

**CLEARWATER COUNTY
COUNCIL AGENDA
February 8, 2011**

DELEGATIONS:

A. CALL TO ORDER

B. AGENDA ADOPTION

C. CONFIRMATION OF MINUTES

1. January 25th, 2011 Regular Meeting Minutes

D. PUBLIC WORKS

1. Public Works Manager's Report
2. Field Spreading Septage

E. FINANCE

1. Accounts Payable Listing
2. Release of Audit Management Letters

F. MUNICIPAL

1. Municipal Manager's Report
2. County Website - Clearwatercounty.ca
3. CAEP Regional Transportation Project
4. Clearwater County Code – Overview
5. Nordegg Leisure Residential Lot Purchasing Policy
6. Agricultural Services Council Update

G. PLANNING

1. 11:00 Application to Amend Land Use Bylaw - Bauer

H. COMMITTEE REPORTS

1. NSWA Governance workshop – Pat Alexander

I. ADJOURNMENT

TABLED ITEMS

<u>Date</u>	<u>Item, Reason and Status</u>
08/10/10	Residential Subdivision Policy <ul style="list-style-type: none">• To allow more discussion between Council and Public Works. STATUS: In progress, Public Works

AGENDA ITEM

DATE: February 8, 2011

ITEM: Field Spreading Septage

PREPARED BY: Rick Emmons

BACKGROUND:

Council has made inquiries as to the proposed amendments from Alberta Environmental Protection in regards to the spreading of human septage on fields. In an effort to address these inquiries, Administration has compiled a summary of the amendments from AEP.

The amendments from AEP are only in effect for the Central Region at this time. The main focus of the amendments is not to permit field spreading when:

- the septage is within 50 km of a wastewater treatment facility or
- if the field is in a water run area that would feed into a lake.

A septage hauler will have to apply to Alberta Environment and obtain a Letter of Authorization (LOA) if he/she is interested in disposing the hauled septage any other way than discharging it to an approved wastewater treatment facility.

The AAMD&C's October 13, 2010 bulletin also gave some notification of the proposal from AEP.

Recommendation:

Council receives the information as provided by Administration.

Attachments – Discussion paper
AAMD&C Bulletin



MEMBER BULLETIN

October 13, 2010

Proposed Criteria for Septage Land Spreading Partial Ban

In 2004, a Septage Management Advisory Committee was formed to provide advice and recommendations to Alberta Environment on septage management practices and legislative requirements. The AAMDC had representation on this committee; more information is available [here](#). The report submitted by this committee recommended that:

Alberta Environment should lead the development of requirements that describe specific exemptions under which land application of septage will be allowed by the Letter of Authorization if access to proper disposal facilities is unavailable. These requirements would identify restrictive conditions for land disposal, ensuring that this method is used as an exception to preferred practice. The committee notes that improved access to approved wastewater facilities is necessary and preferred.

To this end, Alberta Environment has been working with the multi-stakeholder Septage and Onsite Wastewater Strategic Advisory Committee to develop a discussion document. AAMDC District 3 Director John Whaley chairs this committee. The discussion document provides proposed criteria for a partial ban on land spreading of septage.

This discussion document will be piloted in Alberta Environment's [central region](#) only. As such, only municipalities in that region are being asked to comment on the draft document at this time. Each municipality will be contacted separately. Based on the pilot results, the criteria for partially banning land application of septage will be modified to meet regional needs in northern and southern regions. At that time, the appropriate municipalities will be consulted.

Enquiries may be directed to:

Kate Hovland
Policy Analyst
780.955.4094

Kim Heyman
Director of Advocacy & Communications
780.955.4079

Discussion Document

Land application of Septage October 4, 2010

Introduction:

This document has been prepared specifically for Alberta Environment's **Central Region** as a pilot area. Once the criteria identifying areas where land application of septage would not be acceptable are finalized, it will be adopted for the Southern and Northern regions, with the necessary modification to consider their regional specific circumstances.

The purpose of this document is:

1. To identify criteria where land application of septage would NOT be allowed in Central Region.
2. To seek constructive feedback from stakeholders with the goal of continuous improvement and clarification of the proposed criteria.

In general it is proposed that, in the **Central Region**:

- a) septage shall not be applied to land inside the effective drainage area of lakes of concern up to a maximum of 10 kilometers from the lake shore; and
- b) septage collected within 50 kilometers travelling distance of an approved wastewater treatment facility must be taken to the facility for treatment and shall not be applied on land.

When the concepts presented in this document are finalized, it will then be prepared as AENV policy and will be reflected in the Letter of Authorization (LOA) for land application of septage issued to the haulers.

A septage hauler must apply to Alberta Environment and obtain a Letter of Authorization (LOA) if he/she is interested in disposing the hauled septage any other way than discharging it to an approved wastewater treatment facility. A LOA application form can be obtained from an Alberta Environment Regional Office.

The LOA is a document issued by Alberta Environment to the septage hauler, authorizing him/her to dispose septage on land according to specific condition and criteria. These criteria include, but are not limited to setback distances, application rate, method of application, and restrictive conditions (e.g. septage shall not be applied to frozen land or snow covered land) etc.

The LOA from Alberta Environment does not exempt the septage hauler from other approvals/authorizations/requirements such as municipal development permit, provincial and local transportation requirements etc.

Background:

In 2004 a Septage Management Advisory Committee (SMAC) was formed to provide advice and recommendations to Alberta Environment on septage management practices and legislative requirements: <http://environment.alberta.ca/02228.html>. Alberta Environment (AENV) has prepared this document to implement the following recommendation captured in the SMAC's final report:

"AENV should lead the development of requirements that describe specific exemptions under which land application of septage will be allowed by the LOA if access to proper disposal facilities is unavailable. These requirements would identify restrictive conditions for land disposal, ensuring that

this method is used as an exception to preferred practice. The committee notes that improved access to approved wastewater facilities is necessary and preferred”.¹

Proposed Policy Criteria:

Land application of septage in accordance with Letter of Authorization (LOA) **would only be allowed** provided:

1. The proposed land is **not** within the effective drainage area of lakes of concern up to a maximum of 10 Kilometer from the lake shore. To see the maps identifying the lakes of concern in the central region and their effective drainage area go to following website which will be valid for a limited time only:

<https://external.sp.environment.gov.ab.ca/CR-Lakes/Shared%20Documents/Forms/AllItems.aspx>

Lakes of concern in Central Region:

- **In the Red Deer District** - Pigeon Lake, Gull Lake, Buffalo Lake, Sylvan Lake, Pine Lake, West Dried Meat Lake, Capt. Ayre Lake, Coal Lake, Buck Lake, Battle Lake, Bittern Lake, Miquelon Lake, Glennifer Lake, Cow Lake, Abraham Lake.
 - **In the Spruce Grove District** - Saunders Lake, Ord Lake, Big Hay Lake, Joseph Lake, Minnistik Lake, Oliver Lake, Lessard Lake, Wizard Lake, Spinningbank Lake, Birch Lake, Brule Lake, Rock Lake, Sunset Lake, Wabamun Lake, Lac Ste. Anne, Chip Lake, Lake Isle, Lac La Marine, Oldman Lake, Majeau Lake, George Lake, Shoal Lake, Baird Lake, Beaverhill Lake, Brazeau Canal/Reservoir.
2. There is **not** a “Reasonable Access” to an approved wastewater treatment facility.
Reasonable access is defined as:
 - a) A travel distance from last septage pick up to the approved wastewater treatment facility is less than 50 kilometers or as otherwise authorized by the Director; **and**
 - b) The owner of the wastewater treatment facility has given permission to the hauler to dispose hauled septage to their system.

¹ ALBERTA ENVIRONMENT – SEPTAGE MANAGEMENT ADVISORY COMMITTEE
Recommendations for Septage Management in Alberta

Appendix A: Question and Answers:

1. Why is land application of septage not acceptable within the effective drainage area of lakes of concern?

Disposal of septage is regulated under the Environmental Protection and Enhancement Act (EPEA) and Regulations:

http://www.gp.alberta.ca/574.cfm?page=E12.cfm&leg_type=Acts&isbncln=9780779745753.

Alberta Environment will not issue a Letter of Authorization for land applications of septage within the effective drainage area of lakes of concern to avoid potential nutrient loading and environmental impacts that may result from such practices.

2. Can biosolid from municipal wastewater treatment facility be applied on land in the effective drainage area of lakes of concern?

Biosolid is defined as treated sludge from municipal wastewater treatment process. Biosolid has different characteristics than septage. Land application of biosolid is approved after a detailed site specific evaluation to determine site specific criteria that have to be met prior to proceeding with the practice. Therefore land application of biosolid within effective drainage area of lakes of concern will only be acceptable after detailed site specific evaluation and monitoring to prevent potential nutrient loading and environmental impact.

3. Can septage or biosolid be applied on frozen or snow covered land?

No, application of septage and biosolid is not allowed on frozen or snow covered land. Under these conditions the potential adverse environmental impact and human health risk resulting from nutrient and pathogen runoff are not acceptable.

4. What are some of the criteria that were considered to identify “Lakes of Concern”?

The following criteria were used to identify “Lakes of concerns”

- Lakes within Green Zone
- Lakes with Summer Village or development on the shorefront
- Lake is dammed or has a weir to control water level
- Lake is a water supply source
- Lakes where the First Nation land are on the shorefront
- Lakes with Provincial or Federal Park on the shorefront

5. What would determine if a hauler has or does not have “reasonable access” to an approved wastewater facility for disposal of septage?

“Reasonable access” is dependent on two factors:

- a) “**acceptable travel distance**” for an hauler to travel to discharge to an approved wastewater facility; and
- b) “**Written permission or rejection**” letter form the owner of the wastewater facility to accept septage from a hauler at their approved wastewater facility.

6. What is an “acceptable travel distance”?

It is well understood that acceptable travel distance is dependent on the road conditions, haulers expenses and customer willingness to pay for those expenses, and that these factors will be different from one region to another. However, to level the playing field, a maximum accepted traveling distance of 50 kilometers was agreed to by Alberta Environment and stakeholders. All septage collected within this traveling distance from an approved wastewater facility that accepts septage must be hauled to the approved facility. The Director may authorize a different travel distance on site-specific bases.

7. How do haulers obtain “written permission or rejection” from the owner of the approved wastewater treatment facility?

The hauler must contact the owner of the approved wastewater treatment facility to outline their request and work with the owner of the facility to address their concerns if any. As an outcome of this discussion, the owner of the facility and the hauler should arrive to a decision as to whether the hauler has permission or does not have permission to discharge septage at the approved wastewater facility. It is recommended that the decision is documented in writing. Some of the issues that may need to be addressed in this process are:

- a) Confirmation of type of septage that will be hauled to the facility
- b) The hours of operation when the facility can be accessed by the hauler
- c) Maintenance of septage dumping site and road access to the site
- d) Fee for access
- e) etc...

Agenda Item

Date: February 8, 2011

Item: Release of Audit Management Letters

Prepared by: Murray Hagan

Introduction:

AAMDC has been asked to forward a position regarding the proposed requirement, under the Province's Municipal Accountability Action Plan, to publicly release details of audit management letters.

This suggested requirement was one of the alternatives proposed by Hon. Ray Danyluk, then Minister of Municipal Affairs, to the proposal of appointing a Municipal Auditor General.

As a member council of AAMDC, Clearwater County has been asked to provide an opinion on this matter to assist AAMDC in drafting its position paper. This opinion is to be communicated through an electronic survey provided by the AAMDC.

Background:

Auditors are not required to issue a management letter as part of their responsibilities under Canadian Auditing Standards (CAS). However, should they choose to do so, this letter forms an essential communication vehicle between Council and its appointed auditors, identifying weaknesses in internal control or breakdowns in processes. It is not intended for third party use.

While the publication of the management letter may appear to support the concept of transparency, it is staff's position that posting of the management letter is inappropriate in this regard due to the following:

- 1) The management letter is meant to inform Council of any significant weaknesses in internal control and provides recommendations for improvement. The management letter is not a statement of the appropriateness of the expenditures, nor should it be portrayed or represented as such.
- 2) In some circumstances the nature of the information contained in the management letter could be subject to the Freedom of Information and Protection of Privacy Act (FOIP) with those sections needing to be excepted (blacked out), which would lessen public confidence or result in the auditors not addressing their concern or addressing the concern in another manner, thereby diminishing the importance or initial purpose of the management letter.

- 3) There exists the risk that comments could be misinterpreted or taken out of context. This could seriously diminish the intended usefulness of the document and lead to incorrect conclusions regarding the effective governance and management of the municipality.
- 4) There is also a risk, as evidenced by the federal auditor general, where the auditor takes on a political role, choosing to comment on the “appropriateness” of a program as opposed to confining themselves the accounting functions.

Management also consulted the County’s auditor to gain his insight on this matter. The firm does not generally object to the sharing of information contained within the management letter. However, they did express concern that the awareness that comments could be made public may create sensitivity on the part of management and/or Council, thus detracting from the effectiveness of the communication.

Staff believes that the citizen engagement strategy that Council is proposing is a more appropriate process in attaining the goals of accountability and transparency being advocated by AB Municipal Affairs as this strategy provides the opportunity for more dialogue and better interaction between Council and its citizenry than the auditor’s management letter would.

Questionnaire:

Following is the questionnaire information provided by AAMDC. If Council is in agreement with the preceding statements, staff suggests the following responses be submitted.

1. Please indicate your municipality.

Clearwater County

2. Does your municipality publicize its audit management letter?

Yes

No

3. Does/would publicizing the audit letters unduly restrict the effectiveness of the communication between auditor and council? If so, how?

Clearwater County believes that publicizing the audit letters would unduly restrict the effectiveness of the communication between auditor and council.

There is risk that the accountability relationship between council and ratepayers could be blurred, creating an expectation that management is directly accountable to the ratepayers. This could significantly diminish council's ability to effectively govern the organization.

Further, we believe that potential sensitivity as to the content to be shared and the risk that information could be taken out of context or misunderstood could seriously hinder the effectiveness of the intended communication.

4. In the interest of accountability and transparency, does your municipality have any suggestions on how significant weakness or breakdowns in process should be disclosed?

We believe the current method of communication between council and auditor, through the management letter, provides an effective method of obtaining feedback as to the existence and effective operation of internal controls implemented by management. Council relies on these internal controls to ensure it is effectively carrying out its governance responsibilities and meeting the accountability expectations of its ratepayers.

If there should be a significant weakness, or breakdown in process noted, it is council's responsibility to follow up with management as to corrective action. In the interest of transparency, it would be prudent for council to inform ratepayers that issues were identified and addressed. It may not be necessary to go into detail regarding the specific items noted.

Recommendation:

That Council reviews, amends as required, and directs staff to submit the questionnaire to the AAMDC reflecting the concepts and principles relating to the publication of the municipal auditor's management letter.

Agenda Item

Date: February 8, 2011
Item: County Website - www.clearwatercounty.ca
Prepared by: Mike Haugen and Christine Heggart

Background:

Now that initial development of the website is virtually complete, staff wish to demonstrate some of the functionality of the site to Council. Staff are still working on a couple of issues in various areas, but for the most part the initial site structure and functionality is complete.

Some of the major components in the initial development included:

- A content management system which allows County staff to alter content and add/remove pages as necessary;
- Budget Visualization Component that allows the County's budget (or portions thereof) to be shown clearly and linked to relevant information pages;
- Forms Component which allows users to submit forms and contact County staff;
- County calendar and events information;
- Document, File, Photo and Video Management Components which allow for the easy management of these files on the website; and,
- Dark Site that can be activated by staff and used in emergencies. The dark site becomes the new homepage and provides information about the event. This site can be bypassed by the user to access the County's main site.

Staff will provide more in depth information and explanation on these components and their functions during our Council presentation.

Approved budget has allowed Staff to consider additional elements that arose during the initial phase of development. We are currently working to assess which of those components will provide value to the website. They include items such as an expandable "Dark Site", ability to change picture banners and an organizational chart component, among others. These are small scale items and it is anticipated that they will be completed quickly before moving into more complex items.

The current stage of development being embarked upon is the most complex part of the development process and includes such items as:

- Advanced Mapping which allow staff to tag a location and associate that location with other information. For example, to tag a community hall and provide a way of accessing information on that hall through the map;
- Access Management and Portal Components that will allow staff to dictate access levels of different persons. For example, this allows us to develop a message board for volunteer firefighters that is accessible only by volunteer firefighters. Another application would potentially allow realtors or lawyers to access Tax Certificates themselves and automatically generate a corresponding invoice;

It is these advanced functions that transition the website from solely a provider of information, to an interactive service tool. While the number of components at this stage in development are fewer, they are far more complex.

The old site has been removed and visitors to that address are automatically being redirected to the new site. It was found that the old address – www.county.clearwater.ab.ca was long and cumbersome. Staff secured www.clearwatercounty.ca as an alternative address during the site development. The new address is slightly shorter, much less cumbersome and much more memorable. Accordingly, staff email addresses also reflect this change. This was done from a communication/branding perspective, but was seen as appropriate to align with the website redevelopment.

As the website represents an important element of Council's communication and engagement strategies, staff wished to provide Council with an update on the current status of this project.

Recommendation

That Council accepts this report for information.

Agenda Item

Date: February 8, 2011
Item: CAEP Regional Transportation Strategy Meeting
Prepared by: Tyler McKinnon

Background:

In 2009, the Central Alberta Economic Partnership (CAEP) established a committee to develop a needs assessment for a regional transportation strategy based on transportation patterns, local resources and current demand.

At the July 27 meeting, Council reviewed CAEP's 90% complete draft regional transportation strategy report, and completed a short survey indicating levels of support for the items in the report. Council's completed survey gave support, in principle, for most of the report but stayed neutral for two sections (types of transportation and types of fee collection) as those sections were simply informational and had no recommendations to provide or withhold support for.

Council also noted that, until CAEP is able to provide some concrete information around costs, and the type of services we would be getting, Council could not determine whether or not a regional transportation system would be beneficial to residents.

CAEP has requested that Council complete three short questions, indicating Council's level of interest or ability to participate in any funding or organizing of projects towards the implementation of a regional transportation network. A copy of the questions has been attached for your information.

The questionnaire references Section 4.0 of the transportation strategy report ("Implementation"). As Council may recall, the report had noted that implementation would be phased as follows:

- 1) The creation of a regional transit spine (eg: Red Deer to Rocky Mountain House, Red Deer to Wetaskiwin)
- 2) Transit connectors leading into the spine, created according to the readiness and willingness of two partners to create and support such a connector (eg: a spur line from Caroline to Rocky that connects to the greater transit spine)
- 3) Rural local transit support to be created on an as needed or desired basis to get users from sparsely populated rural areas to transit connectors

A copy of the report and the questionnaire Council previously completed has been attached for your review.

CAEP has asked that Council provide a response by February 9, should Council wish to complete the questions with staff at this time, the answers will be forwarded to CAEP staff.

Question 1 asks:

“How interested / capable is your municipality in participating in the organization and funding of one or more initial implementation projects for the regional transportation strategy?”

With the following answer options:

Not Interested or Not Able To Fund (Go to Question 3)	Maybe Interested and Potential Funding Available	Definitely Interested and Funding Available
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Previous discussion had noted that, given the rural nature of Clearwater County, any implementation here would be a long term item, following the establishment of the main transportation spine and connectors. Given this, Council has not included any funding consideration for such a project in their approved 2011 or projected 2012 budgets. Staff recommend that Council answer “Not interested or not able to fund” to this question.

Question 3 asks:

“If you answered Not Interested or Not Able to Fund, please elaborate so the Transportation Committee can understand the opportunities and constraints of CAEP members.”

In the previous questionnaire that Council submitted to CAEP, Council had responded *“at a regional level, this is probably a good strategy/program to pursue. Given that we are a rural municipality on the periphery of the system, we would need to determine if the benefits to ratepayers outweigh the costs. Most residents in rural areas would need their own transportation to get to the transit access points”*. Council may wish to respond that Clearwater County will need more details on the system as it gets up and running, as well as a cost benefit analysis for any system the County may implement, before Council considers committing funding towards a Regional Transportation system.

Recommendation:

That Council complete the attached questionnaire with staff.

Sent on behalf of the Regional Transportation Committee Chair, Will Taylor

CAEP is committed to engaging its members and as such, the Regional Transportation Committee (RTC) needs your input. The Committee will be meeting on February 14, 2011 to discuss the next phase: implementation of the *CAEP Regional Transportation Strategy - Guide and Toolbox*. Activities in this phase will be determined based on the level of member collaboration and number/location of members interested in implementation.*

A response from your Council on or before **February 9, 2011** to the following three (3) questions will provide a better understanding of how CAEP should proceed. (Please note that your responses are non-binding at this time.) Please send your completed response by Email to Natalie.gibson@gov.ab.ca or Fax to 403-357-2288.

1. How interested / capable is your municipality in participating in the organization and funding of one or more initial implementation projects for the regional transportation strategy? Please circle, or mark your selection with an X.

Not Interested or Not Able To Fund (Go to Question 3)	Maybe Interested and Potential Funding Available	Definitely Interested and Funding Available
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2. If you answered Maybe Interested or Definitely Interested, approximately what level of annual funding do you estimate your municipality could invest on a per capita basis in the regional transportation strategy, that would be your portion of a GreenTRIP application? (specifically operating an implementation project benefiting your community.) Please circle, or mark your selection with an X.

\$2 per capita annually	\$4 per capita annually	\$6 per capita annually	\$8 per capita annually	\$10 per capita annually
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3. If you answered Not Interested or Not Able to Fund, please elaborate so the Transportation Committee can understand the opportunities and constraints of CAEP members.

* Referring to "Section 4.0 - Implementation" of the *Regional Transportation Strategy*

RTS Background:

- The *Strategy* was approved at CAEP's Board Meeting on September 16, 2010. Information about the approval process, along with a copy of the *Guide and Toolbox* and results from the member Councils referral process last Fall is available on CAEP's website at <http://www.centralalberta.ab.ca/index.cfm?page=RegionalTransportationStrategy>.
- The Province of Alberta announced the Green Transit Incentives Program (GreenTRIP) in support of public transit initiatives in Alberta mid 2010 while CAEP was working on the *Strategy*. Information on GreenTRIP is available at <<http://alberta.ca/acn/201006/28647600F68AB-9D3D-8FDB-3964EB27F31BF3DF.html>>
- Following the approval of our *Regional Transportation Strategy - Guide and Toolbox*, the CAEP Regional Transportation Committee Chair sent a letter to Alberta Transportation's GreenTRIP administrators to inform them of the strategy and indicate intent to apply for a portion of the \$400 million currently available for rural communities to help with public transit capital outlays.
- The Honourable Luke Ouellette, Minister of Transportation, is prepared to meet with the CAEP Chair and members to discuss the *Strategy* and opportunities for implementation.



