounded on the south and southeast by agricultural lands that are currently undeveloped. The land to the southwest is fully developed and is known as Lake Isle Estates. Finally, the land to the northwest is protected land under the ownership of the Crown of Alberta.

Poplar Springs is located approximately 3.2 kilometres (2 miles) north of Highway #16. The nearest urban services to Poplar Springs are located in Seba Beach 7 km (4.4 miles) or Wabamun 23 km (14 miles). The City of Edmonton as the nearest metropolitan area is approximately 90 km (55 miles) or an hour drive away.

The Poplar Springs Location Map, (pg. iv) provides an overview of the location of the property within the region. The map on the following page provides a local setting.

2.2) CURRENT LAND OWNERSHIP

The land is currently under the ownership of Three M Poplar JV Inc.. Adjoining lands are described in the following table.

Legal Description	Landowner Name
NE 31-53-5-5 • Lot 1, Plan 772-2374 • Lot R1, Plan 772-2374	Parkland County
E 1/2 31, TWP 53, Rge. 5, W5M	Lending Institution
NE 30-53-5-5	Meger Family
N ½ NW30-53-5-5	Meger Family
Lot 2, Plan 772-0582	Spitzmacker Family
SE 36-53-6-5	Crown
Lot, 1, Plan 902-0244	Jim Hole
Lot 3, Plan 902-0244	Kennedy Family
Lot 4, Plan 902-0244	Duchesneau Family
Lot R1, Plan 1415 NY	Parkland County

It is noted that if not for Lake Isle, the Plan Area would also be adjoining to the SW 6-54-5-5 and SE 1-54-6-5. Based upon the reasoning that there is a sufficient separation between the properties by Lake Isle these two properties are not being treated as adjoining for the purposes of this Plan.

Note that Plan 852-1462 is a road plan.

2.3) SUBDIVISION HISTORY

The property has been subdivided in the past, most recently in 1990.

Plan No. 1415 NY was the initial subdivision of the lands that took place. The subdivision created several lots, two of which remain today as park lands (Lot R1 and R2) under the ownership of Parkland County.

Road widening on the main access road took place in 1978 with the registration of Plan No. 782-0279. Later, under Plan No. 852-1462 an additional road plan was registered for the purpose of accommodating a turn-a-round for traffic.

In 1990, a new subdivision plan was registered against the land that was originally subdivided under Plan 1415NY.

Currently, the lands are complete quarter-sections except for land which is taken by the lake, the three existing privately owned lots, and several municipal owned park and reserve properties.

Historical development within Poplar Springs is summarized in Section 1.3.

2.4) HISTORICAL REPORTS

An application was prepared and submitted to Alberta Culture through the OPAC web-site. A letter confirming that no known historical resources are identified on the site has been received and is attached as part of the consultation package appendix to this Outline Plan.

2.5) TOPOGRAPHICAL ASSESSMENT

Map No. 5: Terrain Mode (pg. 21), provides a three dimensional overview of the topographical characteristics of the property.

The baseline elevation for the lakeshore is the 1989 recorded level of 730.82 metres A.S.L.

The property ranges from 730.8 to 742 metres for an elevation range of 11.2 metres. As shown on the Terrain Model, the property features a number of ravines which contain intermittent creeks or watercourses.

Near the eastern boundary of the site the two major wetlands are shown as flat areas in local depressions. Other wetland areas may be seen when compared to the Biophysical Map which follows later in this Outline Plan (pg. 29).

2.6) GEOTECHNICAL EVALUATION

Hagstrom Geotechnical Services Ltd, as part of the Norcan Group, conducted and prepared a geotechnical report under file no. HI207-687. Relevant details of the report are highlighted below:

Drilling Report:

In total, 24 boreholes were drilled in the summer of 2012 at varying depths ranging from 4.5 to 7.5 metres. All drilling was supervised by Mr. Merle Hagstrom. Groundwater conditions were observed at the time of drilling, several hours post-drilling and thirty-one days following the drilling.

Soil Conditions:

Topsoil and peat is found in much of the property with thicknesses that vary from 10 to 230 cm. Other areas have peat underlying 70 to 140 cm of fill. Moisture content in the topsoil and peat ranges from 33% to 67%.

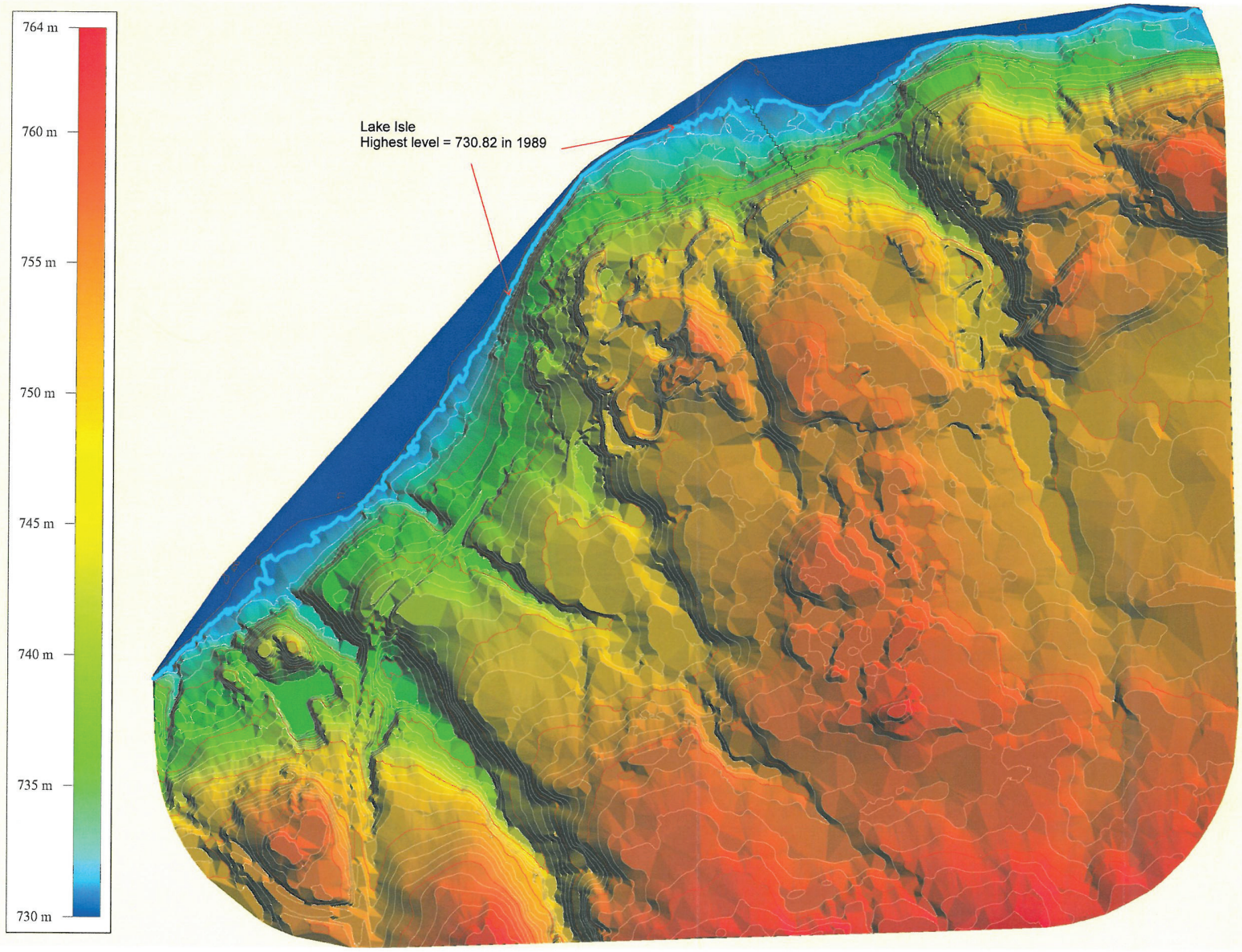
Where encountered, the fill has variable compaction and will not support light to moderate loads.

Gravel was encountered at six borehole locations with thicknesses that range from 0.3 to 2.3 metres. The largest thickness of gravel was encountered in Borehole 12-4. Low moisture content from 3% to 28% were found with most values less than 7%.

Sand was encountered in eighteen boreholes and ranged in thickness from 0.4 to 3.8 metres in depth. Moisture content in the sand ranged from 5% to 35%.

Clay and Clay till were found in most of the boreholes at depths that range from 0.4 to 4.4 metres. Moisture content ranged from 11% to 35%.

Map # 5
Terrain Model



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Site grading for buildings should include a slope of 3% away from the building and a clay base extending for 2 metres around the building.

Near-Surface Groundwater Levels:

Of the 24 boreholes, groundwater levels higher than 2.0 metres were found in four boreholes (12-2,12-11,12-12 and 12-13). Borehole 12-2 is located outside of the proposed development area near the center of the development area. The other noted boreholes are located near the shoreline of Lake Isle.

Generally, higher groundwater levels are associated with lower elevations and poorer drained areas while lower groundwater levels are associated with higher and better drained elevations.

A further investigation into near surface groundwater levels was conducted on May 16, 2013 by Darcy Paulichuk, P. Eng., for the purpose of determining graphically and throughout the undeveloped portion of the property which lands within Poplar Springs meet Parkland County's requirements for developable land. The Constructability Assessment Report builds upon the Hagstrom and Beckingham reports by providing a near surface water table assessment for the entire property from an engineering perspective. The assessment shows that except for road crossings, important water features, buffer zones and lands with predicted high water tables are not included within areas to be developed under this plan.

Slope Evaluation:

A number of locations exist with slopes in excess of 15%. These are primarily found in the various ravines and other areas that are within the ecological protection areas. A detailed slope analysis is provided on Map No. 6: Slope Analysis on page 27 of this Outline Plan.

