

BY-LAW NUMBER 2007/21

BY-LAW NO. 2007/21 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 the Bridges Area Structure Plan in NE 22-46-6-W5M, Plan 7823341, Block 2, Lot 1 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 22-46-6-W5M, Plan 7823341, Block 2, Lot 1.

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 the "*Bridges Area Structure Plan, NE 22-46-6-W5M, Plan 7823341, Block 2, Lot 1*".

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


READ: A First time this 26th day of April, A.D., 2007.

READ: A Second time this 26th day of April, A.D., 2007.

READ: A Third time and finally passed this 26th day of April, A.D., 2007.



REEVE



SECRETARY-TREASURER

AREA STRUCTURE PLAN (ASP)

For

Proposed Subdivision

NE 1/4 22-46-06-w5th

Block 2, Lot 1, Buck Lake Estates Plan 782 3341

41.24 Acres, in the

County of Wetaskiwin No 10, Alberta

RE: File 4509.29S

**Prepared by
Dennis and Hazel Bridges
Owners and Developers
March 27th, 2007**

1. Introduction

We, Dennis and Hazel Bridges, owners of NE 1/4 22-46-06-w5th, Block 2, Lot 1, Buck Lake Estates, Plan 782 3341 are proposing to subdivide our 41.24 acres into eighteen Country Residential lots. Lot sizes will be two + or - acres. Lots will be properly surveyed and registered by an Alberta Land Surveyor.

The lots will be served by two internal access roads from Buck Trail. The proposed design shows two cul-de-sacs. The cul-de-sac to the west serves a total of eleven lots and the one to the east serves seven lots. The two cul-de-sacs will be connected by a 4-meter walkway.

An Area Structure Plan (ASP) is required by the County of Wetaskiwin before Council will approve a rezoning or subdivision that will lead to there being more than three parcels.

This ASP has been prepared based on information obtained from West Central Planning Agency, County Development Officials, Public Works, Fire Chief, Hydrogeological Consultants Ltd., Sabatini Earth Technologies Inc., EXH Engineering Services Ltd., H. Rasmussen, P. Eng., and Adjacent Landowners.

From our Council Meetings of November 9, 2005 and August 10, 2006, issues and concerns have been brought to our attention. Since then we have had consultation meetings with Development Officials and Engineers. All issues have been addressed with resolutions.

The issues of concern were:

1. Public Participation Process,
2. Road Access,
3. Water Supply,
4. Storm Water Management,
5. Fire Protection,
6. Lake Access.

On October 10th, 2006, we had a meeting with County Officials, H. Rasmussen, P. Eng., and EXH Engineering regarding our storm water management plan and together had resolved the issues of concern. On October 31st, 2006, our storm water management plan was again reviewed by Administration and EXH Engineering with further recommendations and comments. At this time all comments and recommendations have been included in this ASP. The additional storm water management plan will be a detailed design showing all ditch gradients and culvert inlets/outlets to Buck Lake and will be submitted and signed by a professional engineer registered with APEGGA, and will be provided to County Officials at the time of construction of the subdivision. After consultation with our Engineer and County's Engineer and Alberta Environment's guidelines, we feel we have an excellent storm water concept plan ensuring the least impact on Buck Lake. We have designed a very safe and user-friendly subdivision for new homeowners as well as existing landowners.

2. Existing Conditions

This land is located in Buck lake Estates 3km north of the Hamlet of Buck Lake, Alberta.

Map 1

2.1 Site Characteristics

The subdivision contains contours, which show a gradual slope down to the lake with no appreciable areas of trapped drainage. Percolation tests and groundwater reports are on file. This property is located just behind the lakefront subdivision of Buck Lake Estates, on Buck Lake's west side. This attractive property includes heavily wooded areas, composed of native species of mature spruce, balsam poplar and aspen, mixed with meadow lands. The south portion of the property has a view of Buck Lake. This is one of the last remaining undeveloped treed areas along Buck Lake's west shore. All of the proposed land on Block 2 Lot 1 has excellent building conditions.

2.2 Use of Surrounding Lands

The quarter NE 1/4 22-46-06-w5th now referred to as Buck Lake Estates was subdivided in 1976. A single row of 29 half-acre lake lots were created. They were separated by a 60-meter reserve with the remainder of the quarter left as a single tree covered parcel, Block 2 Lot 1, consisting of 41.24 acres, under County of Wetaskiwin file RW/76/115.

The adjacent quarter SE 22-46-4-w5th known as Heritage Estates was subdivided in 2002 to create lakeshore lots.

Other adjacent quarters are subdivisions, residential acreages and agriculture.

2.3 Former Land Use

This land was originally zoned recreational and was purchased with the intent to subdivide. In 1988, we had the land rezoned to agricultural for grazing purposes. There is no evidence of any contamination to the soil.

2.4 Present Land Use

The use of this land at the present time is sitting dormant. As seen from the attached map, this property consists of heavily wooded areas, mixed with meadow lands. This property has ideal conditions for county residential lots. **Map 2**

2.5 Historical and Archaeological Features

In rural areas of Alberta, features of historical and archaeological interest are usually found adjacent to lakes and rivers, on hilltops, and on land that was cleared before the time of white settlement. It is extremely unlikely that the subject land contains any features of historical and archaeological interest. However, as required by the provincial Subdivision and Development Regulations, a copy of this document will be sent to the Historical Resources Division of Alberta Community Development with a request for comments.

3. Provincial Regulations Affecting Development

There are no pipeline right-of-ways, landfills, sewage treatment, lagoon storage, sour gas installations, livestock operations or airports to restrict development on the proposed land of Block 2 Lot 1.

4. Proposed Subdivision Design

The layout of the proposed subdivision is shown on the sketch design.

See Appendix 'A' 1) copy of the proposed design

The design shows eighteen lots of varying sizes of two + or - acres, divided into two cul-de-sacs. The cul-de-sac to the west serves 11 lots and the one to the east serves 7 lots. The two cul-de-sacs are connected by a 4-meter walkway.

A design with cul-de-sacs, i.e., no "drive through" has several advantages:

- cul-de-sacs provides a more secure community (no "escape" route for people with criminal intent driving in),
- families with children find cul-de-sacs more desirable for safety and secure reasons,
- cul-de-sac designs reduces the flow of traffic substantially, a 'no through' road discourages outside traffic,
- cul-de-sac slows down the traffic, less risk of speeding with shorter roadways,
- with slower speed, there will be less dust,
- cul-de-sac design with walkways will provide safer pedestrian traffic for the new residents and also the adjacent landowners,
- cul de sac design distributes the traffic more evenly,
- the cul-de-sac roadway ditches are shorter, which keeps the storm drainage nutrient load down to a minimum, with less erosion and sedimentation flowing into Buck Lake.

4. Proposed Subdivision Design cont'd

There are numerous examples of cul-de-sacs (dead end roads) within the County of Wetaskiwin, including subdivisions in the Buck Lake area, i.e. Trails of Minnehik - 11 lots, Heritage Estates - 15 lots, Oakes Bay - 9 & 11 lots, Sunset Bay 13 & 14 lots. It is also noted that there are several cul-de-sacs in other areas for example in the City of Edmonton and the County of Strathcona which allows 13 lots or more per cul-de-sac with no vehicle emergency exits.

See Appendix 'A' 2) copies of existing subdivisions with cul-de-sacs

This proposed design will be properly surveyed by an registered Alberta Land Surveyor so there will be no conflict with any existing driveways. The cul-de-sac lot frontages will be adjusted to accommodate minimum county requirements. We have over dedicated a 7-meter MR buffer in the front along Buck Trail and in the proposed design we have incorporated internal pedestrian walkways for all residents of Buck Lake Estates.

4.1 Municipal Reserves

In addition to the MR- 35 (19.13 acres) already supplied by the existing subdivision that was created in 1976, the developer will over dedicate to the MR, a 7-meter buffer adjacent to Buck Trail to preserve the natural forestation. They will also dedicate 4-meter internal walkways, (both are shown on the proposed design).

4.2 Road Access

The developer will provide a contribution of \$2000.00 per lot (\$36000.00) toward the maintenance of the road (Buck Trail) providing access to the development area. Upon county approval of this proposed subdivision, the developers at their own expense will complete the internal cul-de-sac roads built to County standards with a paved surface. After completion of the cul-de-sac roadway construction, the developers are requesting that pavement to commence once 75% of the proposed lots are developed.

There will be two cul-de-sacs, each large enough to accommodate a minimum turning radius of 15 m and with ditches and slopes to County Standards. Each cul-de-sac road will be 20 meters with a 5-meter utility easement on each side. The proposed development will have road right-of-ways and utility right-of-ways which will accommodate any future sewage collection and line installations for compatible future corridors. Any holding tank will be between the house and the street with sewage flow by gravity to the tank. A covenant will be registered against each lot to provide provisions for future sewer access.

**See Appendix 'B' reference to item #2 of County letter, dated November 16, 2005
reference to Council meeting of August 10, 2006**

4.3 Water supply

The developer was asked to provide an updated report by a professional engineer complying with Section 23 of the Water Act confirming that there is enough groundwater to supply the new lots.

See Appendix 'B' reference to item #3 of County letter, dated November 16, 2005

A aquifer evaluation report prepared by Sabatini Earth Technologies Inc., May 24, 2006 confirms adequate water quantity complying with Section 23 of the Water Act., allowing each of the proposed lots the option of an individual well with no adverse impact on existing wells.

See Appendix 'C' copy of Sabatini Earth Technologies Inc - Aquifer Evaluation Report

4.4 Sewage Disposal

As shown on the attached lot layout plan, all lots in the proposed subdivision exceed two + or - acres in size and have a frontage exceeding 40m, except on cul-de-sacs. Where the lot frontage is less than 40m on cul-de-sacs, the average lot width exceeds 40m. Therefore, in accordance with County of Wetaskiwin guidelines for development near lakes, a piped sewage disposal system is not required at this point in time.

There is no sewer trunk line in the vicinity of the proposed development. The proposed development has road right-of- ways and utility right-of-ways which will accommodate any future sewage collection and line installations for compatible future corridors. In order to accommodate any future piped sewage system, it is proposed to include a 5m utility casement on each side of the 20m road right-of-way. Any holding tank will be between the house and the street with sewage flow by gravity to the tank. A covenant will be registered against each lot to provide provisions for future municipal sewer transmission lines. The County may require to have registered on title an agreement regarding sewage disposal.

4.5 Soil Quality

A soils report, prepared by Hydrogeological Consultants Ltd., indicates that all 7 test holes, drilled within the NE 22, were dry with the exception of one hole that showed water at 2.1m (7') depth within 24 hours of drilling. It is therefore concluded, that the water table throughout the proposed subdivision is below 2m, measured from the surface.

4.6 Storm Water Management

The subdivision contains contours, which shows a gradual slope down to the lake with no appreciable areas of trapped drainage. Storm water run off is not expected to be significantly higher after development. Roads and roof shed will be less than 10% of total area with the remainder of land in grass and trees.

At the time of application for subdivision, the developer will provide a properly engineered storm water management plan, and build any necessary detention ponds and off-site improvements to drainage.

See Appendix 'B' reference to item # 4 of County letter, dated November 16, 2005

Council meeting of August 10, 2006 requested that developer provide a storm water management plan. David Blades, H. Rasmussen, P. Eng., and ourselves had a meeting on August 11, 2006. Our engineer Henning Rasmussen had a site visit and revealed some problem areas regarding the storm water drainage.

A letter, dated August 23, 2006, was submitted to the County of Wetaskiwin by our engineer, Henning Rasmussen. The letter was written in response to the County's request at a meeting on August 11, 2006.

Another consultation meeting was held again on October 10, 2006 with David Blades, Fire Chief, Ken Carlson, H. Rasmussen, P. Eng., Colin Anderson with EXH Engineering, and ourselves regarding the storm water management plan.

Results from this meeting was consenting recommendation to lower the south ditch from the existing outlet at Block 1, lots 15/16 past the high point around Block 1, lots 19/20/21, in order to direct all of the ditch flow towards the east via the fire pond and MR towards the lake. The current difference between shoulder of road and south ditch bottom at the high point (Block 1, lots 19/20/21) is approximately 1.0m. By reversing the ditch flow and lowering the south ditch, the height between shoulder of road and the proposed ditch bottom will be approximately 1.8m at the high point, which will also become the point where the south ditch will be at its deepest. The south ditch grade from the existing outfall at Block 1, lots 15/16 will be 0.3% over approximately 250m. Such a flat grade will, of course, require careful construction. However, a relatively flat grade may be considered advantageous as it will decrease the flow velocity and thereby the risk of erosion. Reversing the ditch flow and letting all the runoff flow east, in combination with the closure of the outlet at Block 1, lots 15/16 will be the best solution to the management of the storm drainage. The existing ('non-existing') southwest ditch along Block 2, lots 2 and 3 needs to be lowered and there is a need to clean out and possibly reconstruct the ditch through MR-35 towards the lake. It will comply with Alberta Environment guidelines.

With regards to ensuring adequate quality of runoff, it is suggested that the fire pond/storm wet pond, as a retention and catchment facility would go a long way towards addressing any concerns.

4.6 Storm Water Management cont'd

Inflow from south ditch along Buck Trail will drain into the fire pond from the north side of the fire pond access road and the overflow outlet from the fire pond will cross the fire pond access road and continue draining along the south ditch to MR-35 to the lake. Any sediment will be trapped in the fire pond/storm wet pond. There is an interceptor ditch along the back side(west) of Block 2, lots 2 & 3 and proposed lot 17. Lot 17 will have a registered easement for the interceptor ditch.

Additional information requested by County Administration was submitted by Henning Rasmussen, November 18, 2006, in regards to the:

STORM WATER DETAIL AT BUCK LAKE TRAIL

ABUTTING AND WITHIN MR 35

A letter, dated August 23., 2006, was submitted to the County by the Developer's Engineer as requested by the County's Director of Development. The letter outlined the storm water drainage concept for the above subdivision. Also, a meeting was held with the County on October 10., 2006. The meeting was attended by the County's Director of Development, the County's Fire Chief, the County's engineering consultant, the Developer (Mr. And Mrs. Bridges) and the Developer's engineering consultant. The Developer left the meeting with the impression that the drainage concept plan, as outlined by the Developer's Engineer, was acceptable to the County.

However, the County has in an e-mail to the Developer, dated November 14., 2006, requested further detail on the storm drainage, especially with regards to flows across MR 35. The e-mail – among other items – specifically states:

“ Flow calculations need to be estimated for the storm water exiting the storm/fire pond, exiting the Buck Trail cul-de-sac to lot 35 MR and from 35 MR to the lake. This will help determine what needs to be provided for proper storm water flow management through lot 35 MR. (refer to first paragraph, page 4. Henning Rasmussen's August 23., 2006 letter). What will be necessary for storm water management at the Buck Lake Trail cul-de-sac and MR 35 must be better defined than currently stated.” (end of quote)

The following information is considered supplementary to the information provided in the letter to the County, dated August 23., 2006.

4.6 Storm Water Management cont'd

Storm Flows:

The total flows from the proposed subdivision and contributing adjacent area is estimated at approximately 0.55 cubic metre/sec. for the 1 in 100 year rainstorm at the point of the proposed fire pond. (It is noted that a more exact value cannot be determined until the final road/ditch design stage).

The fire pond – and ditch leading into the fire pond – will have a relatively large retention capacity and will be able to handle the storms with duration of 20 – 40 minutes and with intensity of 60 – 80 mm per hour such as may occur during the 1 in 100 year storm. The pond inlet/outlet pipe and the road intersection culverts along Buck Lake Trail will be 600 mm dia. that will ultimately reduce the above maximum flow to approximately 60 – 80 % of the contributing flow, depending on the HW/D ratio. It may be advantageous – depending on the detailed design – to reduce the diameter of the pond outflow pipe to for example 500 mm dia.

Details re. proposed ditch along lots 2 and 3

The existing roadway ditch along lots 2 and 3 will be lowered by 0.4 – 0.7 m and the existing driveway culverts to these two lots will be replaced with 600 mm diameter CSPs, which will handle the outflow from the fire pond/retention pond of less than 0.35 cubic metre/second. The existing 500 mm CSP at the end of the Buck Lake Trail cul-de-sac (the emergency access) will also be replaced by a 600 mm dia CSP.

Details re. ditch across MR 35

The storm run-off currently flows across MR 35 through a shallow ditch that is not well defined. The Developer intends to improve the drainage by excavating a ditch across MR 35 towards the lake along the south boundary of NE 22, across the road allowance and the ER in SW 23 towards the lake. The cross-section of this ditch is shown on the attached concept sketch. Appropriate geotextile silt fences will, of course, be applied during – and immediately following – construction, in order to prevent sediment washout into the lake.

A concept plan, showing the proposed flow pattern is attached.

We believe that all of the above – with the exception of the flow volumes – was explained at our meeting at the County office on October 10., 2006.

Edmonton, November 18., 2006

Henning F. Rasmussen, P. Eng.

4.6 Storm Water Management cont'd

The following information was provided to the Developers by EXH Engineering:

BUCK LAKE MULTI-LOT RESIDENTIAL STORM WATER MANAGEMENT PLAN REVIEW

EXH Engineering Services Ltd. (EXH) has reviewed the revised information provided for the storm water management plan for this proposed subdivision and has the following comments:

- 1) We recognize that the information submitted is conceptual in nature and therefore would not have the required detail to fully or adequately review the proposed system. The plan provides a conceptual basis for the proposed system and as such the amount of detail provided is adequate. The overall concept appears feasible subject to further detailed engineering. Further detailed engineering would be required to be submitted and properly reviewed before any approvals are issued for construction of the works.
- 2) Further details must include any design information on how the proposed system will meet County and Alberta Environment guidelines for storm water management. The provincial guidelines deal with water quantity impacts on adjacent and downstream lands and potential water quality impacts on Buck Lake. It is suggested that the proponent and their consultant review Alberta Environment guidelines to ensure these proposed works meet these requirements.
- 3) Further details on the ditch gradients and culvert inlets/outlets to Buck Lake should be included in the detailed design.
- 4) The further engineering details must be presented in a report/letter format with accompanying plans. The report and plans must be signed by a professional engineer registered with APEGGA.
- 5) The proponent must ensure that they have obtained consent or easements from all landowners impacted by the works up to the shore of Buck Lake.
- 6) This proposed system may require an approval pursuant to the Water Act and/or Public Lands Act and it is recommended that the proponent contact Alberta Environment regarding the requirements for this approval.