❖ Section 1 of Draft Report: Project Vision & Objectives, do you:

- support in principle
- take a neutral position
- withhold support in principle

Please provide comments / rationale:

❖ Section 2 of Draft Report: Regional Transportation Toolbox, do you:

- support in principle
- take a neutral position
- withhold support in principle

Please provide comments / rationale:

The question is not clear - section 2 is a list of possible transportation tools. What is supported.

❖ Section 3.1 of Draft Report: Proposed System Framework, do you:

- support in principle
- take a neutral position
- withhold support in principle

Please provide comments / rationale:

seems reasonable, based on geography

❖ Sections 3.2 / 3.3 of Draft Report: Funding / Fares and Transfers, do you:

- 3.3 support in principle
 3.2 take a neutral position

withhold support in principle

Please provide comments / rationale:

3.2 - as w/ Section 2 - this is informational
 but unclear what support is give/withold for here

❖ Section 4 of Draft Report: Implementation, do you:

- support in principle
 take a neutral position
 withhold support in principle

Please provide comments / rationale:

Additional Comments:

- At a regional level, this is probably a good strategy/program
 to pursue. Given that we are a rural
 municipality on the periphery of the system, we
 would need to determine if the benefits to
 ratepayers outweigh the costs. Most residents in
 rural areas would need their own transportation
 to get to transit access points.

Please forward responses to:

Karen Parsley via fax: 403.340.5231 or email karen.parsley@gov.ab.ca.



Stantec

**CAEP REGIONAL
TRANSPORTATION STRATEGY -
GUIDE & TOOLBOX - 90% DRAFT**

Prepared For:

Central Alberta Economic Partnership
(CAEP)

Prepared By:

Stantec Consulting Ltd.

File: 1162-39176

[DRAFT NOTE: THIS IS A PROGRESS DRAFT
REPORT AT APPROXIMATELY 90%
COMPLETION. SOME REMAINING GAPS AND
ONGOING REVISIONS ARE TO BE EXPECTED.
FEEDBACK AND COMMENTS ARE WELCOME.]

June 10, 2010

Stantec

CAEP REGIONAL TRANSPORTATION STRATEGY - GUIDE & TOOLBOX - 90% DRAFT

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1.0 Introduction

[DRAFT NOTE: THIS IS A DRAFT REPORT ON THE CAEP REGIONAL TRANSPORTATION STRATEGY AT APPROXIMATELY 90% COMPLETION. SOME REMAINING GAPS AND ONGOING REVISIONS ARE TO BE EXPECTED. FEEDBACK AND COMMENTS ARE WELCOME.]

1.1 PROJECT OVERVIEW

Rural communities face complex challenges in sustaining growth and the need for a regional transportation strategy has been growing over the past number of years. Many Central Albertans live and work or attend school and post-secondary in different communities. The intent of an improved transportation system is to increase retention of residents in municipalities across Central Alberta, ultimately helping retain businesses and keeping our communities strong and vibrant.

In 2009, under its Regional Economic Development Strategy, CAEP established a committee to develop a needs assessment for a regional transportation strategy for moving people. The committee is now in phase two of a three phase process to develop the strategy based on transportation patterns, local demand and existing resources. In addition to generating economic development opportunities, the goal of a regional transportation strategy is to help local communities retain businesses and residents by improving the quality of life and supporting participation in employment, recreational, social, health services, and educational opportunities across the region.

The key deliverables of the project are a long-term vision for regional transportation that reflects local plans, considers future demands, recommends coordinated planning processes, provides direction on priorities, and responds to new transportation methods and opportunities.

Stantec**CAEP REGIONAL TRANSPORTATION STRATEGY - GUIDE & TOOLBOX - 90% DRAFT**

Introduction

June 10, 2010

1.2 VISION & OBJECTIVESVision:

CAEP's Regional Transportation Strategy will promote the development of a balanced and sustainable transportation system providing the region with reasonable and affordable transportation choices.

Objectives:

The Regional Transportation Strategy must:

- be long term and innovative
 - responsive and adaptable to the changing needs of the community
 - environmentally friendly
 - equitable and sustainable for users and stakeholders
 - accommodate identification and prioritization of community needs
- generate economic development opportunities
 - move people efficiently
 - create jobs
 - connect communities
 - create opportunities for First Nations
 - support employment needs in smaller communities
- be implementable
 - easily duplicated and scalable template
 - specific to the CAEP region
 - affordable
 - create awareness of regional public transportation to all CAEP members
 - build member participation

2.0 Elements of Regional Transportation System

This section introduces a toolbox of potential regional transit elements / modes, with descriptions of what is involved with each, and commentary on circumstances where each would be most suitable. Table 2.1 summarizes the key features of the toolbox of regional transit elements / modes described in this section.

Table 2.1 - Toolbox Summary

Report Reference	Mode	Minimum Population	Capital Costs (approximate)	Operating Costs (approximate)	Vehicles	Trips Best Served	Clients Best Served	Program Operator
2.1.1	Volunteer Driver Program	n/a	minimal (perhaps purchase of sedan or minivan)	mileage allowances (e.g. \$0.52/km), dispatching	provided by volunteers, purchased, or donated	casual (e.g. appointments, shopping, leisure/social)	elderly, young, disabled, persons without a car	local government, non-profit or faith-based group
2.1.2	Voucher Program	n/a	minimal (voucher supplies, software)	mileage allowances (e.g. \$0.52/km), dispatching	provided by volunteers, purchased, or donated	casual (e.g. appointments, shopping, leisure/social)	elderly, young, disabled, persons without a car	local government, non-profit or faith-based group
2.1.3	Demand Responsive Paratransit	n/a	paratransit buses or vans, dispatch software	approximately \$60/h, plus dispatch costs	grants or donations often available	work (e.g. regular commuting) or casual (e.g. appointments, shopping, leisure/social)	everyone, including elderly and disabled, persons	local government, non-profit or faith-based group, using direct operations or contracted operator
2.1.4	Route/Point Deviated Transit	varies	purchase of bus(es) and garage for storage	\$60/h - \$100/h depending on operating model	likely eligible for provincial grants	work, school and casual (e.g. appointments, shopping, leisure/social)	elderly, young, disabled, persons without a car	local government, non-profit or faith-based group
2.1.5	Car Pooling / Ride Matching	n/a	none	cost shared among users	provided by users	casual - work, education or any regular trip	all	local government, or non-profit
2.1.6	Van Pooling	n/a	purchase of van or minivan	may be subsidized and cost shared with passengers/employer	purchased	work	employees	local government, non-profit or major employer

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Report Reference	Mode	Minimum Population	Capital Costs (approximate)	Operating Costs (approximate)	Vehicles	Trips Best Served	Clients Best Served	Program Operator
2.1.7	Bus Pooling	40,000+	from \$80,000 to \$600,000 per bus depending on size	\$75/h to \$100/h	grants may be available to offset costs	employment	shift workers	employer, local government or joint
2.1.8	Community Van	1,000	minimal - purchase of a van	cost for maintenance, about \$0.60/km	purchased or donated	casual (e.g. appointments, shopping, leisure/social)	elderly, young, disabled, persons without a car	local government, non-profit or faith-based group
2.1.9	Fixed Route Transit	5,000	purchase of bus \$80,000 - \$400,000	\$80/h to \$100/h	grants likely to be available if vehicles are accessible for persons with disabilities	all	all	local government
2.1.10	Coordinated Transportation / Mobility Management	n/a	minimal - perhaps purchase software	office staff	not required	casual (e.g. appointments, shopping, leisure/social)	elderly, young, disabled, persons without a car	local government, non-profit or faith-based group
2.1.11	School Bus Sharing	n/a	none - uses existing vehicles and resources	depends on use	provided by school districts	all	potentially anyone	local government, or school district
2.1.12	Jitney	100,000	van or small bus - \$40,000 to \$100,000	approximately \$50/h	purchased	all	all	private operator
2.1.13	Car Sharing	varies	purchase of cars, software	covered by user fees, rentals	purchased	casual (e.g. appointments, shopping, leisure/social)	persons without a car or without a second car	private sector

All costs presented in this document are estimates based on general experience and approximations of local data. They are approximate, and presented only for the purpose of broadly evaluating potential regional transportation elements at a conceptual level.

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2.1 REGIONAL TRANSPORTATION TOOLBOX**2.1.1 Volunteer Driver Program**

- Minimum Population Range: n/a
- Capital Costs: minimal (perhaps purchase of sedan or minivan)
- Operating Costs: mileage allowances (e.g. \$0.52/km), dispatching costs
- Vehicles: provided by volunteers, purchased, or donated
- Types of Trips Best Served: casual (e.g. appointments, medical, shopping, leisure/social)
- Types of Clients Best Served: elderly, young, disabled, persons without a car
- Program Operator: local government, non-profit or faith-based group

Volunteer Driver Programs have been widely adopted in urban, suburban and rural communities across North America. These programs can be operated by non-profit agencies, faith-based organizations or municipal/local governments. The programs involve volunteer drivers using their own (or agency-owned) vehicles to transport individuals or small groups to appointments, shopping or recreation/social outings. If their own vehicle is used, volunteers are reimbursed for vehicle expenses or mileage. Operating models also exist where volunteers earn credits that can be used when they or their loved ones may need to receive a donated trip.

Volunteer Driver Programs can operate in villages of a few hundred population, or metropolitan areas of more than 1,000,000 people. Users are usually asked to consider making a donation, but fixed fares are rarely utilized. This type of service caters to travel by persons unable to drive their own vehicle or needing special assistance, including seniors and the disabled. The use of volunteer drivers, most likely using their own vehicles, does limit the potential for the service to meet the needs of the disabled. Ambulatory passengers are typically less constrained, but not every driver (or driver's vehicle) can carry or load mobility devices such as wheelchairs or scooters.

Although relatively easy to establish, Volunteer Driver Programs do require an initial amount of work to set up. Insurance, driver screening, and training are among the most difficult issues to resolve. The service must be target-marketed to the most likely group of clients and a reservation/cancelation system established.

Volunteer drivers are, by definition, not paid. However, operating expenses can add up, particularly in rural areas where the distances and hence the mileage payments can quickly become significant. Volunteer Driver Programs can exist without tax revenue support, surviving purely on donations of in-kind-services, cash and equipment (e.g. cars no longer needed by owners). However, a stable source of funding makes for a more stable system.

Pre-registration of users and volunteers is required to provide time for screening, training and to ensure that users are aware of the limits of service and booking procedures. Pre-registration

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and service limitations help reduce the likelihood that any local taxi operator will protest the creation of a Volunteer Driver Program.

Services may be rationed to users based on a maximum number of trips per month or a maximum number of kilometres. In rural areas, it may be desirable or possible to pro-actively consolidate trip demands (e.g. shopping trips on Tuesday, medical appointments on Wednesdays, etc), but such groupings may not always be feasible.

Manuals and how-to pamphlets are widely available to assist in starting Volunteer Driver Programs. Information is also commonly available from insurance companies. Some insurance companies even sponsor Volunteer Driver Programs as a means of helping to encourage senior drivers to give up their own cars.

Rural communities in Alberta often face economic challenges as farm populations continue to decline and young people move to larger cities. Volunteer Driver Programs help reverse that trend by encouraging residents to remain in their homes and access health care, personal business, shopping, or leisure activities in their local area. Volunteer Driver Programs can provide access to jobs for persons with disabilities and improve the quality of life for seniors.

2.1.2 Voucher Program

- Minimum Population Range: n/a
- Capital Costs: minimal (voucher supplies, software)
- Operating Costs: mileage allowances (e.g. \$0.52/km), dispatching costs
- Vehicles: provided by volunteers, purchased, or donated
- Types of Trips Best Served: casual (e.g. appointments, medical, shopping, leisure/social)
- Types of Clients Best Served: elderly, young, disabled, persons without a car
- Program Operator: local government, non-profit or faith-based group

Voucher Programs offer the flexibility to pay for trips on public transport, taxis or volunteer driver systems. Voucher Programs can be adapted to pay for all, or just one or two, of these three types of transportation. This makes them ideal for rural areas where not all options are available or may not be available every day. Vouchers provide a form of user-side subsidy that takes the place of the usual supply-side subsidy offered with traditional public transportation services such as transit. In a voucher program, the subsidy is only applied when the user travels. (In supply-side models such as transit, the operator of the system decides when the subsidized service will be provided.) Voucher Programs can strengthen rural communities and promote economic development by making it possible to live in these areas without having access to an automobile.

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Taxi voucher or taxi scrip programs are quite common across North America. A taxi voucher/scrip program requires a locally licensed taxi company to be in operation. A local agency or local government sells taxi vouchers to designated individuals based on a fixed discount. The discount can be any amount from 10% to typically 50%. When a person needs a ride, they call the taxi and pay for the fare using the pre-purchased vouchers or scrip. Individuals, couples or households are limited to the purchase of fixed amount of scrip per week in order to cap the exposure of the sponsoring agency or local government. The need to have an existing taxi operation is a significant barrier in many small communities; however the program could provide some level of guaranteed business for an individual thinking of beginning a taxi operation where none was previously available or feasible.

Taxi vouchers or scrip easily allow the sponsoring organization to establish limits to the extent of the subsidy being paid by limiting the amount of discount or value of scrip to be sold each month. The eligibility for the vouchers/scrip can also vary from seniors and disabled to people with limited financial means or any other qualification that is appropriate for the community, including areas with local transit, or geographic barriers that prevent walking.

The use of vouchers with a volunteer driver program is a newer adaption of a popular program, and removes an administrative layer but shifts the burden of finding a driver onto the individual. Each person who needs rides is able to acquire a certain number of vouchers each month for a fixed number of trips or a certain number of kilometres. These vouchers may be given to anyone who provides a trip and the driver can exchange the vouchers for cash. A number of voucher systems for volunteer driver programs are now operating in rural areas of Montana, Wyoming and Minnesota, all of which share many characteristics of rural Alberta.

The two models in common use are the “checkbook” system and the “i-voucher” system. In the checkbook model, a client receives a booklet of pre-printed vouchers with an allocation of kilometres or trips, together with a number to call to request a ride. The client has the option of either arranging his or her own trip with someone like a neighbour, friend or family member and paying for the trip with a check, or booking through the central dispatch number. If booked through the central dispatch office, the municipality or non-profit agency seeks to match the trip request with an available volunteer. The reimbursement of the driver is based on the number of kilometres travelled. A client is given a certain number of kilometres per month that they may use. The checkbook model should be a familiar paradigm for most seniors and can easily be adapted for various modes. A strength of this model is that it readily supports spontaneous trips, but a weakness of this model is that it is dependent on the availability of a volunteer driver.

The i-voucher system can be used for volunteer drivers or taxi operations, and requires a software solution (that is now readily available¹) and is managed by a non-profit agency or municipality. The software tracks the number of kilometres available for each client, and on request will print a voucher that is mailed to the client or provided directly to the volunteer driver. Systems may also be available that allow the client to book directly over the internet; however

¹ An example provider of the software is Internet Business Support Software (<http://www.ndcpd.org/grit/training.html>).

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many seniors may not have access to a computer or be unable to navigate such a system. This problem may be lessened in future as people become more familiar with computers.

There are some limitations to Voucher Programs including a lack of mechanisms to assure the availability of accessible services at all times, and the potential for abuse and fraud. Voucher Programs can be funded with tax dollars or with local funding or sponsorship.

Voucher Programs help support local economies by encouraging residents to remain in their homes and access health care, conduct personal business, shop, or participate in leisure activities in their local area. Voucher Programs can provide access to jobs, or can improve the quality of life for seniors.

2.1.3 Demand Responsive Paratransit

- Minimum Population Range: n/a
- Capital Costs: paratransit buses or vans, dispatch software
- Operating Costs: approximately \$60/h, plus dispatching costs
- Vehicles: grants or donations often available
- Types of Trips Best Served: work (e.g. regular commuting trips) or casual (e.g. appointments, medical, shopping, leisure/social)
- Types of Clients Best Served: everyone, including elderly and disabled persons
- Program Operator: local government, non-profit or faith-based group, using direct operations or contracted operator

Demand Responsive Paratransit is the generic term that covers services that are otherwise known as dial-a-ride, tele-bus, curb-to-curb, or door-to-door services. Demand Responsive Paratransit operates with smaller buses that are custom scheduled and routed based on individual passenger bookings. In urban areas these service are usually publicly operated for persons with disabilities who are unable to use regular transit service. In rural areas, their application can also apply to ambulatory passengers, as fixed route service is often not an option within a reasonable walking distance, and the overall density of potential disabled passengers is likely to be too low.

Demand Responsive Paratransit in urban areas generally operates on a “many-to-many” model. This means it will pick up passengers at any location and take them to any other location within the urban area. This type of model would not work in rural areas as the destinations are far apart and the density of potential passengers is too low. The model that would work is a “many-to-one” system. Under this scheme, passengers would be picked up throughout a designated rural area but only to be transported to a major destination such as a town or city. There could be multiple destinations served within the destination zone so that employment, medical trips, shopping or other personal business can be conducted. This type of service helps connect the rural hinterland to businesses and jobs in the small urban communities of the region and

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contributes to an improved quality of life for rural residents. Similarly, many-to-one service can be used to transport urban residents in communities within the region to rural job centres.

In urban-setting Demand Responsive Paratransit, operation of many-to-many services is considered successful if it attains three passengers per hour. With operating costs in excess of \$60/h, they have a cost per ride of more than \$20, less any fares that are collected. Typically, the cost recovery is 15% or less. It is difficult to estimate how much ridership a many-to-one service could achieve in rural Alberta. There are many factors, such as population density and the maximum distance to be travelled, that would affect ridership and costs.

In a rural setting, one or two round-trips per day might be offered, and it may not be necessary to offer the service in every area on every day unless there is a definite demand for regular work trips. For example, on Tuesdays and Thursdays service could be operated to bring rural residents living west of Red Deer to destinations in Red Deer. Mondays and Wednesdays service could be provided east of Red Deer. The service still has the potential to be very expensive to operate as the service may have downtime waiting for the passengers to complete their appointments or errands in the city or town.

A Demand Responsive Paratransit system with multiple buses or vans likely requires a dispatch operation. Dispatch systems that include routing software are available at reasonable cost and ensure that the most efficient route is utilized; however, in rural areas it may be necessary to geocode the network to ensure that all roads and potential shortcuts are identified. Small systems could allow dispatch to be handled by someone working from home, or integrated into the dispatch operation of a local government agency. In very small systems, another option is to permit users to call directly to the driver in the bus, eliminating the need for any dispatch function. This direct access system may be feasible in small rural communities with populations of up to 5,000 or more, if distinct zones for the operation of dedicated buses are created.

When demand begins to increase on this type of service, the time spent on the bus or van can quickly become unacceptable. More demand means more pick-up and drop-off locations and that usually has a negative impact on travel time. If this begins to happen, the solution is usually to add more vehicles, or to begin to convert the service to a route deviated or fixed route operation². Using a larger vehicle is usually not a viable option as the problem is usually travel time rather than vehicle capacity. Demand responsive services usually incur unacceptable travel times before they become too crowded.

Demand Responsive Paratransit is easily and commonly adapted to provide accessible service, for example using onboard wheelchair lifts, or using low-floor vehicles (either minivans for lesser-demand service, or larger cutaway-style buses for greater-demand service).

The use of larger vehicles, although often not warranted for demand responsive service, allows the vehicles to be used for other purposes during times when the paratransit operation is not in

² Route deviated transit is described in Section 2.1.4, and Fixed Route Transit is described in Section 2.1.9.

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use. An example of this type of coordination might be use of the vehicles for community charters, group home, or senior residence outings on weekends.

The cutaway-style vehicles are generally available as alternative fuel vehicles able to be fuelled with propane, compressed natural gas or bio-fuels. This feature helps reinforce community environment goals and cleaner air for everyone.

2.1.4 Route/Point Deviated Transit

- Minimum Population Range: varies
- Capital Costs: purchase of bus(es) and garage for storage
- Operating Costs: \$60/h - \$100/h depending on operating model
- Vehicles: likely eligible for provincial grants
- Types of Trips Best Served: work, school and casual (e.g. appointments, medical, shopping, leisure/social)
- Types of Clients Best Served: elderly, young, disabled, persons without a car
- Program Operator: local government, non-profit or faith-based group

Route/Point Deviated Transit service differs from conventional fixed route service as the buses may detour from their path to pickup or drop off passengers. Deviated routes are based on the premise that with low ridership, the chances of a bus having to make every deviation are slim or non-existent, and time is only allocated based on a limited number of potential deviations.

It is generally accepted that there are two types of deviated transit: route deviated and point deviated. A Route Deviated service follows a fixed route but deviates from the route to pick-up or drop-off passengers. Passengers must call in advance to book a pick-up. After making the deviation, the bus returns to the same point on the original route and resumes following the fixed route and schedule. In order to be able to maintain a reasonable level of schedule adherence, the number of deviations will be limited and not every passenger might be able to reserve the trip they wish to take. If missed trips become too frequent, a revision to the service may be warranted. In rural areas, one of the most important criteria for accepting a deviation request would be the ability to turn the bus around in a safe and timely manner so it may return to its route. Given relatively narrow roads and a sparse road network, it may not always be possible to safely turn around a large vehicle in all conditions.

A Point Deviated service stops to pick-up or drop-off at fixed points but travels on any route required to pick-up or drop-off demand response passengers who wish to travel to locations in between the fixed stops. Persons living within walking distance of the fixed stops can continue to have walk access without phoning ahead for a reservation; however, those living off the route can phone in and have the bus come to their address to provide access.

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Differential fares can be used to encourage use of the fixed route stops and discourage advance bookings that require buses to leave the shortest path. The actual area to be available for the route deviations would have to be identified in advance, and only trip-ends within the deviation area would be served. Both types of deviated services result in slower service than could otherwise be offered with fixed route service, but the deviation feature greatly expands the potential coverage area. Deviated service is also a means of ensuring that persons with disabilities can have equitable access to transit if only fixed route service is being provided.

The dispatch function needs to be coordinated through a central call centre to facilitate advance bookings, cancellations etc. Software solutions exist to allow bookings over the web or by telephone for registered users, and if tied into a mobile data terminal in the bus might be able to eliminate the need for a live dispatcher.

The cost of providing the service would be similar to operating fixed route transit and would be expected to be between \$60/h \$100/h depending on the vehicle and the operating model (e.g. contracted or directly operated).

Service frequency could be tailored for demand; however, a minimum of three round-trips per day, and providing service two or three days per week, would likely be expected. If employment travel is a large part of the potential market, daily service would be expected. If employment based trips are not a large market, then the service could be alternated with operations in different sectors on different days of the week to provide greater coverage.

