



MUNICIPAL DISTRICT OF GREENVIEW No. 16

REGULAR COUNCIL MEETING AGENDA

February 14, 2023

9:00 a.m.

Administration Building
Valleyview, AB

#1	CALL TO ORDER		
#2	ADOPTION OF AGENDA		
#3	MINUTES		
	3.2 Regular Council Meeting Minutes held January 10, 2023		4
	3.3 Business Arising from Minutes		
#4	PUBLIC HEARING		
#5	DELEGATION		
	11:00 a.m. 5.1 RCMP Delegation		
#6	BYLAWS		
	6.1 Update Bylaw 22-889 Tax Payment Plan		16
#7	BUSINESS		
	7.1 Mountain Metis Nation Association Grant Request		25
	7.2 Peace Wapiti Academy Sponsorship		52
	7.3 Support for Heart River Housing Loan		58
	7.4 Minister of Municipal Affairs Funding Impact Letter		62
	7.5 Beaver Harvest Incentive Program Policy Suspension		66

7.6 Analysis of Greenview Wolf Harvest Incentive	72
7.7 Grande Cache Medical Clinic Cooperation Board Appointment	91
7.8 Water Well for Sunset House Waterpoint	93
7.9 Bill C-21	212
7.10 Alberta Roadbuilders and Heavy Construction Association Fuel Surcharge & Tonne/Km Rates Review	215
7.11 Tendering of Forestry Trunk Road and Operations South Roadside Ditch Mowing	223
7.12 Connector Request Application to connect Range Road 13 from Township Road 734 and Township Road 741	229
7.13 Connector Request Application to connect Range Road 14 from Township Road 734 and Township Road 741	243
7.14 Managers Reports	257

#8 NOTICE OF MOTION

#9 CLOSED SESSION

9.1 Disclosure Harmful to Business Interests of a Third Party

9.2 Disclosure Harmful to Intergovernmental Relations

9.3 Disclosure Harmful to Intergovernmental Relations

#10 MEMBERS REPORTS/EXPENSE CLAIMS	<ul style="list-style-type: none"> • Ward 1 • Ward 2 • Ward 3 • Ward 4 • Ward 5 • Ward 6 • Ward 7 • Ward 8 • Ward 8 • Ward 9 • Ward 9 	296
--	--	-----

#11 ADJOURNMENT

Minutes of a
REGULAR COUNCIL MEETING
MUNICIPAL DISTRICT OF GREENVIEW NO. 16
 Greenvue Administration Building,
 Valleyview, Alberta on Tuesday, January 24, 2023

#1
CALL TO ORDER Chief Administrative Officer, Stacey Wabick called the meeting to order at 9:00 a.m.

PRESENT	Ward 1	Councillor Winston Delorme
	Ward 2	Councillor Ryan Ratzlaff
	Ward 3	Councillor Sally Rosson
	Ward 5	Councillor Dale Smith
	Ward 6	Councillor Tom Burton
	Ward 7	Councillor Jennifer Scott
	Ward 8	Councillor Christine Schlieff
	Ward 9	Councillor Duane Didow

ATTENDING	Chief Administrative Officer	Stacey Wabick
	Director, Infrastructure and Engineering	Roger Autio
	Director, Corporate Services	Ed Kaemingh
	Director, Planning & Economic Development	Martino Verhaeghe
	Director, Community Services	Michelle Honeyman
	Manager, Communications & Marketing	Stacey Sevilla
	Recording Secretary	Wendy Holscher
	Legislative Services Officer	Sarah Sebo

ABSENT	Ward 9	Reeve Tyler Olsen
	Ward 8	Deputy Reeve Bill Smith
	Ward 4	Councillor Dave Berry

APPOINTMENT OF CHAIR MOTION: 23.01.29 Moved by: COUNCILLOR SALLY ROSSON
 That Council appoint Councillor Dale Smith as Chair for the January 24, 2023, Regular Council Meeting.
 FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

**#2
AGENDA**

MOTION: 23.01.30 Moved by: COUNCILLOR TOM BURTON

That Council adopt the Agenda of the January 24, 2023, Regular Council Meeting as amended.

- Add Members business for Ward 5 and Ward 8
- Add Agenda Item 9.2 Disclosure Harmful to Individual or Public Safety. (FOIPP, Sections 18 & 19)
- Correction to 7.8 Policy 4004
- Remove Agenda item 7.11 Sunset House Water Point

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

**#3
MINUTES**

MOTION: 23.01.31 Moved by: COUNCILLOR SALLY ROSSON

That Council adopt the minutes of the January 10, 2023, Regular Council Meeting as amended.