The Slope Analysis Map includes an outline of the Development Concept that is described later in this Outline Plan. Where located within the developed area, steeper slopes are almost exclusively within existing roadways and sites. Any disturbance of these existing slopes as part of a construction program will be supported by necessary engineering design standards.

Within the undeveloped lands, the steeper slope areas are primarily dedicated for environmental protection as an Environmental Reserve Lot or Environmental Reserve Easement. Some exceptions are made to accommodate proposed roadways or related works.

The above-mentioned Constructability Assessment[2] also examined slope stability within the lands to be developed. During a recent site-visit during the summer of 2013, no active slumping or slides were found on the property. It was further identified that most lots will be constructed in flat areas of the property and there were no high fills that could potentially fail due to the addition of new lots and roadways.

In steeper areas, some grading of slopes will be required which is common practice. A future detailed design will provide greater detail on a lot by lot basis. Future design will include sliding and erosion control as well as drainage works as required.

Recommendations:
Based upon the variable soil and groundwater conditions that exist, strip and spread footings, cast in place concrete or screw piles are recommended for foundations. Subgrade conditions are considered fair to good for parking lots and roads.
All topsoil/peat and organic soils will have to be removed from proposed building sites with

[2] Norcan Group Inc., *Constructability Assessment Report - Poplar Springs*, August 9, 2013, Section 5: Slope Stability.

engineered fill being compacted to at least a 98% Proctor Density.

2.7) ECOLOGY

Beckingham Environmental Ltd. prepared a Biophysical Assessment of the property in the summer/fall of 2012. The report was later amended to clarify a number of issues that were raised by Parkland County in consultation with the Norcan Group. One amendment was prepared in November, 2012 while a second amendment was prepared in October, 2013.

The following is a summary of the major considerations in the report and its recommendations.

The content of this section is connected to the maps provided within the various Beckingham reports and to Map No. 7: Biophysical Assessment (pg. 29).

(Ground-water) The Lake Isle area is part of a regional groundwater recharge area, with the Poplar Springs area serving as a groundwater discharge area[3].

Note that near surface groundwater is discussed in greater detail in Section 2.5: Geotechnical Report.

(Wildlife)[4] Few species were observed on the site during the site inspections, possibly due to weather conditions. Regardless, signs indicated the presence of a variety of wildlife including deer, elk, moose, beaver, black bear, squirrels, chipmunk, hare, rabbit and porcupine.

Many species of birds were observed or indicated as being present, including: grouse, chickadee, harrier hawk, ducks, yellowthroat, sparrows, woodpecker and herring gull.

A variety of reptiles such as frogs and salamanders

[3] Beckingham Environmental Ltd., *Biophysical Assessment of Poplar Springs Park*, Section 2.0, par. 3, September, 2012.
[4] Beckingham Environmental Ltd., Section 3.1

were observed at the site.

The consultant noted that the date of the field visit limited the range of aquatic species that would be observed. Further, the consultant also noted that a variety of species that are at risk may be found at the site, but were not observed.

(Vegetation)[5] The dominant tree species is aspen, balsam poplar and white spruce of moderate height. The forest is not mature due to a historical forest fire.

A wide variety of species of other vegetation; grasses, sedges and shrubs were observed in various locations within the property. This included some invasive plants such as argentine canola, wild oats, peppergrass, thistle and tansy.

No rare plants were observed, but may be present on site.

(Recommendations)[6] Included in the study are a number of recommendations, summarized below. The Map titled: Bio-Physical Assessment provides a spatial description of areas to be protected.

(wetland areas) Two wetland sloughs were identified and recommended for preservation due to being home to a wide variety of birds and mammals.

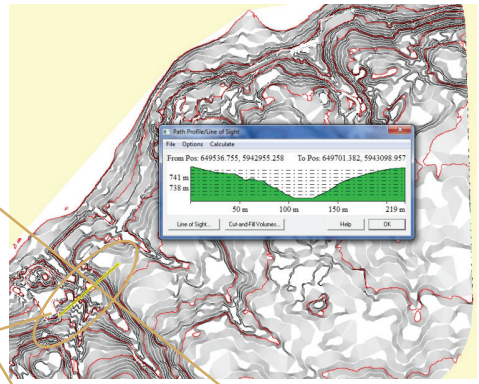
The first wetland area is defined as a Class IV[7] wetland. It features an inflow intermittent creek and has no outflow. The wetland is currently used as a beaver pond. As shown in the report and on the Biophysical Constraints Map, the wetland is located in the western portion of the property.

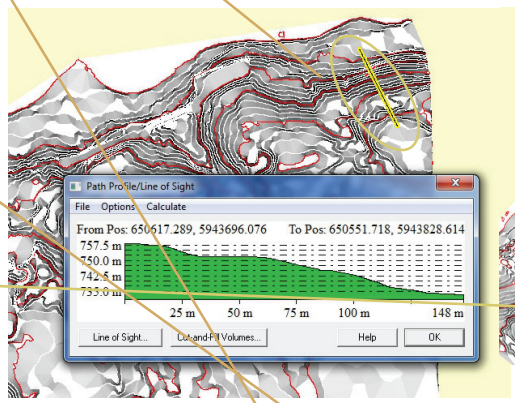
[5] Beckingham, Section 3.2
[6] Beckingham, Section 5.0
[7] Beckingham Environmental Ltd., *Camgill Poplar Springs Review of Concerns and Recommendations,* 2013, Section 2.3, Table 1.

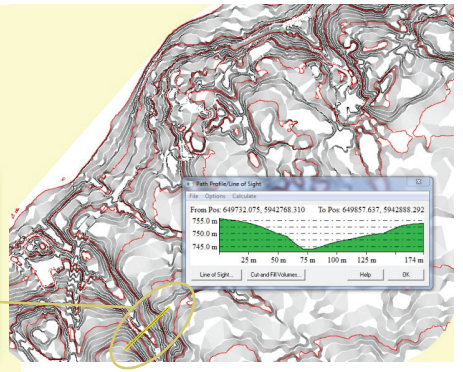
Map # 6

Site Slope Analysis

Slope Shading Plot with Topographical Cross Sections

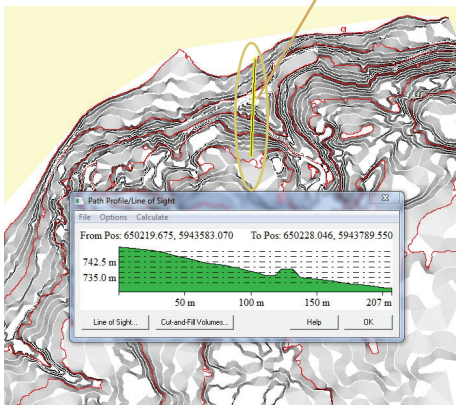


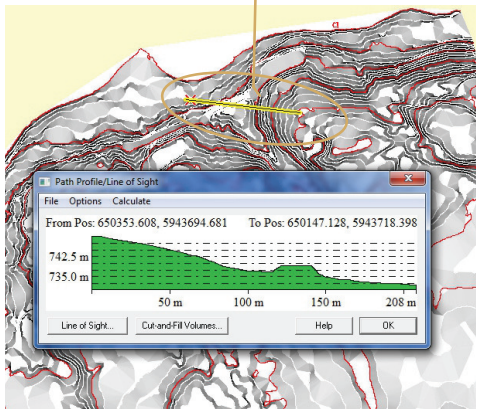


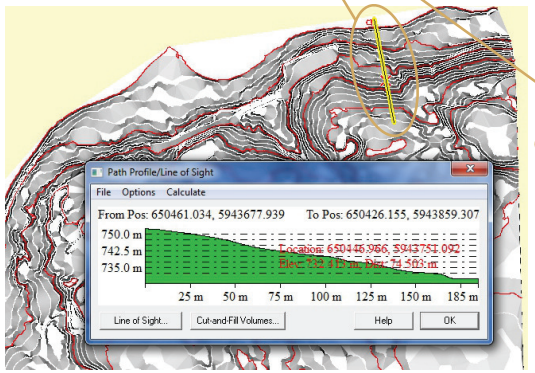


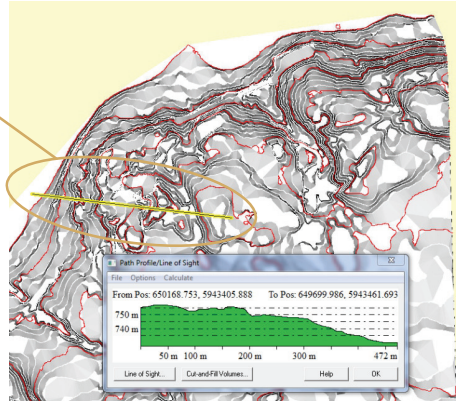
NOTE: dark shading indications range from 17.6 - 26.79 %. The development overlay indicates that there will be no development in these areas and if any encroachment, adequate engineering and environmental protection needs & conditions will be addressed at the detail design stages of the development.

(This map does not display detail well unless viewed in original software digital format, which displays tighter contour intervals separate and not blending together as one color mass.)