2.1.5 Car Pooling / Ride Matching

- Minimum Population Range: n/a
- Capital Costs: minimal or none
- Operating Costs: shared among users
- Vehicles: provided by users
- Types of Trips Best Served: casual or regular trips
- Types of Clients Best Served: all
- Program Operator: local government, or non-profit

Car Pooling can be an informal program (e.g. encouraged through advertising campaigns), operated as a ride matching program, or as volunteer matching at park-and-ride lots. Simply promoting car pooling through the media is the least expensive method of encouraging car pool use; however, it generally only encourages car pools among commuters who know each other or at least commute to the same location. In order to form car pools among strangers, it is necessary to offer a third-party ride matching service. In communities where reserved HOV (high occupancy vehicle) lanes exist and there is significant congestion, informal ride-sharing begins to develop at park-and-ride lots. People park their cars and wait for strangers to pick

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them up so that the driver can proceed in an HOV lane. The current conditions in Central Alberta would not support such a system.

Ride matching software is readily available and can be made accessible over the internet, reducing the cost of maintaining and operating the system. For example, www.carpool.ca provides ride matching support and marketing services for many car pooling initiatives across Western Canada. The major focus of ride matching and car pooling is usually for work or school trips. The existence of a formal ride matching program is a tangible form of support for economic development programs. Since the cost of operating the vehicles is shared by the participants, the only cost to the program sponsor is for marketing, advertising and running the ride matching service.

Although ride matching and car pools are oriented toward daily travel for work or school, it may be possible to develop car pools in rural areas to support once-a-week trips for shopping, leisure or other trip purposes.

A car pool generally has one driver and one or more passengers. The driver provides the vehicle and passengers pay a daily, weekly or monthly fare based on expenses such as fuel, maintenance and parking. Another alternative which avoids the necessity of paying a fare is to alternate the driving on a daily, weekly or monthly basis. The driver pays all costs during his or her turn at the wheel, and the passengers ride free.

There are basic rules to car pooling which can be enumerated and listed in a sample agreement document put together by the car pooling agency, identifying what the participants should agree upon. An important issue for car poolers is how to get home in case of an emergency. This is one area where the ride matching agency can provide some backup through the provision of a guaranteed ride home program. Such programs can be financed by user charges, employers or tax subsidies and provided by taxis or other transport providers. Typically, each car pooler is allowed to call upon the guaranteed ride home for a maximum number of occasions each year. Typically, the number of permitted uses does not exceed three trips per year. The programs can typically cover trips home in the middle of the day for personal emergencies, or after-hours trips to cover unexpected overtime at work.

As part of a car pool arrangement, it is appropriate to provide notification to the automobile insurer and confirm appropriate insurance coverage. Typically, the recommended insurance coverage is similar to the normal insurance carried by a vehicle owner (in terms of liability and underinsured drivers). Additional coverage and costs, if any, are usually minor and can be included in costs that are apportioned to the car pool participants.

2.1.6 Van Pooling

- Minimum Population Range: n/a
- Capital Costs: purchase of van or minivan

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- Operating Costs: may be subsidized and cost-shared between passengers / employer
- Vehicles: purchased
- Types of Trips Best Served: work
- Types of Clients Best Served: employees
- Program Operator: local government, non-profit or major employer

Van Pools are similar to car pools, except that the vehicle is owned by a third party such as a van pool agency, a car rental company, a charitable foundation, or an employer. The driving is done by a volunteer who is also commuting to work or school and, as an incentive, is typically allowed to use the vehicle for his or her own use in the evenings or on weekends. Driving responsibility can be shared among the participants, who also share in the paying the operating costs.

Employer-based systems do not need any outside assistance beyond help with initial organization issues. Employer-based systems are particularly attractive in cases where the employer owns a fleet of vehicles that would otherwise sit unused in the evening or on weekends. Van poolers would pay a fee to cover operating costs including additional fuel, maintenance and insurance, although the company could subsidy part of the costs as well. Employers support environmental goals, can reduce their need to build parking spaces, and are providing a money-saving benefit for their employees.

In some Canadian cities, such as Vancouver, there is a regional van pool program supported by a third party, e.g. the Jack Bell Foundation. In the United States, van pooling is supported by subsidies from the federal government. Such programs usually charge fees based on the total cost of providing the service or calculations on the round-trip distance to cover the operating expenses of the vehicle. The driver is a volunteer from among the riders and usually gains the benefit of use of the vehicle in the evening and on weekends. Alternate drivers from among the group of passengers cover vacation days or sick days. Van pools can serve a single employer or take passengers to multiple destinations; however, the number of pick-up and drop-off locations must be minimized in order to keep travel time within acceptable and attractive limits.

Van pool use also benefits from the availability of a guaranteed ride home program to take care of rare emergencies or overtime situations. Guaranteed ride home programs can be developed by a local government agency or even a large company in the case of an employer-provided van pool service. Van pools can pick passengers up at their home; however, when a van or minivan is carrying more than six and as many as fourteen passengers, it becomes more efficient to use collection points or park-and-ride facilities. In rural areas, these collection points would not need to be large unless multiple van pools are serving the same area. Small parking areas to accommodate anywhere from one to fourteen cars would be needed. These parking areas can be on-street or negotiated with facilities such as churches that have minimal parking requirements during the week.

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The availability of a local van pool program can be marketed to companies considering locating in rural parts of Central Alberta.

2.1.7 Bus Pooling

- Minimum Population Range: 40,000+
- Capital Costs: from \$80,000 to \$600,000 per bus depending on size
- Operating Costs: \$75/h to \$100/h
- Vehicles: grants may be available to offset costs
- Types of Trips Best Served: employment
- Types of Clients Best Served: shift workers
- Program Operator: employer, local government or combination

Car pools and van pools provide an excellent alternative transportation option for getting smaller groups of employees to work sites. In the case of larger employee groups travelling to the same location at the same shift times, larger vehicles are necessary. A Bus Pool is the next step. Bus Pools can operate with vehicles ranging in size from 24 seats (small cutaway-style bus) to 57 seats (standard highway coach). However, since the bus requires a paid, professional driver the economics of the service are best when a large bus is utilized to share cost of driver over the maximum number of passengers.

In Alberta today, Bus Pools are used extensively at oilsands facilities in Fort McMurray, and to transport construction workers to oil upgrader plants near Edmonton. Currently, there are limited (if any) private bus operators in Central Alberta with sufficient available vehicles or resources to mount a large Bus Pool program. Private companies on a charter basis operate all the services in Fort McMurray and Edmonton for private employers. If a community within Central Alberta is interested in attracting a major industrial operation it may be necessary to guarantee the availability of a Bus Pool operator by augmenting the fleet of an existing operator. Depending on the shift times and the location of a plant, it may be possible to use some existing buses. The availability of a bus operator may be a significant incentive to heavy industry considering locating in Central Alberta.

Bus Pools are subscription services, only available to employees willing to commit for a fixed period such as six months. Casual riders are not accepted, and service is generally not provided outside of shift times. This means that auxiliary programs such as a guaranteed ride home are required to support the needs of employers (overtime) and workers (home emergencies).

The cost of operating the service is often highly subsidized by the employer. Security needs, lack of parking, or other issues that require an employer to restrict access of private vehicles sometimes warrants the use of a Bus Pool.

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Bus Pools do require significant parking areas for park-and-ride. In Edmonton, the services make use of commercial parking lots, on-street parking or other sites. Bus Pools generally cannot support dedicated parking lots except minimally-improved vacant properties.

If a public authority operated a Bus Pool, it is expected that all of the costs would be fully covered by the employer or users of the service. Any subsidy made available to an employer should be covered as an economic development cost to the appropriate agency.

2.1.8 Community Van

- Minimum Population Range: 1,000
- Capital Costs: minimal (purchase of a van)
- Operating Costs: cost for maintenance, about \$0.60/km
- Vehicles: purchased or donated
- Types of Trips Best Served: casual (e.g. appointments, medical, shopping, leisure/social)
- Types of Clients Best Served: elderly, young, disabled, persons without a car
- Program Operator: local government, non-profit or faith-based group

A community van program can be operated as a rental vehicle owned by the local municipality or as a van given to a local non-profit group to program and coordinate.

Under a rental program (e.g. Hanna, Alberta), a van is acquired and becomes available for rental to community groups within the jurisdiction who need a vehicle for short-term use. The type of outings could include shopping trips for seniors, team transportation for youth sports teams, or taking a group of adults to a show or cultural event in another community. The group renting the vehicle would pay a fee to cover maintenance, insurance and other fixed costs, and would be responsible for returning the vehicle with a full tank of fuel. The operation of the program would be similar to commercial vehicle rental services that are rarely found in the smaller rural communities where there are fewer transportation options. The rental rate could be subsidized or calculated to break even or earn a profit. If owned by a municipality the van could be used for other fleet purposes when not booked by a community group.

The other type of community van program is based on the assignment of a vehicle to a community group. The group then becomes responsible for its operation and scheduling. Generally, the vehicle would be driven by volunteer drivers and the group would coordinate the availability of drivers. The van could be used on some days to provide scheduled service to shopping, medical centres or leisure facilities. On other days, it could be available to groups for special outings to cultural events, team sporting events or similar activities. If the van was low-floor or equipped with a wheelchair lift, it could provide an important resource in rural areas where such a vehicle may not otherwise be available for seniors or persons with disabilities.

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The operation of either type of community van service would significantly increase the transportation options available to small rural communities with minimal capital and operating costs.

2.1.9 Fixed Route Transit

- Minimum Population Range: 5,000
- Capital Costs: purchase of bus \$80,000 to \$400,000
- Operating Costs: \$80/h to \$100/h
- Vehicles: grants likely to be available if vehicles are accessible for persons with disabilities
- Types of Trips Best Served: all
- Types of Clients Best Served: all
- Program Operator: local government

Fixed route transit is the traditional form of public transportation operated in communities of about 20,000 or more. Fixed route transit has rarely been implemented in rural areas in Canada due to the significant subsidy required to fund the service. Fixed route service in rural areas generally has limited success due to the low residential densities, and the lack of pedestrian access to bus routes. Without sidewalks and winter maintenance, few people will be able to get to bus stops and ridership will be very limited.

The potential exists for services between small communities and larger centres such as Red Deer; however, there may not be sufficient demand for service to operate every day or to make multiple round-trips each day. Since a bus route may not have time to circulate within each small community it may be necessary to limit stops to single or multiple stops along the main highway, and local users would need a means of reaching the stops.

With operating costs of \$80/h to \$100/h, fares are unlikely to cover more than 10% to 15% of the costs. Capital grants are available to cover the cost of buying the vehicles. In the past fifty years, many local rural bus routes provided by private providers have vanished as rural areas depopulated and car ownership rates increased. It is possible that the restitution of a rural bus network would help retain population in the rural areas and encourage new economic activity. Such a system would come with a high cost and could potentially take years to see a payback.

There are alternatives to the conventional directly-operated transit system, such as using contract operators or awarding a franchise to a private operator to provide the service. Both of these alternatives could potentially lower operating costs (e.g. amortize costs over a larger-scale operation, or operate under a less-expensive labour cost structure) but require negotiation to provide transferability with Red Deer Transit.

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2.1.10 Coordinated Transportation / Mobility Management

- Minimum Population Range: n/a
- Capital Costs: minimal (perhaps purchase software)
- Operating Costs: office staff
- Vehicles: not required
- Types of Trips Best Served: casual (e.g. appointments, medical, shopping, leisure/social)
- Types of Clients Best Served: elderly, young, disabled, persons without a car
- Program Operator: local government, non-profit or faith-based group

The concept of Coordinated Transportation / Mobility Management is to establish a local agency specialized in creating more transportation capacity through the sharing of services and vehicles. This concept is primarily focused on social service or human service transportation typically dedicated to specialized groups such as seniors, persons with disabilities and persons with limited incomes. The cost of the programs is generally limited to management and office staff promoting coordination and perhaps handling joint dispatching functions.

Transport Canada has recognized that transportation duplication and overlapping funding is an issue in Canada and the agency encourages transportation coordination. Coordination of transportation offers better allocation of limited resources designed to improve the performance of transportation services. The purpose of coordination is to reduce or eliminate duplicate and inefficient services and ultimately increase capacity and lower costs.

Coordination in the rural Alberta context would seek to identify and work with all transportation providers or purchasers of transportation capacity. This could include:

- public and private transportation providers
- departments of human and social services
- departments of health
- agencies involved with seniors
- agencies involved in developmental disabilities
- departments of labour and education
- local school districts
- employer groups
- post secondary education facilities
- faith-based organizations

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In the United States, it has been shown that rural transit services have a benefit/cost ratio of greater than 3:1, which means that personal transportation services are a good investment for rural communities. Coordinating existing services to increase capacity and reduce costs brings these benefits at the lowest cost to the region. Coordination and mobility management can be used to reduce overall costs, increase capacity or expand service to new areas.

The literature suggests that there are several steps that must be followed in order to achieve coordination. The literature also recognizes that it is not necessarily a linear process and some steps may need to be repeated over the years. The typical steps are:

- a. initiate the improvement process, form a working group
- b. analyze the existing conditions
- c. establish focus and direction – agree on problem definition
- d. design alternative courses of action including alternative service designs
- e. assess alternative options – select the best coordinated service approach
- f. implement the preferred choice – formulate an action plan
- g. evaluate and improve the service – reconfigure as necessary

2.1.11 School Bus Sharing

- Minimum Population Range: n/a
- Capital Costs: none (uses existing vehicles and resources)
- Operating Costs: depends on use
- Vehicles: provided by school districts
- Types of Trips Best Served: any
- Types of Clients Best Served: potentially anyone
- Program Operator: local government, or school district

This concept is based on rural residents and students sharing the use of yellow school buses. Sharing means residents either riding at the same time as students, or allowing residents to use the buses when they are not required for student transport. Under Alberta law, yellow school buses may only be used to transport students; however, there are instances in other North American jurisdictions where similar restrictions have been lifted.

In many rural areas, the yellow school bus fleet is the only significant fleet of buses and certainly the only fleet operating any type of scheduled service on rural roads. There are many challenges to making school buses available for public use ranging from the legal restrictions to the cramped seating that has not been designed to accommodate adults.

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In order for school buses to be included in the list of possible transportation resources for rural residents, support will be needed from the RCMP, school boards, bus operators, legislators and parents. There are issues of liability and insurance, accessibility of the vehicles and issues surrounding the co-mingling of students and residents. Notwithstanding the relevant issues, co-mingling of students and the public occurs on urban bus routes in larger centres with public transit operations and there are few problems.

A possible alternative may be to replace some school bus routes in rural areas with rural transit service, which does not face any legal limitations on co-mingling of passengers. Part of the subsidy of the rural service could be paid by the school district and rural residents would have unhindered access to public transit. There would still be some outstanding issues such as the need to adjust routes as students enter or leave the system; however, the problems are not insurmountable.

2.1.12 Jitney

- Minimum Population Range: 100,000
- Capital Costs: van or small bus (\$40,000 to \$100,000)
- Operating Costs: approximately \$50/h
- Vehicles: purchased
- Types of Trips Best Served: all
- Types of Clients Best Served: all
- Program Operator: private operator

Jitneys are small-capacity buses or vans operating on fixed routes when demand warrants. Jitneys only leave their terminal station when they have boarded an adequate number of passengers. On well-used routes in areas with high population densities or low car ownership, jitneys can provide frequent service. In some parts of the world, jitneys are the main form of public transportation. Jitneys are often owner-operated which keeps costs down, but it means that they must operate profitably.

Jitneys are a poor match for the low-density areas of Central Alberta. There are likely to be too few passengers to allow the services to operate profitably and the headways would be so erratic due to the lack of passengers that the services discourage use.

2.1.13 Car Sharing

- Minimum Population Range: varies
- Capital Costs: purchase of cars, software
- Operating Costs: covered by user fees, rentals
- Types of Trips Best Served: casual (e.g. appointments, medical, shopping, leisure/social)

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- Types of Clients Best Served: persons without a car or without a second car
- Program Operator: private sector or community cooperatives

Car sharing typically involves automobile or light truck rentals by the hour for pre-approved members. Car sharing is a mode that is designed to support public transit use or encourage families to forego purchasing a second or third car. Rentals are provided for about \$10/hr with no minimum rental period.

Large-scale car sharing currently only exists in Canada in major cities like Vancouver and Toronto and the market potential has not been tested in smaller communities. It seems likely that this mode would not be feasible in small communities due to the overhead necessary to manage a small fleet and the likely low demand for vehicles.

Smaller-scale cooperative vehicle ownership models also exist, and may provide a scalable model that could reduce the need for discretionary vehicle ownership. By distributing fixed costs of ownership of less vehicles over a larger number of people, and sharing the availability of such vehicles (e.g. among neighbours or other defined groups), an effective and environmentally-friendly option may be possible.

3.0 Overall Strategy / Framework

Based on the project objectives and stakeholder consultation, this section outlines a proposed overall framework for a regional transportation system for the CAEP area.

3.1 PROPOSED SYSTEM FRAMEWORK

Figure 3.1 illustrates a proposed system framework, based on three components.

- ❖ A regional **transit spine**, which could potentially provide scheduled, fixed-route transit service along the central highway routes connecting the larger population centres within the CAEP area.
- ❖ A set of sub-regional **transit connectors**, which could provide various forms of customized transit service reflecting the specific passenger travel needs and budget availability of participating municipalities.
- ❖ An underlying layer of **local transit support** for sparsely-populated areas, which could provide additional transportation options even in areas where larger-scale transit options are not feasible.

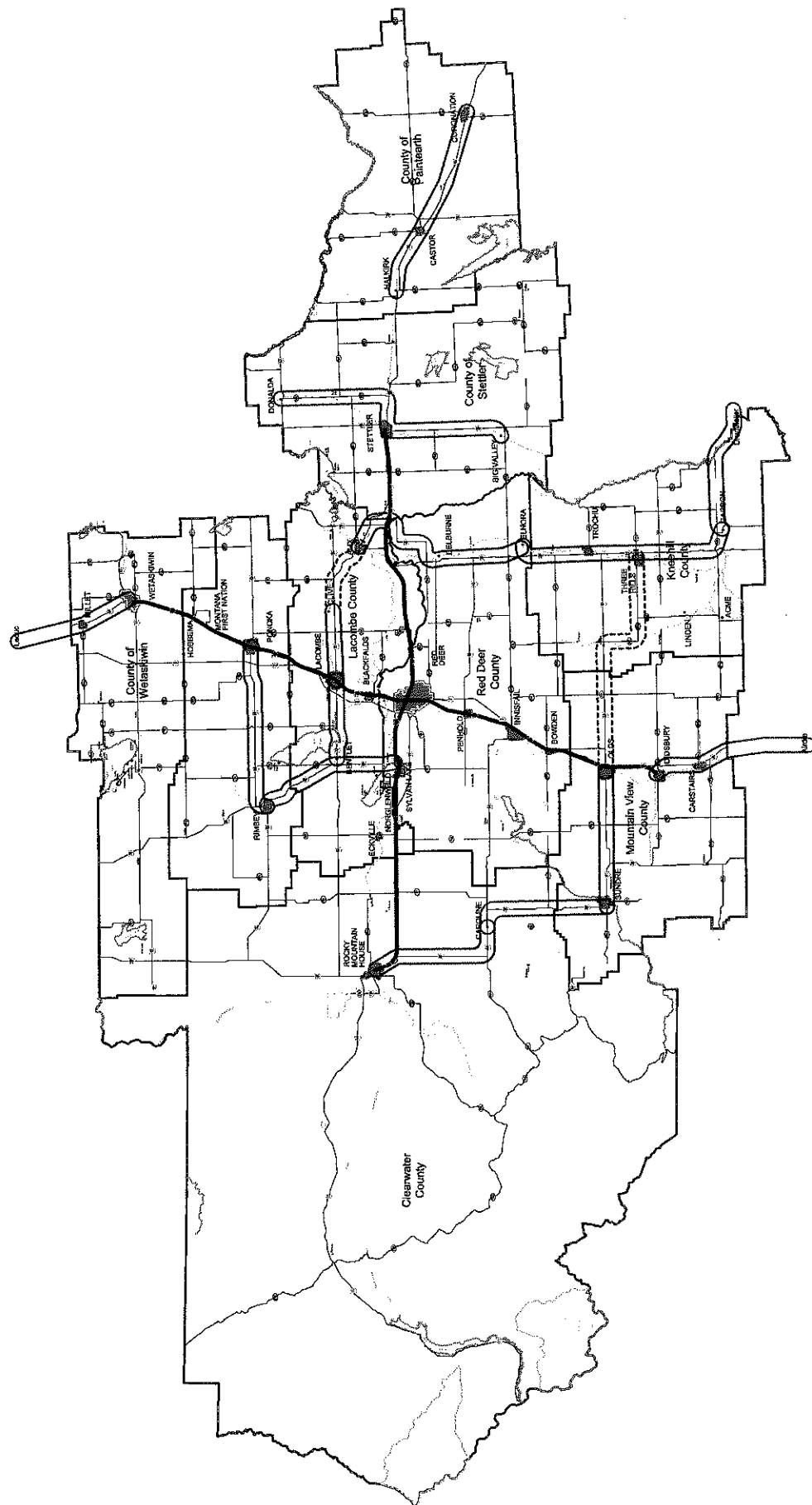
Figure 3.2 illustrates the extent of the CAEP area that could be positively impacted by such regional transportation system. The darker grey shading represents a distance of 25 km or less (~18 minutes drive or less) from the regional transit spine, and the lighter grey shading represents a distance of 15 km or less (~12 minutes drive) from the sub-regional transit connectors.

This is based on the idea that residents within that shaded area could potentially benefit from the regional transportation service if it existed. For example, in the rural context, 25 km would be a reasonable distance to drive to a collection point for the regional transit spine (e.g. a town centre, or a park-and-ride or passenger drop-off location). Similarly, 15 km would be a reasonable distance to travel to access a transit connector (and might also be feasible to cover through a route-deviated transit service).

Each of these system components is described in additional detail below.

3.1.1 Regional Transit Spine

Fixed route rural bus service is feasible along the two spines that divide the CAEP region into quadrants: Highway 2A and Highway 11 (see Figure 3.3).