If you have any questions, please call me at 403-342-7650.

Sincerely

Gordon J. Ludtke, P. Eng.
EXH Engineering Services Ltd.

4.6 Storm Water Management cont'd

The Developers will provide an additional detailed storm water management plan showing all ditch gradients and culvert inlets/outlets to Buck Lake and will be submitted and signed by a professional engineer registered with APEGGA, and will be provided to County Officials at the time of construction of the subdivision. Alberta Environment has been contacted and they welcome additional quality runoff water into Buck Lake. The Developer ensures all construction will comply with County Standards, Alberta Environment guidelines and all approvals.

The Developer also proposes to distribute pamphlets and brochures, prepared by Nature Conservancy Groups and the Alberta Government to all new lot owners, outlining Best Management Practices for runoffs, including recommendations to limit the use of fertilizers and herbicides and on proper landscaping.

See Appendix 'D' **1) copies of all H. Rasmussen's engineered Storm Water reports and concept plans,**
2) Buck Lake Multi-lot residential storm water management plan review by EXH Engineering.

4.7 Fire protection

The proposed land is less than 10 km from the fire hall near Alder Flats, Alberta, so response times are expected to be good.

The fire pond / storm wet pond will be properly designed and situated accordingly, with the engineered storm water management plan, County of Wetaskiwin Public Works and Fire Chief.

Developer will provide a fire pond to specifications and satisfaction of the County Fire Chief. The specifications for fire pond as provided by the County Fire Chief - Ken Carlson will contain 4000 gallons per lot x 18 lots = 72,000 gallons plus allowance for 3 feet of frost top for approx 100,000 gallons winter storage. The fire pond will be setback a minimum 30 meters from road allowance and a minimum 6 meters from adjacent property lines. All season 7.3 meter road top, with road access easement for the fire dept will be provided. The fire pond will be on a public utility lot – county owned. Fire pond location is shown at the east end on lot 18 of the proposed design. The fire pond / storm wet pond will be fenced with a 6 x 6 mesh wire fence, 6 feet high with appropriate signage.

See Appendix 'B' **reference to item #5 of County letter, dated November 16, 2005**
reference to Council meeting of August 10, 2006

See Appendix 'D' **enlarged detailed drawing of fire pond**

4.8 Policing

The proposed subdivision is policed by the County of Wetaskiwin Constabulary and the Breton RCMP Detachment.

5. Lake Access

The total municipal reserve access is 192', which is more than adequate for eighteen lots. The developer will provide and construct a usable access to the lake. Any usable access shall be undertaken in an appropriate manner that still ensures the watershed and habitat management intent of the Lot 35 MR. The access will be provided in the form of a pedestrian walkway accessible by the public from the south east end of Buck Trail through the south east portion of Lot 35 MR to the lake within NE 22-46-6-W5M to the County's satisfaction. The access will be constructed to the same standards as our planned internal pedestrian trail systems.

See Appendix 'B' reference to item #6 & 7 of County letter, dated November 16, 2005

See Appendix 'E' highlights in green shows an internal pedestrian walkway with lake access

6. Proposed Zoning

The developer requests Country Residential zoning for the entire 41.24 acres with intention to apply for a subdivision of 18 lots, each lot being approximately 2 (+ or -) acres. This rezoning will contribute a substantial revenue for the County of Wetaskiwin ensuring road maintenance and upgrades.

7. Public Participation Process

The owner/developer will rely on the County of Wetaskiwin advertising and public hearing process to gather input from the public and will be available to respond to questions and concerns of adjacent landowners.

From our meeting of November 9, 2005 with the County of Wetaskiwin, concerns from adjacent landowners were raised.

In May of 2006, the Developers met one on one with the adjacent landowners regarding all their concerns. Concerns and issues were addressed with positive results. No other concerns were expressed.

In our revision of the ASP for meeting August 10, 2006, we attached copies of the letters from the adjacent landowners with their concerns and included our comments resulting from our meeting with the landowners.

See Appendix 'B' reference to item #1 of County letter, dated November 16, 2005

See Appendix 'F' copies of adjacent landowners' letters

APPENDIX LIST

Map 1 **Buck Lake Estates**
location of our proposed plan

Map 2 **air photo showing wooded and meadow areas**
with our proposed design as an overlay
(sorry overlay is a bit off)

Proposed Subdivision Design

Appendix 'A' 1) our proposed design
2) copies of existing cul-de-sacs within the County of Wetaskiwin

Issues from Council Meetings

Appendix 'B' copy of County letter dated November 16, 2005 outlining issues
from County meeting of November 9, 2005, and issues from
August 10, 2006 Council meeting

Water Supply

Appendix 'C' copy of Sabatini Earth Technologies Inc.,
Aquifer Evaluation report dated May 24, 2006

Storm Water Management

Appendix 'D' 1) copy of H. Rasmussen, Engineer Report dated August 23, 2006,
copy of ditch profile, copy of cross-section, copy of direction of
drainage flow, Storm water detail dated November 18, 2006 with
drawing of the drainage ditch concept across MR 35 towards Buck
Lake
2) copy of EXH Engineering - comments

Fire Protection

Appendix 'D' enlarged detailed drawing of fire pond

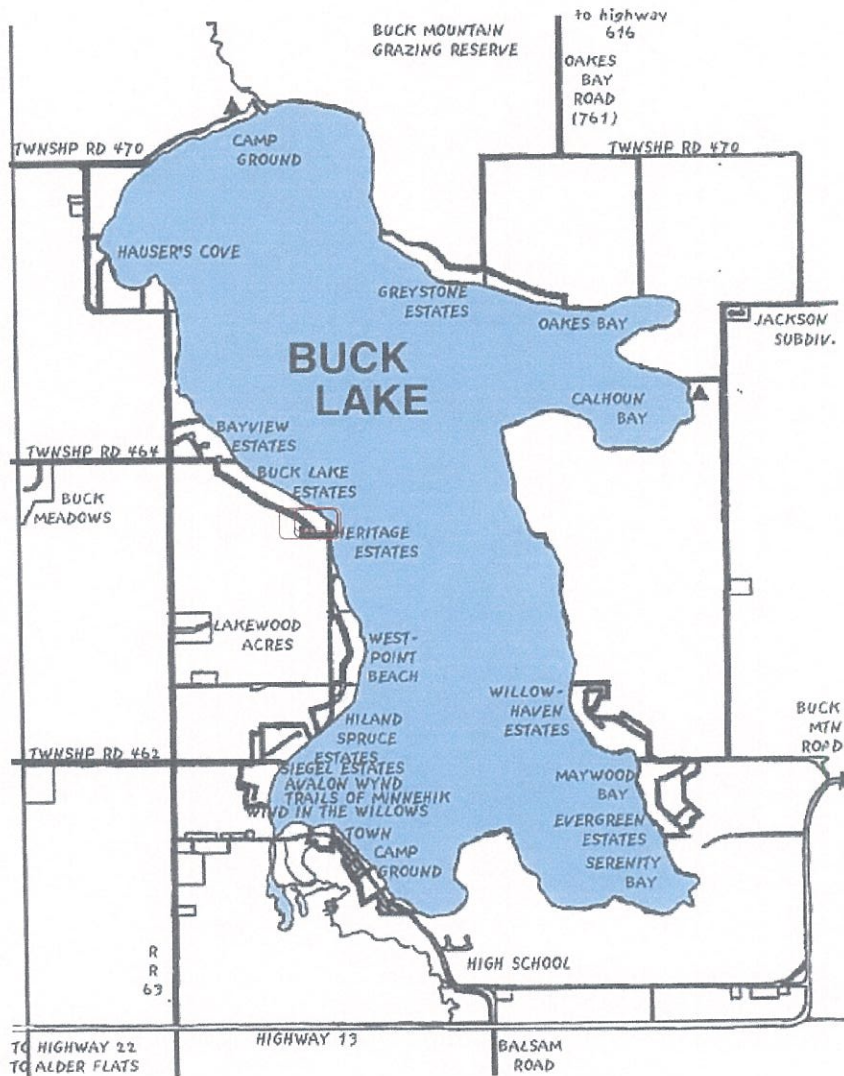
Lake Access

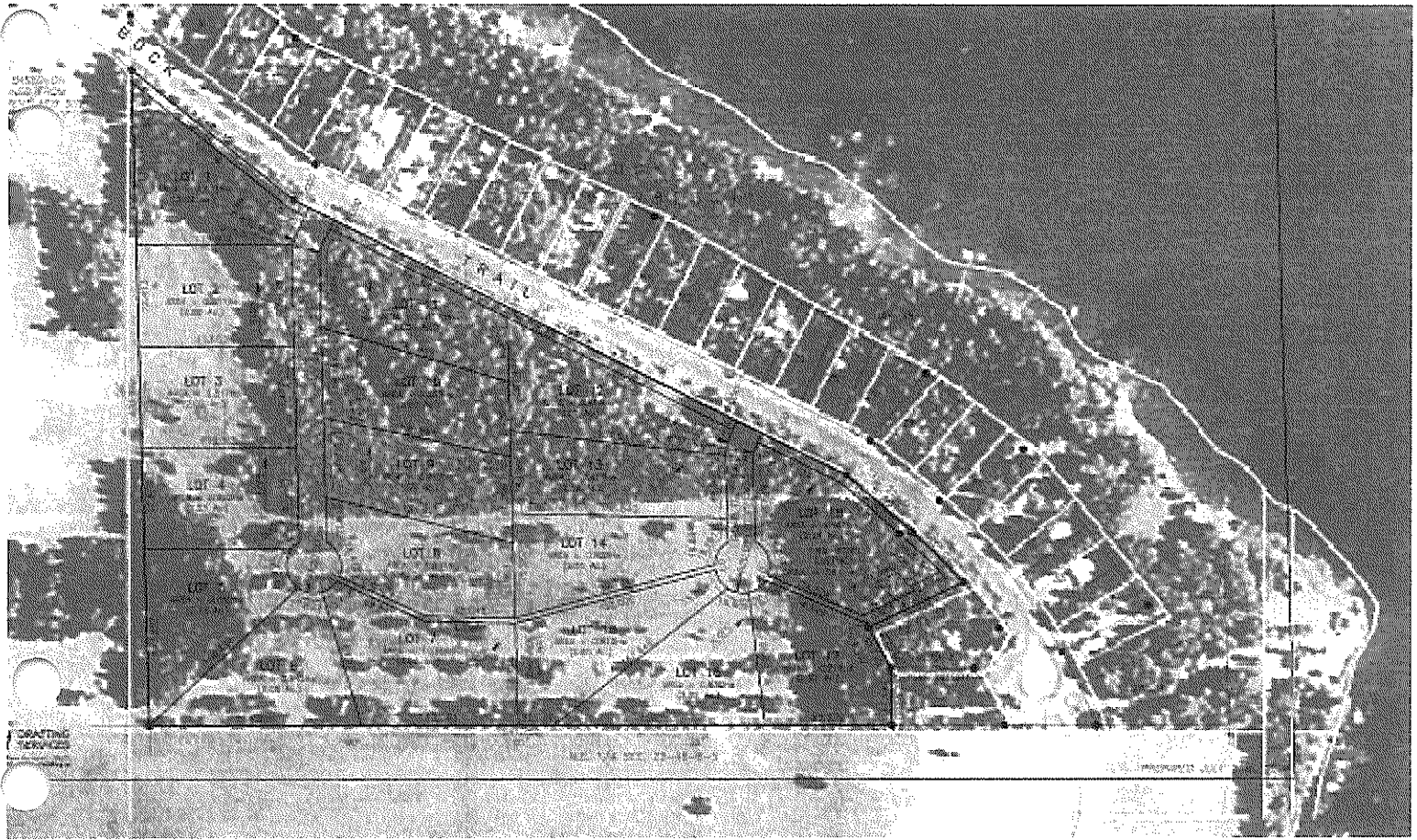
Appendix 'E' our proposed plan showing the internal pedestrian walkways
with lake access, **highlighted in green**

Public Participation Process

Appendix 'F' adjacent landowners' letters with comments from our visit with
them regarding their concerns

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KATHY SCHWENGLER, BUCK LAKE AND

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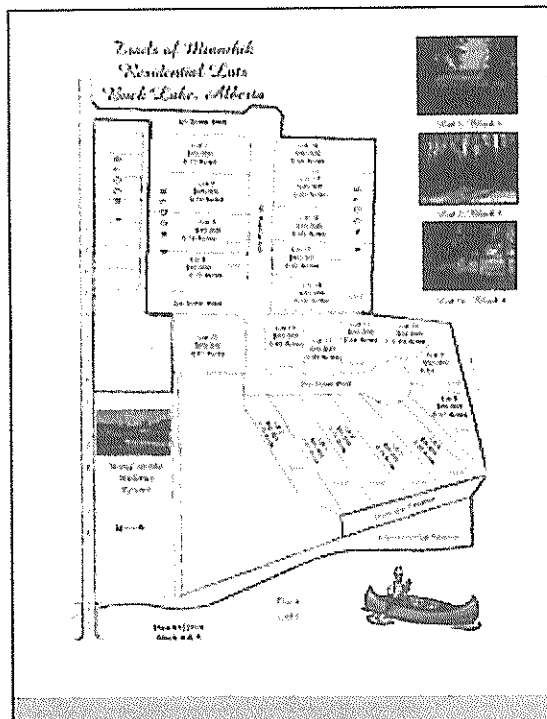
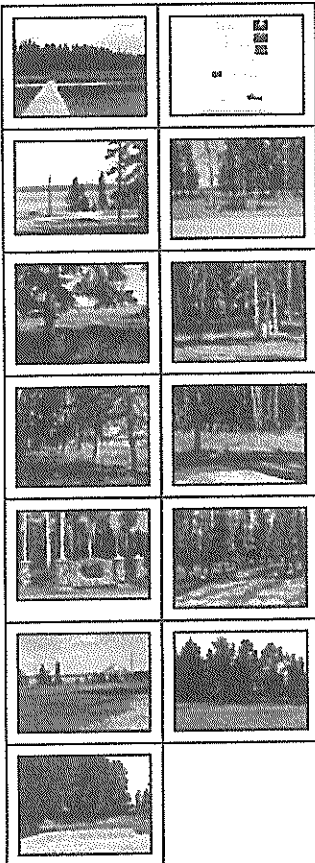
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Photo Gallery

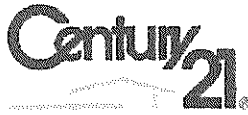
Buck Lake (Trails of Minnehik)

SOLD \$40,000 SOLD OUT

Click thumbnails to Enlarge.



TrailsOfMinnehikScan2



KATHY SCHWENGLER, BUCK LAKE AND

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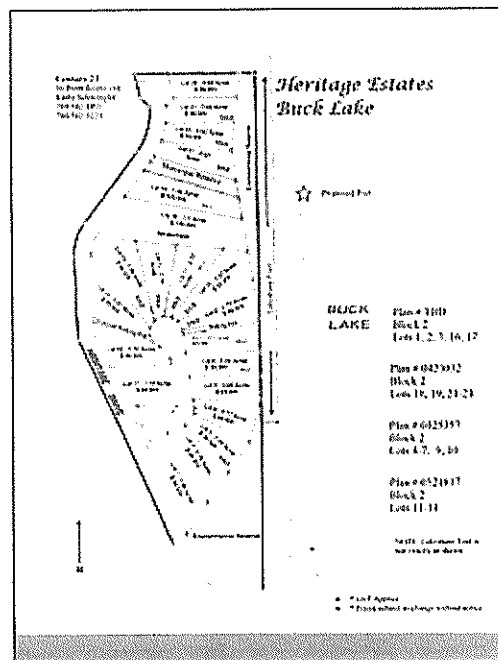
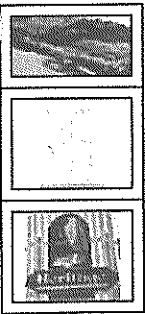
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Photo Gallery

Buck Lake (Buck Lake)

MLS® \$39,900 44,900 to 109,900 + gst

Click thumbnails to Enlarge.



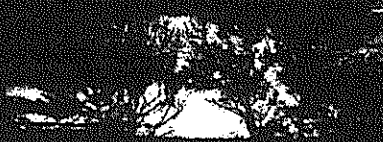
Heritage Estates R08

Point2
Agent PROFESSIONAL
MEMBER

Powered by Point2 Real Estate Websites

OAKES BAY

ESTATES



Owned & Developed by
Buck Lake Developments Ltd.

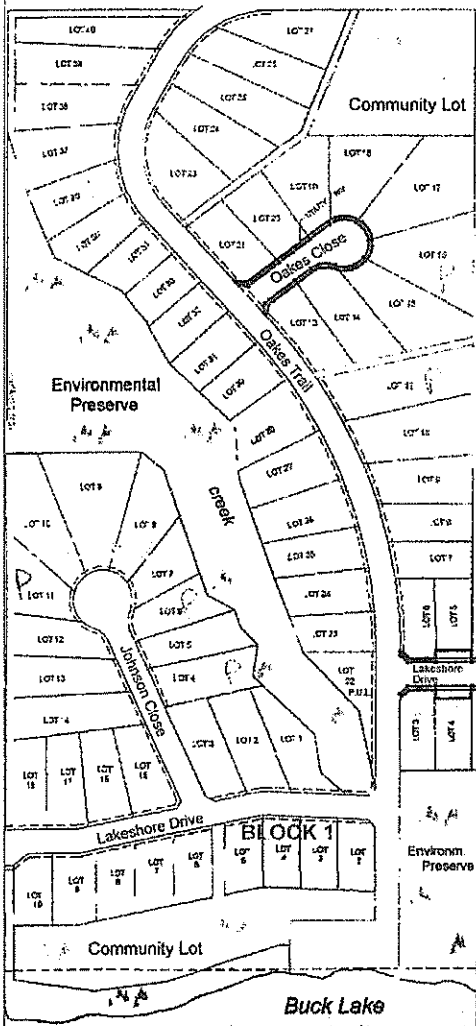
Karen & Len Johnson

Ph/Fax: (780) 682-2066

Email: bucklakedevelopments@telus.net

www.bucklakedevelopments.ca

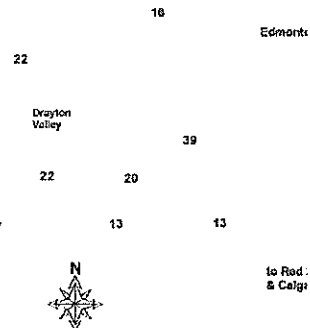
cell: (Karen) 780-898-9111 (Len) 780-898-9123



On beautiful Buck Lake, set amidst gently rolling hills in the County of Wetaskiwin, 105 km southwest of Edmonton.