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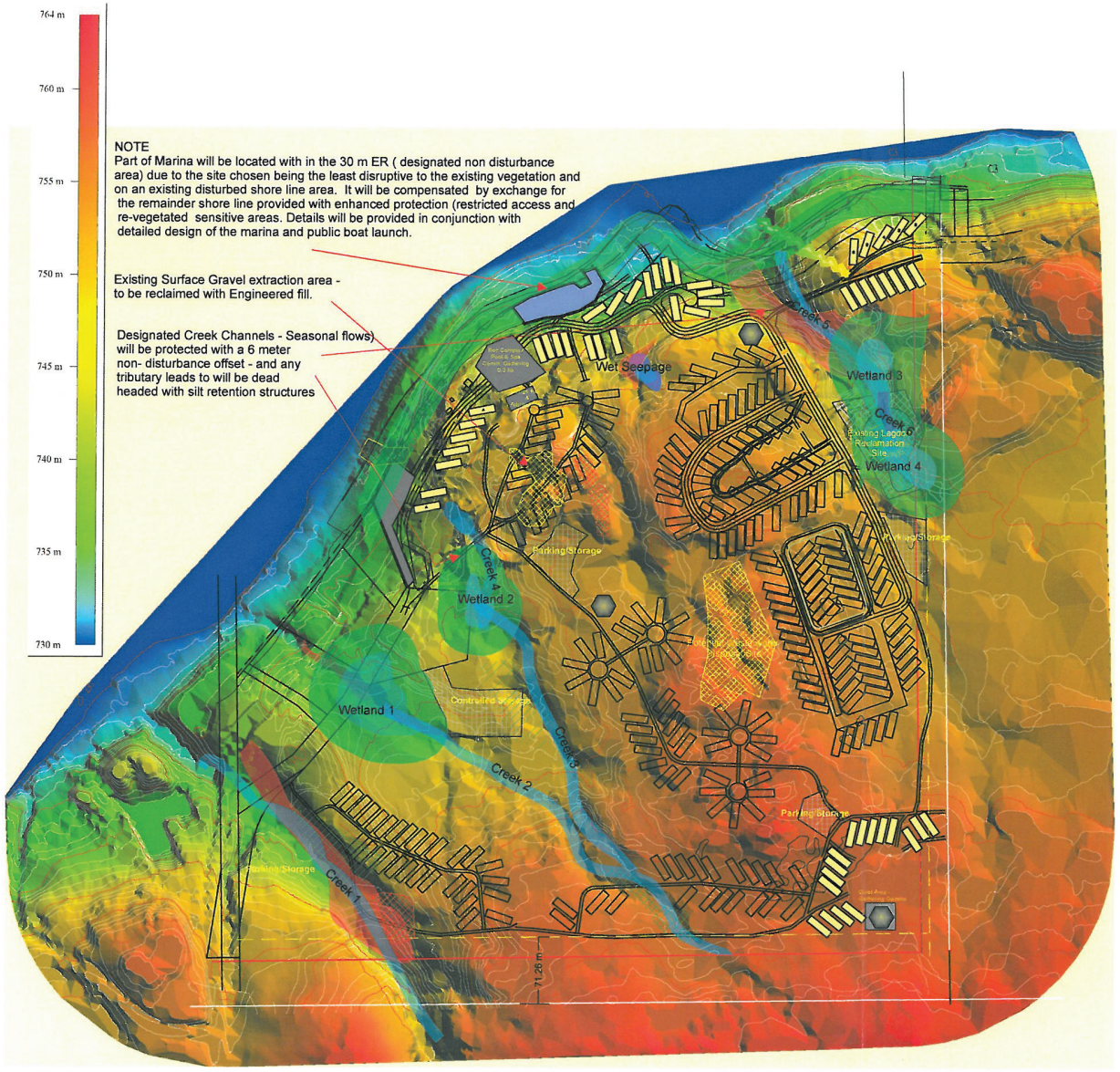
Map # 7
Biophysical Assessment
Development Constraints Map



- Wildlife concern areas
- Wet land buffer areas (30 m)
- Wetland concern areas
- Water course concern areas
- Shoreline non disturb concern areas (30 m)
- Water course seasonal flow buffer areas (6 m)

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The second wetland area located further east and is defined as a Class V[8] wetland. It is a "*terminus to the intermittent inflow creek that originates near the centre of the property*"[9]. The wetland is also used by Beavers and some waterfowl. It is possible that it has a human influence as a borrow pit from historical construction that took place near the site.

- Two other wetlands are located primarily outside and adjoining to the east property line. They are classified as a Class IV and V[10] wetland respectively. Though not a formal recommendation from Beckingham, a wetland buffer will be established within the Poplar Springs lands.

  Migratory birds also use the wetland areas on a seasonal basis.

  A buffer area of 30 metres is to be established upon subdivision as Environmental Reserve[11] for each wetland (see below).

  In addition to the wetland areas, the latest submission from Beckingham included a discussion on a Wet Seepage area (Table 1). This wet area was created through a blockage of natural surface drainage due to a lack of culverts installed during the original development of Poplar Springs. This area will likely drain upon the re-development of Poplar Springs, however, the Norcan Group planning recommendation is for a six (6) metre Environmental Reserve to be created around the area.

  Note: These areas will be designated for future

[8] Beckingham Environmental Ltd., *Camgill Poplar Springs Review of Concerns and Recommendations*, 2013, Section 2.3, Table 1.
[9] Ibid, Table 1
[10] Ibid, Table 1
[11] Recommendations for the exact type of Environmental Reserve, Environmental Reserve Lot or Environmental Reserve Easement, are provided in Part III, Section 3.3 of this Outline Plan.

environmental protection. A full description is provided in Part III of this Outline Plan.

(Creeks) Six (6) creeks were identified in the Beckingham report and addendums. Table 2 within the November, 2012 addendum provides a description of the various creeks.

- Creek (1) is located on the western portion of the property and provides an inflow into the wetland area described above. It has value as a wildlife corridor and habitat purposes.

- Creek (2) enters into Poplar Springs and flows northwards to a wetland area. It has value as wildlife habitat.

- Creek (3) is located and originates near the center of the property and terminates at a wetland.

- Creek (4) has a poorly defined streambed and is likely only water-filled during wet seasons and during high run-off periods.

- Creek (5) originates at the south boundary of the south wetland on the east boundary of the property and continues to the lakeshore of Lake Isle. This is the only creek that connects to the Lake. The creek area provides wildlife habitat, but is only active as a watercourse during peak flow events.

- Creek (6) connects the two wetlands on the east boundary of the property and is part of the greater wetland area in that portion of the property. It provides an important wildlife habitat area.

These areas will be protected and designated for environmental protection in a form acceptable to the subdivision approving authority. Recommended setbacks are provided below.

(Lakeshore) The Beckingham addendum (November, 2012) recommends that the lakeshore area be left in its natural state (pg. 12, par. 1) or returned to a more natural state over time. From the shoreline, a recommended environmental buffer of 30 metres should be established.

The report and addendum (October, 2013, Section 2.4) recommends that all structures and other improvements be removed from the buffer area in a responsible manner, and that vegetation and shoreline restoration take place as required to ensure that a natural shoreline is restored.

(Marina area) This component of Poplar Springs is addressed in a general sense by the Beckingham second addendum (October, 2013, pg. 16, par. 2) with the recommendation of a full assessment by Fisheries and Oceans as well as other applicable agencies including: Parkland County, Alberta Environment and Sustainable Resources).

(Recommended Setback Distances) The above recommendations are quantified through the following minimum buffer distances:

Feature[12]	Setback (m)
Identified bed and shore	6.0
Creek buffer	20.0
Wetland buffer	30.0
Lakeshore buffer	30.0

As described in the bio-physical assessment, the ill-defined and intermittent nature of the creeks should be satisfied with a 6 metre buffer on both sides of the bed and shore where one exists..

To date, Alberta Sustainable Resources has not formally commented on this report or any other aspect of this project.

(Further The first addendum to the Beckingham Report,

[12] Beckingham Environmental Ltd., *Camgill Poplar Springs Review of Concerns and Recommendations*, 2013, Section 2.3, Table 1.

Recommendations) dated November, 2012, included the following recommendations:

- erosion control structures and/or runoff impediment barriers to be installed on hills, inclines and roadways,
- avoiding unnecessary soil and vegetation disturbance,
- restricting construction during high rainfall and run-off events,
- not depositing debris, soils and deleterious materials onto non-approved storage areas,
- not crossing watercourses during active periods and to install proper drainage works such as culverts or bridges as part of designated watercourse crossings,
- permanent road crossings of water bodies shall be built to incorporate the flow of the water bodies, including crossings of adequate size to accommodate water volumes in excess of peak flow of the creeks and wetlands, and
- timely remediation of disturbed areas and replanting of lost vegetation to prevent further soil loss and sedimentation.

The second addendum, dated October, 2013[13], included the following additional recommendations:

- A no net loss principle in designing site development plans: utilizing existing infrastructure and built environment wherever possible, maximize the retention of natural habitat areas, and minimize further development encroachment into sensitive habitat types,
- use buffers or effective size to mitigate and prevent additional disturbance,
- connect buffers to adjoining natural areas to provide connectivity and habitat intactness,
- enhance natural environment beneifts for the enjoyment of property users,
- manage disturbance, weeds and waste to

[13] Beckingham, *Poplar Springs Biophysical Assessment - Review of Concerns and Recommendations*, October, 2013, Section 3.0: Recommendations Summary

minimize further deleterious effects on natural systems,
- minimize human impact within natural areas, through the restriction of activities and access via trails and other designations (foot and non-motorized access only)
- reclaim disturbed areas to natural conditions,

Regarding the Phase II Environmental Site Assessment (study underway), it is recommended that all disturbance areas and sources of contamination be delineated, that sites be reclaimed to a natural state, implementation of weed control measures and a monitoring program for future changes.

Class IV and V wetlands should be managed so that:

- sensitive wildlife hotspot areas must be adequately buffered from additional disturbance,
- to avoid augmentation and physical and chemical alteration of wetlands,
- to ensure that development activities are suitable for the wetlands and will not overwhelm their absorptive, sediment-collecting or water-holding capacity, and
- to manage for enhanced wildlife use and minimal weed presence.

Shoreline areas should be managed to:

- Identify and develop buffer regions along shoreline to restrict human access and activities,
- emphasize natural habitat conditions and wildlife access within the buffer,
- enhance degraded habitat to provide more effective environmental conditions,
- reclaim disturbed areas to natural habitat, removing built structures wherever necessary,
- replace disturbed or lost habitat with additional similar habitat reserve within the property, and
- contact the Canadian Department of Fisheries and Oceans for further assessment and

permission to construct all marina and boat-launch facilities.