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Regional Transportation Strategy

Figure No.
3.1

Title
Proposed System Framework
Spine & Connector Network

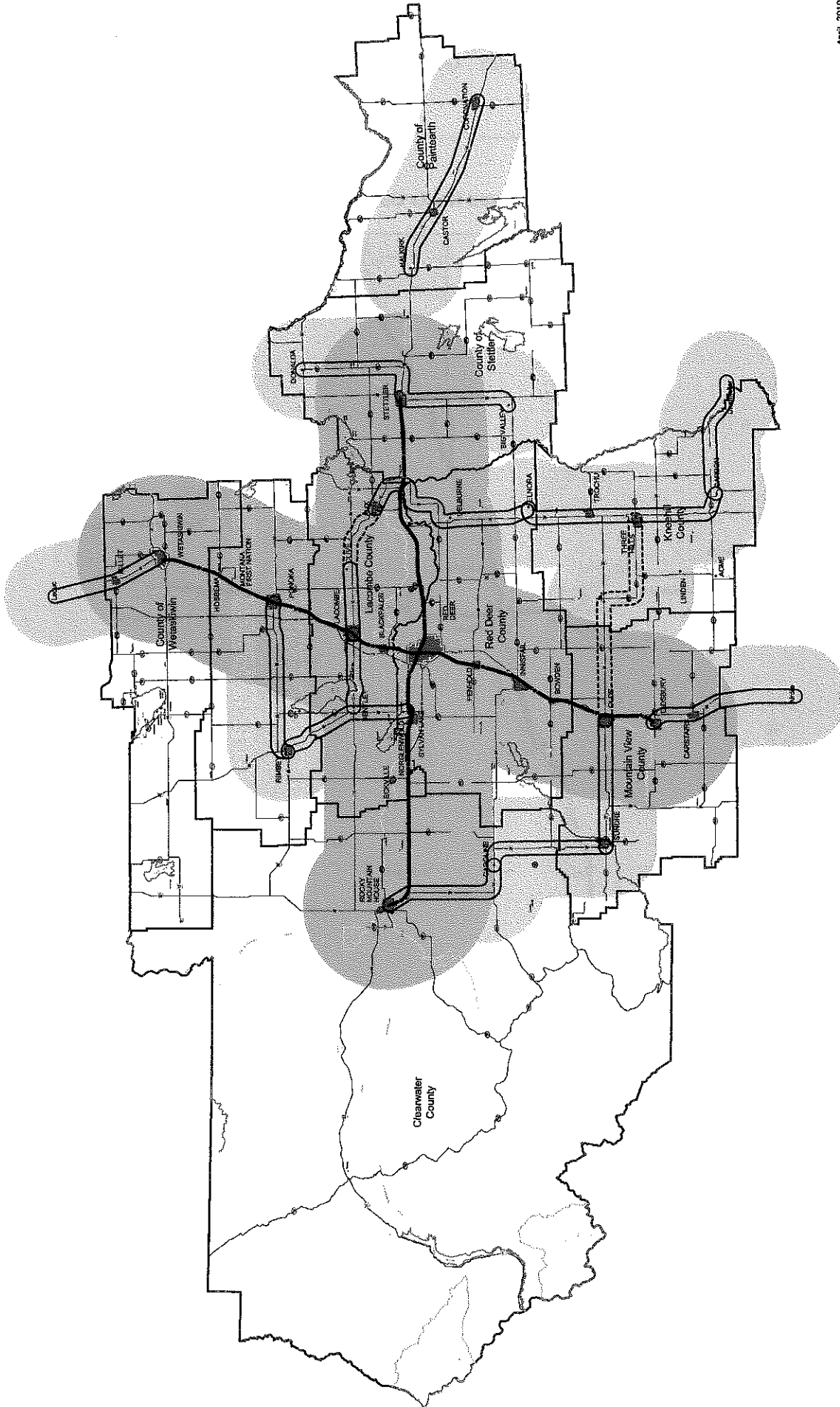
Note:
The endpoints of the Connector Network could also be extended to link to the airports in Edmonton and Calgary.

Legend

- ⊗ Major Industrial Plant
- ⊙ Spine Network
- ▬ Connector Network

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Note:
The endpoints of the Connector Network could also be extended to link to the airports in Edmonton and Calgary.

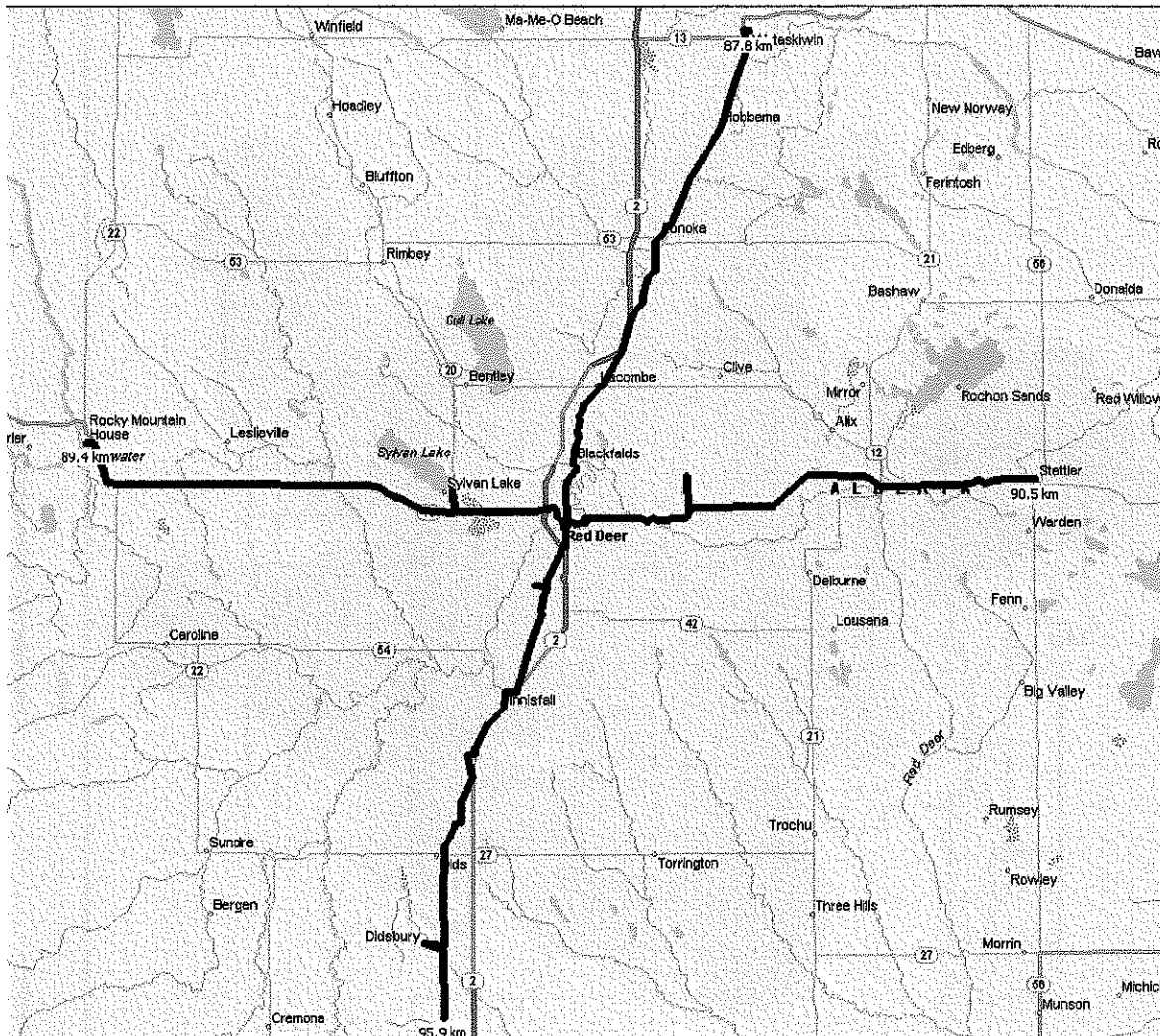
Legend

- Major Industrial Plant
- Spine Network
- Connector Network
- Spine Network Influence Area
- Connector Network Influence Area

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Figure 3.3 - Rural Fixed Route Bus Network



Existing Conditions

Both corridors are currently served by Greyhound Lines, which operates two or three daily round-trip services, stopping at the larger communities on Highway 2A, and one daily round-trip on Highway 11. Greyhound charges about \$0.30 to \$0.40 per kilometre for a regular one-way ride on the Highway 2A corridor, although discounts are available. The undiscounted one-way trip from the outer end of each the four spokes that form the spine to the centre at Red Deer costs about \$27. The current schedule provides for trips south from Wetaskiwin at 1:00 AM, 7:00 AM, and 4:00 PM, and north from Didsbury at 7:50 AM, with same-day round-trips possible. On Highway 11, Greyhound departs Rocky Mountain House at 7:00 AM and returns at

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7:00 PM. Greyhound departs Stettler at 2:55 PM but the next return trip is the following day at 8:45 AM.

The Greyhound service is not designed to provide commuter access to or from Red Deer. Although some trips fit regular commuter times there is not always a suitable return trip, and the fares within the CAEP region are too high to encourage regular commuter use. The schedules and fares are designed to attract longer-haul passengers to destinations such as Edmonton, Calgary and beyond.

The populations in the towns along the spines, as shown in Table 3.1, add up to a significant number of people that should be sufficient to support a rural bus service that meets commuter, education, shopping, personal business and leisure needs.

Table 3.1 - Spine Route Municipal Populations

Town/Village/Hamlet	Population	Town/Village/Hamlet	Population
Wetaskiwin	12,285	Rocky Mountain House	7,231
Hobbema	12,000	Sylvan Lake	11,115
Ermineskin Tribe	2,904	Benalto	385
Ponoka	6,576	<i>West Subtotal</i>	<i>18,731</i>
Lacombe	11,733	Joffre Employees	1,000
Blackfalds	5,610	Joffre Residents	200
<i>North Subtotal</i>	<i>51,108</i>	Erskine	100
Penhold	2,114	Stettler	5,843
Innisfail	7,883	<i>East Subtotal</i>	<i>7,143</i>
Bowden	1,236		
Olds	7,248		
Didsbury	4,599		
Carstairs	2,656		
<i>South Subtotal</i>	<i>25,736</i>	<i>Grand Total</i>	<i>102,718</i>

Regional Transit Spine - Vehicle Types

It is assumed that the network would be operated with cutaway-style small bus(es) similar to the one shown in Figure 3.4. The buses would be equipped with a wheelchair lift and therefore should be eligible for capital grants from senior levels of government. The service could also be contracted-out, with the operator responsible for providing the vehicle; however under such an arrangement grants would not be available to cover the initial acquisition of the vehicles. Red Deer Transit may also be interested in operating the route and extending their coverage to the rural areas³.

³ Among other things, there would be a requirement for Red Deer Transit to use vehicles with acceptable axle loadings for rural road operation, e.g. using smaller cutaway-style buses for this service.

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Figure 3.4 - Bus Types

Typical bus types clockwise, from top left, Low floor cutaway, Sprinter van, heavy duty cutaway with lift, and high top van conversion.

The projected passenger volumes could likely be accommodated with conventional vans; however equipping a van with a wheelchair lift requires significant modification and loss of capacity. Vans do not have a centre aisle and some passengers may have to disembark in order to allow others to board or alight. Cutaway buses are available in various sizes and the latest heavy-duty units are highly suitable for the highway operations being proposed. Cutaway buses offer a centre aisle and stand up headroom that is not available on conventional vans. The lack of headroom on a conventional van can be overcome by acquiring a van with a raised roof; however, this is an undesirable configuration for highway use due to the high, narrow profile and the extra weight to the vehicle. Low floor cutaways are also available and may be suitable for these services. Various propulsion options are available, including hybrids. The passenger version of the Sprinter Van may offer a compromise vehicle that shares the smaller size of a van, with the stand up headroom and ease of access of a cutaway. Any of the styles of bus or van can be equipped with bicycle racks to increase the attractiveness of the service.

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Regional Transit Spine - Service Options

Five alternative service levels for the transit spine were examined, to project possible fares and the net cost to the system. These options are labelled A to E in this document, and are described below.

❖ Option A - Weekday Peak + Mid-Day Service

Option A is based on providing service Monday through Friday, from about 7:00 AM to 8:00 PM on all four spokes of the spine shown in Figure 3.3. This option requires four buses; one bus is dedicated to each spoke with all four buses leaving Red Deer in the morning at about 6:00 AM. At an average speed of about 70 km/h, a one-way trip to the outermost communities would take about 70 to 75 minutes. The full service schedule utilizes one bus on each of the four spokes in the morning and evening, and two buses in total for all four spokes during the mid day period. Five trips would be provided in each direction each day. A total of 53 hours of revenue service are provided each weekday. In addition, it has been estimated that there will be about 4 hours of deadhead time.

Based on the experience of other rural transit operations ridership has been estimated at about 3.5 boardings per hour, resulting in a projection of 160 passengers per day for the entire network. It has been assumed the routes stay on the highways, except that a diversion to the Red Deer Regional Airport and the Joffre Petrochemical Complex has been included on the south and east routes respectively.

An operating cost of \$55.00/h has been assumed based on contracted service, and public ownership of the vehicles. The average fare is projected to be \$3.50. The single ride ticket for an adult could be priced as high as \$15.00 with discounts available for multiple trips, monthly passes and seniors or students. Passes should be priced at about \$150 per month for adults. This fare would be significantly lower than the current fares on Greyhound Lines and would be expected to stimulate new travel within the CAEP network. It is not expected that there would be a significant impact on Greyhound, as it is believed that most of the traffic they serve in this corridor is long haul to destinations such as Edmonton and Calgary and beyond. The total annual cost to provide the services is about \$783,000, of which the fares are projected to cover about 22%. Urban transit systems in Alberta generally cover between 40% and 50% of their costs from the farebox, but they have significantly higher ridership per hour. This leaves a balance of \$609,000 that must be covered by other public or private sources.

The annual ridership of 49,700 is less than one annual transit trip per capita for all of the towns along the four spokes. Urban transit systems that operate entirely within small towns (under 20,000 population) usually generate at least 10 trips per capita. This suggests that the estimate of 3.5 rides per hour is potentially understated, but reasonable given the limited service being provided.

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❖ Option B - Weekday Peak-Only Service

Option B would run buses only during the morning and afternoon peak periods. This time period is expected to have the highest ridership potential. The total daily revenue hours is reduced from 53 hours to 45 with the elimination of midday service. The average number of boardings per hour is projected to increase slightly with the elimination of the less utilized midday service. However, it may be necessary to create a guaranteed ride home program so that workers are reassured they can head home if there is a midday emergency.

A peak only service would cost about \$646,000 to operate annually. It is estimated that the farebox would cover about 35% of the cost, leaving a balance of \$435,000 to be covered from other sources.

❖ Option C - Three Days Per Week Limited Service

In Option C, a minimal or "lifeline" type service would be offered. This option is based on providing two round-trips on each spoke, on three days each week. This would allow shopping or medical trips to occur by making possible a round-trip to Red Deer from each of the spokes on three days per week. This option reduces the number of buses required from four to one, and the number of daily hours decreases to just 12 hours, although service is now provided six days per week. The ridership is projected at a lower level, about 2 passengers per hour or about 7,200 per year. The annual cost is estimated at \$215,000 and about 18% is covered from the farebox, leaving a deficit of \$176,700 to be covered from other sources.

❖ Option D - Weekday Enhanced Inner Spine Service + Mid-Day Service

In the Option D service scenario, two peak hour trips are provided in each direction, in each peak period on all four legs of the spine, however the services only cover the inner most portion of the spine. Service operates during the peaks between Red Deer and Lacombe, Sylvan Lake, Joffre and Innisfail. The two peak hour trips are designed to support employment and school based trips from the region immediately surrounding Red Deer. During the midday period two round trips are provided on each leg of the Spine to allow return trips to Red Deer from all points in the region for doctor visits, socializing, shopping and other trip purposes. This service option generates more riders per hour as the peak service is concentrated in the locations with the greatest likelihood of generating passengers. The annual cost of operation is estimated at about \$467,500 with a subsidy of \$296,000.

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❖ **Option E - Weekday Enhanced Inner Spine Service + Three Days Per Week Mid-Day Service**

Option E is based on the same routing and schedules as Option D except that the midday service only operates three days per week. This service would cost about \$371,000 to operate, and require a subsidy of \$212,000 annually.

Table 3.2 summarizes the service levels associated with the options, including some examples of service coverage that could typically be provided with each.

Table 3.2 - Potential Spine Service Options / Examples

Option	Portion of Spine	Weekday Mornings	Weekday Mid-Days	Weekday Afternoons / Evenings
A	complete spine	2 departures each direction (between 6:00 AM & 10:30 AM)	1 departure each direction (between 10:30 AM & 5:30 PM)	2 departures each direction (between 5:30 PM & 10:00 PM)
B	complete spine	2 departures each direction (between 6:00 AM & 10:30 AM)	none	2 departures each direction (between 2:30 PM & 7:00 PM)
C	complete spine (3 days/week for each of E/W and N/S directions)	1 departure each direction (between 7:00 AM & 10:00 AM)	none	1 departure each direction (between 4:00 PM & 7:00 PM)
D	inner spine only	2 departures each direction (between 6:00 AM & 8:00 AM)	none	2 departures each direction (between 4:00 PM & 6:00 PM)
	complete spine	none	1 departure each direction (between 8:00 AM & 10:00 AM) plus 1 departure each direction (between 2:00 PM & 4:00 PM)	none
E	inner spine only	2 departures each direction (between 6:00 AM & 8:00 AM)	none	2 departures each direction (between 4:00 PM & 6:00 PM)
	complete spine (3 days/week)	none	1 departure each direction (between 8:00 AM & 10:00 AM) plus 1 departure each direction (between 2:00 PM & 4:00 PM)	none

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All scenarios assume that free transfers are allowed onto Red Deer Transit within Red Deer. If Red Deer Transit wishes to be reimbursed for the transfers, it will be necessary to increase the fare on the rural services or decrease the revenue estimate.

The ridership for each of the options was based on the level of service and ridership as related to other similar rural services in western Canada and the U.S. Table 3.3 shows the ridership per service hour for each of the options, weighted for peak and off peak.

Table 3.3 - Assumed Ridership Per Hour

	Option A	Option B	Option C	Option D	Option E
Percentage Peak Hrs	25%	100%	0%	57%	69%
Percentage Off Peak Hrs	75%	0%	100%	43%	31%
Passengers/Peak Hr	6	6	0	10	10
Passengers/Off Peak Hr	3	0	3	3	3
Weighted Average	3.75	6.00	3.00	6.98	7.83

Summary of Fixed Route Options

Table 3.4 compares the projected annual results for each of the options.

Table 3.4 - Summary of Fixed Route Options

	Option A	Option B	Option C	Option D	Option E
Number of Buses	4	4	1	4	4
Weekly Revenue Hours	285	215	72	140	116
Weekly Deadhead Hours	20	20	5	30	30
Passengers Per Hour	3.75	6.00	3.00	6.98	7.83
Annual Passengers	49,688	51,919	10,800	48,888	45,414
Average Fare	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50
Annual Revenue	\$173,906	\$211,669	\$37,800	\$171,108	\$158,949
Operating Cost / Hour	\$55	\$55	\$55	\$55	\$55
Annual Cost (estimated)	\$783,750	\$646,250	\$214,500	\$467,500	\$371,250
Farebox Recovery	22%	35%	18%	37%	43%
Subsidy Required (approximate)	\$609,844	\$434,581	\$176,700	\$296,392	\$212,301

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3.1.2 Transit Connectors

In the areas not covered by the regional spine, passenger demand is not expected to be sufficient to operate fixed route bus service. However, there is apparent demand for travel between communities for trip purposes such as medical appointments, shopping and leisure activities. Not every community offers the same range of services, and people in the rural areas understand and expect to have to travel to other nearby communities to find the services they need. The resulting set of origins and destinations is somewhat dispersed, but does tend to create natural linkages around centres that have, for example, a medical centre and associated health and personal business establishments.

Some of the linkages where such potential demand may exist are illustrated in Figure 3.5, and are considered potential locations for a “transit connector” type of public / shared transportation. The detailed configurations of the connectors do not need to be exactly as shown in the figure, and would be created to reflect the specific transportation demands needing to be served.

These lower- volume connections would generally not be able to support transit services operated with paid drivers, although in some cases staff shared with other municipal functions may be able to operate vans or small buses. The regional transportation toolbox includes a number of options that can operate without full time drivers, or only part-time staff.

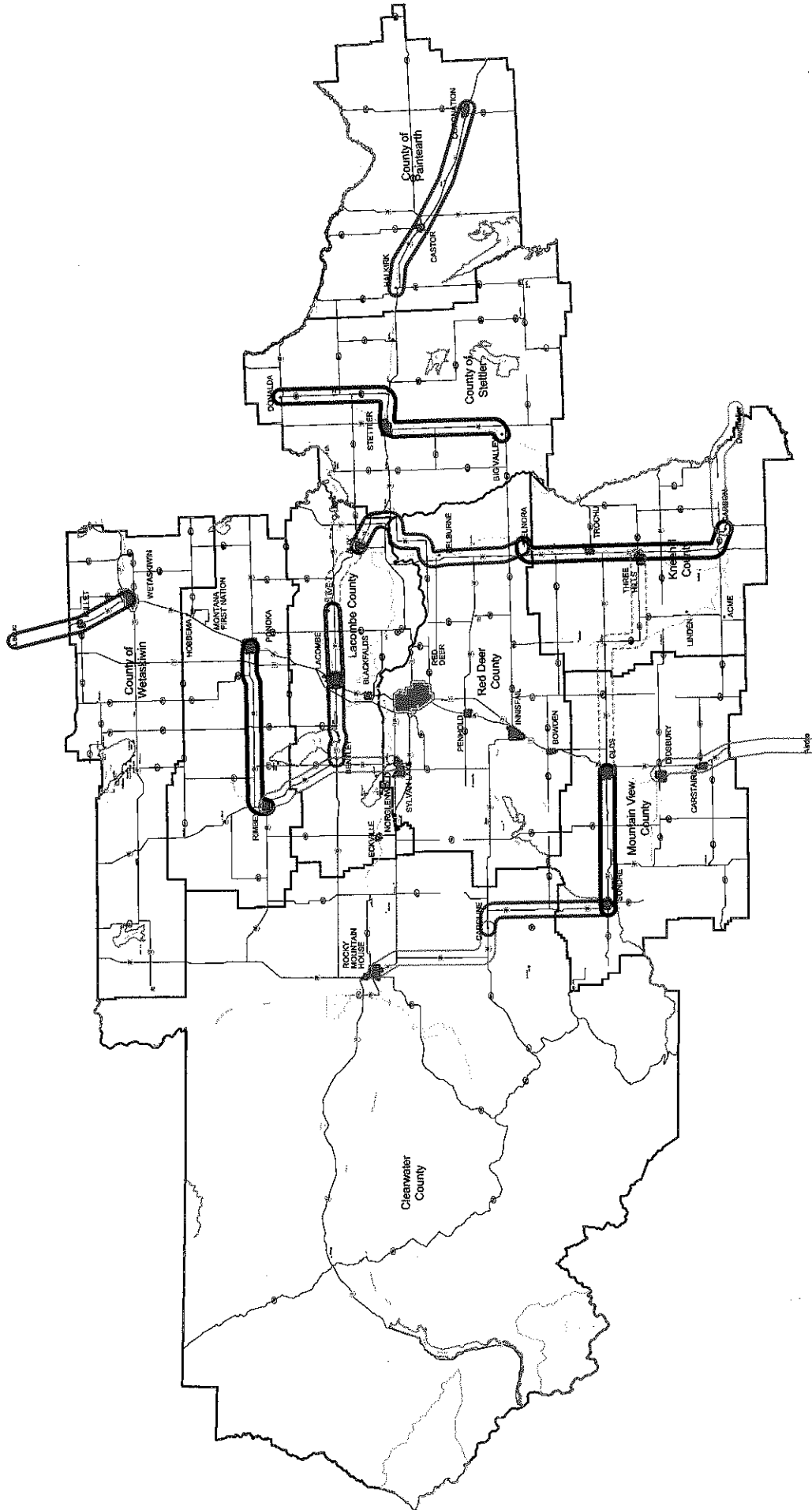
One such option is the Community Van, which could be used to service one of the identified potential connector linkages. The van could be operated two days per week by municipal staff for a scheduled trip. On other days, the van would be available to community groups to use for outings or trips to further points such as Red Deer, Edmonton or Calgary. Some level of cost recovery would be achieved by charging a modest rental fee.