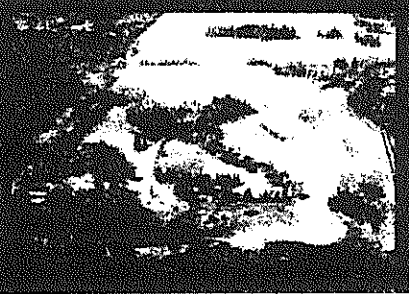
Nearest large population centre is the town of Drayton Valley, 45 km to the northwest.

Buck Lake is popular for swimming, water skiing, sea-doing, boating, fishing and just enjoying nature



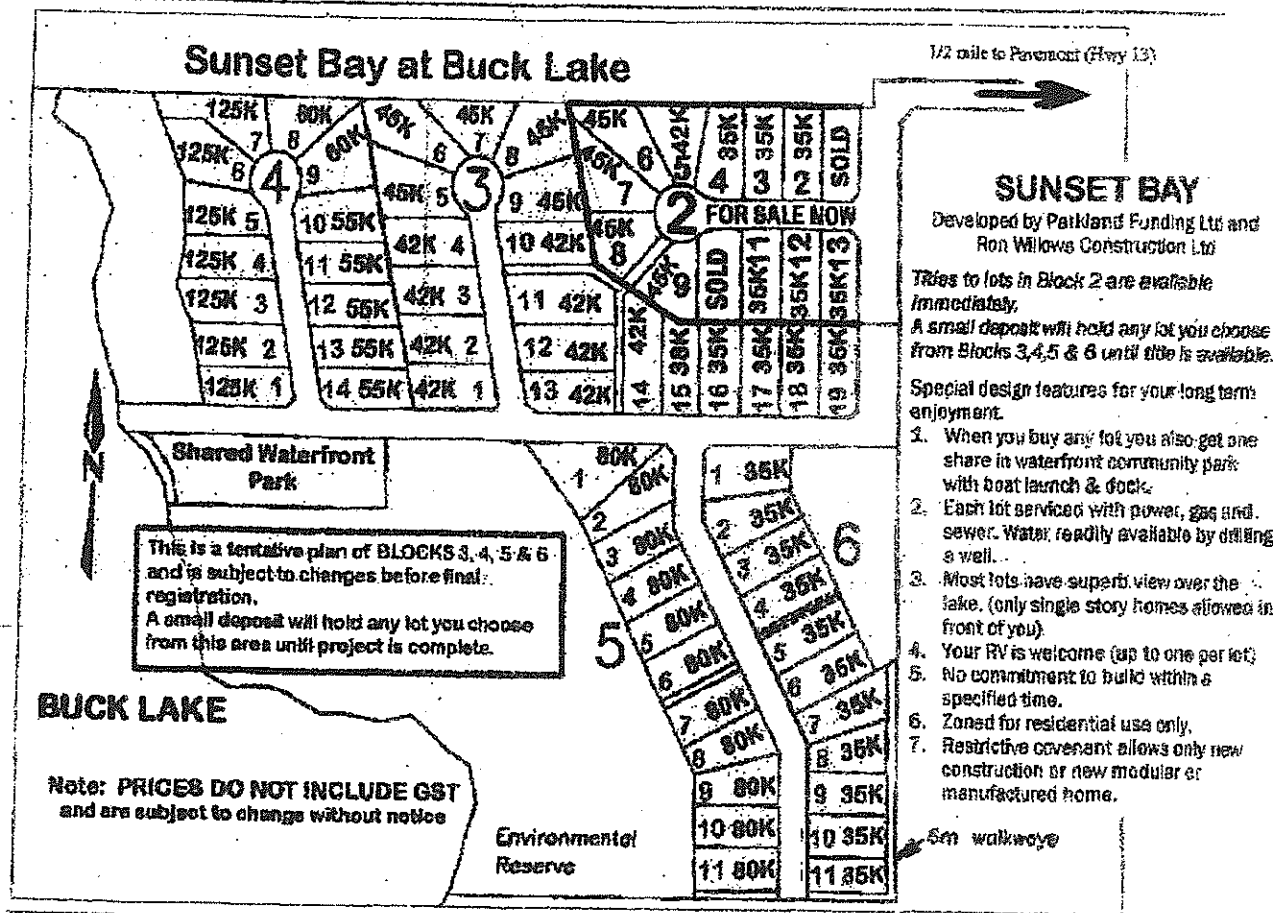
Special Features

- Lots are 1/2 acre or larger.
- No time restriction to build, all lots are registered
- Underground power, natural gas and telephone already to the property line
- Many lots enjoy a spectacular view of the lake or look out onto the peaceful treed areas
- Restrictive Covenants are in place to help maintain the subdivision and protect the lake's shoreline and waters
- There are two Community Lots - one is lakefront and the other is the northeast part of the subdivision in a beautifully treed location. Lot owners receive one share in the Community Lots
- Beautiful walking trails extend along the entire border of the subdivision, meandering past a creek and along the shoreline
- A dock, boat launch and swimming area are located on the lakefront Community Lot
- Each lot comes with one mooring on the seasonal dock



Oakes Bay

68 LOT SUBDIVISION ~ SUNSET BAY AT BUCK LAKE, ALBERTA



FOR THE PROPOSED USE LISTED BELOW HAVE BEEN ISSUED IN ACCORDANCE WITH BY-LAW 95/54, LAND USE BY-LAW OF THE COUNTY OF WETASKIWIN NO. 10.

Application #06/140

NEW MOBILE HOME: NE-23-47-1-W5M - Lot 11, Block 1, Plan 9924873 - Lakeland Estates.

THE PROPOSED USE LISTED BELOW SHALL NOT COME INTO EFFECT UNTIL AFTER FOURTEEN (14) DAYS FROM THE FIRST DATE OF THIS PUBLICATION.

Any person wishing to review the above application(s) or permit(s) may do so at the County Office during normal business hours.

IN ACCORDANCE WITH SECTION 686 OF THE MUNICIPAL GOV-

ROD HAWKEN, SECRETARY TO THE
DEVELOPMENT APPEAL BOARD
COUNTY OF WETASKIWIN NO. 10
P.O. BOX 6960
WETASKIWIN, ALBERTA T9A 2G5

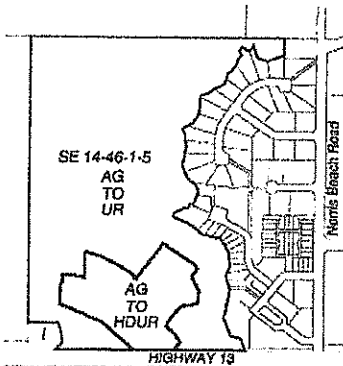
WITHIN FOURTEEN DAYS OF THE FIRST DATE OF THIS NOTICE.

NOTICE OF PUBLIC HEARING

County of Wetaskiwin No. 10

Notice of proposed change in land use classification

TAKE NOTICE that the Council of the County of Wetaskiwin No. 10 has been asked to amend its Land Use By-Law so as to rezone the following land, as shown on accompanying map, from Agricultural to Urban Residential and High Density Urban Residential districting on the following lands:



SE 14-46-01-W5M

If approved, the applicant intends to further subdivide. A copy of the Urban Residential and the High Density Urban Residential districts outlining permitted and discretionary uses can be obtained from the County Office.

Before proceeding further with the bylaw, Council will hold a public hearing at which any person claiming to be affected by the proposed rezoning may ask questions or make their views known.

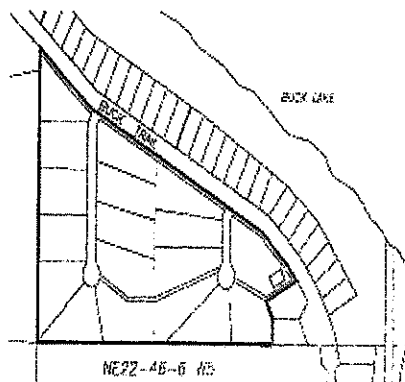
The hearing will be held in the Council Chambers, County Office, 1.6 kilometres west of Wetaskiwin on Highway 13, at 1:30 p.m., Thursday, August 10, 2006.

Written submissions will be accepted up to the time of the hearing and should be addressed to the undersigned at the County Office.

DAVID BLADES, A. Sc.T., LGA
Director of Planning & Economic Development
County of Wetaskiwin No. 10

NOTICE OF PUBLIC HEARING

TAKE NOTICE that the Council of the County of Wetaskiwin No. 10 has been asked to adopt an Area Structure Plan on the following land:



NE 22-46-06-W5M
(Southwest of Buck Lake Estates)

Before proceeding further with a by-law, Council will hold a public hearing at which any person claiming to be affected by the proposed Area Structure Plan may ask questions or make their views known.

The hearing will be held in the Council Chambers, County Office, 1.6 kilometres west of Wetaskiwin on Highway 13, at 2:30p.m., August 10, 2006.

Written submissions will be accepted up to the time of the hearing and should be addressed to the undersigned at the County Office.

A copy of the proposed Area Structure Plan may be picked up at the County of Wetaskiwin Administration Building or by contacting the Planning and Economic Development Department at: 352-3321.

DAVID BLADES, A. Sc. T., LGA
Director of Planning & Economic Development
County of Wetaskiwin No. 10



County of Wetaskiwin No. 10

P. O. Box 6960, Wetaskiwin, AB T9A 2G5

Phone: (780) 352-3321

Fax: (780) 352-3486

www.county.wetaskiwin.ab.ca

Strong Proactive Leadership • Safe Progressive Communities

November 16, 2005

File: 4509.29 S

Dennis & Hazel Bridges
10805 Giants Head Road
Summerland, B.C.
V0H 1Z7

Dear Mr. & Mrs Bridges:

**RE: PROPOSED AREA STRUCTURE PLAN – Lot 1, Block 2, Plan 782 3341
(NE 22-46-06-W5M).**

Please be advised that the above mentioned proposed Area Structure Plan was presented to Council at their regular meeting held Wednesday, November 09, 2005.

At the time, Council refused the Plan, but have invited you to reapply once you have addressed the following issues.

1. The Results of the consultative processes between the developer and adjacent landowners.
2. Road Access: That the following be added to the paragraph under Road Access. "That the developer shall provide a contribution of \$2,000.00 per lot towards the maintenance of the road (Buck Trail) providing access to the development area. The developer will complete at their own expense the internal cul-de-sac roads to an oil surface standard to match the oil surface of Buck Trail.
3. Water Supply: That the following be added to the paragraph under Water Supply. "That the developer provide an updated report by a professional engineer complying with Section 23 of the Water Act confirming that there is enough groundwater to supply the new lots."
4. Storm Drainage: That the following be added to the paragraph under Storm Drainage. "That the developer provides a properly engineered storm water management plan, and build any necessary detention ponds and off-site improvements to drainage."
5. Fire Pond: That an additional clause be added entitled Fire Pond which will state the requirement for a Fire Pond to the satisfaction of the County Fire Chief.

6. Lake Access: That the last sentence starting with the words "History of back lots." be deleted from the paragraph under Lake Access.
7. Lake Access: That the following be added to the paragraph under Lake Access. "That the developer provide usable access to the lake. Any usable access shall be undertaken in an appropriate manner that still ensures the watershed and habitat management intent of the Lot 35 MR."

The reapplication fee will be waived if the developer applies within one year of this date.

Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Yours truly,



DAVID BLADES, A. Sc.T., LGA
Director of Planning & Economic Development

:dkr

cc: Correspondents / Delegates in Attendance at Hearing

Issues from Council Meeting of August 10th, 2006

- 1. Road Standards and related costs**
- 2. Storm drainage and engineering components**
- 3. Fire pond standards and accessibility**

SABATINI EARTH TECHNOLOGIES INC.

203, 6919 - 32nd AVENUE N.W.
CALGARY, ALBERTA T3B 0K6
TEL: (403) 247-1813
FAX: (403) 247-1814

12323 - 67th STREET
EDMONTON, ALBERTA T5B 1N1
TEL: (780) 438-0844
FAX: (780) 435-1812

Abacus Industries Ltd.
10805 Giants Head Road
Summerland, British Columbia
V0H 1Z7

May 24, 2006
Our File: E0512-1429

Attention: Mr. Dennis Bridges

Dear Sir:

RE: Aquifer Evaluation Report
Proposed Country Residential Subdivision
Portion of NE - 22 - 46 - 6W5M
Wetaskiwin County, Alberta

1.0 INTRODUCTION

A hydrogeological assessment was undertaken within the above referenced parcel to determine whether there is sufficient groundwater to supply 18 proposed and 29 existing country residential lots with sufficient water. A water supply of 1250 m³/year (0.523 imperial gallons per minute) is required for each lot. The total water supply for the 47 lots is approximately 25 imperial gallons per minute (igpm).

The parcel is located along the west side of Buck Lake. A portion of the County of Wetaskiwin map showing the location is shown on Plate 1. The area generally consists of cultivated cropland or pasture with numerous small acreages along the shore of Buck Lake.

A review of the existing wells in the area was undertaken in a previous report (report from Sabatini Earth Technologies Inc., dated January 16, 2006). This report summarized 125 water well records that are available from a 2 km radius of the site. Aquifer zones in the area consist of sandstones of the Paskapoo Formation. Well yields were generally in the range of 5 igpm, with some wells up having yields of up to 23 igpm. It was concluded that the aquifer was not sufficient to supply the development from one well, but individual wells on each lot may be capable of supplying water needs.

To determine aquifer capabilities of the site itself a 29 hour pump test was conducted on a well within the parcel. The location of the well that was used and the proposed subdivision site plan is shown on Plate 2.

2. PUMP TEST

2.1 Field Data Collection

The well used for the pump test is a 130 foot deep well drilled in 1999 by Bar-K Water Well Drilling Ltd. of Leduc, Alberta. The well obtains water from a sandstone aquifer and the liner is perforated from 120 to 130 feet. Upon completion of the well in 1999 the well was pumped at a rate of 10 gallons per minute for 2 hours with a decline in the water level of less than 2 feet indicating the well is a good producer. The water well drilling report of the well record is shown on Plate 3.

A 29 hour pump test was undertaken on this well on May 1 - 2, 2006 by Dennis Bridges. The well was pumped at a rate of 10 gallons per minute for 24 hours and fluid levels were read for 5 hours after pumping stopped until the water levels returned to the static level. The water level report from Dennis Bridges is shown on Plates 4 and 5. A graph showing the water level with time is shown on Plate 6. A total drawdown of 1.32 m was noted during the 24 hours of the pumping portion of the test, again indicating a good well.

A water sample was collected towards the end of the test for analysis of water quality parameter. Samples were collected for analysis of dissolved constituents and bacterial content. The dissolved constituent report is not available currently, but the bacterial analysis report was provided and is shown on Plate 6.

2.2 Pump Test Analysis

The pump test was analyzed with the aid of the AQTESOLV program developed by HydroSoft Inc. A confined, non-fractured radial flow model was selected which is likely representative of aquifer conditions.

A graph showing the Cooper-Jacob solution method for the pumping portion of the test is shown on Plate 7. A transmissivity of $18.2 \text{ m}^2/\text{day}$ is calculated from the data. The data shows an increase in slope with time. It is interpreted that the aquifer is likely of limited extent and boundary conditions are occurring during the test. It was noted in the desktop survey of wells that the well depths are somewhat variable, as are the static water levels, and it is likely that numerous sandstone aquifers are present in the area, but are of limited extent and are weakly connected.

It is also possible that the increase in slope is due to pumping from nearby wells.

The Theis (Recovery) analysis of the buildup data is shown on Plate 8. A higher transmissivity of $61.5 \text{ m}^2/\text{day}$ is calculated, which likely is more indicative of near well bore conditions. As there may be issues with aquifer extent, the more conservative transmissivity from the pumping portion of the test will be used in further calculations.

Analysis of the 4 hour test data from the pump test undertaken when the well was first drilled in 1999 was also undertaken. The graph of water level versus time is shown on Plate 9, with the Theis solution to the combined pumping and buildup data shown on Plate 10. A much higher transmissivity of 205.7 m²/day is calculated, but this data does not reflect the changing aquifer conditions of the longer test.

Comparison of the two tests does show similar drawdowns at the beginning of each test showing that no loss in well bore efficiency is noted from when the well was drilled in 1999 to the present. A slight lowering of the static water levels observed when the well was drilled in 1999 (10.21 m) compared to the recent test (11.13 m) may indicate some dewatering of the aquifer, but may be due to changes in lake levels or reference measurement points.

3.0 WELL YIELD CALCULATIONS

3.1 Q₂₀ Calculations

The 20 year safe yield of the well (Q₂₀) can be calculated with the use of the Farvolden Equation as preferred by Alberta Environment:

$$Q_{20} = 0.68 \times T \times H \times 0.7$$

Where T is the transmissivity from the pump test (18.2 m²/day), H is the distance between the static water level to the top of the aquifer (22.7 m), 0.68 is a factor accounting for well radius, aquifer storativity and 20 year time frame, and 0.7 is a safety factor.

Substituting these values a twenty year safe yield 196.6 m³/day (30 gallons per minute) is calculated. This volume is enough to supply 56 lots, suitable for the proposed and existing development.

3.2 Individual Well Calculations

It is reported that individual wells on each parcel will be installed. Calculations of the expected drawdown in one well due to pumping at a rate of 1250 m³/year and the effects of neighbouring wells can be undertaken utilizing the modified non-equilibrium well formula and the Principle of Superposition.

The storativity of the aquifer is not available from the pump test as no observation well was used. A regional value typical for the Paskapoo Formation is used. For a well distribution of one well per lot and wells are approximately 30 m apart, a well in the centre of the property will have a drawdown of 0.4 m due to pumping from that well only and a total drawdown of 8.8 m due to pumping from all wells in the area. As the available drawdown is 22.7 m, sufficient drawdown exists such that any well in the area should not go dry.

The above calculations assume that the efficiencies of the wells are not reduced due to biological or chemical encrustation. Effects of recharge are also not taken into account, which will likely occur due to the proximity of the wells to Buck Lake. Recharge into the aquifers will provide an additional safety factor in ensuring well supplies to the development.