- Motion 23.01.13 fix the for/against
- Motion 23.01.16 fit the for/against
- Correct dates in Members Business

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

**BUSINESS ARISING
FROM THE MINUTES**

BUSINESS ARISING FROM MINUTES

- Councillor Burton
23.01.06 – add the Grant listings as an attachment.
Add “past Reeve” in members business with Ken Mulligan
- Update on firearms restriction in Ward 9.

MOTION: 23.01.32 Moved by: COUNCILLOR TOM BURTON

That Council direct Administration to include “past Reeve of the MD of Greenview” beside Ken Mulligans name in Members business on the January 10, 2023, meeting minutes.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

4.0 PUBLIC HEARING

5.0 DELEGATIONS

6.0 BYLAWS

7.0 NEW BUSINESS

VV CDI

7.1 VALLEYVIEW COMMUNITY DEVELOPMENT INITIATIVE (CDI) AGREEMENT

MOTION: 23.01.33 Moved by: COUNCILLOR JENNIFER SCOTT

That Council authorize Administration to enter into a three-year (2023-2025) Community Development Initiative (CDI) Agreement with the Town of Valleyview in the yearly amount of \$3,000,000 with the funds to come from the Community Services Budget, as amended.

- Add a fiscal year to section 10.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

FOX CREEK CDI

7.2 FOX CREEK COMMUNITY DEVELOPMENT INITIATIVE (CDI) AGREEMENT

MOTION: 23.01.34 Moved by: COUNCILLOR RYAN RATZLAFF

That Council authorize Administration to enter in a three-year (2023-2025) Community Development Initiative (CDI) Agreement with the Town of Fox Creek in the amount of \$2,500,000 with the funds to come from the Community Services Budget.

- Add a fiscal year to section 8.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

GIPOT

7.3 WRITE-OFF TAXES OWING FOR GRANTS IN PLACE OF TAXES PROPERTIES

MOTION: 23.01.35 Moved by: COUNCILLOR WINSTON DELORME

That Council direct Administration to write-off the balances owing in the amount of \$23,963.31 on the 2022 Grants in Place of Taxes Properties with the expense to come from Corporate Services 2022 budget.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

7.4 PROVINCIAL EDUCATION REQUISITION CREDIT & DESIGNATED INDUSTRIAL REQUISITION CREDIT

PERC

MOTION: 23.01.36 Moved by: COUNCILLOR JENNIFER SCOTT

That Council direct Administration to apply to the Province of Alberta for the Provincial Education Requisition Credit for Uncollected Education Property Taxes on Oil and Gas Properties, totalling \$5,691.05 and the Uncollected Designated Industrial Property Tax Requisition, totaling \$1,340.31.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

7.5 Q4 PRELIMINARY FINANCIAL REPORTING

Q4 FINANCIAL

MOTION: 23.01.37 Moved by: COUNCILLOR CHRISTINE SCHLIEF

That Council accepts, the preliminary Operating and Capital reports for the period ending December 31st, 2022, for information, as presented.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

CARRIED

Chair Dale Smith recessed the meeting at 10:03 a.m.

Chair Dale Smith reconvened the meeting at 10:09 a.m.

Councillor Berry entered the meeting at 10:13 a.m.

7.6 NEGATIVE IMPACT OF BILL C-21 ON RURAL ALBERTANS

BILL C-21

MOTION: 23.01.38 Moved by: COUNCILLOR SALLY ROSSON

That Council endorse the proposed RMA Resolution: "Negative Impact of Bill C-21 on Rural Albertans".

- Remove rural from Resolution title
- Add whereas referring to the stats in Canada with violent crime (add to members background)
- Page 81 – add what they refer to as Assault Style Firearms (add to members background)

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton, Councillor Berry

CARRIED

GC POLICY REPEAL

7.7 TOWN OF GRANDE CACHE POLICY REPEAL

MOTION: 23.01.39 Moved by: COUNCILLOR DUANE DIDOW

That Council repeal the following obsolete Town of Grande Cache policies:

- Commercial Waste Bins 097/16
- Development on Town Lands by Property Owner(s) 252/15
- Emergency Response Policy 035/13
- Employee Health and Safety 373/12
- Excavation on Town Property 205/15
- Hazard Identification Directive 036/13
- Joint Work Site Health and Safety Committee 411/14
- Public Works Shop Use 265/09
- Safety Investigation 037/13
- Safety Maintenance Program 038/13

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton, Councillor Berry

CARRIED

POLICY 4004

7.8 POLICY 4004 “EQUIPMENT CONTRACTOR REGISTRY”

MOTION: 23.01.40 Moved by: COUNCILLOR WINSTON DELORME

That Council approve Policy 4004 “Equipment Contractor Registry” as amended.