The cost to the municipalities served by the community vans would include the initial acquisition cost of the vehicles, fuel and maintenance (some of which would be offset by the rental fees).

The operating cost of the van will be about \$0.60 per kilometre based on a slight premium over the current Revenue Canada automobile operating costs. This amount would cover fuel, oil, maintenance and depreciation. A typical connector route might involve a 100 kilometre round-trip over 8 hours. The cost would be about \$60.00 based on the kilometre rate and about \$25.00/hour for a driver or \$200 for a total cost of \$260. If 10 passengers take the trip, the average cost of the transport is \$26.00 per passenger (round-trip).

Based on providing a return trip on two days per week, the annual cost for the van would be about \$27,040, and would service about 1,040 passengers per year. For scheduled services, a round trip fare of \$5.00 may be appropriate, bringing the net cost down to \$21,840 or about \$21.00 per passenger (round-trip). As a result of the relatively few persons transported on the service the cost per trip is the highest of all the services examined.

If the van was used two times per week by community groups for trips with an average length of 150 kilometres, the cost of the total program would be an additional \$9,400, with an offset from



Client/Project
CAEP

Regional Transportation Strategy

Figure No. 3.5

Title
Potential Connector Network

Note:

The endpoints of the Connector Network could also be extended to link to the airports in Edmonton and Calgary.

Legend

- ⊗ Major Industrial Plant
- ▭ Connector Network

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rental fees. Existing community vans in Red Deer County generally charge a below market rate for rental of the vehicle ranging from \$5/h to \$25/h plus mileage in some cases.

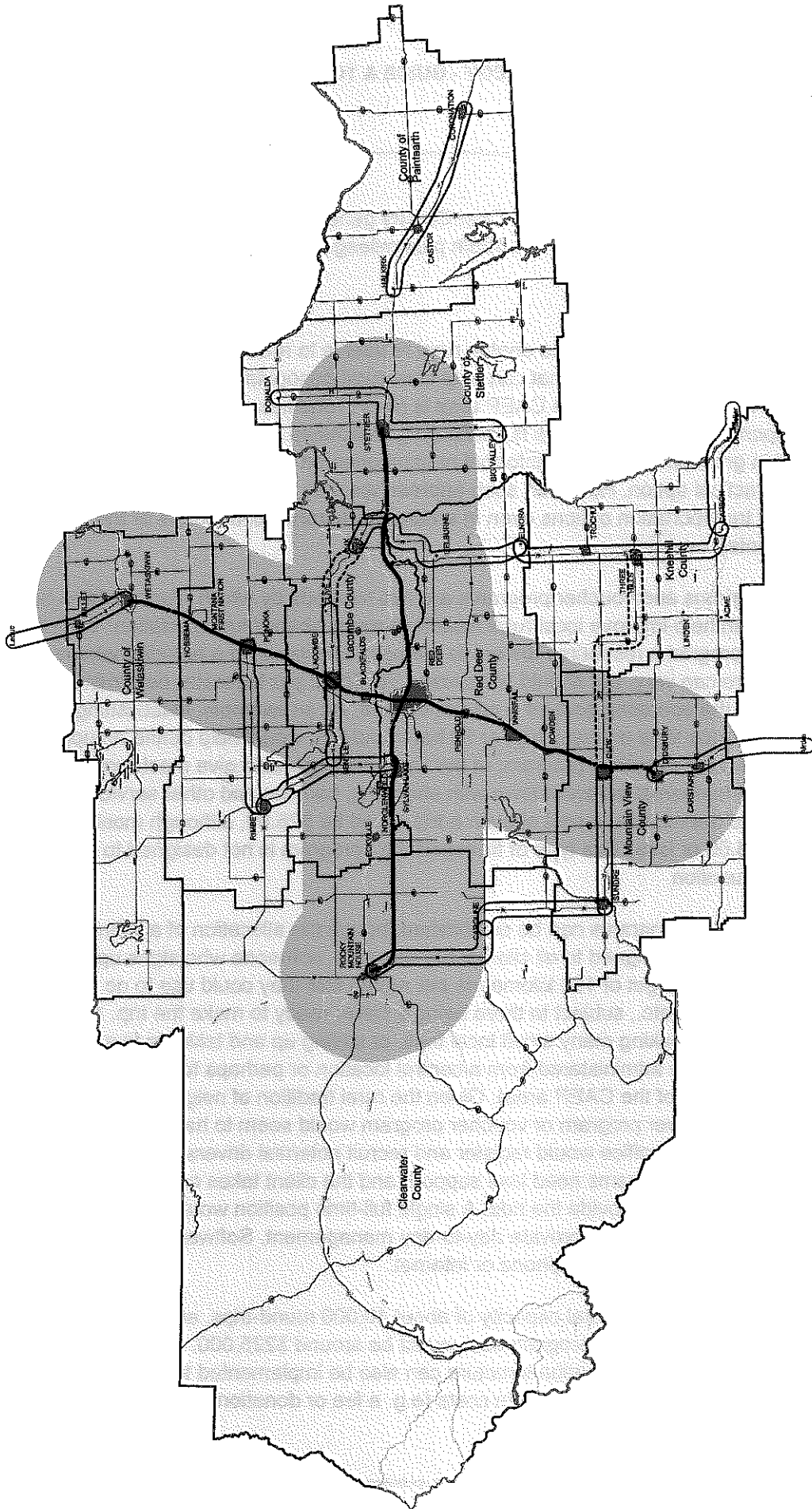
3.1.3 Rural Local Transit Support

The provision of transportation options to enable rural residents to reach a local municipality for non-work trips is an important service that can help slow rural depopulation and retain local economic activity. Because much of the CAEP area is (by its rural nature) sparsely populated, developing transportation support options is challenging to achieve cost-effectively. For these areas (illustrated in green in Figure 3.6), informal or local-oriented transportation support options may be the only practical option. However, such approaches may also be relevant as an underlying layer of transportation options even in areas where transit connectors or the transit spine are implemented over time.

Volunteer driver programs and voucher programs are two methods by which municipalities or other local groups can help improve local rural mobility through shared transportation. Volunteer Driver and Voucher programs reimburse drivers to transport clients using a per-kilometre rate. The rate per kilometre can vary, but should not exceed the \$0.52 per kilometre determined by Revenue Canada as the operating cost for a private vehicle. As an example, establishing a 25 km maximum distance for a one-way trip, or 50 km round-trip, would help define an upper limit on the municipal cost of such a program; at the same time, it would give most rural residents access to the nearest adjacent town with shopping, banking and other services. Using the per-kilometre rate the maximum cost of such a trip would be \$26.00, although most trips would likely cost \$15.00 or less. This type of transportation program is not designed to provide access to jobs or education.

The cost exposure for the programs can be established through the allocation of a kilometre per week or per month budget assigned to all clients. For example, someone who signs up for the program may be given a budget of 150 kilometres per month that they could use to go shopping, or attend church etc., subject to there being a driver ready to make the trip. A user would have the choice of making many small local trips, or saving up and taking a few longer trips. The program could be administered from a central location or perhaps four local offices (e.g. one in each quadrant of the CAEP area). Given the rural tradition of neighbours helping neighbours, a volunteer driver program or voucher program would seem to have a good chance of success. The coordinating office would register and recruit potential drivers and those clients in need of a ride. Voucher programs need less support, and the client takes on more of the burden for finding someone to provide the ride. A single full-time position would be required to get the program up and running and provide day-to-day management. Software is available to allow automatic booking of trips by telephone or internet.

Based on one full time position, a total capacity of about 10,000 round-trips, and an average round-trip length of 30 km, the total program cost would be around \$225,000. A nominal or value-based membership fee or donation structure can also be implemented to raise some money that can be used to offset the program costs (e.g. a fee or donation of \$5.00 per round



April 2010
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Client/Project
CAEP

Regional Transportation Strategy

Figure No. 3.6

Title
Underlying Rural Local
Transit Support Areas

Legend

- ⊗ Major Industrial Plant
- Spine Network
- Connector Network
- ▨ Spine Network Influence Area
- ⋯ Local Transit Support Service Area

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trip was used in the financial calculations described herein). Since drivers are only reimbursed for operating costs, there is no need for the drivers to carry special insurance or hold a different class of license. The agency managing the program does require insurance, but the coverage is widely available. A budget of \$225,000 would be sufficient to provide one trip per week for about 200 people for one year, or about 10,000 person trips at an average cost of about \$22.50 per trip.

Significant resources (typically organizational rather than financial) are available through many sources to help guide the establishment of such programs, help recruit drivers and register clients. The cost of a volunteer driver program may appear to be expensive, however in a rural setting the distances are long and the vehicle operating costs are not inconsequential. The payment of the Revenue Canada rate of \$0.52 per kilometre is still significantly less expensive than a typical Alberta taxi charge. For example a one way five kilometre trip in a Red Deer taxi currently costs about \$11.30, or about \$4.25 per kilometre and that does not include assistance or any waiting time at the destination.

Other local transit support measures can also be undertaken on a broader scale, such as promotion and support for car pooling.

3.2 FUNDING

The cost of providing shared / public transportation typically comprises capital costs (e.g. equipment, vehicles, garages) and operating costs (e.g. drivers, fuel, maintenance). Capital costs are generally easier to finance, as grants are available from both public and private sources for these one-time expenses. Operating dollars are much more difficult to fund as they are usually reoccurring costs that must be covered each year, and grant availability is limited or nil for operating costs.

3.2.1 Capital Costs

Capital costs for buses and vans will generally be eligible for provincial funding support if the vehicles are low floor or include wheelchair lift. Program rules and eligibility may change from year to year, but grants of up to 100% are often available. Federal grants are also available in conjunction with provincial funding. Private donations of cash or vehicles are often available in sponsorship arrangements in exchange for advertising the source of the money or vehicle on the vehicle itself. Local funding sources such as charities or church groups may also partly or wholly fund vehicles. Ancillary equipment such as radios or dispatch software is usually eligible for grant programs as well. Given the small fleet size, a dedicated maintenance facility is not likely required. Gasoline powered vehicles can be parked outdoors, although it is preferable to park larger diesel vehicles indoors in the winter to reduce warm up time.

3.2.2 Operating Costs

Table 3.5 provides a comparison of the operating cost of transporting passengers on the regional transit spine, the transit connectors, and the rural local transit support services. The net

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cost per person transported ranges from \$4.67 to \$12.27 for the fixed route service options on the spine, and up to \$26.00 per passenger for trips on the transit connectors.

Table 3.5 - Estimated Operating Cost Comparison

	Cost Per Passenger Trip	Net Cost Per Passenger Trip	Cost Recovery
Transit Spine - Option A	\$15.77	\$12.27	22%
Transit Spine - Option B	\$12.45	\$ 8.95	35%
Transit Spine - Option C	\$19.86	\$16.36	18%
Transit Spine - Option D	\$ 9.56	\$ 6.06	37%
Transit Spine - Option E	\$ 8.17	\$ 4.67	43%
Transit Connectors (e.g. community bus)	\$26.00	\$21.00	19%
Rural Local Support (e.g. volunteer driver program)	\$22.50	\$17.50	22%

The best farebox recovery is projected to be about 43% for Option E (Weekday Enhanced Inner Spine Service + Three Days Per Week Mid-Day Service). The farebox recovery for the other options ranges between 19% and 37%. The remainder of the funding will likely need to be allocated from local tax sources. In Western Canada, only the Government of British Columbia provides operating subsidies for local transit services in small communities. In every other province, the full subsidy is covered from local sources which depend heavily on property tax revenues.

For the CAEP services there are several possibilities for sharing cost recovery, at least one of which depends on the type of service operated on the spine. The first is to allocate costs to the sub-regions served by the four spine routes, and define service areas for each of the connector routes. The subsidy required for each route would be apportioned only to the service area being served by the individual service. This would be the fairest system, but in practice it would be difficult to implement. Deciding how far the service area extended in light of possible use by park-and-riders would make the drawing of boundaries a potentially controversial and difficult task. Similarly, allocating costs on a per route basis would require extensive bookkeeping and add to the overhead burden, possibly creating disagreements difficult to resolve by consensus.

A second, alternative approach would be to assess all communities equally for the service. In communities far from the spine, the revenues would be used to support the connector services, whatever form they take, and in the areas closer to the spine the funds would support the spine transit operation. A sliding scale could be developed based on community size or distance from the spine, and calculated based on population or assessed value.

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The third approach would only be considered if spine service Option D or Option E was selected. Under these hybrid schemes, more service is provided on the innermost sections of the spine. Building on this service pattern, the cost of the spine services would be shared based on the proportion of the service provided. In Option D, the inner communities have six daily round trips, while the outer communities have only two round trips. This would mean that the inner communities would be responsible for 2/3 of the net cost. However, this type of arrangement is not preferred since minor service adjustments could result in small changes to the allocation formula which could make the financial calculations overly complex. It is noteworthy that in urban areas all neighbourhoods pay the same proportion of their taxes towards transit regardless of the level of service being provided.

3.3 FARES AND TRANSFERS

It is suggested that fares on the spine routes be established using distance-based zones. Each spine could be divided into zones of about 5 km to 10 km and fares or passes developed that reflect the distance travelled. For example if the cash fare was set at \$3.00 per zone, a trip on one zone would be \$3.00, but a trip to the end of the line, might be 5 zones, or \$15.00. Discounts could be available for seniors, youth or for the purchase of monthly passes. The fare system outside the spine would have to be designed to match the type of service being provided. Reciprocity with Red Deer Transit would permit transfers between users of the rural system and services within Red Deer. This reciprocity is a critical element, as the spine service alone will not be able to serve all destinations with Red Deer.

4.0 Implementation

4.1 REGIONAL TRANSPORTATION STRATEGY STAGING

The proposed regional transportation strategy for Central Alberta consists of three related components, each of which has different factors affecting implementation of the strategy in stages.

Regional Transit Spine

The regional transit spine is to some degree an “all or nothing” endeavour, at least in how its individual sections are implemented. Similar to human anatomy, the spine is not functional if it is broken into small sub-sections. The transit spine must create contiguous connections and the greater the extent of coverage of the spine, the more effective it will be.

- At a minimum, the spine would consist of one leg of the “inner” spine system, e.g. the inner leg in the west direction (Sylvan Lake - Red Deer), or the inner leg in the north direction (Lacombe - Red Deer).
- Preferably, the initial stages of the regional transit spine would consist of two to four legs of the “inner” spine (any directions), or one leg of the complete spine, e.g. the entire leg in the west direction (Rocky Mountain House - Red Deer) or the entire leg in the north direction (Wetaskiwin - Red Deer).

Transit Connectors

The transit connectors are envisioned as elements that can be implemented individually according to the readiness and commitment of proponents wanting to build part of the regional system.

- At a minimum, a transit connector will typically require a bilateral partnership between two parties that are ready and committed to creating a regional connection (typically between the two parties involved). Examples could include:
 - two towns creating a transit connector between themselves
 - a town and an institutional agency (e.g. educational, healthcare) or company (e.g. an industrial employer) creating a transit connector between themselves
 - a county and a major employer (e.g. economic development centre being attracted or retained) creating a transit connector between employees and employment needs
- More feasibly, a transit connector will result from a multilateral partnership where several parties are ready and committed to creating a regional connection. Examples could include various combinations of those listed in the previous bullet. One combination that would be

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particularly appropriate would be for a county to partner with some or all of the larger towns within it as well as major non-governmental partners (employers, institutions).

The level of readiness and interest in providing public / shared transportation (or “transit connectors”) to serve such interactions may differ in various locations throughout the CAEP area. Although individual transit connectors can be customized and do not require minimum sizes, certainly more and longer transit connectors will work together better and provide increasingly attractive service, thus creating a virtuous cycle of increasing patronage.

Rural Local Transit Support

Rural local transit support is envisioned as an underlying part of the fabric of the CAEP area, particularly for more-remote and sparsely-populated areas. It is not location-specific, and does not require specific partnerships to implement. Rather it can be implemented on a scaled basis according to need and the availability / commitment of resources.

4.2 ROLE OF CAEP / OVERARCHING ORGANIZATION

As noted, the proposed regional transportation strategy for Central Alberta consists of three related components, which can theoretically operate in isolation but will be much more effective if they are viewed as inter-related and mutually-supportive, with an overall level of coordination or organization.

The individual elements of the strategy, including the regional spine, the transit connectors, and the rural local supporting services can be scheduled, organized and/or contracted at a local level. However, in order to function as an overall system there needs to be some type of overarching organizational structure and that is a role that can be fulfilled by an existing regional agency, or a new dedicated transportation authority.

The regional spine service could potentially fit within the existing structure of Red Deer Transit. However, the structure to collect the subsidy dollars from the local and county governments and develop the detailed service specifications should be a regional function. Red Deer Transit could operate the service under contract to a regional transportation agency. Red Deer Transit could even be restructured to become a regional transportation authority for the entire Central Alberta area.

The transit connectors will use resources that are best managed at the local level, including municipal garages and potentially drivers from other municipal departments. However, there is a regional role in insuring that the implemented connections link to the regional spine in a coordinated fashion. The actual vehicles could rotate around the various municipalities and the regional transportation agency would have a role in developing the schedule for sharing and coordinating local contributions for funding.

A regional transportation agency could also have a large role in organizing the local transportation programs such as rural volunteer drivers. Although the actual organization of the

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system would be locally based, there is a need for regional assistance in handling training and recruiting of volunteers and perhaps also in handling details such as vouchers and payment systems. Centralizing those functions would relieve the local authorities of much of overhead needed to make a volunteer driver or voucher system a reality.

In terms of public accountability, issues such as fare setting, use of tax dollars and service policies should be established at an agency that functions with a public board of directors, and open public meetings. Rather than having individual municipalities or counties handling these types of issues the best solution would appear to be an existing or new regional agency or authority.

4.3 READINESS CRITERIA

Below are listed a number of criteria that would typically be important in establishing the type of regional transportation strategy proposed herein. These criteria might be viewed as “trigger points” and when several of them are deemed to be present, the probability of a successful regional transportation initiative would be greater.

Are there:

- ✓ numerous public requests?
- ✓ one or more business / institutional requests (especially those including potential funding opportunities)?
- ✓ financial resources available (e.g. grants, municipal sources, industry sources)?
- ✓ human resources available (e.g. volunteer drivers, municipal staff, service organizations)?
- ✓ partnerships initiated (e.g. to create transit connectors)?
- ✓ consistencies with prevailing / supportive plans and policies (e.g. municipal development plan goals, transportation master plan goals, sustainability objectives)?
- ✓ local supporting transportation facilities (e.g. bicycle / pedestrian networks within towns, trails / connections between significant destinations, park-and-ride or other collection points available for shared transportation purposes)?

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5.0 Appendices

5.1 APPENDIX A - ANNOTATED RESOURCE LIST

[TO BE COMPLETED IN FINAL DRAFT.]

5.2 APPENDIX B - EXISTING PUBLIC / SHARED TRANSPORTATION SYSTEMS

[TO BE COMPLETED IN FINAL DRAFT.]

Agenda Item

Date: February 8, 2011
Item: Clearwater County Code Overview
Prepared by: Christine Heggart

Background:

As per Council's request at their regular Council Meeting on January 11, 2011, attached please find a copy of the *Clearwater County Code* document – which emphasizes mutual respect for all landowners and details differences between city and country life.

The Code was developed in response to the previous Council's request that a document be developed to clarify service delivery standards provided by the County and provide specific information or requirements concerning:

Property, including: building permits, easements, property line issues, dust, vehicle wear and tear and future of adjacent property;

Access to Property, including: emergency response, legal access, road maintenance, extreme weather driving, personal emergency preparedness, school buses, paving, mail/delivery, construction costs/delays;

Utility Services, including: electric service, power outages, telephone/internet, sewer/septic, water, waste removal;

Mother Nature, including: characteristic of property, steep slopes, soils, topography, wildlife; and,

Agriculture, including: agriculture or livestock business, noxious weeds, animals, and rural aroma.

Council reviewed the first draft of the Code at their July 13th, 2010 meeting and the revised draft was adopted on August 10, 2010.

The Clearwater County Code is currently available through various departments, including Council on the new website, www.clearwatercounty.ca. The Code is also available in hard copy in the front lobby, and is included in all new development and subdivision application packages.

Recommendation:

That Council reviews the Clearwater County Code, amends if required or approves the document as presented.



Clearwater County Code

Box 550, 4340-47 Avenue

Rocky Mountain House, AB T4T 1A4

403-845-4444



Introduction

Settlement history in Clearwater County extends back over 200 years and includes a long history of ingenuity and growth. Explorers and traders, such as David Thompson, had an entrepreneurial spirit which set the mold for our modern day community.

Although much has changed in the past century – with the addition of roads, buildings and industries - this area still retains its natural attractions and cultural treasures, offering opportunity to various industries and a wide ranging community demographic.

Along with those early settlers travelling west, came a “Cowboy” value and lifestyle which has been chronicled for well over a century, has inspired literature and film and has provided generation after generation with a timeless moral code to aspire to. The unwritten “Code of the West” or cowboy code provides a set of rules or principles that guided our predecessors in their lives and journey west.

While there are numerous interpretations of what the Code of the West entails, the general spirit of comradery, ethics and community behaviour encompass the essence of this unwritten code.