4.0 GROUNDWATER CHEMISTRY DATA

The desktop study report shows that the water is generally a sodium bicarbonate water with total dissolved solids concentration in the range of 500 - 1000 mg/L. All parameters generally meet drinking water criteria with the exception of slightly elevated sodium and total dissolved solids concentration. As these parameters are based on aesthetic, rather than health-based criteria, these parameters should not adversely affect the drinking water supply.

The water can be treated at point of use by distillation or reverse osmosis techniques if so desired.

The bacteria analysis also shows no indications of total coliforms or e. coli and bacterial contamination is not present.

It is recommended that the water from any well be tested for chemical and bacterial content prior to be used as a potable source.

5.0 SUMMARY AND CONCLUSIONS

Sufficient aquifer supplies exist for the proposed development. Although one well could supply all existing and proposed lots the use of individual wells per lot is favourable in minimizing aquifer drainage.

The water quality meets all health based drinking water criteria and can be used for potable consumption.

Should community wells be used a water license will have to be prepared for the development and water treatment will be necessary.

8.0 CLOSURE

This report was prepared for the sole intent and use of the client for the specific location studied and identified at the beginning of the report. Sabatini Earth Technologies Inc. (SETI) owes a duty of care only with the party, or parties, named above, for the site identified above, and will

not take responsibility for any consequence that may arise by use of this report by an unauthorized third party and shall be held harmless.

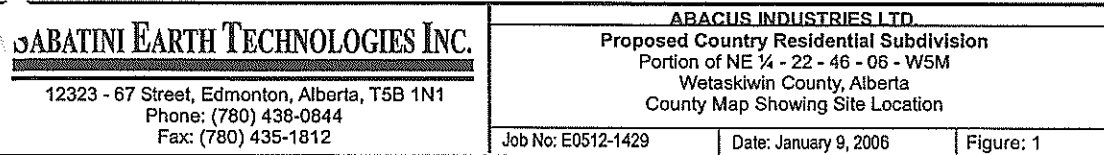
SETI follows industry accepted standards when making all situational assessments and recommendations. Any statements included in this report are based on the opinion of the professional and technical staff of SETI and are deemed to be accurate at the time of writing, based on immediate site conditions and data collected, including information gathered from other sources believed to be based on fact. If, at any time, it is discovered that pertinent information is deficient, inaccurate, or misleading because of error or subsequent developments, SETI reserves the right to re-state this report, in whole or in part, and make all reasonable efforts to otherwise rectify the error.

Respectfully submitted
SABATINI EARTH TECHNOLOGIES INC.

APEGGA P5773



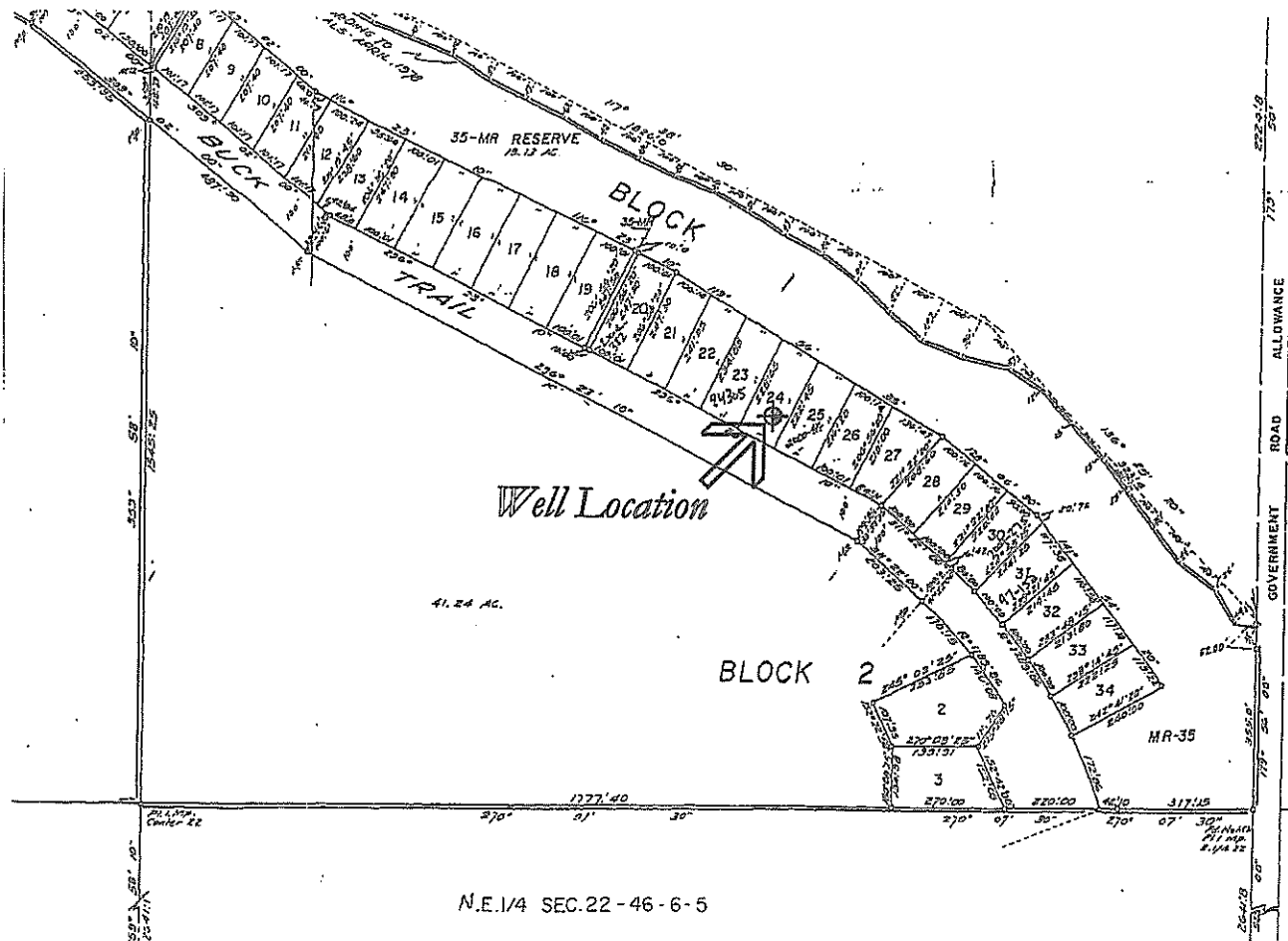
Distribution: (4) addressee
(1) Edmonton office



12323 - 67 Street, Edmonton, Alberta, T5B 1N1
Phone: (780) 438-0844
Fax: (780) 435-1812

Proposed Country Residential Subdivision
Portion of NE ¼ - 22 - 46 - 06 - W5M
Wetaskiwin County, Alberta
County Map Showing Site Location

Figure: 1



Sabatini Earth Technologies Inc.

ABACUS INDUSTRIES LTD.

Proposed Country Residential Subdivision

Portion of NE 1/4 - 22 - 46 - 6 W5

Site map showing well location and subdivision plan

File: E051201429

Date: May 24, 2006

Plate No: 2

ALBERTA ENVIRONMENTAL PROTECTION

WATER WELL DRILLING REPORT

THIS DATA MAY NOT BE FULLY CHECKED; THE PROVINCE DISCLAIMS ALL RESPONSIBILITY FOR ITS ACCURACY: Page 1 of 1

WELL I.D. 494920

CONTRACTOR:		WELL OWNER:		WELL LOCATION:		IC#:	
NAME: BAR-K WATER WELL DRILLING LTD.		NAME: BAIRD, WARD/BONNIE		- OR LSE		SEC	
ADDRESS: 29 Camelot Avenue Leduc, Alberta T9E-4M4		ADDRESS: 35 ASH CRES, ST ALBERT		TWP		RGE	
LICENCE NO.: 0861 JOURNEYMAN NO. JA2732		POSTAL CODE: T8N 3J6		NE		W5	
LITHO:		DRILLING METHOD: ROTARY		LOT:		BLOCK:	
Depth (Feet):		TYPE OF WORK: NEW WELL		WELL ELEV:		PLAN:	
Ground to:		FLOWING WELL No		Feet		How obtain: NOT OBTAIN	
13 Brown Clay		RATE:		PRODUCTION TEST:			
40 Gray Clay & Rocks		GAS PRESENT: No		TEST DATE: August 23, 1999			
41 Hard Sandstone		OIL PRESENT: No		START TIME: 9:00			
44 Sandy Clay		DATE OF ABANDONMENT:		Elapsed Time in Min:Sec			
46 Gray Sandstone		MATERIAL USED:		Depth to Water Level During Pumping (Feet)			
48 Sandy Shale		PROPOSED USE: DOMESTIC		Depth to Water Level During Recovery (Feet)			
60 Brownish Gray Silty Sandstone		WELL COMPLETION DATA:		1:00 34.72 33.44			
62 Brown Soft Sandstone		WELL FINISH: CASING/PERFORATED LINER		2:00 35.44 33.52			
64 Gray Shale		TOTAL HOLE DEPTH: 130 Feet		3:00 35.56 33.51			
66 Green Shale		CASING TYPE: PLASTIC		4:00 35.60 33.50			
68 Gray Fractured Shale		SIZE OD: 6.00 Inch WALL THICKNESS: 0.432 Inch		5:00 35.63 33.50			
93 Sandstone		BOTTOM AT: 92 Feet		6:00 35.66 33.48			
99 Shale		PERFORATED CASING/LINER:		7:00 35.68 33.46			
109 Siltstone		TYPE: PLASTIC		8:00 35.69 33.45			
114 Gray Siltstone & Sandstone		SIZE OD: 4.50 Inch		9:00 35.70 33.44			
127 Shale		WALL THICKNESS: 0.237 Inch		10:00 35.71 33.43			
130		TOP AT: 90 Feet BOTTOM AT: 130 Feet		14:00 35.75 33.40			
		PERFORATED FROM: 120 Feet TO: 130 Feet		20:00 35.78 33.39			
		SIZE OF PERFORATIONS: 0.062 Inch X 3.000 Inch		30:00 35.84			
		HOW PERFORATED: SAW		40:00 35.80			
		SEAL TYPE: CEMENT/GROUT		50:00 35.90			
		INTERVAL TOP: 10 Feet TO: 92 Feet		120:00 35.90			
		GEOPHYSICAL LOG TAKEN:					
		RETAINED ON FILE:					
		SCREEN:					
		MATERIAL:					
		SIZE ID (CLEAR): Inch SLOT SIZE: Inch					
		INTERVAL TOP: Feet TO: Feet					
		Feet TO: Feet					
		INSTALLATION METHOD:					
		TOP FITTINGS:					
		BOTTOM FITTINGS:					
		PACK TYPE:					
		GRAIN SIZE: AMOUNT:					
		FITLESS ADAPTER TYPE:					
		DROP PIPE TYPE: LENGTH: Feet					
		DIAMETER: Inch					
		ADDITIONAL PUMP INFORMATION:					
STARTED: August 19, 1999		COMMENTS: DRILLER REPORTS DISTANCE FROM TOP OF CASING TO GROUND LEVEL: 15"					
COMPLETED: August 20, 1999		(Maximum of 9 lines printed)					
RECEIVED: September 3, 1999							
ADDITIONAL TEST AND/OR PUMP DATA:							
CHEMISTRIES TAKEN: HELD:		DOCUMENTS HELD: 1					
WELL OWNER'S ANTICIPATED WATER REQUIREMENTS PER DAY: 250 Gallons							

PRINTED:

May 23, 2006

15:31:13

KEYED:

February 29, 2000

GICS

UM

Plate 3

Sabatini Earth Technologies Inc
12323 67th Street
Edmonton, AB
T5B 1N1
Attn: Merle Hagstrom

May 03rd, 2006

File: E0512-1429

Re: Pump Test report for:
Domestic Groundwater Evaluation
Proposed Country Residential Subdivision
NE 22-46-6-W5M Buck Lake Estates
Wetaskiwin County, Alberta

Well Location: NE 22-46-6-W5M

Time started: 12:22 PM on May 1st, 2006 Time end: 6:22 PM on May 02nd, 2006

Water flow calibrated for drawdown: 10 igpm

Time (minutes)	Drawdown (metres)	Buildup (metres)
0	11.13	12.45
0.5	11.56	11.38
1	11.73	11.375
1.5	11.77	11.37
2	11.78	11.37
3	11.79	11.37
4	11.80	11.365
5	11.81	11.36
6	11.81	11.354
7	11.815	11.35
8	11.82	11.347
9	11.82	11.343
10	11.825	11.34
12	11.83	11.335
15	11.84	11.329
20	11.85	11.317
25	11.86	11.309
30	11.87	11.30
35	11.875	11.294

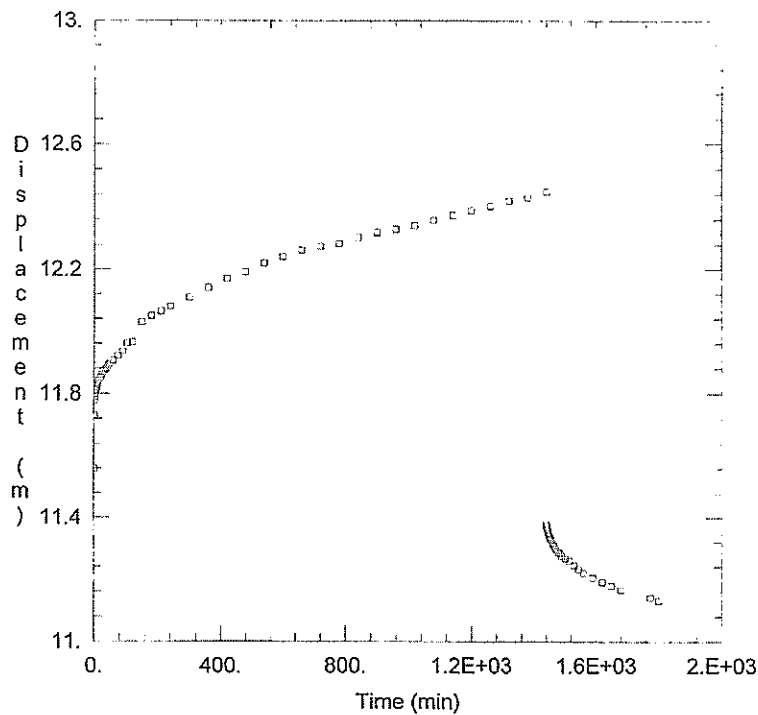
...2/

Plate 4

- 2 -

Time (minutes)	Drawdown (metres)	Buildup (metres)
40	11.88	11.287
45	11.89	11.281
50	11.895	11.275
60	11.905	11.267
Water flow check: 10 igpm		
75	11.92	11.26
90	11.935	11.245
105	11.96	11.232
120	11.965	11.22
150	12.03	11.204
180	12.05	11.19
210	12.065	11.178
240	12.08	11.165
300	12.11	11.14
Water flow check: 10 igpm		
360	12.14	11.13
420	12.17	
480	12.192	
540	12.22	
Water flow check: 10 igpm		
600	12.24	
660	12.262	
720	12.275	
780	12.285	
Water flow check: 10 igpm		
840	12.305	
900	12.32	
960	12.33	
1020	12.345	
Water flow check: 10 igpm		
1080	12.36	
1140	12.375	
1200	12.39	
1260	12.403	
Water flow check: 10 igpm		
1320	12.42	
1380	12.43	
1440	12.45	

Plate 5



BUCK LAKE ESTATES AQUIFER EVALUATION

Data Set:

Date: 05/23/06

Time: 15:53:58

PROJECT INFORMATION

Company: Sabatini Earth Technologies

Client: Dennis Bridges

Project: E0512-1429

Test Location: NE-22-46-6W5

Test Well: Baird Well

Test Date: May 2 - 4, 2006

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (m)	Y (m)	Well Name	X (m)	Y (m)
Baird Well	0	0	Baird Well	0	0

PROVINCIAL LABORATORY FOR PUBLIC HEALTH (MICROBIOLOGY)

WMC 1B1, 8440 - 112 Street
Edmonton, Alberta T6G 2J2
Phone: (780)407-7121
Fax: (780)407-8984

===== | CONFIDENTIAL LABORATORY REPORTS | =====

* Page 1 of 1*

REPORT DESTINATION: (A1305)

CAPITAL HEALTH AUTHORITY - LEDUC
HEALTH UNIT
4219 - 50 Street,
LEDUC, AB
T9E 8C9

BRIDGES, DENNIS
BOX 20, SITE 9, RR 1
EDMONTON, ALBERTA
(250)404-0549 T6H 4N6
NE 1/4-22-46-6-W5
Lot/Blk/Pln: 1/2/7823341
Access #: ID #: R127291

Lab Spec #: E06W029661
Sample: PRIVATE
DRINKING WATER
Coll Site: BUCK LAKE ESTATES
Source:
Coll (DMY): 02/05/2006 1800
Coll by: DENNIS BRIDGES
: (250)404-0549
Recv (DMY): 03/05/2006 1334
Analyzed (DMY): 03/05/2006
Reported: 04/05/2006

Final Results

ENZYME SUBSTRATE TEST - PRESENCE/ABSENCE per 100mL


Total Coliforms ABSENT
E. coli ABSENT

Result Verified by: 257

Specimen Comments:

RESULTS OF ANALYSIS RELATE ONLY TO THIS SAMPLE.
FOR FURTHER INFORMATION CONTACT THE HEALTH UNIT OR AGENCY.