(Implementation) It is the intent of the Developer for Poplar Springs to implement the recommendations where applicable and as required by Parkland County.

2.8) TRAFFIC PATTERNS

A traffic analysis was performed on the road leading from Highway #16 to Poplar Springs by Darcy Paulichuk Engineering. The route is direct to the property and does not require any improvements in order to accommodate the traffic generated by the project.

2.9) FLOOD PLAIN ANALYSIS

The highest recorded lake level on Lake Isle as provided by Alberta Environment occurred in 1989. The lake level is recorded as 730.82 metres and is displayed on the map shown on the following page.

The elevation map is also shown on various maps and engineering reports within and as an appendix to this Outline Plan.

Our survey data shows that the flood plain is contained within the proposed environmental reserve with an estimated maximum inundation of 5.0 metres into the proposed 30 metre wide reserve.

Communication with Alberta Environment revealed that a 1 in 100 year flood plain elevation has not been established by the Province of Alberta. On a precautionary principle, the highest recorded elevation, higher than previous floods, is suggested for this project.

2.10) ENVIRONMENTAL SITE ASSESSMENT

AMEC Earth and Environmental prepared a Phase I environmental assessment of the property in the

spring of 2008. This included:

- a review of historical and current documentation, and
- an inspection of the site to identify practices or circumstances that may present potential environmental contamination.

The assessment did not find any hazardous materials such as bulk storage tanks, chemical storage or sumps and drains, but did identify issues related to a reclaimed landfill, groundwater wells and a sewage lagoon.

With respect to the landfill, it was recommended that further analysis be done to better examine the nature of what was placed into the landfill.

The lagoon, built in the early 1970's was empty at the point of inspection. It was recommended that impacts on groundwater be determined in the vicinity of the lagoon.

It was recommended that existing groundwater wells on the site be reclaimed if they are not intended to be used in the future

(ESA follow up) A follow up Phase II report is in the process of being prepared by AMEC. At the time of submission of this Outline Plan it was not yet complete.

(Landfill follow up) As a follow up to the AMEC report Hagstrom Geotechnical Ltd. did further analysis on the land fill site and found that extensive drilling discovered no waste other than typical household waste such as plastic bags and food cans.

The landfill material was removed and the site reclaimed without backfill in the spring of 2013. Since then, a letter of acceptance has been recieved from Alberta Health. The Norcan Group is working with Alberta Environment on obtaining the necessary approval from that Department.

It is anticipated that the remaining backfill and re-vegetation/restoration will take place once a process is approved by Alberta Environment.

(Water well follow up) It is the intent of the developer that upon approval each of the three noted water wells will be reclaimed.

(Sewage lagoon reclamation) It is the intent of the developer upon approval of this project to reclaim the sewage lagoon that is currently on the property, no later than as part of Phase I. Reclamation will take place in accordance with Alberta Health and Alberta Environment guidelines and approvals.

(Gravel area) That portion of the gravel pit/harvest area that is not part of the new development concept will be reclaimed to a natural state in accordance with Alberta Environment guidelines.

Where a portion of the gravel pit/harvest area is within a future development area, the transition from the existing condition to the proposed development will be performed in consultation with Alberta Environment and Parkland County so that no adverse impact is placed on the natural environment.

2.11) ABANDONED WELLS

A search was performed on the Energy Resources Conservation Board's (ERCB) web-site on October 26, 2012 to identify abandoned wells that may be located on the property. The search turned up no results.

2.12) LAND STEWARDSHIP CENTRE

A search was performed on the Land Stewardship Centre's web-site for any reports that may be registered on the subject lands. The search was performed on October 26, 2012 and had no results.

PART III: DEVELOPMENT CONCEPT

3.1) OVERVIEW

Part III of the Poplar Springs Outline Plan describes the development concept, servicing scheme, phasing program and transitional process which will allow for the transformation of the current R.V. Park to the proposed Poplar Springs Bare Land Condominium Recreational Resort.

Within this document, references to "lots" may be applied as meaning "units" within the context of a bare land condominium development.

3.2) RECREATIONAL RESIDENTIAL

The current R.V. Park includes a single full time residence and several manufactured homes. Other development includes a large number of R.V.'s, accessory buildings and landscape related structures. These structures will be removed from the property on a phase by phase basis at the discretion of the Municipal Planning Commission (MPC).

The full time residence is located near the proposed marina and is used as a manager's residence. This use will continue as part of the overall park re-development.

Existing campground sites may continue under the amended design, but in large part will have to be re-designed in order to fully comply with existing Parkland County design standards. This will result in some cases in the removal of some sites and combination of others.

This Outline Plan describes a design layout that based upon the data available is both feasible and sustainable from a geotechnical and biophysical perspective. The final decision of which sites are subject to removal or other modifications will be

subject to approval at the discretion of the MPC.

Poplar Springs will be developed in five (5) phases, in conformity to the Bare Land Recreational Resort District as described in Section 5.9 of the Parkland County Land Use Bylaw No. 20-2009.

All residential recreation use structures shall conform to the Parkland County R.V. standard.

(Site Characteristics)

Each site or subdivided Bare Land Condo unit within Poplar Springs will be in full compliance with the Bare Land Recreational Resort District.

Each lot will be fully serviced with piped water and waste-water and electricity. Wifi/ wireless - internet services will also be provided. Services will be seasonal.

Minimum lot sizes will be 235m^2 (2,529ft^2) as per current municipal standards and will be limited to a maximum 65% development coverage as described in the setback and site coverage requirements of the Bare Land Residential Resort District. An illustration is provided on Figure No. 2: Lot and Servicing Details - Private Common Lands (Pg. 47).

R.V.'s and Park Model Homes which conform to an R.V. standard[14] will be permitted within Poplar Springs on designated lots. Park Model and R.V. units will be separated into different neighbourhoods. Recreational Residents will be allowed to keep their R.V.'s and Park Model homes on-site during the entire year rather than being required to re-locate the home/R.V. off of the property during the off-season.

(Neighbourhood Plan)

Poplar Springs will consist of a variety of neighbourhoods once it is fully developed. This will include lake view, upland and forest area properties designed on both a cluster and linear model. The

[14] The R.V. Standard is as established by Parkland County's Land Use Bylaw and the Alberta Building Code.

following is a description of the individual neighbourhoods within Poplar Springs. A graphical description of the various neighbourhoods in Poplar Springs is provided on Map No. 8: Development Concept Neighbourhood Plan. (pg. 43)

(Poplar Terrace) Poplar Terrace will consist of 31 lots for R.V. use. neighbourhood. Poplar Terrace is located in the southwest portion of Poplar Springs. As described in Section 3.6:Phasing of this Outline Plan, Poplar Terrace will be the first area to be developed within Poplar Springs.

(Poplar Bluff) Poplar Bluff will be developed as an R.V. neighbourhood with 42 lots. The cluster approach in this area will lend itself well to group and extended family ownership with clusters as small as seven 7 lots.

(Poplar Meadows) Located in the southern and southeast portion of Poplar Springs, Poplar Meadows will be one of the last to be developed.

The cleared area in the southeast will be developed for recreational purposes. The type of recreational use will be subject to the needs and desires of the condominium association membership when the land is developed.

A Park Model area which will cater to an adult market will be developed around the clearing. The remainder of Poplar Meadows will be developed for R.V.'s. In total, Poplar Meadows will create 17 Park Model lots and 21 R.V. lots.

(Poplar Place) Poplar Place is a re-configuration of the existing Mortgage Heights neighbourhood with the final development having a total of 55 lots developed for R.V. use.

(Poplar Heights) Poplar Heights is similar to Poplar Place in that it is a reconfiguration of an existing neighbourhood. Poplar Place will consist of 54 lots when fully developed as a replacement for Snob Hill.

(Poplar Ridge) Poplar Ridge is a new neighbourhood that will offer views of Lake Isle in a private setting on land that is partially cleared in its present state. Offering 19 lots, Poplar Ridge is located near the center of the property on higher ground. Much of the area of Poplar Ridge was previously disturbed.

(Lake View) Lakeshore development will take place and include 64 lots constructed over multiple phases. The lots in the northeast portion of Poplar Springs will be the most secluded and private (Lake View East). The west portion (Lake View and Lake View West) of the this neighbourhood will also include marina and other recreational related traffic. These lots will all be developed for Park Model type dwellings.

(Amenity Areas) Poplar Springs will feature a number of amenity areas for park residents. This includes both indoor and outdoor services and facilities. Map No. 9: Development Concept Plan - Amenities (pg. 45), describes some of the planned amenities for the property.

For the outdoor enthusiasts, Poplar Springs will have a number of multi-use trails. The trail routes will be developed in a manner that will be a good recreational resource while minimizing its environmental impacts on nearby environmental reserve areas. Trails will be surfaced with environmentally sustainable and friendly materials such as wood chips, designed to minimize erosion issues. Pet stations will be located in various neighbourhoods.

The condominium association will decide what type of development will go into the cleared area in the southeast portion of Poplar Springs, but this could include a lawn bowling or other outdoor amenity.

Several large gazebos will be developed in various locations within Poplar Springs. Please refer to the following amenities figures for conceptual drawings.