The *Clearwater County Code* that follows depicts this same spirit, along with providing helpful information and tips on what to expect when living, purchasing property and/or building in Clearwater County. We are a rural community and our residents understand that country life is different from that of a city or urban area.

Understanding and respect are critical aspects of rural living. Different segments of our community have differing needs and wants - from agriculture to industry and from the small to the large land owners – and we all need to live in harmony, respecting each other and coexisting peacefully alongside one another.

The information presented in the *Clearwater County Code* is not intended to discourage anyone from rural living; rather it is intended to provide an accurate picture of rural life – and the expectation of mutual respect for all stakeholders in our community that comes with it.



The Property

There are many issues that can affect your property. It is important to research these items before purchasing land. Not all land can be built on. You must check with the Clearwater County Planning Department to confirm that a piece of land can be built on.

BUILDING PERMITS - Provincial legislation requires that construction of residences and buildings requires a building permit. The County also requires, in most cases, a development permit as well.

These permitting processes help assure you that your proposed project conforms to applicable bylaws and statutory plans and is consistent with provincial requirements regulating property and uses such as setbacks, minimum frontage, potable water supply and sewage disposal systems. As well, permits are often required from other agencies, such as Alberta Transportation or Alberta Environment. Before commencing construction, be sure you have obtained the appropriate permits.

EASEMENTS - Easements may require you to allow construction and maintenance of roads, power lines, water lines, sewer lines, etc. across your land. There may be easements that are not on record. Check these issues carefully.

PROPERTY LINES / SURVEY - Fences that separate properties are often misaligned with the property line. You can confirm the location of your property lines through a survey of the land. Verification of the location of property lines is the responsibility of the property owner. Property lines disputes are a civil matter that the County does not become involved in.

CONDITIONS / RESTRICTIONS - Many subdivisions and planned unit developments have covenants that limit the use of the property. It is important to obtain a copy of the covenants (or confirm that there are none) and make sure that you can live with those rules.

DUST - Traffic on unpaved roads generate dust. When traffic reaches specific levels, Clearwater County treats some roads to suppress the dust, in other cases residents can enter into a cost share agreement to reduce dust in front of their property, but "road dust" is still part of life for most rural residents.

VEHICLE WEAR AND TEAR - Because unpaved roads are typically rough and slippery in wet weather, vehicle maintenance costs may increase when you regularly travel on these roads.

FUTURE OF ADJACENT PROPERTY - The surrounding properties may not remain as they are indefinitely. As property ownership changes; so might the owner's plans for that property. Provincial and municipal legislation set out processes and requirements that are to be followed on how property might be developed and while there are limitations on what types of land uses may occur on property and where that development might be situated on the property, it is important to respect the landowner's right to explore these options. You can check with the Clearwater County Planning Department to find out how the properties are designated and to see what future developments may be in the planning stages.





Access to your Property

The fact that you can drive to your property does not necessarily guarantee that you, your guests and emergency service vehicles can achieve that same level of access at all times.

EMERGENCY RESPONSE - Response times (RCMP, fire suppression, medical care, etc.) cannot be guaranteed. Under some extreme conditions, you may find that emergency response is slow and/or costly.

LEGAL ACCESS - There can be problems with the legal aspects of access, especially if you gain access across property belonging to others. Obtain legal advice and understand the easements that may be necessary when these types of questions arise, and remember that easements are not legal access for purpose of subdivision and development approval.

ROAD MAINTENANCE - You may experience problems with the maintenance and cost of maintenance of your road. Clearwater County repairs and maintains nearly 3300 kilometres of road, approximately 300 kilometres of which are paved. There are also some County roads that are not maintained by the County – which means no grading or snow plowing. Make sure you know what type of maintenance to expect and who will provide that maintenance. Private internal roads and driveways are the responsibility of the landowner. Determine if you will be responsible for your road before purchasing a property. Residents served by private roads and/or bridges may be responsible for the cost of repairs and/or reconstruction after floods or for required maintenance over time.

EXTREME WEATHER DRIVING - Extreme weather conditions can impact roads. You may want to determine whether the road on your property was properly engineered and constructed. In extreme weather, even County maintained roads can become difficult to travel or even impassable. You may need a four wheel drive vehicle to travel during these times.

PERSONAL EMERGENCY PREPAREDNESS - In the event of an emergency - extreme weather (wind, rain, and snow), fire, flooding etc. - some services may be delayed, like snow plowing or ambulance for example. If you require in home care, please understand immediate service is not going to be available in all instances. Always be prepared to be self-sufficient for at least 72 hours. All residents are encouraged to have a basic emergency kit. For more information on how to prepare your emergency kit, visit www.getprepared.ca.

SCHOOL BUSES - School buses travel only on maintained County roads that have been designated as school bus routes by the school district. You may need to drive your children to the nearest County road so they can get to school. Information on school bus service may be obtained from the Wildrose School Division or Red Deer Catholic Regional School Division.

PAVING - If your road is unpaved, it is unlikely that Clearwater County will pave it in the foreseeable future.

MAIL, NEWSPAPER AND PARCEL DELIVERY - Check availability with Canada Post, your newspaper of choice, and/or standard parcel and overnight parcel delivery services, as these services may not be available to all areas of the County.

CONSTRUCTION COSTS/DELAYS - It may be more costly and time consuming to build a rural residence due to delivery fees and time to reach your site. Many large construction vehicles cannot navigate small, narrow roads or may be limited in the amount of material they can haul due to road bans. If you plan to build, it is a good idea to check out construction access, particularly if you plan to build during spring break-up (early March to mid-May).



Utility Services

Water, sewer, electric, telephone and other services may be unavailable or may not operate at urban standards. Repairs can often take much longer than in towns and cities. Check with local service providers for more information and be sure to call Alberta One Call (1-800-242-3447) and Alberta 2nd Call (1-888-632-2122) to locate all utilities BEFORE you dig, build, tear down, demolish or disturb existing improvements or ground.



ELECTRIC SERVICE - Electric service is generally available to most areas of Clearwater County, but it is important to determine the proximity of electrical power. It can be expensive to extend power lines to remote areas. It may be necessary to cross property owned by others in order to extend electric service to your property in the most cost efficient manner. It is important to make sure that the proper easements are in place to allow lines to be built to your property. If you have special power requirements, it is important to know what level of service can be provided to your property.

If you are purchasing land with the plan to build at a future date, there is a possibility that electric lines (and other utilities) may not be large enough to accommodate you if others connect during the time you wait to build. Make sure you inquire as to the potential future of the area with this in mind.

POWER OUTAGES - Power outages can occur in outlying areas. A loss of electric power can interrupt your supply of water from a well. You may also lose food in freezers or refrigerators and power outages or fluctuations can cause problems with computers as well. It is a good idea to be equipped to survive for up to a week in the cold, with no utilities, if you live in the country.

TELEPHONE / INTERNET SERVICE - Rural telephone and internet services range from full service to no service at all. Due to mountainous areas and tree coverage, cellular phones will not work in all areas.

SEWER / SEPTIC SERVICE - Municipal sewer service is not available in most rural areas. If sewer service is not available, you will need to use an approved septic system or other treatment process. Recent changes in Provincial regulations may affect the type of system you will have to install and whether you may have to upgrade or change your private septic system in the future. Check the Alberta Private Sewage Systems Standards of Practice for guidelines or discuss with an agency approved by Alberta Municipal Affairs. Contact information is available through the Clearwater County Planning Department.

WATER - Similarly, municipal water service is not available in most areas of the County so you will have to locate an alternative supply, most commonly a water well. Wells come with drilling and pumping costs. The quality and quantity of well water can vary considerably from location to location and from season to season.

Not all wells can be used for irrigation and/or watering livestock. Licenses from Alberta Environment may be required. If you have needs other than for your household, make certain that you have the proper approvals before you invest. It is advised that you review water issues for your property very carefully, through Alberta Environment.

WASTE REMOVAL - Clearwater County does not provide household waste removal. You will need to haul your household waste and recyclables to the landfill or one of several transfer sites within Clearwater County. It is illegal to create your own trash dump, even on your own land.





Mother Nature

Clearwater County is an eastern slopes community, meaning it is located close to the Rocky Mountains. Therefore there can be extremes in weather and topography. Here are some thoughts for you to consider:

CHARACTERISTIC OF PROPERTY - The physical characteristics of your property can be positive and negative. Trees are a wonderful environmental amenity, but can also involve your home in a forest fire. If you start a forest fire, you are responsible for paying for the cost of extinguishing that fire.

STEEP SLOPES - Steep slopes can slide in unusually wet weather or due to groundwater springs. Large rocks can also roll down steep slopes and present a great danger to people and property.

SOILS - Expansive soils, such as Bentonite Clay, can buckle concrete foundations and twist steel I- beams. You can find out the soil conditions on your property if you have a soil test performed.

TOPOGRAPHY - The topography of the land can tell you where the water will go in the case of heavy precipitation. Take this into consideration when deciding where to build.

WILDLIFE - Nature can provide you with some wonderful neighbors. However, even harmless animals like deer can cross the road unexpectedly and cause traffic accidents. Much of Clearwater County is the traditional habitat of coyotes, cougars, bears and other animals that can be dangerous and you need to know how to deal with them. In general, it is best to enjoy wildlife from a distance and know that if you do not handle your pets and trash properly, it could cause problems for you and the wildlife.



Agriculture

Owning rural land means knowing how to care for it and how your neighbours use it. There are a few things you need to know:



AGRICULTURE OR LIVESTOCK BUSINESSES - Agriculture is an important industry in Clearwater County. If you choose to live among the farms and ranches of our rural countryside, do not expect County government to intervene in the normal day-to-day operations of your agri-business neighbors. In fact, Alberta has "Right to Farm" legislation that protects farmers and ranchers from nuisance and liability lawsuits. It enables them to continue producing food and fiber.

Farmers often work around the clock, especially during planting and harvest time. Crops are often sprayed, swathed or harvested early in the morning or through the night. It is possible that adjoining agricultural uses may disturb your peace and quiet.

Land preparation and other operations can cause dust, especially during windy and dry weather. Chemicals (mainly fertilizers and herbicides) are often used in growing crops.

NOXIOUS WEEDS - Before buying land you should know if it has noxious weeds that may be expensive to control and you may be required to control. Some plants are poisonous to horses and other livestock. The Agricultural Services staff will be able to provide some information with regard to weeds on properties located in the County.

ANIMALS - Animals, including farm animals can be dangerous - bulls, stallions, pigs, rams, etc. can attack human beings. It is not safe to enter pens where animals are kept and persons should not access lands without the consent of the landowner. Livestock will eat loose garbage which can harm them. Keep your garbage enclosed and on your own property.

Your neighbour's cattle, sheep or other livestock should not be on your property. It is the responsibility of the rancher or farmer to keep his/her livestock off your property, as it is your responsibility to ensure that your pets, and/or livestock remain on your own land. Provincial legislation allows a farmer/rancher to shoot dogs that are harassing or "worrying" livestock.

THE RURAL AROMA - Animals and their manure can cause objectionable odors. Living in rural areas means living with the smells inherent in rural life. Development of new residential areas is not grounds for shutting down existing permitted agricultural uses.





Industry

County governments are not able to provide the same level of service that city governments provide. Clearwater County is home to a wide range of industries including timber, oil and gas, agriculture, sand and gravel, technology, manufacturing and tourism. Even though you pay property taxes to the County, the amount of tax collected does not necessarily cover the cost of the services provided to rural residents. We are all fortunate to share in services that are funded in no small part, by the taxes paid by industry.

Conclusion

Clearwater County is an area of vast and rugged splendor. Our landscape along with our community is what draws people and businesses to locate and remain in our region. The *Clearwater County Code*, an accurate picture of modern day rural life, although not exhaustive, is intended to provide information to foster understanding and enhance mutual respect for existing and future residents, so we may all fully enjoy our life in the County.

“Even though cowboy life has changed over the past 150 years, cowboys still honor and live by their code. They are a source of inspiration that reaches back into our history, yet still speaks to us today...But remember, you don't have to do extraordinary deeds to be a hero. Cowboys are heroic — not just because they do a dangerous job, but because they stand for something. Principles like honor, loyalty and courage are at the heart of the Cowboy Way.” James P. Owen

References

Clearwater County's Code brochure was adapted from the *Code of the West* written originally by John Clarke, former County Commissioner of Larimer County, Colorado.

The *Code of the West* was first chronicled by well-known western writer Zane Grey.



Agenda Item

Date: February 8, 2011

Item: Nordegg Leisure Residential Lot Purchasing Policy

Prepared By: Joe Baker

Background:

The County is anticipating having a number of Leisure Residential acreages available for sale later this summer. There were a total of sixty-nine acreages created over the past year and we are considering placing roughly a third of them on the market in 2011. These lots would be referred to as the Phase IV Cottage Lots. All lots from the previous three phases have been sold although there are three cottage lots and three residential lots that have been taken back and will be re-sold as part of the next draw. A Lot Purchasing Policy has been in place to guide the sale of all three of the previous Leisure Residential land phases, and has been quite effective in providing direction to both staff and potential land purchasers as to how these lots will be sold. Section 13 of the current NLR Lot Purchasing Policy states that this policy, "shall apply to the third phase of leisure residential lots only and shall be reviewed by Council prior to any further lots being sold."

Consequently, I am bringing the policy forward for Council's approval to guide the sale of the Phase IV Leisure Residential lots, but with one minor change. Section 13 of the policy should be changed to read fourth phase from the current third phase reference. (See existing policy below)

POLICY TITLE: Nordegg Leisure Residential Lot Purchasing Policy

SECTION: Administration

POLICY STATEMENT: To guide the development and sale of leisure residential acreages in Nordegg

PROCEDURE:

1. All new leisure residential lots will be made available for purchase and are not for lease.
2. All purchasers must be eighteen years of age or older.
3. All purchasers must agree to follow Clearwater County development guidelines and policies through the signing of a Purchase Agreement.
4. Prices for lots are to be established by Clearwater County Council.
5. All lots are to be sold through the Clearwater County office.

6. Only one lot may be purchased per family unit initially, (married couple and children under eighteen years of age). Husband and wife may purchase as co-owners of one lot.
7. Should lots remain available after all interested purchasers have had opportunity to purchase, families or individuals would be permitted to purchase additional lots. No additional lots may be purchased until two months have passed from the first date of sale.
8. A non-refundable deposit of \$5,000.00 will be required to hold the lot until the Purchase Agreement can be prepared and signed.
9. Full payment will be required at the time of signing the Purchase Agreement. This payment and signing of the Purchase Agreement is to be completed within sixty days from the date of purchase.
10. All payments are to be made in the form of cash, a certified check, or a bank draft.
11. Purchasers will be given three years from the date of signing the Purchase Agreement in which to develop their cottage to lock up stage. Failure to develop the lot within the three year time limit may result in the property returning to the County at the original purchase price less \$5,000.00.
12. Procedure for purchasing lots will be as follows:
 - a. After the establishment of lot costs, development requirements, and zoning, the lots will be advertised as becoming available for sale as of a designated date. Individuals, who have previously expressed interest and have left name and address, will be contacted regarding date of sale.
 - b. Lots will be sold on a first come basis. In the event that two or more parties are present at the time that lots go on sale, a draw will be held to determine the order in which the lots are to be purchased. A \$5,000.00 non-refundable payment in the form of cash or certified check must be put down in order to secure a lot.
13. This Leisure Residential Purchasing Policy shall apply to the third phase of leisure residences only and shall be reviewed by Council prior to any further lots being sold.

Recommendation:

That the Nordegg Leisure Residential Lot Purchasing Policy be approved with the recommended amendment to provide guidance for the sale of the Phase IV Nordegg Leisure Residential lots.

Agricultural Services Council Update

Letter the Provincial Agricultural Minister

The Agricultural Services Board has sent a letter the Agricultural Minister requesting that Clearwater County become a pilot area in administering fines under the Alberta Weed Control Act. We are proposing that this compliance tool can only be authorized for use when weed control efforts are community driven, as we demonstrated this summer with our Priority Area Weed Compliance (P.A.W.C.) model. The use of fines as a compliance tool has been supported by the P.A.W.C. steering committee that we met with in January and through a motion supported the Agricultural Service Board sending this letter. The Weed Regulatory Advisory Committee has also shared its support in investigating the use of fines within our P.A.W.C. area. The AAAF executive, I serve as central region director, and the Provincial Agricultural Service Board Committee, Councilor Duncan serves on as an alternate, will be meeting in March to discuss the fines concept and recommendations to the Minister.

Eradicable Weeds

The Agricultural Service Board was successful in passing our eradicable weeds resolution at the Provincial Agricultural Service Board Conference this past January. We have been surprised by the very quick reaction Alberta Agriculture has had to this resolution. The AAAF executive will be meeting with Alberta Agriculture staff this week to discuss the potential for an Eradicable Weed program funded by Alberta Agriculture.

Grant Opportunity

Staff has recently submitted a grant proposal to Environment Canada, Invasive Species Partnership Program, requesting funding to help control Orange and Meadow Hawkweed. Should we be successful in obtaining this funding the Invasive Species Partnership Grant will inject approximately \$90 000 over three years into our Eradicable Program which will be utilized to eradicate Hawkweeds on Private and Crown land currently found in the north east part of Clearwater County. Alberta Sustainable Resource Development has agreed to support this initiative and along with Clearwater County will be contributing significant resources to the Hawkweed Eradication efforts, regardless of the grant proposal results. Clearwater County will be leading the joint Hawkweed Eradication efforts and should our grant proposal be successful will receive and coordinate the expenditure of grant funds.

Clearwater Landcare

Clear Water Landcare is excited to host Geoff McFarlane, a pioneer in Australian Landcare this June. We are confident that Geoff's desire to come and make a difference will be well received. With the support of the Ag Service Board we have begun preparations to engage stewardship groups and decision makers by having him present at a variety of gatherings. Confirmed so far are Clear Water Landcare's "Cows, Creeks and Communities" event, the annual general meeting of the North Saskatchewan Watershed Alliance and the annual general meeting of the Medicine River Watershed Society. We are looking for eight to ten speaking

opportunities in total. We have also submitted an application to the Alberta Stewardship Network for a grant to help with Geoff's visit.

Clear Water Landcare met on January 24th and received strong support to continue promoting demonstration sites for beneficial management practices, to move ahead with developing its first board of volunteers and to plan for the Cows, Creeks and Communities event. It was encouraging to welcome a couple of new people around the table including someone from the acreage community with an interest in the Landcare concept. The move to Landcare has seen a renewed interest in our work and offers real promise for the future.

Stewardship Award

During the Provincial Agricultural Service Board Conference Clearwater County was presented with its national Stewardship Award. This is awarded to organizations dedicated to excellence and innovation in the field of Industrial Vegetation management and weed control. Our dedication to extension and community engagement along with our P.A.W.C. concept, eradicable weeds program, low foot print roadside spraying program, and on farm applied research, were noted as factors in Clearwater County being named as the 2010 Dow Agrosociences stewardship award winners. Agricultural Service Board Chairman Ken Pattison accepted the award. Communications staff has prepared a press release which will be released locally.

Respectfully Submitted by:

Matt Martinson



Agenda Item

Date: February 8, 2011

Item: **Appointment Time 1:15 p.m.**
First Reading of Bylaw 935/11
Application No. 02/11 to amend the Land Use Bylaw
For the redesignation of 152.42 acres in the NE 33-38-07-W5
From Agriculture District "A" to Residential Estate District "RE"
For the purpose of creating 54 country residential parcels
Bill Minnes, Bradwill Consultants; on behalf of 490363 Alberta Ltd.,
496000 Alberta Ltd. and 1307594 Alberta Ltd.

Prepared by: Keith McCrae

Background:

The subject quarter section is located approximately 2.5 miles south of the Town of Rocky Mountain House. Three numbered companies, 490363 Alberta Ltd. represented by Darren Bauer, 496000 Alberta Ltd. and 1307594 Alberta Ltd. presently hold joint title to the balance of the NE 33-38-07-W5 containing ±152.42. The subject quarter section is bound on the east and partially on the north by the Everdell Road. The subject property is located ½ mile south of the intersection of SH 752 and the Everdell Road.

The application before Council today is for the redesignation of the subject lands for the purpose of creating a residential estate subdivision comprised of 54 parcels ranging from 1.2 to 1.7 acres in size. It is proposed that the parcels would be serviced by a communal water system and by private engineered wastewater systems. Bill Minnes of Bradwill Consultants has prepared a couple of preliminary concept plans for the subject property as well as a "draft" terms of reference for Council's consideration to guide the preparation of an Outline Plan for the proposed development referred to as "Meadow Ponds Estates".

Attached is an information package for Council's review. Mr. Minnes will be in attendance at the meeting to present the proposal and discuss it with Council. On behalf of the landowners he is seeking first reading of the proposed land use amendment and permission to proceed with the Outline Plan process.

Planning Direction:

The new Municipal Development Plan (MDP), adopted in July 2010, presents a significant change in policies regarding rural residential development in Clearwater County. The MDP provides direction on multi-lot residential subdivision as follows:

Applicable Definitions:

- **Traditional Multi-Lot Rural Residential Subdivision** means a rural residential subdivision for traditional country residential and/or traditional country residential agricultural parcels having a minimum size of 0.91 hectares (2.25 acres) with each parcel usually having private (individual) water and wastewater services.
- **Residential Estate Subdivision** is a multi-lot residential subdivision, located outside a hamlet setting, consisting usually of five or more residential parcels that have either or both common water and wastewater services, unless an alternate standard of servicing is approved by the appropriate Provincial Government department.

General Rural Residential Policies

- 6.2.1 Recognizing rural residential development will be required to accommodate future population growth and to help sustain rural infrastructure, especially schools, Clearwater County views that rural residential development which is appropriately located and designed to the satisfaction of the County is compatible within the rural area, including adjoining and nearby agricultural operations.
- 6.2.2 Except for a first residential parcel and a fragmented parcel, in approving a rural residential subdivision each proposed parcel shall be redesignated to the applicable country residential land use district.
- 6.2.3 When considering a proposed rural residential subdivision, Clearwater County may require that the proposed subdivision:
- (a) demonstrates the site has attributes suitable for rural residential development;
 - (b) is appropriately located and designed such that it effectively embraces, and conserves where appropriate, the visual and environmental qualities of the area, including topography, landscapes, water features, native habitat and biodiversity values;
 - (c) identifies mitigating strategies to minimize impacts on natural resources, including productive agricultural land, water, aggregate and energy resources; and
 - (d) the proposal can be reasonably served by social and physical infrastructure.
- 6.2.4 Clearwater County shall require that each parcel to be approved for a rural residential development:
- (a) has legal access and year-round physical access developed to meet County standards;

- (b) has a sufficient developable area which for a privately serviced parcel shall be no less than 0.40 hectares (1 acre) in size and for a communally serviced parcel shall be no less than 0.10 hectares (0.25 acres) in size;
- (c) has a water table at a depth of at least 2 metres (6.56 ft), unless a qualified person can demonstrate to the satisfaction of the County that a water table closer to the surface will not unduly impact the development; and
- (d) serviced in accordance with provincial regulations and any applicable County standards or requirements.