- END OF REPORT -

Capital Health	Leduc Office
Public Health Division	Tel. 980-4644
Environmental Health Services	Fax: 980-4666
The Bacteriological results are:	
<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Not Processed	
Executive Officer: 	



UNIVERSITY OF
CALGARY

Centre for Toxicology

HMRB, University of Calgary
B19, 3330 Hospital Drive NW
Calgary, Alberta T2N 4N1

REPORT TO:

HEALTH REGION 6
4219-50 STREET
LEDUC AB
T9E 8C9

PRIVATE DRINKING WATER FROM:

DENNIS BRIDGES
BOX 20, SITE 9, RR 1
EDMONTON AB
T6H 4N6 (250) 404-0549

Req. ID No: T053165
Lab Code: 2006052443

Land Description: NE-22-46-6-5
Collected: 5/2/2006
By: DENNIS BRIDGES
Site: BUCK LAKE ESTATES
Source: Well
Depth: 130
Comments:

CERTIFICATE OF CHEMICAL ANALYSIS

CDW GUIDELINES (2002)

pH	8.37		6.5-8.5 units AO
Conductivity	1745	uS/cm	
Sodium	368.8	mg/L	≤ 200 mg/L AO
Potassium	2.74	mg/L	
Calcium	48.8	mg/L	
Magnesium	10.76	mg/L	
Total Hardness (CaCO ₃)(Calc)	166.16	mg/L	
Iron	0.08	mg/L	≤ 0.3 mg/L AO
Total Alkalinity (CaCO ₃)	547.1	mg/L	
Carbonate	8.9	mg/L	
Bicarbonate	649.4	mg/L	
Hydroxide	0	mg/L	
Chloride	0.5	mg/L	≤ 250 mg/L AO
Fluoride	0	mg/L	1.5 mg/L MAC
Nitrite (N)	0	mg/L	1.0 mg/L MAC
Nitrate (N)	0	mg/L	10 mg/L MAC
Sulfate	374.7	mg/L	≤ 500 mg/L AO
Total Dissolved Solids (Calc)	1134.65	mg/L	≤ 500 mg/L AO
Cation Sum	19.43	mEq/L	
Anion Sum	18.77	mEq/L	
Ion Balance(Cation/Anion)	103.54	%	
Ion Balance (% Difference)	1.74	%	

Comments:

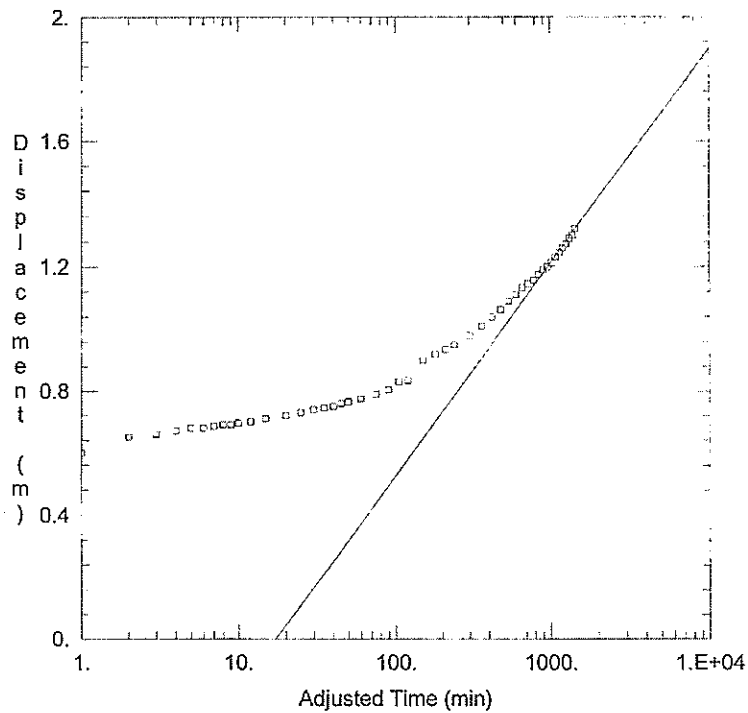
Received: 5/23/2006

Reported: 5/29/2006

Certified By:

For: David W. Kinniburgh, PhD, ECACB
Director
Centre for Toxicology

CDW = Canadian Drinking Water
AO = Aesthetic Objectives
MAC = Maximum Acceptable Concentration



BUCK LAKE ESTATES AQUIFER EVALUATION

Data Set: Z:\A-Job Folders\Reports\5496 Bridges Buck Lake Aquifer\May 06 Aquifer test.aqt
 Date: 05/24/06 Time: 11:47:06

PROJECT INFORMATION

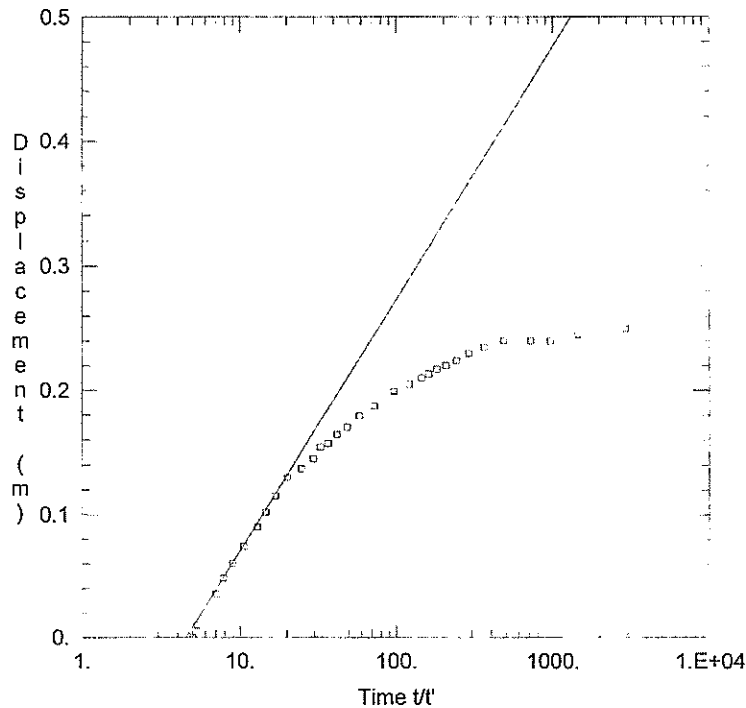
Company: Sabatini Earth Technologies
 Client: Dennis Bridges
 Project: E0512-1429
 Test Location: NE-22-46-6W5
 Test Well: Baird Well
 Test Date: May 2 - 4, 2006

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (m)	Y (m)	Well Name	X (m)	Y (m)
Baird Well	0	0	Baird Well	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
 $T = 18.19 \text{ m}^2/\text{day}$ $S = 84.19$



BUCK LAKE ESTATES AQUIFER EVALUATION

Data Set: Z:\A-Job Folders\Reports\5496 Bridges Buck Lake Aquifer\May 06 Aquifer test.aqt
 Date: 05/23/06 Time: 16:04:03

PROJECT INFORMATION

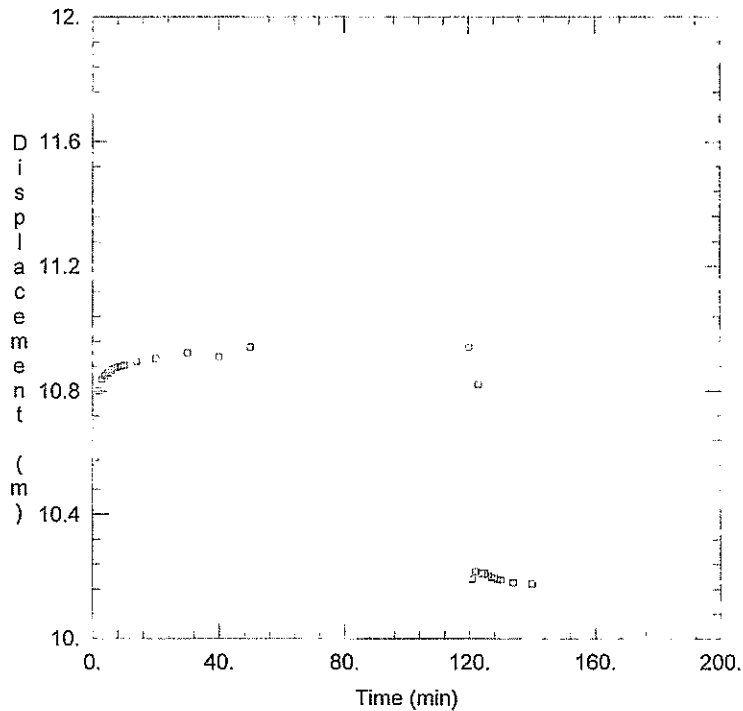
Company: Sabatini Earth Technologies
 Client: Dennis Bridges
 Project: E0512-1429
 Test Location: NE-22-46-6W5
 Test Well: Baird Well
 Test Date: May 2 - 4, 2006

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (m)	Y (m)	Well Name	X (m)	Y (m)
Baird Well	0	0	Baird Well	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Theis (Recovery)
 $T = 61.52 \text{ m}^2/\text{day}$ $S' = 4.538$



BUCK LAKE ESTATES AQUIFER EVALUATION

Data Set: Z:\A-Job Folders\Reports\5496 Bridges Buck Lake Aquifer\May 06 Aquifer test.aqt
 Date: 05/23/06 Time: 16:10:43

PROJECT INFORMATION

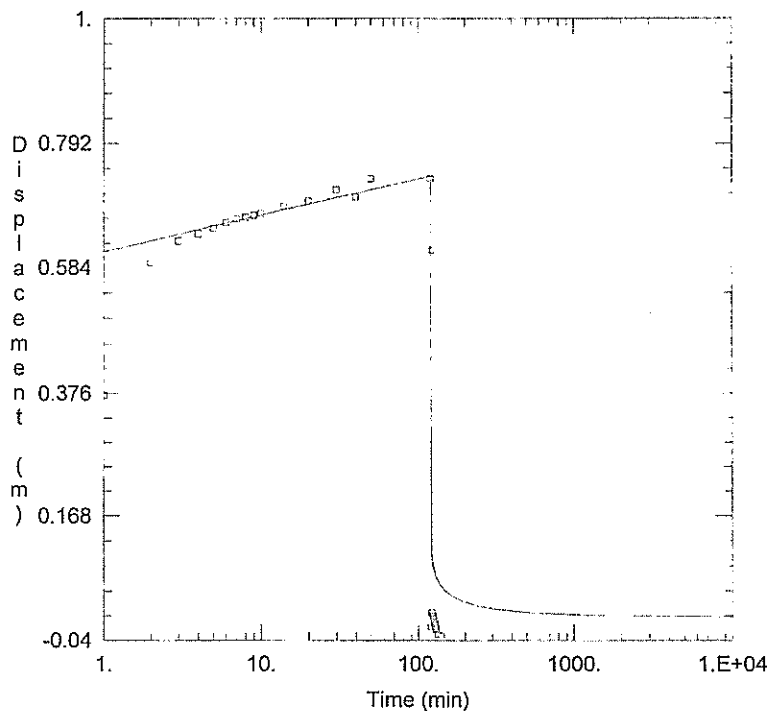
Company: Sabatini Earth Technologies
 Client: Dennis Bridges
 Project: E0512-1429
 Test Location: NE-22-46-6W5
 Test Well: Baird Well
 Test Date: Aug 23, 1999

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (m)	Y (m)	Well Name	X (m)	Y (m)
Baird Well	0	0	Baird Well	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Theis
 $T = 61.52 \text{ m}^2/\text{day}$ $S = 20.38$
 $Kz/Kr = 1.$ $b = 100. \text{ m}$



BUCK LAKE ESTATES AQUIFER EVALUATION

Data Set: Z:\A-Job Folders\Reports\5496 Bridges Buck Lake Aquifer\May 06 Aquifer test.aqt

Date: 05/23/06

Time: 16:12:47

PROJECT INFORMATION

Company: Sabatini Earth Technologies

Client: Dennis Bridges

Project: E0512-1429

Test Location: NE-22-46-6W5

Test Well: Baird Well

Test Date: Aug 23, 1999

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (m)	Y (m)	Well Name	X (m)	Y (m)
Baird Well	0	0	Baird Well	0	0

SOLUTION

Aquifer Model: Confined

Solution Method: Theis

T = 205.7 m²/day

S = 4.749E-09

Kz/Kr = 1.

b = 100. m

County of Wetaskiwin no. 10
P.O. Box 6960
Wetaskiwin, Alberta
T9A 2G5

August 23., 2006

Re.: Proposed Subdivision, Portion of NE 22 – 46 – 6 – W 5, Buck Lake (D. & H. Bridges)

Att.: David Blades, Director of Development

The following is intended to address the issues and concerns that were brought forward during the meeting between you, Mr. And Mrs. Bridges and myself at your office on August 11., 2006.

1. Subdivision Layout

The layout of the proposed subdivision is shown on the attached sketch plan. There will be two cul-de-sacs. The cul-de-sac to the west serves a total of 11 lots and the one to the east serves 7 lots. There will be no emergency exit but the two cul-de-sacs will be connected by a walkway.

A layout with cul-de-sacs, i.e. no “drive through” has several advantages.

- provides a more secure community (no “escape” route for people with criminal intent driving in)

- slows down the traffic, with no risk of speeding

- with slower speed, there will be less dust problems

- will provide safer walkways

- distribute the traffic more evenly

There are numerous examples of cul-de-sacs (dead end roads) without emergency exits, with 10 or more lots within the County of Wetaskiwin, including subdivisions in the Buck Lake area. It is also noted that there are several cul-de-sacs in urban areas, for example in the City of Edmonton, with 15 lots or more, and with no vehicle emergency exits.

2. Sewage Disposal

As shown on the attached lot layout plan, all lots in the proposed subdivision exceed 2 acres in size and have a frontage exceeding 40 m, except on cul-de-sacs. Where the lot frontage is less than 40 m on cul-de-sacs, the average lot width exceeds 40 m. Therefore, in accordance with County of Wetaskiwin Guidelines for developments near lakes, a piped sewage disposal system is not required at this point in time.

A soils report, prepared by Hydrogeological Consultants Ltd., indicates that all 7 test holes, drilled within the NE 22, were dry with the exception of one hole that showed water at 2.1 m (7') depth within 24 hours of drilling. It is therefore concluded, that the water table throughout the proposed subdivision is below 2 m, measured from the surface.

There is no sewer trunk line in the vicinity of the proposed development. It is therefore proposed, that disposal will be by discharge to individual holding tanks with the sewage being trucked to the nearest municipal lagoon site. Alternatively, depending on soils tests on individual lots, on site treatment and disposal may be feasible.

In order to accommodate any future piped sewage system, it is proposed to include a 5 m utility easement on each side of the 20 m road R.O.W.

3. Roadways

The roadways will be built to County standards with a 100 mm thickness gravel surface. I recommend that oil not be applied to the gravel as this may potentially cause pollution to the nearby lake environment.

4. Water Supply

The water supply will be by individual wells. A hydrogeological assessment has been prepared by Sabatini Earth Technologies Inc. and concludes that there is sufficient ground water available for the development with no adverse impact on existing wells.

5. Storm Water Management

It is understood that the primary concern of the County is with regards to storm water management.

At our meeting in your office you did not mention the specifics, but a subsequent site visit revealed some problem areas, which seem to have been caused primarily by inadequate planning of the existing lakeshore development.

There is a 600 mm dia. culvert across Buck Trail directing the flow from the western and a part of the eastern portion of the site of the proposed development into Buck Lake via the lot line between lots 15 and 16. It appears that there is no drainage easement in place between the two lots. I do not know the details surrounding the drainage along the lot line but I assume that the current lot owners have come to some sort of agreement with the County. The 600 mm dia. CSP across the road has a "back slope", causing the surface runoff to pond in the south side ditch.

Lots 2 and 3 to the east are situated quite low. The lot owners told me that their property gets flooded quite frequently, especially during spring runoff. The roadside ditch along lots 2 and 3 is virtually non-existent. It appears that the runoff during high flows overflows into the yards. The lot owners are also concerned with the overland runoff from the west. An interceptor swale or ditch along the west boundary of lots 2 and 3 would likely eliminate the problem.

The existing south side road ditch from lots 19/20 and east and the runoff from lots 2 and 3 drains towards the lake at the east end (the turnaround). However the drainage path across MR-35 is poorly defined and there may be a potential for flooding of part of the lakeside lot that currently has access through MR-35.

Proposed storm drainage concept:

The Alberta Water Act states that post-development storm flows, as a general rule, should not exceed pre-development flows. The guiding principle, however, is the capacity of the downstream facilities to accommodate the post-development flows.

I have discussed the site specifics with Todd Aasen, Water Administration Engineer with Alberta Environment, in a brief telephone conversation on August 16. Mr. Aasen is of the opinion that retention of storm water runoff from the proposed development may not be required since Buck Lake has capacity to receive large amounts of runoff, indeed the lake level is getting lower every year (long term trend) and increased runoff is not a problem. It is noted that in any case, the runoff from the proposed development is anticipated to increase only slightly over existing (pre-development) flows.

However, the quality of the storm water is of course always of concern, especially near a lake environment. The nutrient load should be kept to a minimum and sedimentation, caused primarily by erosion, should be contained.

It is suggested that the required fire pond, to be located at the east end of the subdivision, will act as an excellent trap for any sediments that may be washed down the ditches, especially in the initial development phase, before vegetation gets established in the new roadside ditches. The ditches within the subdivision will be directed towards and through the fire pond.

The existing ("non-existing") ditch along lots 2 and 3 needs to be lowered and there is a need to clean out and possibly reconstruct the ditch through MR-35 towards the lake. Depending on the extent of this work, a license may be required by Alberta Environment.

It is proposed to lower the ditch from the existing outlet at lot 15/16 past the high point around lot 19/20/21, in order to direct all of the ditch flow towards the east via the fire pond and MR towards the lake. The current difference between shoulder of road and ditch bottom at the high point (lot 19/20/21) is approximately 0.75 m. By reversing the ditch flow and lowering the ditch, the height between shoulder of road and the proposed ditch bottom will be approximately 1.8 m at the high point, which will also become the point where the ditch will be at its deepest. The ditch grade from the existing outfall at lot 15/16 will be 0.3 % over approximately 250 m. Such a flat grade will, of course, require careful construction. However, a relatively flat grade may be considered advantageous as it will decrease the flow velocity and thereby the risk of erosion.

Reversing the ditch flow and letting all the runoff flow east, in combination with the closure of the outlet at lot 15/16 will in my opinion be the best solution to the management of storm drainage and would eliminate the need to negotiate a drainage easement with the owners of lot 15/16.

With regards to ensuring adequate quality of runoff, it is suggested that the fire pond, as a retention and catchment facility would go a long way towards addressing any concerns. The Developer proposes to distribute pamphlets and brochures, prepared by Nature Conservancy Groups and the Alberta Government to all new lot owners, outlining Best Management Practices for runoff, including recommendations to limit the use of fertilizers and herbicides and on proper landscaping.