Map # 8

Development Concept

Neighbourhood Plan

Development Stats

RV BLC lots

Lake View	38 units
Poplar Ridge	19 units
Poplar Heights	53 units
Poplar Place	55 units
Poplar Meadows	39 units
Poplar Bluff	43 units
Poplar Terrace	31 units

Lot Unit Types

Park Model	54
RV (trailer, 5thW & MH)	224
R-1 (Managers Residence)	1

Proposed Land Use Stats

Dedications		
Lake Boundary ER	2.73 ha	6.75 acs
Public Road	0.04 ha	0.10 acs
Utility & Easement	0.05 ha	0.12 acs
Protected & ER	12.03 ha	29.97 acs
Roads & Internal Serv	8.45 ha	20.87 acs
Amenity Sites	2.13 ha	5.26 acs
RV BLC Units	9.32 ha	23.03 acs
Common Lands (includes Utility, parking, storage & Trails)	29.70 ha	73.39 acs

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Map # 9
Development Concept Plan
Amenities

Marina
- approx 80-90 slip private, access controlled inland marina
- this will be the only boat access to the lake from Poplar Springs, other than the public launch. (There will be no boat mooring at the exterior of the marina)

Public Boat Launch
- will be installed prior to the entrance into Poplar Springs to provide public access to lake Isl This would occur only if Parkland County deems it to be of benefit to the community.

Rec. Complex
- will be approximately a 740 m2 (8000 ft2) structure
- will house gathering hall, laundramat, food & beverage area, out door patio(s), administration, games and crafts exercise room,

Pool & Spa
- outdoor pool, hot tub(s) and spa area with showers/ washrooms

Quiet Area - Gathering Gazebo

Gathering Area - Gazebo
- 2-3 structures amongst RV lots
- will feature bar-b-que/fireplace
- architectural theme appearance will apply

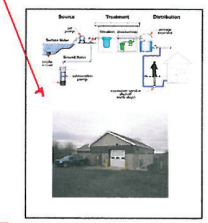
Waste Water Treatment
- will be as more detailed in engineering waste water services report (picture shows typical filter media structure)

Access & Security
- electronic controlled access, - park entrance, buildings marina and emergency services
- 24 hour monitored surveillance camera coverage of site and utility operations
- 24 hour utility, fire and intrusion and climate control monitoring

Water Source & Treatment
- typical well , treatment sand distribution system

Typical RV Park Model BLC Lot

Typical RV BLC Lot



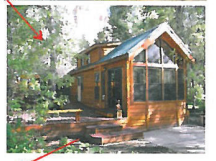


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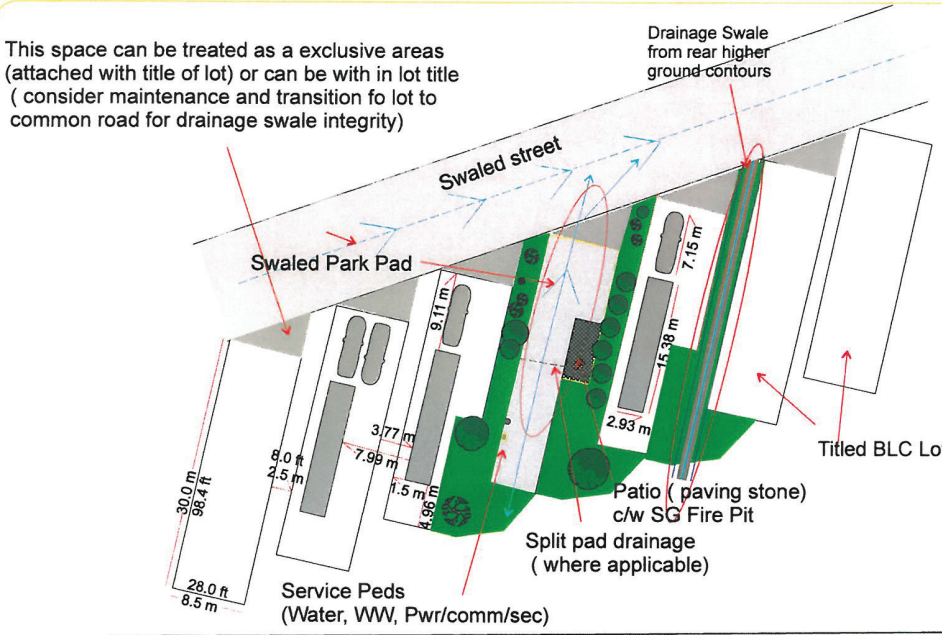
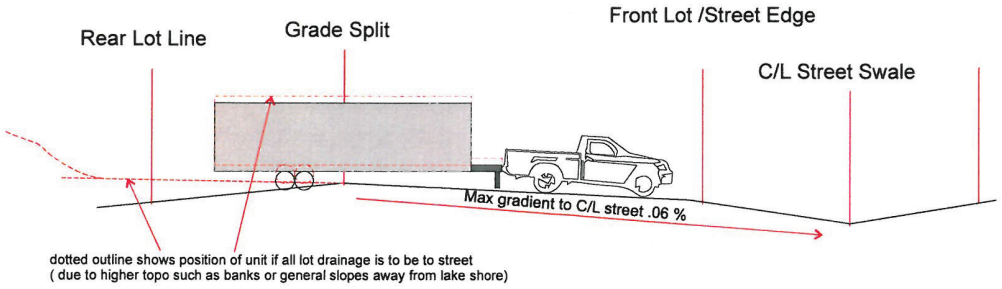
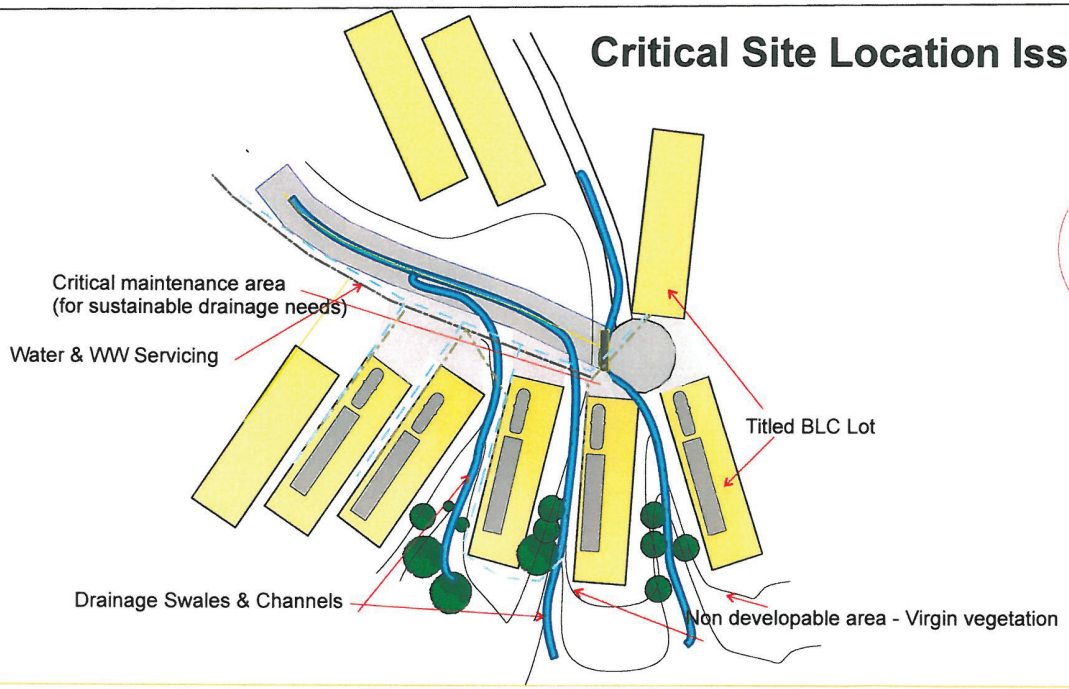
Figure # 2

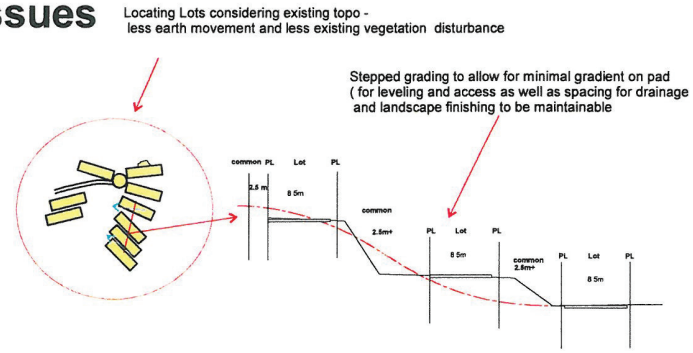
Lot and Servicing Details - Private/Common Lands





Critical Site Location Issues





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Further outdoor recreational development that is not contemplated in this Plan may be developed on appropriate lands at the discretion of the condominium association.

All existing service buildings including the store, maintenance building, coffee shop and community hall be removed[15] and replaced with new structures. This will include:

- a 650 m^2 servicing building that will contain an office, meeting area, shower/bathroom facility, security station and a display area,
- a 465 m^2 area for a future outdoor pool facility, and
- a minimum 0.2 ha. storage compound in several locations for boat trailers and condominium equipment belonging to residents.

A public boat launch is not required for the viability of Poplar Springs. The Norcan Group has contacted Parkland County's Recreation Department to see if there is interest in a launch and parking facility adjoining to Poplar Springs and has to date not received a response.

Should one be desired, a future Municipal Reserve Lot and public parking area on Road Plan 852-1462 could be developed for this use. It is assumed that construction and maintenance of a facility would be determined as part of a development agreement and/or subdivision condition at the discretion of the MPC.

3.3) MUNICIPAL & ENVIRONMENTAL RESERVES

Municipal allocations for reserves will likely take three forms: Municipal Reserves, Environmental Reserves and Environmental Reserve Easements. The distribution and type of reserve will be at the

[15] Existing structures are described on Map No. 4: Consolidated "as-Built" Mapping and in detailed as built drawing supplied to Parkland County.

discretion of the Municipal Planning Commission, but will be based upon the following principles:

- Environmental Reserve to be allocated for all lands that qualify in accordance with the provisions of Part 17 of the Municipal Government Act and Parkland County's Municipal Development and Land Use Bylaw.