- Remove the word increase on 2.6.
- Add a definition for EOI or change to EOIP.
- 3.18 in the Policy, change wording from “will” to “must”

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton, Councillor Berry

CARRIED

AB WINTER GAMES

7.9 GRANDE PRAIRIE ALBERTA WINTER GAMES SOCIETY SPONSORSHIP

MOTION: 23.01.41 Moved by: COUNCILLOR TOM BURTON

That Council approve sponsorship in the amount of \$100,000.00 to the Grande Prairie Alberta Winter Games Society for the 2024 Alberta Winter Games, the condition that \$75,000.00 is allocated for upgrading Nitehawk Year-Round Adventure Park to host the gravity sports and \$25,000.00 for operating costs, with funds to come from the 2023 Community Services Grants and Sponsorships budget.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Scott, Councillor Ratzlaff, Councillor Burton

AGAINST: Councillor Berry, Councillor Rosson

CARRIED

7.10 RURAL FIRE PREVENTION PUMP PROGRAM

RURAL FIRE PUMP

MOTION: 23.01.42 Moved by: COUNCILLOR WINSTON DELORME

That Council accept the recommended changes to the Rural Fire Pump Prevention Program to reduce Greenview's liability and increase efficiency.

- New Fish Creek (7), Sandy Bay (11), Narrows (10), will stay in place.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Berry

AGAINST: Councillor Burton

CARRIED

7.12 BOARD APPOINTMENTS

GC REC BOARD

MOTION: 23.01.43 Moved by: COUNCILLOR DUANE DIDOW

That Council appoint John Webster to the Grande Cache Recreation Board for a 2-year term ending at the 2024 Annual Organizational Meeting.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton, Councillor Berry

CARRIED

FCSS BOARD

MOTION: 23.01.44 Moved by: COUNCILLOR DALE SMITH

That Council appoint Beverly Laughlin to the Greenview Family & Community Services (FCSS) board for a 1-year term ending at the Annual 2023 Organizational Meeting.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton, Councillor Berry

CARRIED

GRM BOARD

MOTION: 23.01.45 Moved by: COUNCILLOR SALLY ROSSON

That Council appoint Beverly Laughlin and Cindy Soderquist to the Greenview Regional Multiplex Advisory Board for 3-year terms ending at the Annual 2025 Organizational Meeting.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton, Councillor Berry

CARRIED

COMM TOWERS

7.13 COMMUNICATION TOWERS ALONG HIGHWAY 40

MOTION: 23.01.46 Moved by: COUNCILLOR JENNIFER SCOTT

That Council direct Administration to explore opportunities of grant funding and partnerships for the establishment of communication towers on highway 40 from Grande Cache Area to Grande Prairie utilizing fibre connection.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton, Councillor Berry

CARRIED

Councillor Dave Berry exit the meeting at 11:38 a.m.

NOTICE OF MOTION

8.0 NOTICE OF MOTION

CLOSED

9.0 CLOSED SESSION

MOTION: 23.01.47 Moved by: COUNCILLOR SALLY ROSSON

That the meeting go to Closed Session, at 11:40 a.m. pursuant to Section 197 of the Municipal Government Act, 2000, Chapter M-26 and amendments thereto, and Division 2 of Part 1 of the Freedom of Information and Protection Act, Revised Statutes of Alberta 2000, Chapter F-25 and amendments thereto, to discuss Privileged Information with regards to the Closed Session.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

Chair Dale Smith recessed the meeting at 11:43 a.m.

Chair Dale Smith reconvened the meeting at 12:27 p.m.

9.1 DISCLOSURE HARMFUL TO BUSINESS INTERESTS OF A THIRD PARTY

9.2 DISCLOSURE HARMFUL TO INDIVIDUAL OR PUBLIC SAFETY

OPEN

9.0 OPEN SESSION

MOTION: 23.01.48 Moved by: COUNCILLOR RYAN RATZLAFF

That, in compliance with Section 197(2) of the Municipal Government Act, this meeting come into Open Session at 1:37 p.m.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

MOTION: 23.01.49 Moved by: COUNCILLOR WINSTON DELORME

That Council approve an operating grant to the Grande Cache Medical Clinic Corporation, with \$50,000.00 annually over a term of 5 years and a one-time operating grant of \$250,000.00 to be used for starting costs, with funds to come from the Community Services Grants and Sponsorships budget.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

MOTION: 23.01.50 Moved by: COUNCILLOR DUANE DIDOW

That Council direct Administration to add a condition to the Grande Cache Medical Clinic Corporation funding agreement that a member of Council be appointed to the GC Medical Clinic Corporation Board.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