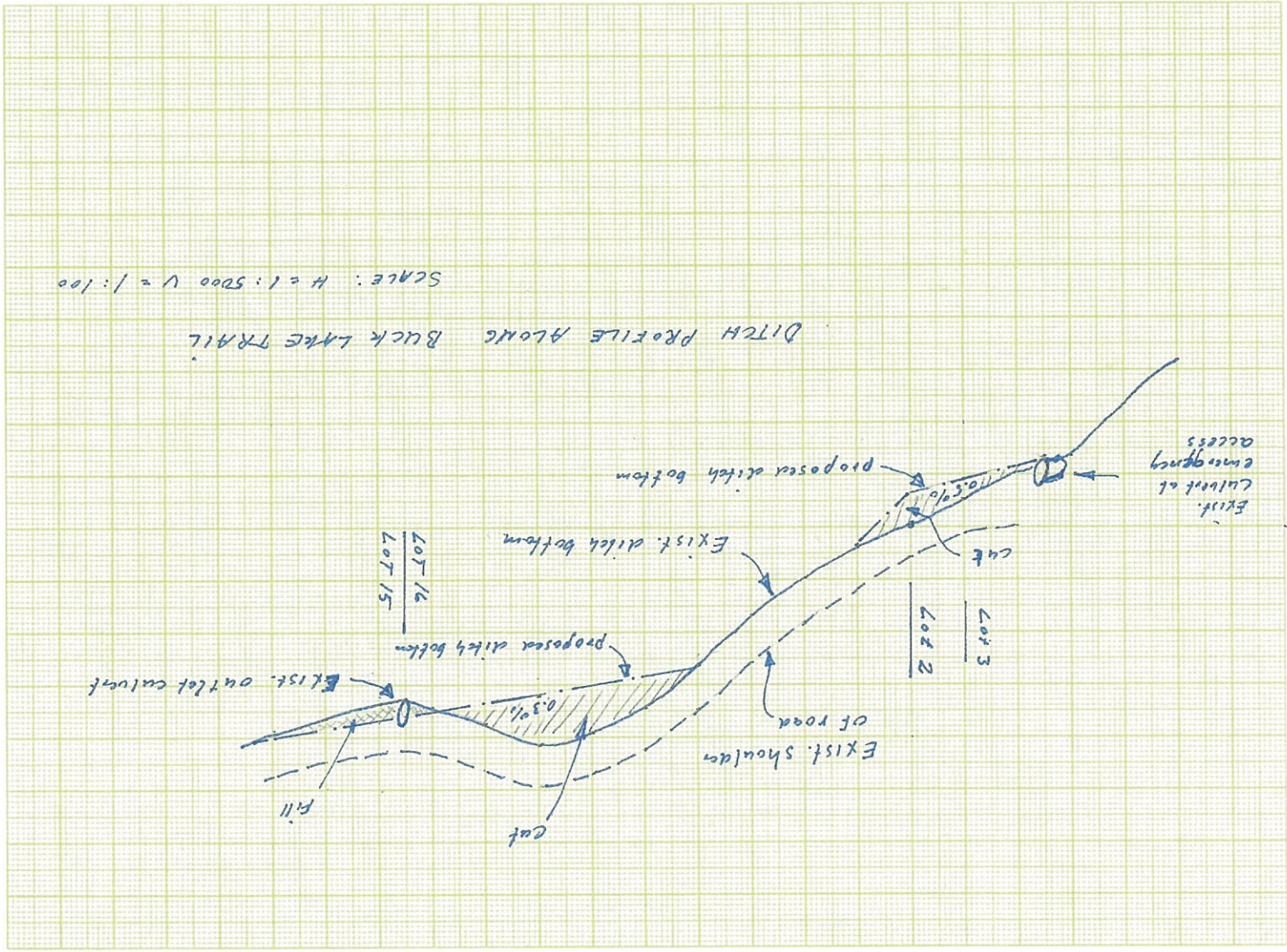
I believe the above addresses the concerns raised at our meeting and I look forward to your response. It is noted, that the Developer proposes to have the Area Structure Plan ready for presentation at the October Council meeting.

For your information I have attached a "quick" hand drawn profile of the south side ditch along Buck Lake Trail and a surface drainage concept plan, superimposed on the original lot layout plan for the subdivision.

Please contact me as soon as possible with your comments regarding the above.

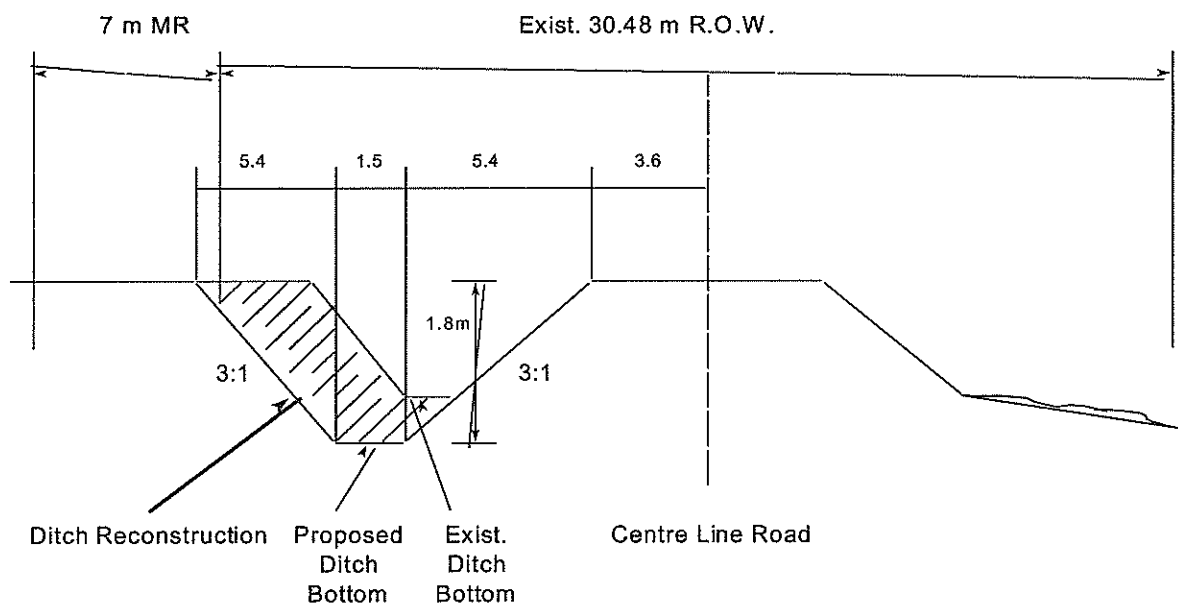
Henning F. Rasmussen, P. Eng.

c.c. Bob Riddett, West Central Planning Agency

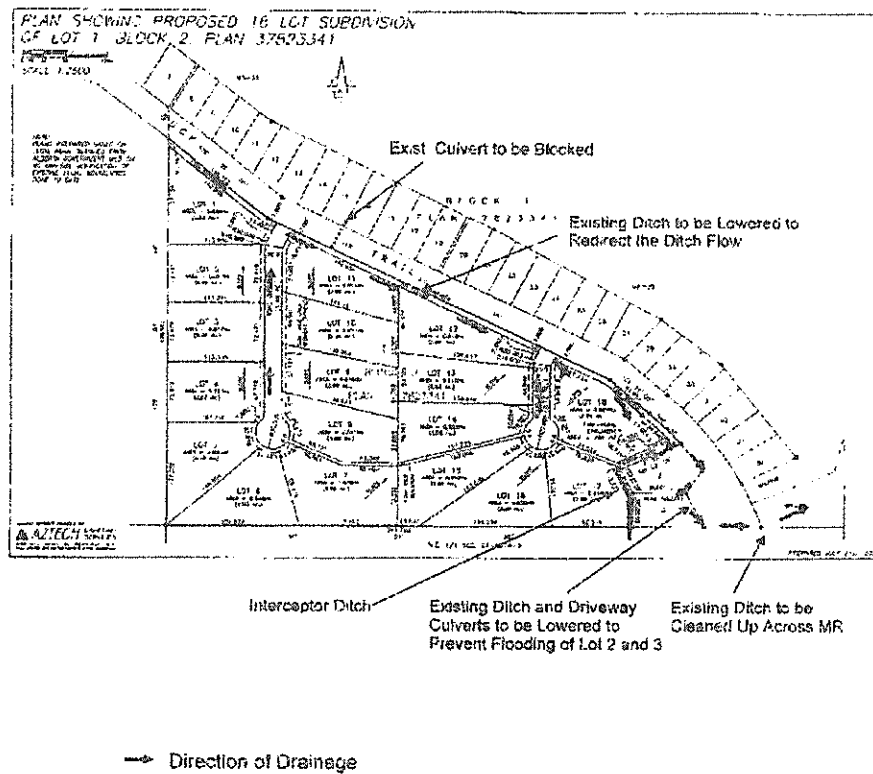


DITCH PROFILE ALONG BUCK LAKE TRAIL

SCALE: H = 1 : 5000 V = 1 : 100



TYPICAL ROAD CROSS-SECTION OF BUCK TRAIL AT
MAXIMUM DITCH DEPTH, N.T.S.



Drainage Concept for Proposed Subdivision

Proposed subdivision in NE 22 – 46 – 6 – W5

STORM WATER DETAIL AT BUCK LAKE TRAIL

ABUTTING AND WITHIN MR 35

A letter, dated August 23., 2006, was submitted to the County by the Developer's Engineer as requested by the County's Director of Development. The letter outlined the storm water drainage concept for the above subdivision. Also, a meeting was held with the County on October 10., 2006. The meeting was attended by the County's Director of Development, the County's Fire Chief, the County's engineering consultant, the Developer (Mr. And Mrs. Bridges) and the Developer's engineering consultant. The Developer left the meeting with the impression that the drainage concept plan, as outlined by the Developer's Engineer, was acceptable to the County.

However, the County has in an e-mail to the Developer, dated November 14., 2006, requested further detail on the storm drainage, especially with regards to flows across MR 35. The e-mail – among other items – specifically states:

- “ Flow calculations need to be estimated for the storm water exiting the storm/fire pond, exiting the Buck Trail cul-de-sac to lot 35 MR and from 35 MR to the lake. This will help determine what needs to be provided for proper storm water flow management through lot 35 MR. (refer to first paragraph, page 4. Henning Rasmussen's August 23., 2006 letter). What will be necessary for storm water management at the Buck Lake Trail cul-de-sac and MR 35 must be better defined than currently stated.” (end of quote)

The following information is considered supplementary to the information provided in the letter to the County, dated August 23., 2006.

Storm Flows:

The total flows from the proposed subdivision and contributing adjacent area is estimated at approximately 0.55 cubic metre/sec. for the 1 in 100 year rainstorm at the point of the proposed fire pond. (It is noted that a more exact value cannot be determined until the final road/ditch design stage).

The fire pond – and ditch leading into the fire pond – will have a relatively large retention capacity and will be able to handle the storms with duration of 20 – 40 minutes and with intensity of 60 – 80 mm per hour such as may occur during the 1 in 100 year storm. The pond inlet/outlet pipe and the road intersection culverts along Buck Lake Trail will be 600 mm dia. that will ultimately reduce the above maximum flow to approximately 60 – 80 % of the contributing flow, depending on the HW/D ratio. It may be advantageous – depending on the detailed design – to reduce the diameter of the pond outflow pipe to for example 500 mm dia.

Details re. proposed ditch along lots 2 and 3

The existing roadway ditch along lots 2 and 3 will be lowered by 0.4 – 0.7 m and the existing driveway culverts to these two lots will be replaced with 600 mm diameter CSPs, which will handle the outflow from the fire pond/retention pond of less than 0.35 cubic metre/second. The existing 500 mm CSP at the end of the Buck Lake Trail cul-de-sac (the emergency access) will also be replaced by a 600 mm dia CSP.

Details re. ditch across MR 35

The storm run-off currently flows across MR 35 through a shallow ditch that is not well defined. The Developer intends to improve the drainage by excavating a ditch across MR 35 towards the lake along the south boundary of NE 22, across the road allowance and the ER in SW 23 towards the lake. The cross-section of this ditch is shown on the attached concept sketch. Appropriate geotextile silt fences will, of course, be applied during – and immediately following – construction, in order to prevent sediment washout into the lake.

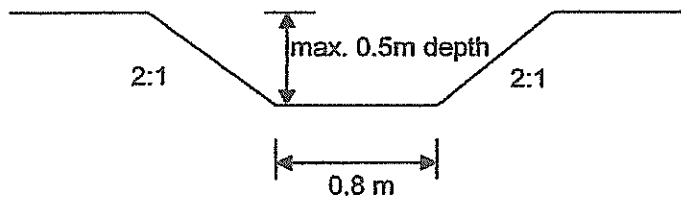
A concept plan, showing the proposed flow pattern is attached.

We believe that all of the above – with the exception of the flow volumes – was explained at our meeting at the County office on October 10., 2006.

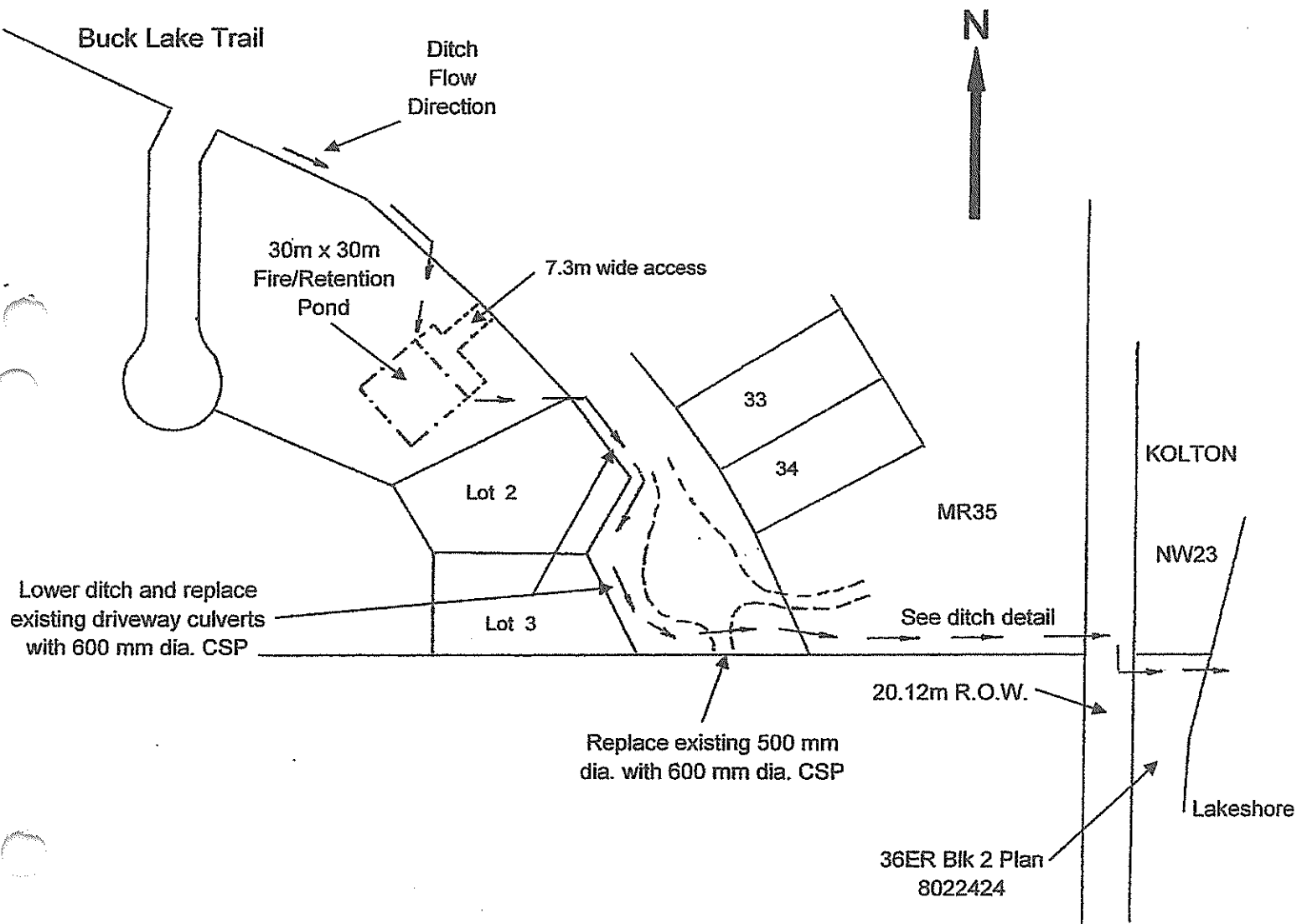
Edmonton, November 18., 2006



Henning F. Rasmussen, P. Eng.



Ditch Across MR35 – Cross Section, N.T.S.



Drainage Concept Plan, Scale 1:2500

Proposed Subdivision in NE 22-46-6-W5

In relation to review of Henning's drainage information, the following is the response from EXH Engineering.

BUCK LAKE MULTI-LOT RESIDENTIAL STORMWATER MANAGEMENT PLAN REVIEW

EXH Engineering Services Ltd. (EXH) has reviewed the revised information provided for the stormwater management plan for this proposed subdivision and has the following comments:

- 1) We recognize that the information submitted is conceptual in nature and therefore would not have the required detail to fully or adequately review the proposed system. The plan provides a conceptual basis for the proposed system and as such the amount of detail provided is adequate. The overall concept appears feasible subject to further detailed engineering. Further detailed engineering would be required to be submitted and properly reviewed before any approvals are issued for construction of the works.
- 2) Further details must include any design information on how the proposed system will meet County and Alberta Environment guidelines for stormwater management. The provincial guidelines deal with water quantity impacts on adjacent and downstream lands and potential water quality impacts on Buck Lake. It is suggested that the proponent and their consultant review Alberta Environment guidelines to ensure these proposed works meet these requirements.
- 3) Further details on the ditch gradients and culvert inlets/outlets to Buck Lake should be included in the detailed design.
- 4) The further engineering details must be presented in a report/letter format with accompanying plans. The report and plans must be signed by a professional engineer registered with APEGGA.
- 5) The proponent must ensure that they have obtained consent or easements from all landowners impacted by the works up to the shore of Buck Lake.
- 6) This proposed system may require an approval pursuant to the Water Act and/or Public Lands Act and it is recommended that the proponent contact Alberta Environment regarding the requirements for this approval.

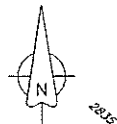
If you have any questions, please call me at 403-342-7650.

Sincerely

Gordon J. Ludtke, P. Eng.
EXH Engineering Services Ltd.