Traditional Multi-Lot Rural Residential Subdivision Policies

6.2.10 A traditional multi-lot rural residential subdivision may be approved only on lands within:

- (a) the Ferrier-Garth Area Structure Plan;
- (b) the Law Area Structure Plan;
- (c) the Nordegg Development Plan;
- (d) a residential outline plan approved by the County prior to the adoption of the Municipal Development Plan (2010);
- (e) any land designated in the Land Use Bylaw as Country Residence District or Country Residence Agriculture District prior to the adoption of the Municipal Development Plan (2010); and
- (f) a plan adopted pursuant to policy 6.2.21.

6.2.11 Clearwater County shall require traditional country residential parcels to meet the following parcel sizes:

- (a) traditional country residential parcels with individual private services: a minimum of 0.91 hectares (2.25 acres) and a maximum of 1.46 hectares (3.6 acres);
- (b) traditional country residential agricultural parcels: a minimum of 1.46 hectares (3.6 acres) and a maximum of 2.02 hectares (5.00 acres).

6.2.12 Unless site conditions require otherwise, private water and private wastewater services are acceptable forms of servicing for traditional multi-lot residential subdivisions.

Residential Estate Subdivision Policies

6.2.13 Clearwater County may approve a residential estate subdivision provided all criteria in this Plan, including the following criteria, are met to the County's satisfaction:

- (a) the proposed subdivision is supported by an area structure plan or outline plan adopted by the County;
- (b) the access to the proposed subdivision is located within 1.6 kilometres (1 mile) of a paved road, such distance being measured along the road that provides access to the subdivision;

- (c) the land on which the residential estate subdivision is proposed has a Farmland Assessment Rating of 34 percent or less, except that up to 15% of the land to be subdivided for residential purposes may have a higher rating;
 - (d) the proposed subdivision is not within 0.8 kilometres (0.5 miles) of an area considered by the County to be a surface resource extraction area or a potential surface resource extraction area, or within 0.8 kilometres (0.5 miles) of a designated haul road; and
 - (e) each residential parcel shall be accessed by an internal access road;
- 6.2.14 The form of wastewater and water services for a residential estate subdivision shall be determined by Clearwater County in consultation with the appropriate Provincial Government departments, with these services being one of the following:
- (a) a communal water system and a communal wastewater system; or
 - (b) a communal water system and private engineered wastewater systems approved by the appropriate Provincial Government department and Clearwater County.
- 6.2.15 Clearwater County shall require residential estate parcels to meet the following parcel sizes:
- (a) residential estate parcels with both communal wastewater and communal water services: a minimum of 0.20 hectares (0.50 acres) and a maximum of 0.61 hectares (1.50 acres); and
 - (b) residential estate parcels a communal water system and individual private engineered wastewater systems approved by the appropriate Provincial Government department and Clearwater County: a minimum of 0.50 hectares (1.25 acres) and a maximum of 0.81 hectares (2.00 acres).
- 6.2.16 The maximum number of residential parcels permitted in a residential estate subdivision shall be determined in accordance with the formula provided in Appendix A, which forms part of this Municipal Development Plan (2010).
- 9.2.1 Pursuant to Policy 6.2.14, Clearwater County shall require a residential estate subdivision to have at least a communal water system but may require a residential estate subdivision to have both a communal water system and a communal wastewater system. The ownership and operation of the system shall be determined by the County at the time of subdivision or development approval. The County may require other multi-lot subdivisions for residential or other land uses to have a communal water system, communal wastewater system or both.

Plans to Support a Major Redesignation, Subdivision or Development

11.2.4 Clearwater County may require an area structure plan or outline plan to address any or all of the following:

- (a) site suitability;
- (b) design and density;
- (c) impacts on natural capital and the environment;
- (d) effects on land uses in the vicinity;
- (e) provision of roads and utilities;
- (f) traffic impacts;
- (g) provision of open space;
- (h) protective and emergency services;
- (i) access to and impacts on education and health services;
- (j) FireSmart provisions;
- (k) measures to mitigate effects; and
- (l) any other matters required by the County to be addressed.

Amendments to the County's Land Use Bylaw (LUB) are presently being considered by Council for the purpose of bringing the LUB into conformity with the new MDP. Attached you will find a copy of the proposed Residential Estate District "RE" that is part of the above mentioned amendments to the LUB.

Recommendation:

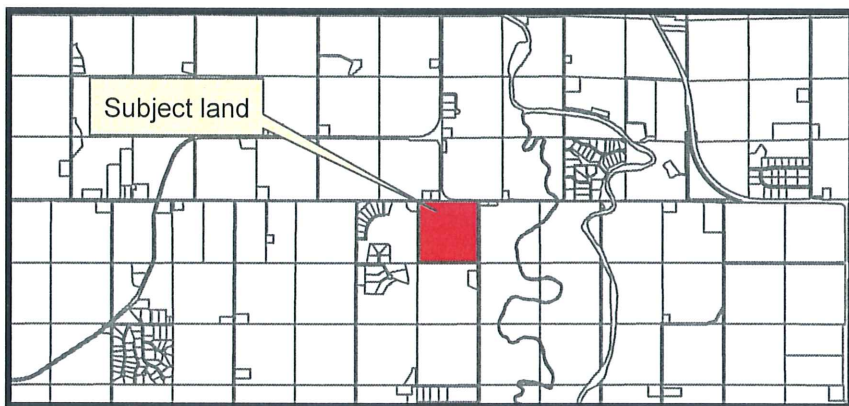
That Council grants first reading of Bylaw No. 935/11 and approves the terms of reference for the preparation of an outline for the subject property, with any amendments they feel are necessary.

Twp Road 39-0

NE 33-38-07-W5

**Area Subject to Application
Redistrict 152.42 +/- acres
From Agriculture District "A"
To Residential Estate District "RE"
For the purpose of creating
54 Residential Estate parcels**

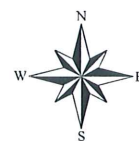
Everdell Road (Range Road 7-3)



**Bylaw No. 935/11
Schedule "A"**



**Application #02/11 to Amend the Land Use Bylaw
Redistrict 152.42 acres +/- within PT NE 33-38-07-W5M
From Agriculture District "A" To Residential Estate District "RE"
Bill Minnes of Bradwill Consultants on behalf of 490363 Alberta Ltd.,
496000 Alberta Ltd. and 1307594 Alberta Ltd.**





**Application #02/11 to Amend the Land Use Bylaw
 Redistrict 152.42 acres +/- within PT NE 33-38-07-W5M
 From Agriculture District "A" To Residential Estate District "RE"
 Bill Minnes of Bradwill Consultants on behalf of 490363 Alberta Ltd.,
 496000 Alberta Ltd. and 1307594 Alberta Ltd.**



BYLAW NO. 935/11

A Bylaw of Clearwater County, in the Province of Alberta, for the purpose of amending the Land Use Bylaw, being Bylaw No. 714/01.

PURSUANT to the Authority conferred upon it by the Municipal Government Act, Revised Statutes of Alberta, 2000, Chapter M-26 and amendments thereto, and;

WHEREAS, a Council is authorized to prepare, to adopt, and to amend a Land Use Bylaw to regulate and control the use and development of land and buildings within the Municipality;

WHEREAS, the general purpose of the Residential Estate District "RE" is to accommodate residential development, outside of a hamlet setting, which is served by a communal water and/or wastewater system, while not permitting any agricultural pursuits.

NOW, THEREFORE, upon compliance with the relevant requirements of the Municipal Government Act, the Council of the Clearwater County, Province of Alberta, duly assembled, enacts as follows:

That all of PT NE 33-38-07-W5, as outlined in red on the attached Schedule "A" be redesignated from Agriculture District "A" to Residential Estate District "RE".

READ A FIRST TIME this ____ day of _____ A.D., 2011.

REEVE

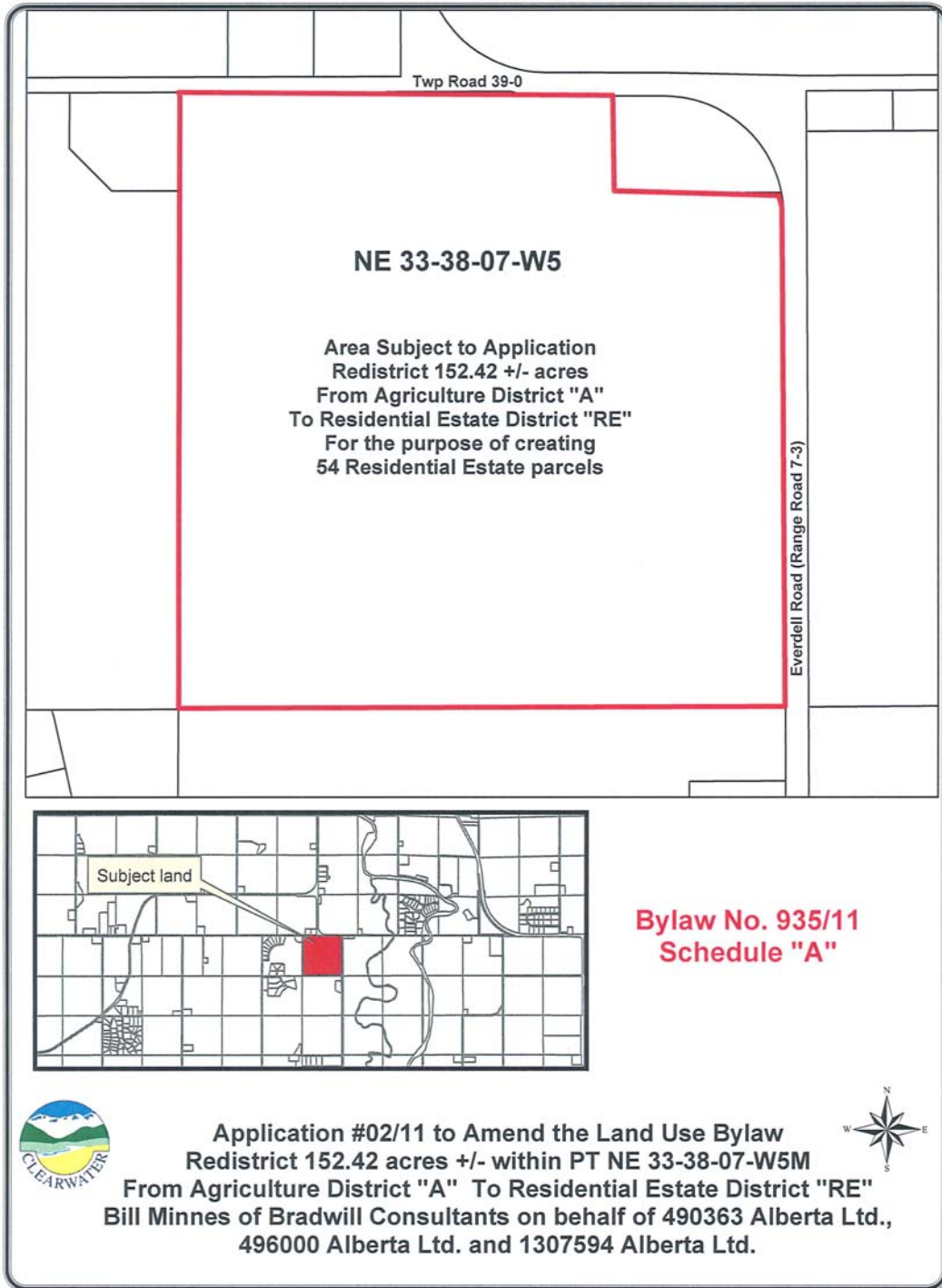
MUNICIPAL MANAGER

PUBLIC HEARING held this ____ day of _____ A.D., 2011.

READ A SECOND TIME this ____ day of _____ A.D., 2011.

READ A THIRD AND FINAL TIME this ____ day of _____ A.D., 2011.

REEVE



NE 33-38-07-W5

**Area Subject to Application
Redistrict 152.42 +/- acres
From Agriculture District "A"
To Residential Estate District "RE"
For the purpose of creating
54 Residential Estate parcels**

Twp Road 39-0

Everdell Road (Range Road 7-3)

Subject land

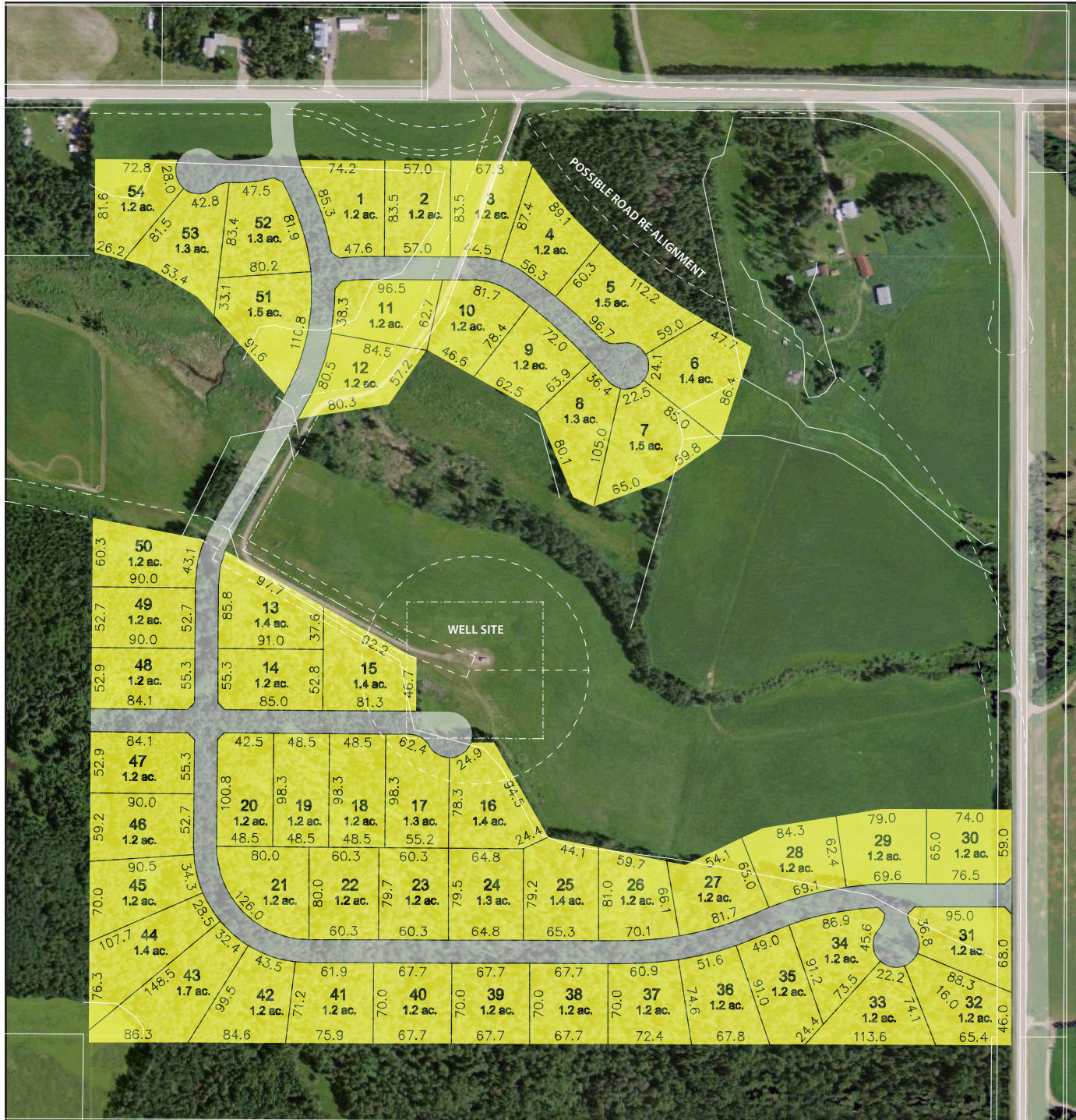
**Bylaw No. 935/11
Schedule "A"**



**Application #02/11 to Amend the Land Use Bylaw
Redistrict 152.42 acres +/- within PT NE 33-38-07-W5M
From Agriculture District "A" To Residential Estate District "RE"
Bill Minnes of Bradwill Consultants on behalf of 490363 Alberta Ltd.,
496000 Alberta Ltd. and 1307594 Alberta Ltd.**