- Municipal Reserve to be allocated based upon 10% of the land remaining once all Environmental Reserve allocations have been determined.

It is estimated and will be confirmed by survey that approximately 9.67 hectares (23.9 acres) of land will be dedicated for environmental protection as part of the development of Poplar Springs. These lands meet the criteria provided in the Municipal Government Act and the Parkland County Municipal Development Plan for environmental protection. The form of environmental protection that is best suited for these lands will be determined by MPC as part of a subdivision approval and may include: Environmental Reserve Lot(s) or Environmental Reserve Easement(s).

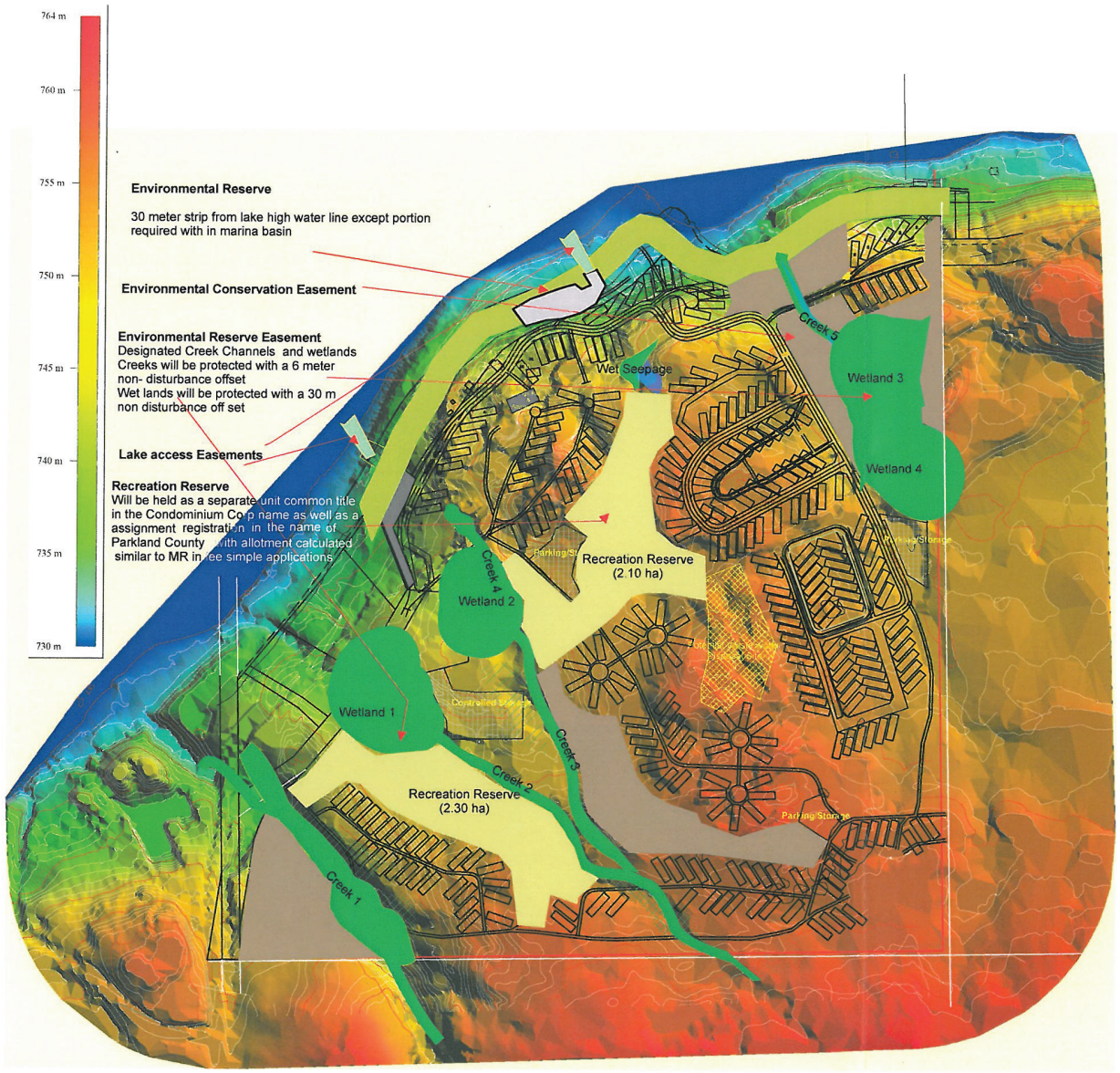
On this basis, it is estimated that approximately 4.4 hectares (10.9 acres) of land will be dedicated for municipal reserve purposes.

(preferred form) Recognizing that the form of allocation is at the sole discretion of the MDP in their role as subdivision approving authority, it is suggested that the following be considered at that stage:

- That environmental reserves other than the lakeshore dedication be in the form of an Environmental Reserve Easement. The primary reason for this is to not permit public access within the gated community.

- That Municipal Reserve dedications, other than what may be required for a public boat launch

Map # 10
Easements & Reserves
Development Constraints Map



Environmental Reserves (2.73 ha)
Environmental Reserve Easements (6.94 ha)
Lake Access Easements (0.96 ha)
Conservation Easements (5.19 ha)
Recreational Reserve/MR equivalent (4.4 ha)

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(marina) A 60 slip inland marina is planned for Poplar Springs. The marina will be accessible to the lake through a channel that will be approximately seven metres in width. The north boundary of the marina will be set back a minimum of six metres from the shoreline. The estimated area for the marina will be about 1944 square metres and have a volume of approx 2320 cubic metres.

The marina will be secured through an electronic gate. Other features will include a boom control system to contain spills, breaker walls, and entrance markers.

The exact approval process for a Marina facility varies depending on the site and the results of the Bio-physical evaluation that is specific to the marina project. Generally, the approval process may take from a half year to three years. A sub-contractor experienced with marina development would be selected to undertake the work required to obtain the necessary approvals.

It is anticipated that consultation/approvals will be required from the following agencies:

- Alberta Sustainable Resource Development for lakeshore disturbance and wildlife/waterfowl/fishery impacts,
- Alberta Environment for water quality issues,
- Environment Canada for wildlife/waterfowl/fishery impacts as well as Species at Risk issues,
- Transport Canada for Navigable Waterways issues,
- Parkland County for overall land use, and
- First Nation consultation where required.

The proponent is prepared to offer compensation and enhancement to off-set impacts of the marina on the natural environment.

Figure No. 3: Marina Concept (pg. 57) provides a conceptual description of the proposed marina facility. The eventual design will be subject to what

is acceptable to all of the applicable approving authorities.

3.6) PHASING

Poplar Springs will be developed in five (5) phases and over a number of years depending on market demand. Each Phase includes both the re-development of existing land and the development of additional lands within the property. A description of each phase is provided below and on Map No. 11: Phasing (pg. 59).

(Phase I) Phase I will consist of the development of the Poplar Terrace community, the water source and waste-water treatment facility.

A total of 31 BRR lots will be created in this phase along with an additional lot for the Water source and treatment facility.

Phase I will also include the completion of the reclamation that is underway for the landfill and lagoon sites. Once the water source is established, all existing wells through Poplar Springs will also be reclaimed.

Though not part of the subdivision process for Phase I, the removal and reclamation activities described in Phase II will begin at this time.

(Phase II) The Lake View and Lake View West area will be developed as part of Phase II.

Prior to development, reclamation/removal and restoration activities will be undertaken. along the Lake View areas. This work may have been initiated as part of Phase I.

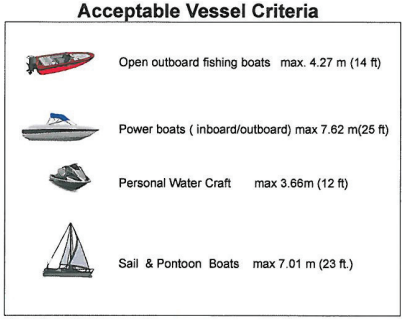
A total of 25 BRR lots will be developed as part of this Phase. An additional lot for the Manager's Residence will also be created. A recreational lot for the recreation complex, pool, spa and community gathering centre will be created during this phase, though it won't be developed until Phase IV.

Figure #3
Marina Concept

No Slips = 60 (can be extended to 90)
Area = 1,933 m2 (20,807 ft2)
Volume = 4,640 m3 (163,860 ft3)