PLAN SHOWING PROPOSED 18 LOT SUBDIVISION OF LOT 1, BLOCK 2, PLAN 37823341

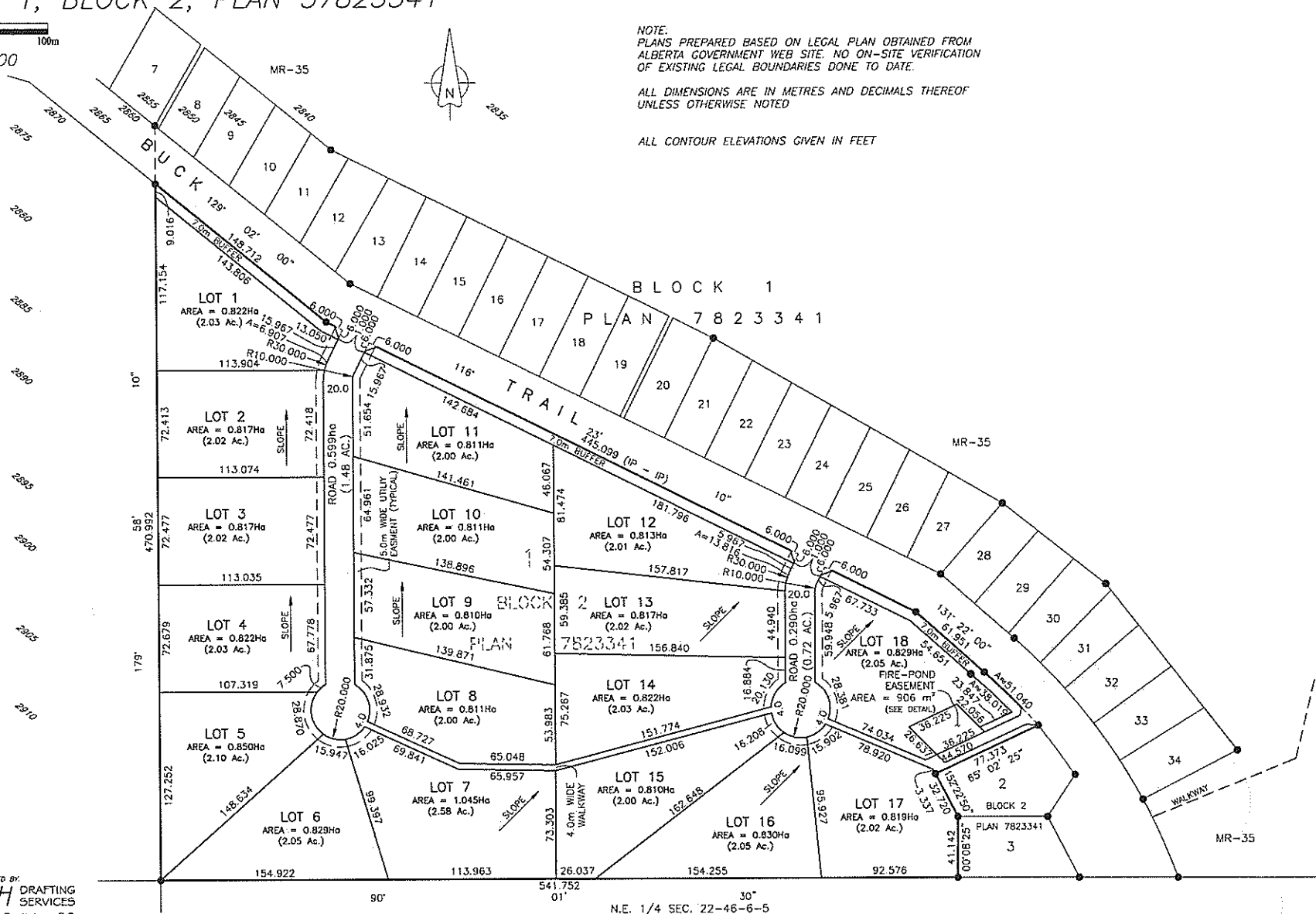
0 10 25 50 100m
SCALE 1:2500



NOTE:
PLANS PREPARED BASED ON LEGAL PLAN OBTAINED FROM
ALBERTA GOVERNMENT WEB SITE. NO ON-SITE VERIFICATION
OF EXISTING LEGAL BOUNDARIES DONE TO DATE.

ALL DIMENSIONS ARE IN METRES AND DECIMALS THEREOF
UNLESS OTHERWISE NOTED

ALL CONTOUR ELEVATIONS GIVEN IN FEET

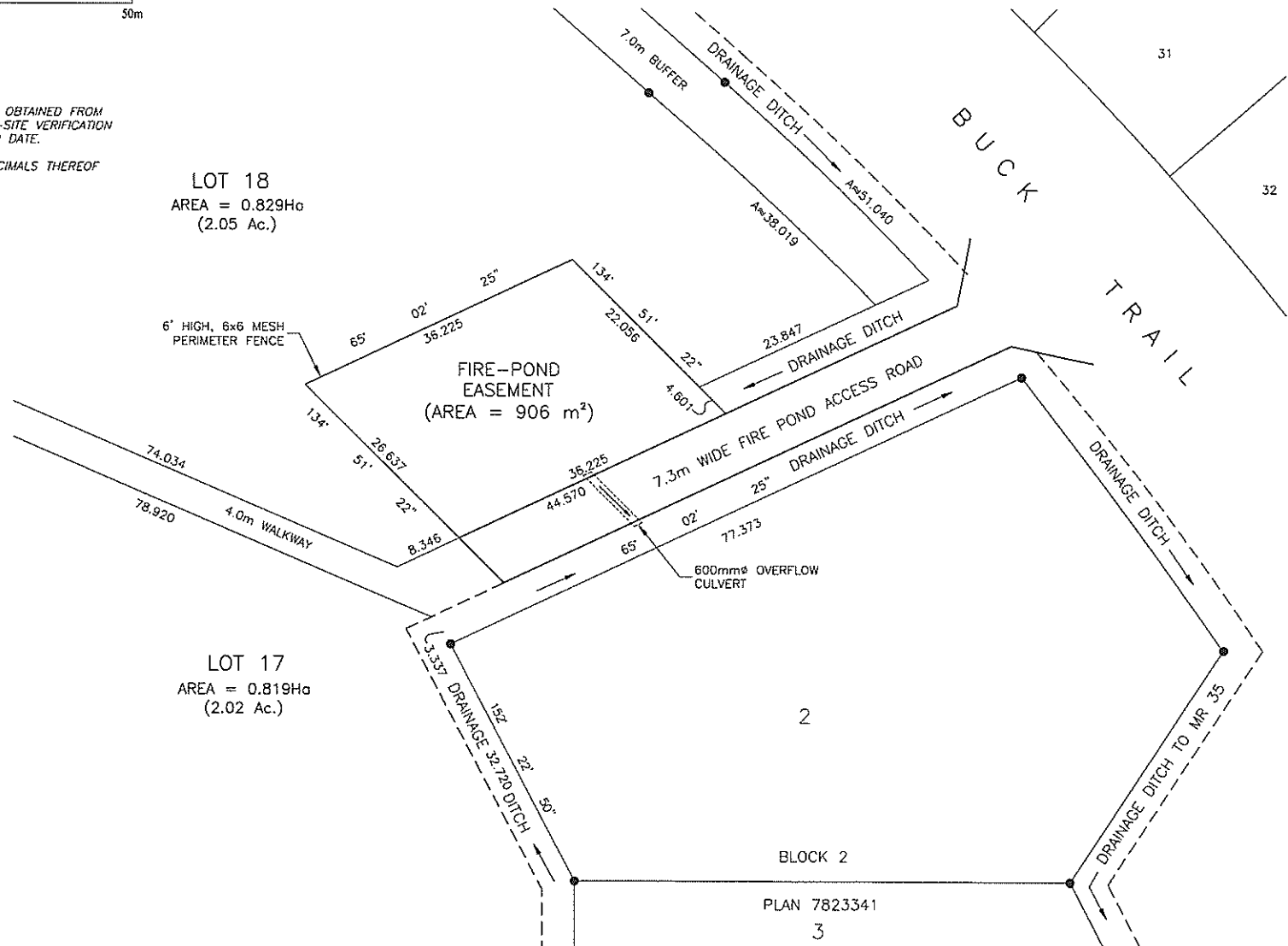


PLAN SHOWING DETAIL OF FIRE POND FOR PROPOSED 18 LOT SUBDIVISION OF LOT 1, BLOCK 2, PLAN 37823341



NOTE:
PLANS PREPARED BASED ON LEGAL PLAN OBTAINED FROM
ALBERTA GOVERNMENT WEB SITE. NO ON-SITE VERIFICATION
OF EXISTING LEGAL BOUNDARIES DONE TO DATE.

ALL DIMENSIONS ARE IN METRES AND DECIMALS THEREOF
UNLESS OTHERWISE NOTED



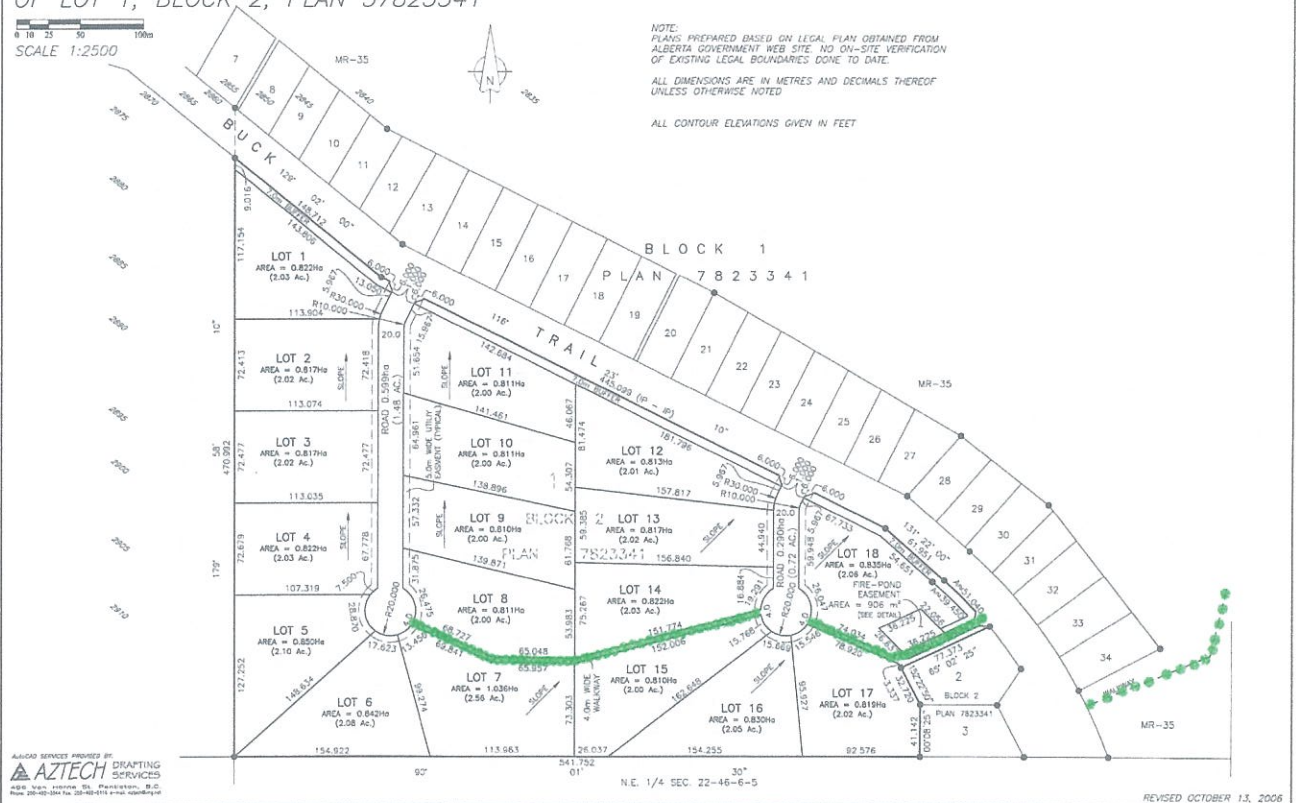
PLAN SHOWING PROPOSED 18 LOT SUBDIVISION
OF LOT 1, BLOCK 2, PLAN 37823341

SCALE 1:2500



NOTE:
PLANS PREPARED BASED ON LEGAL PLAN OBTAINED FROM
ALBERTA GOVERNMENT WEB SITE. NO ON-SITE VERIFICATION
OF EXISTING LEGAL BOUNDARIES DONE TO DATE.
ALL DIMENSIONS ARE IN METRES AND DECIMALS THEREOF
UNLESS OTHERWISE NOTED

ALL CONTOUR ELEVATIONS GIVEN IN FEET



AZTECH SERVICES PROVIDED BY
AZTECH DRAFTING SERVICES
4800, 10th Avenue SE, Edmonton, AB
Phone: 254-400-1000 Fax: 254-400-4111 e-mail: aztech@aztech.ca

N.E. 1/4 SEC. 22-46-6-5

REVISED OCTOBER 13, 2006

1. **C. and E. Badger – copy of your letter with our comments**
74, Templegreen Road N.E.
Calgary, Alberta,
T1Y 4Y8
Telephone: (403) 280-4530

County of Wetaskiwin No. 10
Planning and Economic Development
P.O. Box 6960
Wetaskiwin, AB
T9A2G5

Attention: David Blades A.Sc.T., LGA; Director

Re: File #4509.29

As owners of lot #9 on Buck Trail, Buck Lake Estates, we wish to make our views known to Council on File #4509.29.

Not understanding what is noted as "proceeding further with a by-law"; we must ask if this means that an existing by-law is proposed for change?
If this means that the by-law setting the number of residential/recreational lots around the lake is to be changed in order to increase the number of lots, then we must disagree with that. The lake can only suffer if too many lots are developed.
If it means that the change proposed is to allow access to what looks like one or two more subdivisions from Buck Trail, Buck Lake Estates, we must disagree with that, most strongly, on the following grounds:

A. The road (Buck Trail) was paid for by the owners/residents of Buck Lake Estates lots.

(We have been owners of Block 2 Lot 1 in Buck Lake Estates since 1987. We were also owners of Block 1 Lot 20 since 1984, which was our residence until we sold in 2004.)

B. The road (Buck Trail) will not sustain heavier use; it cannot cope adequately with the traffic that utilizes it now, let alone allow for more traffic.

(This concern is addressed in the ASP under '4.2 Road Access')

David Blades advised that if any money is allotted towards road maintenance for Buck Trail, that the money is allocated to that specific road and not used for other roadways within the county.

The additional revenue from the proposed 18 lots will be beneficial towards Buck Trail road maintenance and upgrades.

C. The quiet enjoyment of those who own lots along Buck Trail, in Buck Lake Estates will become almost non-existent.

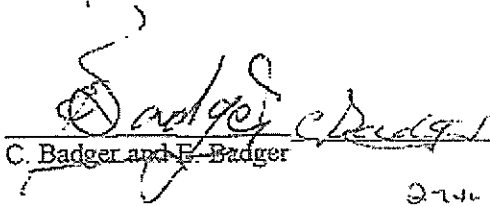
(Larger lots and the dedicated MR buffer along Buck Trail, with the internal pedestrian walkways, should help preserve the existing privacy of the adjacent landowners and the vacant land of Block 2 Lot 1 developed into occupied residential property would deter non resident atv's and motorcycles from abusing private property rights.)

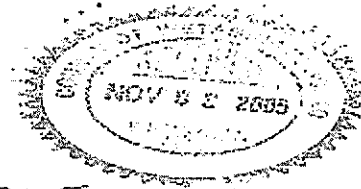
D. It was understood, from previous meetings, that all new sub-divisions were to have their own entry road coming from one of the main arteries around the Lake and NOT from an existing sub-division road.

(Block 2 , Lots 1, 2 and 3 are part of the Buck Lake Estates subdivision that was created in 1976)

Please ensure that our views are submitted to the public hearing.

Yours truly


C. Badger and E. Badger



27th October, 2005

On the long weekend of May, 2006, we spoke with Mrs. Badger, we discussed the above concerns, she was in agreement on what we were proposing, no other concerns were expressed.

The second attached letter dated July 29, 2006, was submitted at our August 10, 2006 Council meeting, all issues that are in this letter have been addressed in our ASP.

Carol and Edward Badger
74, Templegreen Road N.E.
Calgary,
Alberta, T1Y 4Y8

Telephone: (403) 280-4530

July 29, 2006

County of Wetaskiwin No. 10
Planning and Economic Development
P. O. Box 6960
Wetaskiwin, Alberta
T9A 2G5

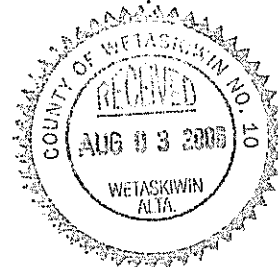
Attention: David Blades, A.Sc.T., LGA; Director

Re: File #4509.29S, Area Structure Plan on NE22-46-06-W5M

With regard to the public hearing to be held in Council Chambers on August 10, 2006, and being owners of Lot #9 on Buck Trail, Buck Lake Estates, we wish to submit the following to Council:

The concerns we have, at this time, relating to the above mentioned file are:

1. How will the extra water usage at the proposed new development affect wells currently in place? Have adequate tests been conducted, and do projections for the foreseeable future show sufficient water to sustain the supply which will be required for an increased population?
2. Has a possible increase in groundwater pollution and the resulting effect on the local water supply been taken into consideration?
3. Has improvement of the condition of the road known as Buck Trail been agreed to in order to facilitate extra traffic usage? Will the County keep the same road in reasonable condition in the future?
4. Have the placement of the entrance driveways into the new development been planned to ensure safety in icy conditions?



5. Will there be a "buffer zone" of trees/shrubs between any new development and the road known as Buck Trail as there is no allowance requirement for overhead wires on that (south) side of the road?
6. Have the concerns of the County Fire Department been fully addressed and agreed to?
7. Has the effect of an increase in the number of lots being made available for residential use been fully explored and do the results determine that the ecology of the lake and surrounding area will not be compromised?

If our above noted concerns, and all others submitted, have all been addressed and resolved to the satisfaction of the majority of people corresponding and those attending the meeting, we will withdraw our objection to the development.

Please ensure that our concerns are submitted to the public hearing.

We would also appreciate a reply answering the above questions.