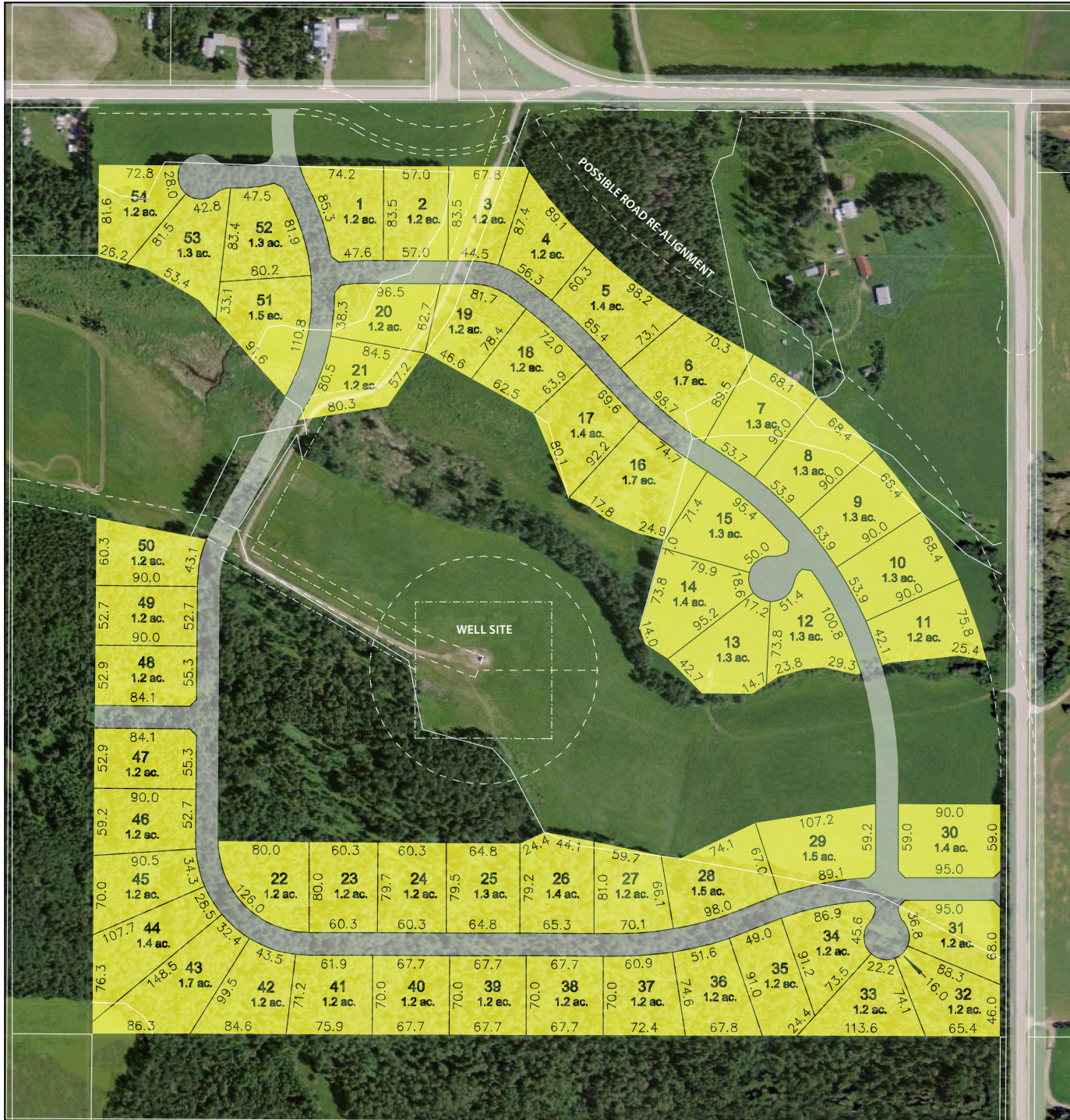
MEADOW PONDS ESTATES

Draft Concept Plan 1



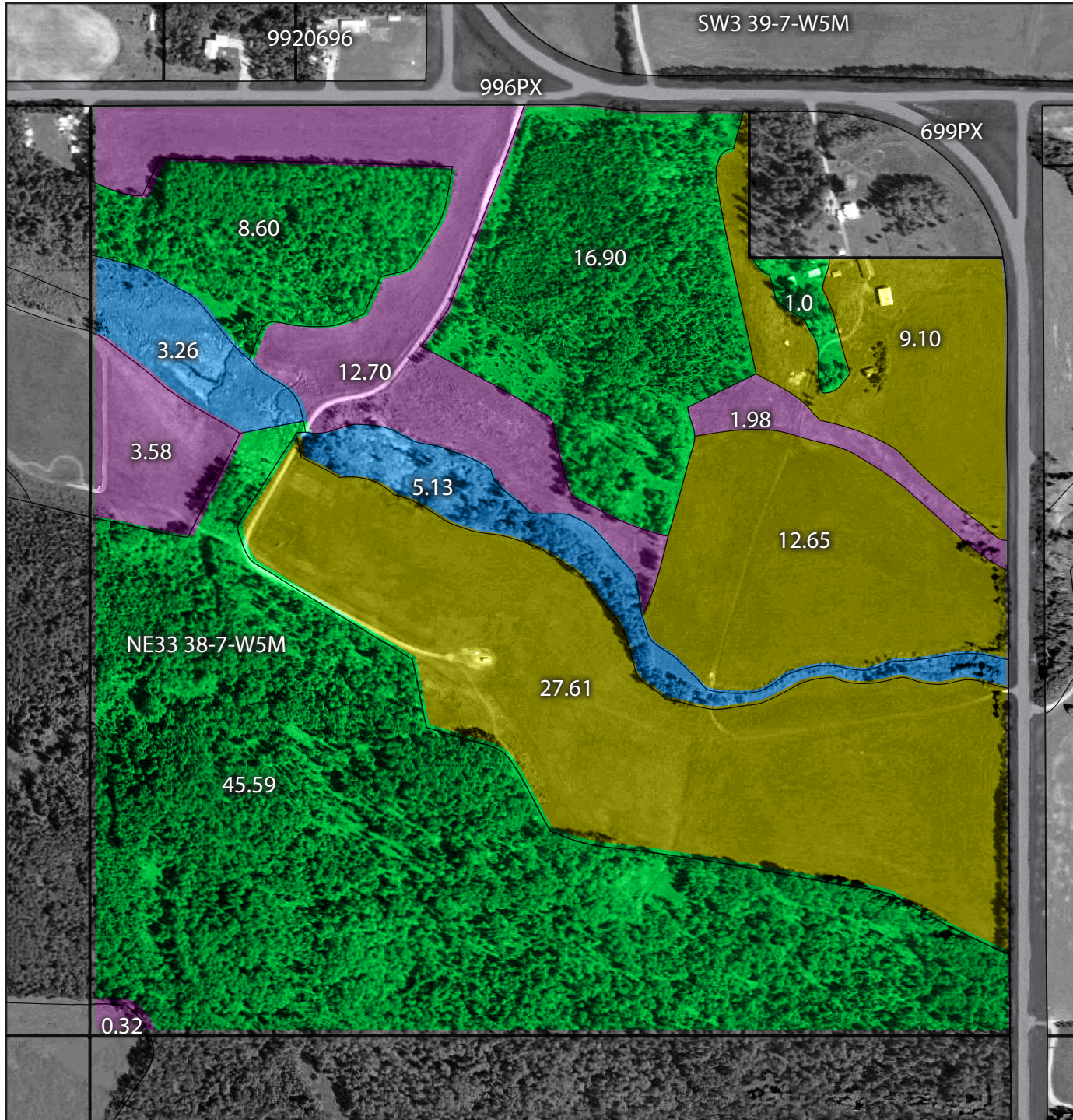
MEADOW PONDS ESTATES

Draft Concept Plan 2

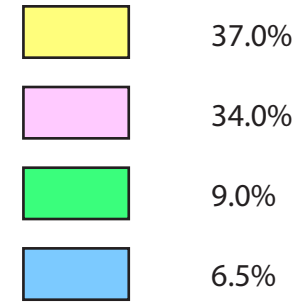


MEADOW PONDS ESTATES

Farmland Assessment Rating Areas



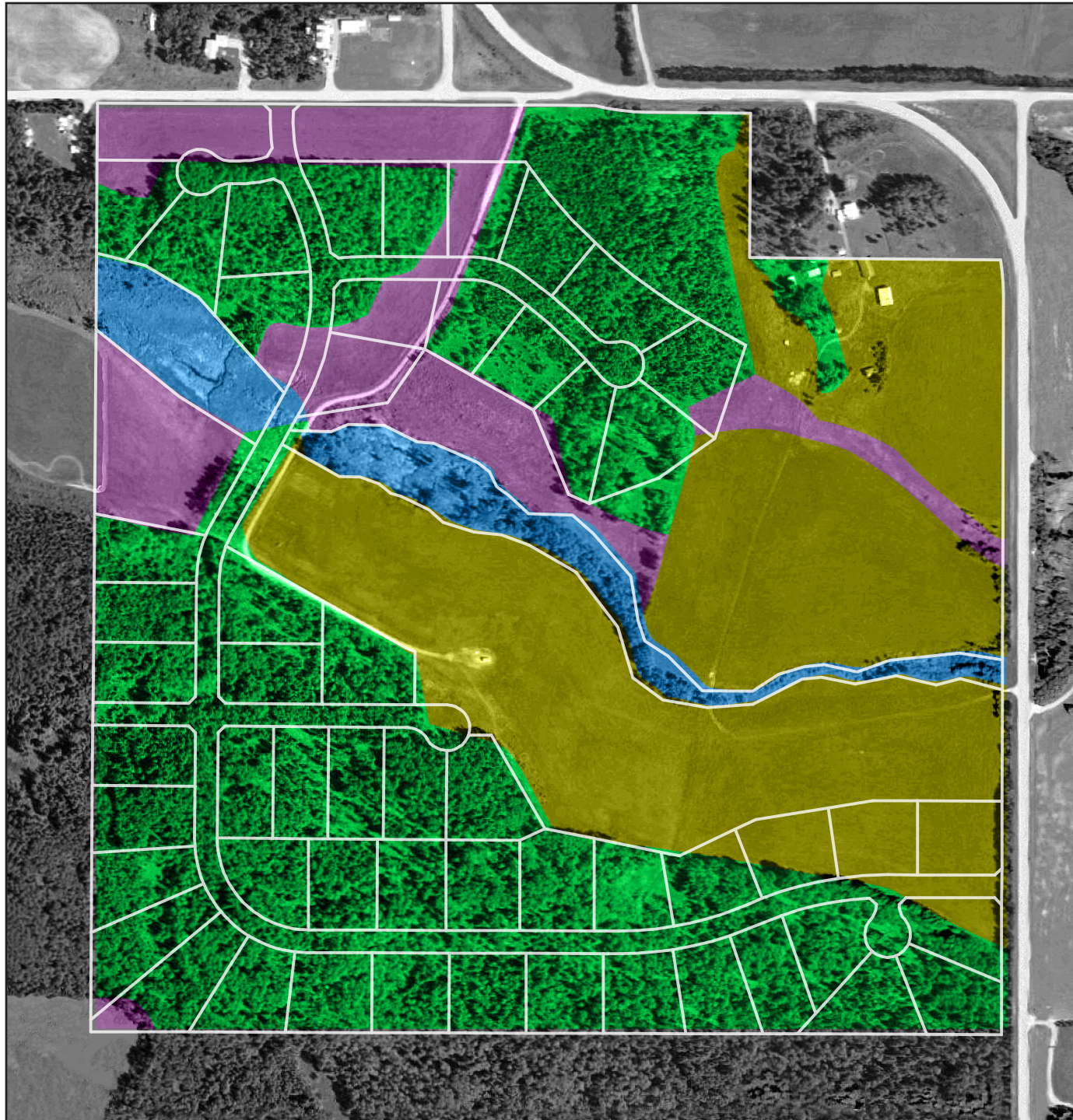
AREA RATINGS







MEADOW PONDS ESTATES

Draft Concept Plan 1

Showing Farmland Assessment Rating Areas



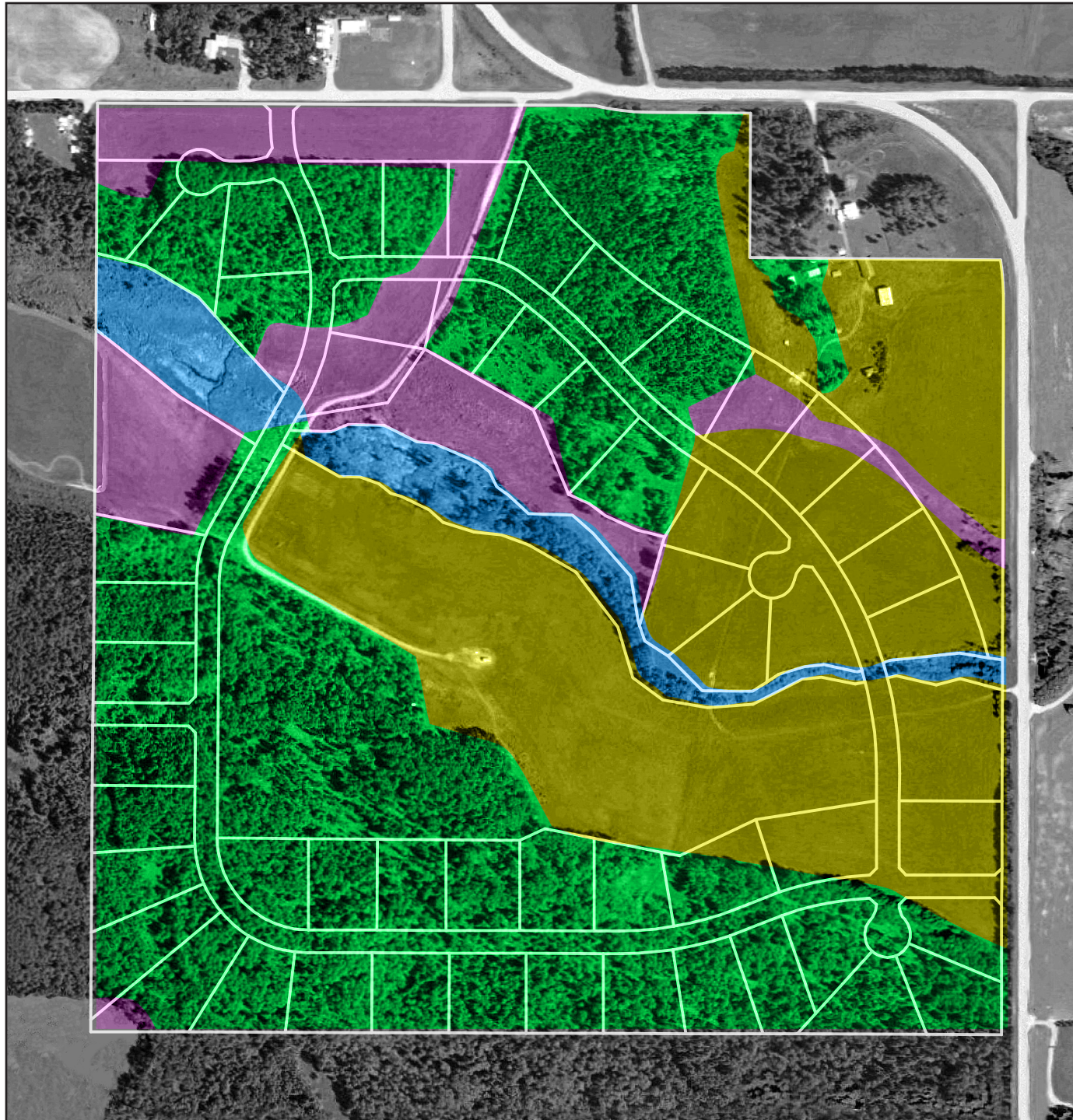
AREA RATINGS

	37.0%
	34.0%
	9.0%
	6.5%





MEADOW PONDS ESTATES

Draft Concept Plan 2

Showing Farmland Assessment Rating Areas



AREA RATINGS

	37.0%
	34.0%
	9.0%
	6.5%

FAR Calculations – Concept 1:

12.70 ac. “34” Field (Actual Area = 13.03 ac.)

Lots:	4.12 ac.	032%
Road:	0.95 ac.	007%
Unused:	7.96 ac.	061%

8.60 ac. “9” Field (Actual Area = 8.54 ac.)

Lots:	6.98 ac.	082%
Road:	1.56 ac.	018%
Unused:	0.00 ac.	000%

3.26 ac. “6.5” Field (Actual Area = 3.33 ac.)

Lots:	0.00 ac.	000%
Road:	0.13 ac.	004%
ER	3.20 ac.	096%
Unused:	0.00 ac.	000%

3.58 ac. “34” Field (Actual Area = 3.41 ac.)

Lots:	0.00 ac.	000%
Road:	0.0 ac.	000%
Unused:	3.41 ac.	100%

16.90 ac. “9” Field (Actual Area = 16.78 ac.)

Lots:	9.03 ac.	054%
Road:	1.03 ac.	006%
Unused:	6.72 ac.	040%

9.10 ac. “37” Field (Actual Area = 9.29 ac.)

Lots:	0.00 ac.	000%
Road:	0.00 ac.	000%
Unused:	9.29 ac.	100%

1.0 ac. “9” Field (Actual Area = 1.01 ac.)

Lots:	0.00 ac.	000%
Road:	0.00 ac.	000%
Unused:	1.01 ac.	100%

1.98 ac. “34” Field (Actual Area = 1.96 ac.)

Lots:	0.24 ac.	012%
Road:	0.00 ac.	000%
Unused:	1.72 ac.	088%

12.65 ac. “37” Field (Actual Area = 12.76 ac.)

Lots:	0.06 ac.	000.5%
Road:	0.00 ac.	000%
Unused:	12.70 ac.	099.5%

5.13 ac. “6.5” Field (Actual Area = 5.16 ac.)

Lots:	0.00 ac.	000%
Road:	0.00 ac.	000%
ER	5.16 ac.	100%
Unused:	0.00 ac.	000%

Continued...

27.61 ac. "37" Field (Actual Area = 27.99 ac.)
 Lots: 4.57 ac. 016%
 Road: 0.89 ac. 003%
 Unused: 22.53 ac. 081%

49.59 ac. "9" Field (Actual Area = 49.40 ac.)
 Lots: 42.05 ac. 085%
 Road: 6.81 ac. 014%
 Unused: 0.54 ac. 001%

0.32 ac. "34" Field (Actual Area = 0.30 ac.)
 Lots: 0.30 ac. 100%
 Road: 0.00 ac. 000%
 Unused: 0.00 ac. 000%

Total Property Area: 152.96 ac.

54 Residential Lots

Total Residential Lot Area: 067.35 ac.

Total Road Area: 011.37 ac.

 Total: 078.72 ac.

Total ER Area 008.36 ac.

Total Undeveloped Land Area: 065.88 ac.

 Total: 074.24 ac.

Allowable use of "37" Field: 018.1 ac.

Proposed use of "37" Field: 005.5 ac.

FAR Calculations – Concept 2:

12.70 ac. “34” Field (Actual Area = 13.03 ac.)

Lots:	4.12 ac.	032%
Road:	0.95 ac.	007%
Unused:	7.96 ac.	061%

8.60 ac. “9” Field (Actual Area = 8.54 ac.)

Lots:	6.98 ac.	082%
Road:	1.56 ac.	018%
Unused:	0.00 ac.	000%

3.26 ac. “6.5” Field (Actual Area = 3.33 ac.)

Lots:	0.00 ac.	000%
Road:	0.13 ac.	004%
ER	3.20 ac.	096%
Unused:	0.00 ac.	000%

3.58 ac. “34” Field (Actual Area = 3.41 ac.)

Lots:	0.00 ac.	000%
Road:	0.0 ac.	000%
Unused:	3.41 ac.	100%

16.90 ac. “9” Field (Actual Area = 16.78 ac.)

Lots:	9.49 ac.	057%
Road:	1.25 ac.	007%
Unused:	6.04 ac.	036%

9.10 ac. “37” Field (Actual Area = 9.29 ac.)

Lots:	0.48 ac.	003%
Road:	0.00 ac.	000%
Unused:	8.81 ac.	097%

1.0 ac. “9” Field (Actual Area = 1.01 ac.)

Lots:	0.00 ac.	000%
Road:	0.00 ac.	000%
Unused:	1.01 ac.	100%

1.98 ac. “34” Field (Actual Area = 1.96 ac.)

Lots:	1.40 ac.	071%
Road:	0.00 ac.	000%
Unused:	0.56 ac.	029%

12.65 ac. “37” Field (Actual Area = 12.76 ac.)

Lots:	10.44 ac.	082%
Road:	1.67 ac.	013%
Unused:	0.65 ac.	005%

5.13 ac. “6.5” Field (Actual Area = 5.16 ac.)

Lots:	0.00 ac.	000%
Road:	0.06 ac.	001%
ER	5.10 ac.	099%
Unused:	0.00 ac.	000%

Continued...

27.61 ac. "37" Field (Actual Area = 27.99 ac.)
 Lots: 4.36 ac. 016%
 Road: 1.18 ac. 004%
 Unused: 22.45 ac. 080%

49.59 ac. "9" Field (Actual Area = 49.40 ac.)
 Lots: 31.45 ac. 064%
 Road: 6.41 ac. 013%
 Unused: 11.54 ac. 023%

0.32 ac. "34" Field (Actual Area = 0.30 ac.)
 Lots: 0.30 ac. 100%
 Road: 0.00 ac. 000%
 Unused: 0.00 ac. 000%

Total Property Area: 152.96 ac.

54 Residential Lots

Total Residential Lot Area: 069.02 ac.

Total Road Area: 013.21 ac.

 Total: 082.23 ac.

Total ER Area 008.30 ac.

Total Undeveloped Land Area: 062.43 ac.

 Total: 070.73 ac.

Allowable use of "37" Field: 018.1 ac.

Proposed use of "37" Field: 018.1 ac.

MEADOW PONDS ESTATES
Proposed Terms of Reference for an Outline Plan

NE1/4 33-38-7-W5M
Clearwater County, Alberta

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1. Purpose of the Outline Plan

This terms of reference is submitted to the County of Clearwater Council in support of an application to amend Land Use Bylaw No. 714/01 by changing the land use district on the NE1/4 33-38-7-W5M from Agriculture District "A" to Residential Estate District "RE".

2. Project Overview

The intention of the applicant, Darren Bauer, is to develop a residential estate subdivision that will provide the rural housing market in this area of Clearwater County with estate lots in a well-planned and serviced community that can be considered a superior asset to the County.

3. Site Suitability and the New Municipal Development Plan

Two draft development concept plan options have been designed to determine, on a preliminary basis, if the requirements of the new Municipal Development Plan are compatible with the expectations of the developer. Although both plans have similar layouts they also display different design characteristics. At this initial point in the process, it appears that either concept should conform to the residential estate subdivision policies and design criteria contained in the MDP. The central focus of this approach is to analyze or test these concept plans during the preparation of the Outline Plan document to produce a final Concept Plan that is technically supported by our findings.

The following information is attached:

- a) Concept Plans 1 and 2 displayed over an air photo of the site
- b) Concept Plans 1 and 2 displayed over the Farmland Assessment Rating (FAR) plan
- c) A detailed FAR Acreage Calculation sheet for each concept

4. Organization of the Outline Plan Document

The proposed composition and content of the Outline Plan is an effective way to illustrate the proposed terms of reference for the project. Any technical reports that were completed in support of the previous development application on this quarter section will be updated and referenced in the appropriate chapter.

Chapter 1 – Introduction

Information regarding the location, physical characteristics, existing land use, agricultural context and farmland assessment, and site suitability will be included gathered and provided in this chapter.

Chapter 2 – Concept Plan

The final draft Concept Plan recommended for approval will be featured in this chapter. The Plan will be described in detail including proposed land uses, staging, impacts on educationaland

health services, the proposed open space system including access, trails and conservation lands and FireSmart provisions.

Both School Divisions and the Regional Fire Chief will be requested to comment on the draft Concept Plan prior to the submission of the draft Outline Plan document to Council.

Chapter 3 – Land Use Planning Context

The final draft Concept Plan will be discussed with respect to its conformity with the Municipal Development Plan, the Land Use Bylaw and more specifically the subdivision design expectations of the County. The existing statutory context of the lands will be described in addition with the amendment requirements needed for development approval.

Chapter 4 – Protection and Management of Conservation Areas

A proposed conservation area management plan will be described in detail including recommended conservation restrictions that may be placed on the subject lands.

Alberta Sustainable Resource Development asked for input related to this topic while we are drafting the management plan.

Chapter 5 - Traffic Impact Assessment

A summary of the latest traffic impact analysis associated with the proposed Concept Plan will be summarized in this chapter.

The County Manager of Public Works and the district office of Alberta Transportation will be consulted on the revised TIA prior to submission of the draft Outline Plan to Council.

Chapter 6 - Engineering and Servicing Concept

Proposed surface drainage and storm water management, communal water servicing and private wastewater systems will be described and presented with appropriate plans. Details related to the provision of services such as design, ownership and operation will be included in this chapter. Anticipated levels of fire protection for future residents will be addressed.

The County Manager of Public Works and Alberta Environment will be contacted and asked to comment specifically on engineering reports related to this chapter and generally on the draft Outline Plan, prior to submission to County Council. Input will also be solicited from any pipeline companies with an interest in the subject lands.

Chapter 7 - Public Consultation

It is expected that at least one public open house will be held for residents of the area to provide them with an opportunity to question members of the consulting team, to make comments and to put forth suggestions. A summary of this meeting will be provided in this chapter. A list of attendees with their verbal comments, questions and answers will be included. Participants wishing to make additional comments after the meeting will be encouraged to forward them to the County administration after the meeting. If the developer with input from County staff determines that certain issues could not be addressed satisfactorily in the meeting, a second open house may be scheduled.

5. Circulation of the Draft Outline Plan

Additional referral agencies that are identified by the County will be contacted for their input prior to the submission of the Plan to Clearwater Council.

During the process of drafting the Plan, we will continue to be in regular contact with the County administration through Keith McCrae, Senior Planner. Any additional information or expertise required from County staff will be arranged through Keith.

13.4 (31) RESIDENTIAL ESTATE DISTRICT "RE"

THE PURPOSE OF THIS DISTRICT IS TO ACCOMMODATE AND REGULATE RESIDENTIAL DEVELOPMENT, OUTSIDE OF A HAMLET SETTING, WHICH IS SERVED BY A COMMUNAL WATER AND/OR WASTEWATER SYSTEM, WHILE NOT PERMITTING ANY AGRICULTURAL PURSUITS.

A. PERMITTED USES

1. Detached dwelling
2. Ancillary buildings

B. DISCRETIONARY USES

1. Home occupation
2. Local community centre or hall
3. Park, playground and/or other outdoor recreation facilities
4. Public building or use
5. Utility building

C. ACCEPTABLE LOT SIZE

1. For residential use:
 - (a) residential estate parcels with both communal water and wastewater services: a minimum of 0.20 hectares (0.50 acres) and a maximum of 0.61 hectares (1.50 acres); and
 - (b) residential estate parcels with a communal water system and individual engineered wastewater systems approved by the appropriate Provincial Government department and Clearwater County: a minimum of 0.50 hectares (1.25 acres) and a maximum of 0.81 hectares (2.00 acres).
2. For non-residential uses, as required by the Development Officer subject to a minimum lot frontage of 15 metres (50 feet).

D. MINIMUM FLOOR AREA

1. Detached dwelling: main floor - 93 square metres (1,000 sq. ft.).
2. Other buildings: as required by the Development Officer.

E. MINIMUM DEPTH OF FRONT YARD

7.5 metres (25 feet).

F. MINIMUM DEPTH OF REAR YARD

12 metres (40 feet).

G. MINIMUM WIDTH OF SIDE YARD

1. A side yard abutting a street: 6 metres (20 feet).

2. An side yard abutting another side, front or rear yard: 3 metres (10 feet).

H. MAXIMUM HEIGHT OF BUILDINGS

1. Detached dwelling: 8 metres (26 feet).
2. Ancillary buildings: 5 metres (16 feet).

I. DESIGN, CHARACTER AND APPEARANCE OF BUILDINGS

1. All buildings shall be new unless otherwise approved by the Development Officer.
2. The architecture, construction materials and appearance of buildings and other structures shall be to accepted standards by the County and shall complement the natural features and character of the site to the satisfaction of the Development Officer.
3. Ancillary buildings and additions shall be designed ~~fabricated so as to~~ complement the detached dwelling.