Typical Slip Configuration

Acceptable Vessel Criteria



Marina Cross Section AA

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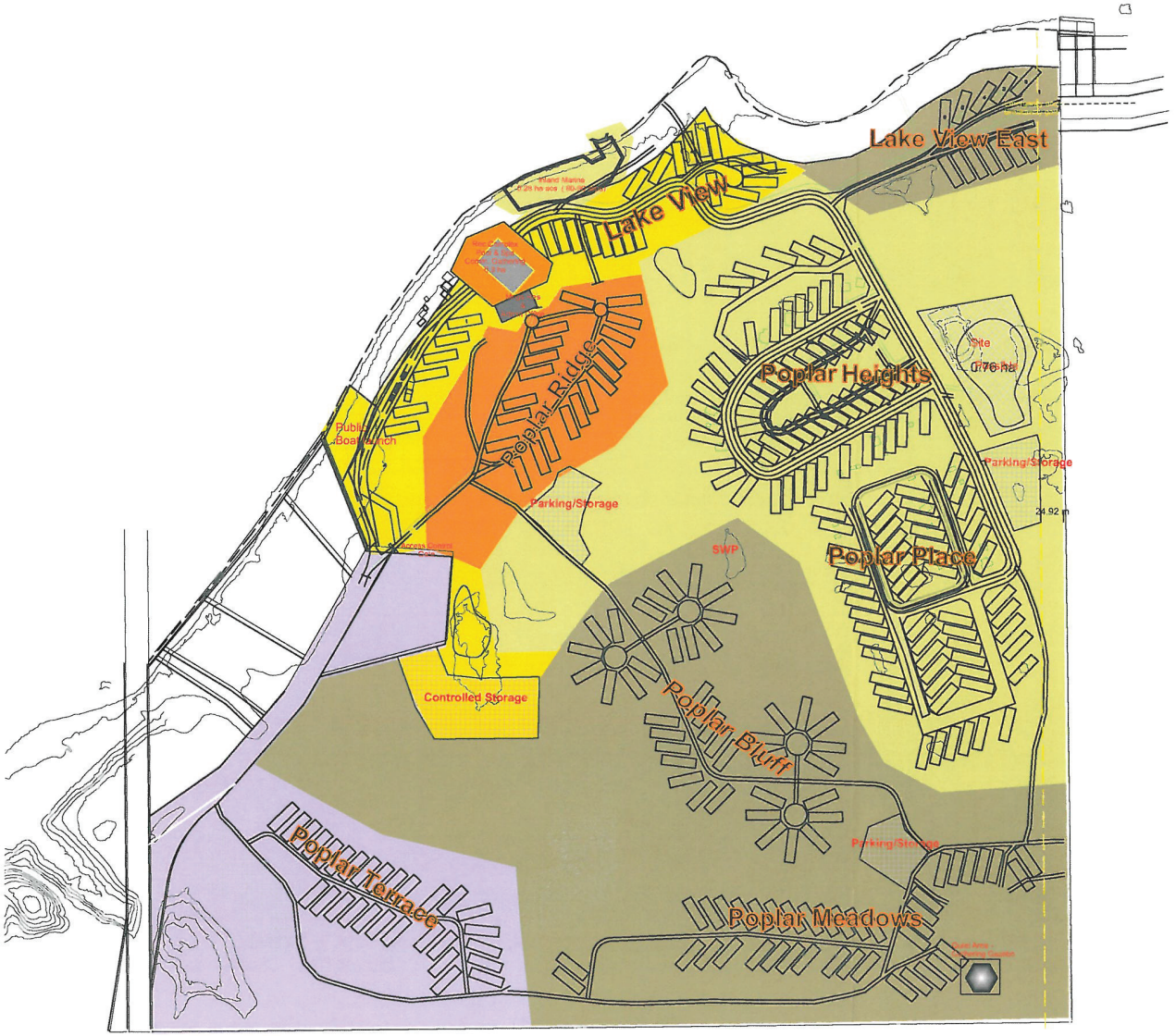
Map # 11
Phasing Plan



Code	Phase	RV	Park Model
	1	29	0
	2	0	26
	3	112	0
	4	20	0
	5	63	28

NC-260 7.4.12, 8.9.12,10.5.12

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This phase will also see the creation of an Environmental Reserve Lot along the lakeshore of Lake Isle.

(Phase III) Phase III will take place with the redevelopment of Snob Hill and Mortgage Heights into the new neighbourhoods of Poplar Heights and Poplar Place for a total of 108 BRR lots.

(Phase IV) Phase IV will include the development of Poplar Ridge with a further 19 BRR lots, the development of the previously created community recreation lot and the development of the marina on its own lot.

(Phase V) Phase V will be the final phase of Poplar Springs and will feature the re-development of the northeast portion (Lake View East) of the lake shore and various neighbourhoods within the central and southeast portion of the development (Poplar Bluff and Poplar Meadows). In total a mix of R.V. and Park Model homes will add an additional 82 BRR Lots.

An additional lot will be created (approx. 2.2 ha.) for the sewage disposal area. Though in Phase V, this lot will be created when the waste water system is constructed, likely in Phase II.

Any other work that is not completed prior to the start of Phase IV will be completed as part of the final phase.

3.7) PLAN STATISTICS

This section details the expected number of seasonal recreational units, population, and land allocation on a phase by phase basis. Please refer to the tables on the following page.

The combined population density at full development is expected to be approximately 556 persons, including the managers residence which could add an additional three persons (on

average).

UNITS BY PHASE			
PHASE	**UNITS**	**RV**	**Park Model**
I	31	31	
II	25		25
III	108	108	
IV	19	19	
V	95	66	29
TOTAL	**278**	**224**	**54**

PHASE	POPULATION[16]
I	62
II	50
III	216
IV	38
V	190
TOTAL	**518**

The following table describes the tentative areas for each land use type within Poplar Springs.

Land Allocation[17]	AREA		
	Ha.	*Ac.*	*%*
Unit Sites	9.32	23.03	17.2
Roads	8.45	20.87	15.6
Utilities/Other	1.78	4.4	3.3
Lake ER Lot	2.73	6.75	5
Public Roads	0.04	0.10	0
Amenity Sites	2.13	5.26	4
Common Lands	29.7	73.39	54.8
TOTAL:	54.15	133.8	100

In addition to the above dedications, a further 6.94 ha. of common land will be dedicated as an Environmental Reserve Easement and 4.4 ha. of common lands will be dedicated as an equivalent to Municipal Reserve.

[16] Population estimates are as follows: All R.V. and Park Models will be calculated at 2 persons per unit and the manager residence'

[17] Numbers are rounded which may lead to totals more than 100%.

3.8) WATER SUPPLY

SD Consulting Group, a partner in the Norcan Group Inc., prepared a desktop and on-site evaluation of the groundwater potential for Poplar Springs in accordance with Alberta Environment guidelines. The on-site investigation was completed in September 2012.

As part of the investigation, three existing water wells located within Poplar Springs were examined. A single well (well #1) located within "Snob Hill" was pump tested for 48 hrs at 104.74m^3/day. Following analysis, a sustainable yield of 122.89m^3/day (18.78gal/min) is anticipated[18].

Operating at full or near full capacity 72 liters/min (16 gal/min), the drawdown of the aquifer is likely to be less than 0.5 metres at a distance of more than 200 metres, and would have no impact beyond 1.4 km (0.87 miles).

It should be noted that during operation the pump would never run continuously as it would over supply the system. The water system would run on a cycle through the day to feed an above ground reservoir as part of a seasonal development.

The water supply system will be installed as part of Phase I and be used to supply the seasonal residents of Poplar Spring. Water haul from this site will be required for sites/lots that are not yet serviced with a private communal water supply system.

3.9) UTILITIES & SERVICING

The Norcan Group Inc. prepared a servicing engineering brief under the partner name, Altime Engineering Limited. The report was prepared in November 2012 and addresses road construction,

[18] S.D. Consulting Group Canada., *GW Supply Analysis Poplar Springs, 10292013*, pg. 4

water and sewer distribution, franchise utilities and storm water management. The servicing report was later amended in October, 2013.

A description of the engineering recommendations is provided below. Figures showing utility network layouts are provided at the end of this section.

(Water) In accordance with the requirements of Parkland County and Alberta Environment, a licensed privately owned and operated piped water source, treatment and distribution system will be created for Poplar Springs.

Water sourcing will be through on-site wells located near the entrance to Poplar Springs. It is estimated that 115.15 m^3 of water per day will be required[19]. This volume of water is sufficient for all BRR Lots, the Manager's residence and all amenity features including the planned swimming pool.

Water sourced on-site will be disinfected and subject to iron removal, which will be done as part of a reservoir storage area adjoining the water wells.

Water will be distributed through a trickle system which will connect a water reservoir to each property. All R.V.'s will be required to maintain an on-site supply of water in their own internal cisterns.

Piping will consist of PE pipe of 50 and 75mm diameter pipe, all installed beneath the frost line (3m below grade) and heat traced.

(Waste Water) Waste water will also be collected and treated through licensed privately owned and operated system, including treatment and disposal of waste water on the Poplar Springs property.

[19] Altime Engineering Ltd, Condensed Servicing Brief, Revised October 2013., Table 1, pg. 6.

It is estimated that at capacity Poplar Springs will generate approximately 128.74 m^3 (28,320 gal)/day of waste water. This waste-water flow includes flows from the R.V. lots, activity centre, manager's residence and other ancillary uses.

Poplar Springs benefits from a partially installed and functioning waste-water system, which will be used to the greatest extent possible.

(Waste Water Treatment & Disposal)

SD Consulting Group Canada Ltd. conducted a detailed analysis of waste-water treatment options for the Poplar Springs development. The following is a summary of their findings.

Waste water treatment will be through a mechanical package plant such as the AdvanTex wastewater treatment system which can be expanded modularly on a phase by phase basis. The treatment site will be located near the entrance to Poplar Springs.

Two disposal areas have been determined from an engineering perspective to be suitable for this project. They are located in the southeast portion of the site in a forested area, away from otherwise environmentally sensitive lands. Each site was selected in part based upon the review of the soils in the Beckingham Report. Mention of specific Beckingham findings is included on page 4 of the SD Consulting Group Report.

It is proposed that a sub-surface disposal system be the best option for waste-water disposal. A three hectare plot of land will be required for this purpose.

(Storm Water)

Storm water management will be focused on the principles of minimizing the amount of disturbance to natural surface drainage patterns and to maximize the infiltration of storm water into the sub-soil and near surface aquifer.

Flows will be directed towards existing wetlands and

proposed storm ponds at various locations within Poplar Springs through the use of natural drainage patterns, swales and roadside ditches.

"Flow control structures will be constructed at road crossings on the downstream end of the storm water ponds. The development as a whole will be designed such that all runoff up to and including the 1:100 year storm event will be contained on site and discharged at predevelopment rates. It is our intent to ensure that development activities are suitable for the wetlands and will not overwhelm their absorptive, sediment-collecting or water-holding capacity."[20]

(Solid Waste) Solid waste will be collected through contract as part of the condominium service and be hauled to a waste transfer station. The nearest transfer station is located at Seba Beach.

(Roadways) Poplar Springs will be serviced by a cold mix surface road network, based upon an 18 metre and 10 metre width. A mix of two way and one way internal roads will be used.