Yours truly,



C. Badger



E. Badger

2. **David Wiltshire - copy of your letter with our comments**

To: David Blades
Director of Planning and Economical Development
County of Wetaskiwin #10

November 4, 2005

From: David Wiltshire
#4951047 RR221
Sherwood Park, Ab.
T8EIG8

RE: File #4509.29

As a recreational resident of Buck Lake Estates (#10), I would like to express my opposition to this proposed development. I do not agree with adding up to 18 more lots to an already under maintained and over used access road. Buck Trail has been in a constant state of disrepair for many years just catering to existing traffic volumes. I also have safety concerns given the current width of the existing road and the volume of pedestrian traffic experienced at peak times.

(Concern#1 - is addressed in the ASP under '4.2 Road Access and '4.1 Municipal Reserve')

David Blades advised that if any money is allotted towards road maintenance for Buck Trail, that the money is allocated to that specific road and not used for other roadways within the county.

The additional revenue from the proposed 18 lots will be beneficial towards Buck Trail road maintenance and upgrades.

Any additional development in this area should have to incorporate a separate access route from the existing road structure. **(Block 2, Lots 1, 2, and 3 were created in the original Buck Lake Estates subdivision in 1976)**

Questions or concerns, please contact me at 780-913-4131.

David Wiltshire
#10 Buck Lake Est.

On the long weekend of May, 2006, we spoke with David, we discussed the above concerns, he was in agreement on what we were proposing, no other concerns were expressed.

3. **Neil and Heather McKay – copy of your letter with our comments**

November 7, 2005
County of Wetaskiwin No.10
Box 6960
Wetaskiwin, Alberta
T9A 205
Attn: David Blades,
Director of Planning & Economic Development

Re: File \$# 4509.29
NE 22-46-06-
5

In response to the Notice of Public Hearing on the proposed development, we have the following comments:

The Area Structure plan for this subdivision proposal makes several references to an original subdivision plan RW 76-115. Thirty years later we suggest that this is an entirely new subdivision that must meet all of the current tests for zoning and subdivision rules.

From the Buck Lake Management Plan, dated April 9, 2002, suggests minimum size of 3 acre parcels within ½ mile of the lake. The Plan encourages conservancy efforts which suggest forest reserves. The subject proposed subdivision does not show any reserve. Again we question that the current proposal can piggyback on the 30 year old subdivision for reserve. The Management Plan indicates that lake access is not an issue where back lots are over two acres in size.

(Concern #1 - is addressed in the ASP under '4.1 Municipal Reserve' and '5. Lake Access')

Overall area density must be reviewed with respect to surface water quality runoff from sewage fields and the pressure this density puts on aquifers.

(Concern #2 - is addressed in the ASP under '4.3 Water Supply', '4.4 Sewage Disposal' and '4.6 Storm Management')

Somehow the reality of the ongoing poor condition of the Buck Lake Estates Subdivision road needs to be addressed. More development will put more stress on the road. The road must be improved prior to any further traffic pressure in the form of heavy construction related vehicles. The load restrictions do not seem to be enough.

(Concern #3 - is addressed in the ASP under '4.2 Road Access')

David Blades advised that if any money is allotted towards road maintenance for Buck Trail, that the money is allocated to that specific road and not used for other roadways within the county.

The additional revenue from the proposed 18 lots will be beneficial towards Buck Trail road maintenance and upgrades.

Thank you for considering our comments as input into this process.

Neil and Heather McKay
Lot 22, Buck Lake Estates

On the long weekend of May, 2006, we spoke with Heather and Neil, we discussed the above concerns, they were in agreement on what we were proposing, no other concerns were expressed. They were also very happy with the dedicated buffer and walkways that we were providing.

4. Daryl Mikalson - copy of your letter with our comments

David Blades
Director of Planning and Economic Development
County of Wetaskiwin No.1 0 ,
Re: Proposed Area Structure Plan NE 22-46-06-W5M

I am in general agreement with the development if:

a) The entrance roads to the development approach Buck Trail at an angle and are shielded with trees so as to cause less disruption to the houses directly opposite the access roads.

(Concern#1 - is addressed in the ASP under '4. Proposed Subdivision Design')

We apologize as this was an oversight.

This proposed design will be properly surveyed so there will be no conflict with any existing driveways.

b) The lakeside banks of the drainage ditch on the north side of Buck Trail are not high enough everywhere to direct the drainage along the ditch. The culvert invert is higher than the north bank of the ditch in some locations. As the construction of roads, clearing of lots, and conversion of forest to lawn, parking, and house area will result in increased drainage the development should be required to upgrade the ditches on both sides of Buck Trail

(Concern #2 - is addressed in the ASP under '4.6 Storm Water Management')

Thank you

Daryl Mikalson
Lot 23 Buck Lake Estates
c/o 19 Discovery Ridge Mews SW
Calgary, Alberta
T3H4Y5. (403-720-6575)

On the long weekend of May, 2006, we spoke with Daryl , we discussed the above concerns, he was in agreement on what we were proposing, no other concerns were expressed.

5. Ward and Bonnie Baird - copy of your letter with our comments

County of Wetaskiwin No.1 0
David Blades
Director of Planning and Economic Development
October 25th, 2005
Re: File #4509.29

Ward and Bonnie Baird lot#24 Buck Lake Estates

We are **not** in agreement with the proposed addition of back lots to the Buck Lake Estates subdivision. According to the management plan prepared by the West Central Planning Agency in 2001, supposedly only 20% more development was going to be allowed on the lake. Since that time several subdivisions have been allowed and several lots are still available.

Should this addition to the subdivision be allowed we would like to see the entry way to the cul-de-sac that is directly across from our lot, off set between Lot#24 and Lot#23. As a safety concern we would like to have it offset, so that it does not appear that the roadway continues and someone overshoots the road into our lot. We tend to have company on weekends and often children are playing on the lot. We would also be able to avoid having lights shining directly into our home in the evenings. We currently are building and would never have built the type of home we are building knowing we would have this roadway aligned..with our lot. We also believe lake access is going to be a huge issue. Knowing human nature people are likely to try and take the shortest route possible to the lake rather than the appropriate access routes. We believe that if the roadway is slightly offset people may be more inclined to turn in the direction of the access route.

We apologize as this was an oversight.

This proposed design will be properly surveyed so there will be no conflict with any existing driveways.

(Concern #1 - is addressed in the ASP under '4. Proposed Subdivision Design')

The road into this subdivision has always caused some contention. The road is poorly maintained and cannot handle an increase in traffic. Does this mean that the County is going to pave the road???

(Concern #2 - is addressed in the ASP under '4.2 Road Access')

David Blades advised that if any money is allotted towards road maintenance for Buck Trail, that the money is allocated to that specific road and not used for other roadways within the county.

The additional revenue from the proposed 18 lots will be beneficial towards Buck Trail road maintenance and upgrades.

We would also like to have clarification on the municipal reserve area. We understand the concept of the reserve area where no one is to build permanent structures, etc., but does public access mean someone can use your dock or pull up a lawn chair and enjoy the afternoon???

(Concern #3 - is addressed in the ASP under '4.1 Municipal Reserve' and '5. Lake Access')

Sincerely,

Ward & Bonnie Baird

On the long weekend of May, 2006, we spoke with Ward & Bonnie, we discussed the above concerns, they were in agreement on what we were proposing, no other concerns were expressed.

6. **Robert Emes - copy of your letter with our comments**

TO: County of Westaskiwin No. 10
Box 6960
Westaskiwin, Alberta
T9A A2G
November 8, 2005

Attn: Development Officer Planning & Economic Development
County of Westaskiwin No. 10

RE: Proposed Rezoning SE 22-46...Q6-W5M File # 4509.29
Agricultural to Residential.

Please find my concerns to this proposal:
I am a permanent resident of Buck Lake Estates. After reviewing the proposed Area Structure Plan # 7822341.

1. It refers to file RW-76-115 Hydrogeological Consultants Ltd. On water supply and soil quality. This report was commissioned in 1976, I would think that in thirty years there would be or could be a change to this study. This proposed development is directly behind our lot with just a road separating our water supply. As mentioned in the site characteristics, as a gradual slope down to the lake. I am concerned that the sewer systems drainage from eighteen (18) lots could put a great strain on our well water quality,
(Concern #1 - is addressed in the ASP under '4.3 Water Supply' and '4.4 Sewage Disposal')

2. Storm drainage: Again concerns with the added lots eighteen (18) there will be more run off as the proposed lots are developed as trees are cleared the surface water will not be absorbed by trees. Resulting in increased run off, the possibility of contamination entering the lake via the drainage ditch.
(Concern #2 - is addressed in the ASP under '4.6 Storm Management')

3. Added traffic: The condition of Buck Lake Road has been and is deplorable at the best of times. There has been little or no maintenance on this road in the twenty-six years of this development existence. The main area of deterioration of the road is at the entrance of the development as this section has the majority of traffic. The drainage at old house site first driveway (West Side) of Buck Lake Road going east to the drainage ditch and west to TWP 464 is not adequate. Why the county's road engineers have not addressed this issue is unclear!
(Concern #3 - is addressed in the ASP under '4.2 Road access')

David Blades advised that if any money is allotted towards road maintenance for Buck Trail, that the money is allocated to that specific road and not used for other roadways within the county.

The additional revenue from the proposed 18 lots will be beneficial towards Buck Trail road maintenance and upgrades.

4. Municipal Reserves under file RWI76/115. There are MR-35 19.13 acres in front of Buck Lake Estates lots and the lakefront. IN NO WAY do I or the owners of lake front lots want to see a trail, road, or pathway developed now or in the future. There are trees that are over sixty (60) to one hundred (100) years old in front of eighty five percent (85%) of the development. These trees act as a sound barrier from the sounds of motor boats and sea doos during the summer months. Also the same can be said for the winter

months with sounds of vehicles from ice fisher men; and the annoyance of snow mobiles running up and along the lakes shore line at all hours. The trees stop the cold winds blowing in from the lake. I have concerns in the municipal reserve.

a: vandalism

b: theft

c: pollution

d: garbage

Not to mention access between West Point Estates, and Heritage Estates for motor bikes and are favorite ATV's.

(Larger lots and the dedicated MR buffer along Buck Trail, with the internal pedestrian walkways, should help preserve the existing privacy of the adjacent landowners and the vacant land of Block 2 Lot 1 developed into occupied residential property would deter non resident atv's and motorcycles from abusing private property rights.)

After our meeting with Mr. Emes atv's were still a concern.

(Concern #4 - is addressed in the ASP under '4.1 Municipal Reserve' and '5. Lake Access')

After our meeting with Mr. Emes this was still a concern.

I request that Planning & Economic Development Department and County Councilors recognize my concerns.

Regards

Robert G. Emes

Box 564 Buck Lake. Alberta

T0E-T0T

Lot # 29

The second attached letter dated August 3, 2006, was submitted at our August 10, 2006 Council meeting. Issues were discussed with Mr. Emes when we met on the long weekend of May. Any of the issues and concerns he states in this letter have been addressed in our ASP.

County of Westaskiwin No. 10
Box 6960
Westaskiwin, Alberta
T9A-2G5

August 3, 2006

Fax # 780-352-3486

Attn: Development Officer Planning & Economic Development
County of Westaskiwin No. 10

RE: Proposed Rezoning SE22-46-06-W5M File # 4509.29S

Please find my concerns to this proposal:

I am a permanent resident of Buck Lake Estates. After reviewing the revised proposed Area Structure Plan # 7823341.

1: Let's back up and revisited this application. The developer bought this property as recreational. He then had it rezoned to Agricultural. Now the developer wants to rezone to residential developing eighteen, two (2) or more acre lots. In my and many of the residents of Buck Lake Estates this can't and should not be grandfathered or piggy back to the original Buck Lake Estates - an Lot 1, Block2. As the developer is applying to do.

2: As per county own policy the developer must build his own road in to a proposed development. This is a problem as the property is land locked.


3: Yes the developer came around this spring to talk to the property owners about our concerns. At that time I introduced Mr. Bridges to two new owners that will be affected Mr. Gary Achtemichuk Lot # 30 and Mr. Lee Chambers Lot # 28. There was no mention of the new proposal dated May 29th, 2006 at that meeting.

4: After reviewing the drawing plan 37823341 it shows the (fire pond) in Lot # 18. This is completely unacceptable. This Lot is heavily treed. Meaning much of the lot would have to be cleared to build and have water drain into it. The pond would be of no service to the proposed subdivision. As there is no access for a fire water truck to take on water. The only way that could be accomplished is to build an approach off of Buck Lake Estates road. At the far end of the proposed subdivision completely out of the question! Further more it would be a breeding grounds for mosquitoes.

5: I propose a remake of the proposed subdivision access. Move the road down to the West End around Buck Lake Estates Lots #8, #9. See drawing attached the fire pond could be relocated in or around Lots #7 #15 putting the pond in the middle of the proposed subdivision. Placing the pond here no trees would have to be removed. Also in moving the road there would only one approach instead of two and the fire pond accessed making three. One service road is a lot safer this would also cut down the amount of traffic; using three quarters of the Buck Lake Estates road Lot#1 to Lot#34.

In reviewing I would like to see a waiting period to have all the concerns and possible changes reviewed before the final acceptance is given to the developer. As this will have a great impact with property owners of Buck Lake Estates; and further property owners of the new subdivision.

I request that Planning & Economic Development Department, County Councilors and the Developer Mr. & Mrs. D Bridges recognize my concerns.

Regards,
Robert G. Emes 
Box 564 Buck Lake, Alberta
T0C-0T0

Lot # 29

7. Joe and Sam Klufas - copy of both your letters with our comments

November 8, 2005

County of Wetaskiwin No 10

David Blades

Director of Planning and Economic Development

RE: File # 4509.29

Klufas, Joe & Sam (Buck Lake Estates # 33)

We are *not* in agreement to the planned developement of the back lots to the Buck Lake Estates developement. It was our understanding that as per the management plan by the West Central Planning Agency in 2001 only 20% more developement was to take place. Since that time, there have been several subdivisions allowed and *several* lots are still for purchase. As there are still many lots around the lake for purchase, we do not feel that there is any sort of demand for additional developement.

If this developement was to take place, we have a direct concern with the condition of the road way leading up to and part of Buck Lake Estates as this road is not maintained at this point in time and with the additional traffic (private passenger as well as bigger vehicles for development/construction), this road will deteriorate even more rapidly. Is the county going to pave/improve maintains roadway???

(Concern#1 - is addressed in the ASP under '4.2 Road Access')

We also have a direct concern in regards to the public access to the municipal reserve area. How are the residents in the back lots to access this area, and where specifically is the area they will have access to ??? We are also concerned with the current use of *ATV'S* and *MOTORCYCLES* on our road. This will only increase with the proposed new developernent. If you take away our lake front access, our property taxes should go down to reflect the new *lake view* lots classification. We feel that perhaps there may be trespassing/crime now due to greater access to this area. Will they have access to use our dock for their boat(s) andlor be able to pull up lawn chairs, B-B-Q's to enjoy the day .. right in front of our property????? With an increase of population and access to this area (Buck Lake Estates) and the surrounding area, we feel that there may indeed be an increase to safety and well-being of the area and its residents at this point in time.

(Concern#2 - is addressed in the ASP under '41. Municipal Reserve' and '5. Lake Access')

Sincerely,


Joe Klufas & Sam Klufas

Second letter received from Joe and Sam Klufas

November 8, 2005
County of Wetaskiwin No 10
David Blades
Director of Planning and Economic Development
Re: File # 4509.29
Klufas, Joe & Sam (Buck Lake Estates # 33)

It has now come to our attention within the last 1hr that with the mailing of the notice concerning the subdivision behind Buck Lake Estates, which is NOT dated, that there were 2 more additional pages in regards to the construction of a 'public path' along the lake shore in front of owned properties. PLEASE ADVISE AS TO WHY WE **DID NOT** RECEIVED THESE ADDITIONAL NOTICES !!

(This concern is addressed in the ASP under '5. Lake Access')

As this is not just an issue about an additional subdivision, it is also concerning our property values/taxes and our right to have a say to what happens to our's and nature's reserve land at this site. It is my understanding that a municipal reserve is to be kept "*untouched*" and is not to be developed. With a pathway being incorporated, it will no longer be kept as such

(This concern is addressed in the ASP under '4.1 Municipal Reserve')

On the long weekend of May, 2006, we spoke with Joe and Sam, we discussed the above concerns, they were in agreement on what we were proposing, no other concerns were expressed.

8. Barrie and Linda Stewart – copy of your letter with our comments

Submitted by email November 8, 2005

Re: File #4509.29

Thank You for the opportunity to submit our concerns regarding the proposed area structure plan on land NE22-46-06-W5M.

Concern#1 The existing roadway(Buck Lake Trail) will require a major upgrade to handle the increase traffic. (including heavy duty const vehicles).

(Concern#1 - is addressed in the ASP under '4.2 Road Access')

David Blades advised that if any money is allotted towards road maintenance for Buck Trail, that the money is allocated to that specific road and not used for other roadways within the county.

The additional revenue from the proposed 18 lots will be beneficial towards Buck Trail road maintenance and upgrades.

Concern#2 Where will the new property owners access the lake?

(Concern #2 - is addressed in the ASP under '5. Lake Access')

Concern#3 The existing boat launch will also require a major upgrade to accommodate increased usage.

Concern#4 When we purchased our property Jan/1981 from A.E. LePage Realtor, we were advised that this section of land would never be developed until 75% of the lake front properties around the entire lake were sold. Has this percentage been achieved? We await your reply.

Barrie and Linda Stewart ... Lot 2,Block2, Plan7823341 Buck Lake Estate.

3535-114 Street

Edmonton, AB T6J1 L7

barriestewart@shaw.ca

780-435-8562

On the long weekend of May, 2006, we spoke with both families and discussed the above concerns, they were in agreement on what we were proposing, no other concerns were expressed. We spoke again when our engineer was on site, and they were very happy with the solution for the storm water drainage issue.

9. Candler from November 9th, 2005 meeting

His concern is addressed in the ASP under '4.2 Road Access, 5. Lake Access and 4.1 Municipal Reserves'.

When we spoke with Mr. Candler, he offered any assistance we needed, but as an adjacent landowner. All concerns were addressed with positive results.

10. Steckly from November 9th, 2005 meeting.

Their concern is addressed in the ASP under '5. Lake Access'.

When we spoke with Marlean, it also was with positive results. Lake access was discussed and there were no other concerns.