Two way roads will be constructed on a conventional road with side ditch design with 3:1 slopes and a 7.5 metre asphalt top.

Single direction roads will be developed on a centre swale model with a 6.0 metre hard surface

(E.M.S.) A full range of E.M.S. services is available to Poplar Springs with each service available to an acceptable rural standard.

The closest R.C.M.P. station is within the Village of Seba Beach, approximately 7 kilometres (4.4 miles) from Poplar Springs.

[20] Altime Engineering Ltd., NC-260-01 Condensed Servicing Design Brief, October 2013, Pg. 10

Figure # 4

Proposed Development Features

Gathering area, games & Administration

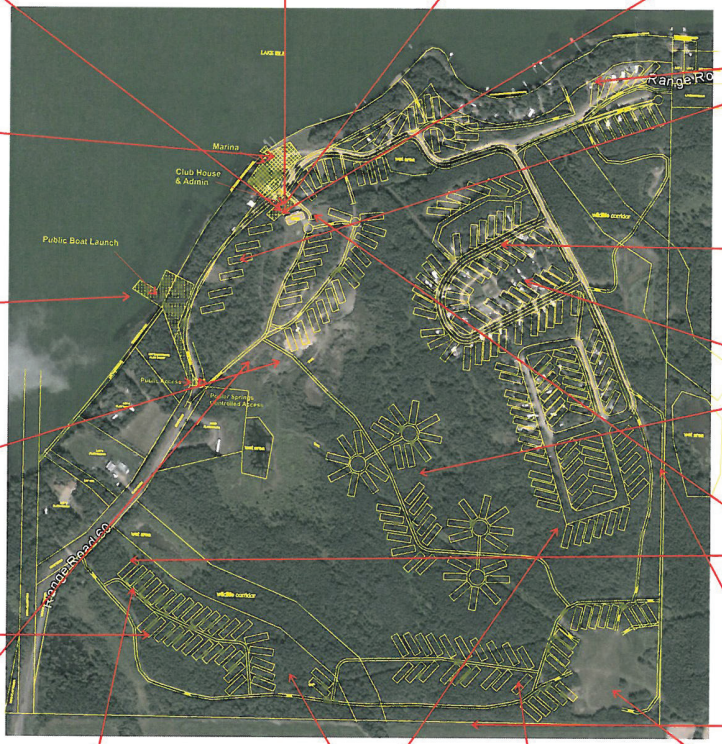
Club House - view from lake side

Pool & Amenity Space - from lake side

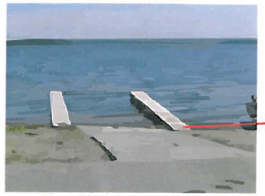
Laundromat facility

Boat Slips in Marina

Typical Park Model setting



RV Lots and Access view from south

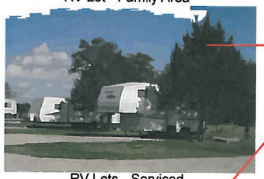


Shared Public Boat Launch

Developed Play Grounds

RV Lot - Family Area

Sports - Volley ball/Badminton Courts



RV Lots - Serviced

Trails - Groomed for Bicycling & Walking

Buletin Board, Solid Waste & Recycle Stations

Pet Station

Wash house / Shower structures

Typical RV Lot - Seniors /Quiet Area

Rest - Areas featuring Group Gazebos

NC-260 10.24.12, 10.25.13

Norcan Consulting Group Inc.

The Norcan Group Inc.

The nearest fire department station is also located within Seba Beach and can provide services to Poplar Springs.

Ambulance services are offered as part of a regional service.

(Postal Services) Other than the manager and condominium association for Poplar Springs, no mail services will be required.

3.10) COMMUNITY SERVICES

Poplar Springs is near, by a rural standard, to a range of commercial, institutional and cultural services.

- Library Services:
  The nearest library is located in the Village of Seba Beach.

- Churches:
  Several churches of various denominations are located in the surrounding area.

- Post Office:
  The nearest post office facility to Poplar Springs is located in Seba Beach.

- Confectionary/Eatery/Groceries:
  The nearest restaurant and grocery facilities are located in Seba Beach.

- Urban Communities:
  Nearby urban communities include:

  - Stony Plain 57 km (45.6 mi.)
  - Edmonton 91 km (73 mi.)
  - Wabamun 23 km (14.25 mi.)

Each of these urban communities offers a wide range of services for residents of Poplar Springs and area.

3.11) LANDSCAPING

The full completion of Poplar Springs will include additional landscaping as part of the development process. Landscaping plans include:

- planting of trees and shrubbery in areas that are lacking vegetative growth. The landscaping will be performed to assist with drainage and the overall attractiveness of the area,
- entrance features including fences, gates and signage, and
- landscaping plans for community buildings.

A pictorial of development features is provided at the end of this section.

(Controls) A landscaping plan will be developed for privately owned properties within Poplar Springs on a neighbourhood basis.

Landscape design plan requirements are provided for in this Outline Plan. Final landscaping plans shall be provided following the survey stage and prior to the commencement of construction of buildings, R.V. pads, or other chattels on the respective neighbourhood.

A simplified neighbourhood landscape plan will be provided as part of the subdivision stage, with the assumption that due to topographical differences from lot to lot that the overall finished landscape plan will vary.

Final landscaping plans may be required as part of the final design process or as part of the development permit process, as applicable. The following are possible elements for inclusion in a neighbourhood landscape plan:

- survey accurate property boundary,
- accurate plot plan of all buildings, shops, sheds, retaining walls, etc.
- screening such as fences or hedges,
- private yard space,
- open lawns,
- building pockets where assigned,
- gardens,
- foundation plantings,
- designated park and forested area,
- designated wildlife spaces and attractions,
- selection of plant species, and
- irrigation systems.

Each recreation unit will be required to limit the disturbed area of the lot to limits imposed by the respective landscaping plan.

(Fire Smart) Fire Smart guidelines will be implemented where practical within Poplar Springs to mitigate wildfire risk from forested areas that are not restricted (i.e, Environmental Reserve Lots/Easements). This will include:

- removal of deadfall and hazard trees a distance of 30 metres to 100 metres from the outer boundary of residential recreational neighbourhoods,
- removal of tree limbs less than 2.0 metres above grade within residential recreational neighbourhoods,
- thinning of trees within the residential recreational neighbourhoods, and
- regular cutting of long grasses and other vegetation in developed areas of Whitewood Village.

The Fire Smart guide as provided by Sustainable Resources Alberta will serve as a handbook for specific measures and will be part of the overall maintenance regime for the condominium association. *http://www.srd.alberta.ca/wildfire*.

(Community All community structures will be landscaped in

Buildings) accordance with Development Permit Approvals and condominium requirements.

3.12) EMERGENCY ACCESS

The existing gate at the northeast corner of Poplar Springs will be re-built in accordance with condominium architectural guidelines. Access will be restricted to E.M.S. and other authorized persons.

3.13) COMMUNITY IMPACTS

Community impacts of Poplar Springs, due to its location are anticipated to be minor in nature, except for generating an increase in commercial service demand from local urban communities.

Poplar Springs will generate no significant additional school student population or mail clients.

Most traffic will naturally be headed southwards towards Highway #16. As stated earlier, the overall impact of Poplar Springs at full development will not require any off-site transportation improvements.

The lake shore will be restored to its natural state and the number of boats allowed at Poplar Springs will be capped to the capacity of the marina.

3.14) FINANCIAL CONTRIBUTIONS

Poplar Springs will contribute 100% towards all on-site improvements, and proportionally towards off-site improvements in accordance with the provisions of the Municipal Government Act.

PART IV: IMPLEMENTATION & AMENDMENTS

4.1) PREAMBLE

This Part of the Poplar Springs Outline Plan discusses the manner in which the Plan would be implemented within the land use planning framework of Parkland County. Part IV includes reference to development transition, conformity to land use plans and Statutory Bylaw, and options to consider for environmental dedications.

4.2) NON-COMPLIANT DEVELOPMENT

As described earlier in this Plan, it is proposed that on a phase by phase basis, non-compliant development will be removed from the property.

In an effort to simplify matters, it is planned to remove all development and structures located on the property with the exception of the residence.

This approach will allow for an orderly transition and compliance with the Municipal Government Act requirement that new lots created through subdivision must be land use compliant.

It is understood that the process for removal of non-compliant development presented in this Outline Plan will be at the discretion of the Municipal Planning Commission.

4.3) MUNICIPAL DEVELOPMENT PLAN

No amendments are required to the Parkland County Municipal Development Plan Bylaw No. 37-2007, as amended, subject to the discretion of Parkland County.

4.4) LAND USE BYLAW AMENDMENT

The subject parcel will have to be re-districted from Agricultural General District (AGG) to Bare land

Recreational Resort District (BRR) to allow for the proposed Poplar Springs Outline Plan to be developed. An amendment application has been submitted to Parkland County. This Outline Plan is intended to support that application.

4.5) CAPITAL REGION PLAN

(Capital Region Land Use Plan)

This Outline Plan has been prepared in accordance with the policies and principles of the Capital Region Growth Plan[21], of which Parkland County is a participant. These land use principles as described in Section 7.6 of the Capital Region Growth Plan are very important to the success of this Outline Plan. In particular, the principle to:

- Preserve and Protect the Environment

is emphasised through the piped privately owned communal water and sewer services, treatment and disposal of waste-water to recharge the aquifer, shoreline and natural land protection.

(Priority Growth Area)

The subject lands are not located within a priority growth area as provided by the Capital Region Land Use Plan.

(REF Review)

This Outline Plan does not propose additional residential growth and is not located near or adjacent to regional infrastructure. In accordance with Section 3.2 of Ministerial Order L026-10 this Outline Plan does not require a Capital Region Board review.

[21] Capital Region Growth Plan, 2009 http://capitalregionboat.ab.ca