MOTION: 23.01.51 Moved by: COUNCILLOR SALLY ROSSON

That Council direct Administration to prepare a report regarding the overall response effectiveness to a pipeline emergency that occurred on January 18, 2023.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

10.0 MEMBERS BUSINESS

#10 MEMBER REPORTS AND EXPENSE CLAIMS WARD 1

COUNCILLOR WINSTON DELORME updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- Policy Review Committee
- Emergency Advisory Committee Meeting
- January 17, 2023, Committee of the Whole
- ASB Conference

MOTION: 23.01.52 Moved by: COUNCILLOR WINSTON DELORME

That Councillors be authorized to attend the Elders Lodge Naming Ceremony on February 2, 2023, in Grande Cache.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

MOTION: 23.01.53 Moved by: COUNCILLOR DUANE DIDOW

That Council appoint Catrina Beggs to the Grande Cache Recreation Board as a member at large for a 2-year term ending at the Annual 2024 Organizational Meeting.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

WARD 2

COUNCILLOR RYAN RATZLAFF updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- Policy Review Committee
- January 17, 2023, Committee of the Whole
- EPR Responsibility Call (Virtual)

WARD 3

COUNCILLOR SALLY ROSSON updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- Policy Review Committee
- January 17, 2023, Committee of the Whole
- Valleyview Rec Board Meeting
- Emergency Advisory Committee
- Webinar
- Little Smoky Ski Hill

Councillor Delorme exit the meeting at 1:52 p.m.

WARD 4

COUNCILLOR DAVE BERRY updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- Policy Review Committee
- Emergency Advisory Committee
- January 17, 2023, Committee of the Whole
- ASB Conference

WARD 5

COUNCILLOR DALE SMITH updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- Policy Review Committee
- January 17, 2023, Committee of the Whole (Virtual)
- Little Smoky Ski Hill
- Final inspection of the Fox Creek Iosegun Manor
- Heart River Housing (virtual)

WARD 6

COUNCILLOR TOM BURTON updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- MD of Greenview Library Board Meeting
- Grande Spirit DeBolt Senior Project
- East Smoky Recreation Board AGM
- ESRB Regular Meeting
- January 17, 2023, Committee of the Whole
- ASB Conference
- Council IS Session

WARD 7

COUNCILLOR JENNIFER SCOTT updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- Policy Review Committee
- January 17, 2023, Committee of the Whole
- Ridgevalley Home Meeting

Councillor Delorme returned to the meeting at 2:02 p.m.

WARD 8

DEPUTY REEVE BILL SMITH updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- Policy Review Committee
- January 17, 2023, Committee of the Whole
- ASB Conference

WARD 8

COUNCILLOR CHRISTINE SCHLIEF updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- MD Greenview Library Board Meeting
- January 17, 2023, Committee of the Whole
- Municipal Planning Commission
- Policy Review Committee
- Community Futures Mixer
- Community Futures meeting
- FCSS Regular Board Meeting
- Wapiti trail zoom
- Council IS Session

WARD 9

COUNCILLOR DUANE DIDOW updated Council on recent activities, which include;

- January 10, 2023, Regular Council Meeting
- Municipal Planning Commission
- January 17, 2023, Committee of the Whole
- Northern Rockies Tourism Townhall
- Community Futures Regular Board Meeting

WARD 9

REEVE TYLER OLSEN updated Council on recent activities, which include;

- Policy Review Committee
- Municipal Planning Commission
- Sturgeon Lake Cree Nation tour
- Emergency Management Committee
- January 17, 2023, Committee of the Whole

- Northern Rockies Tourism Town Hall
- Community Futures West Yellowhead
- The River of Death and Discovery Dinosaur Museum Society

**#10 MEMBERS
BUSINESS**

MOTION: 23.01.54 Moved by: COUNCILLOR TOM BURTON

That Council accept the Members Business Reports for information as presented.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

**#11
ADJOURNMENT**

11.0 ADJOURNMENT

MOTION: 23.01.55 Moved by: COUNCILLOR CHRISTINE SCHLIEF

That Council adjourn this Regular Council Meeting at 2:13 p.m.

FOR: Councillor Didow, Councillor Delorme, Councillor Dale Smith, Councillor Schlieff, Councillor Rosson, Councillor Scott, Councillor Ratzlaff, Councillor Burton

ABSENT: Councillor Berry

CARRIED

CHIEF ADMINISTRATIVE OFFICER

CHAIR



REQUEST FOR DECISION

SUBJECT:	Update Bylaw 22-889 Tax Payment Plan		
SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER: CG
DEPARTMENT:	CORPORATE SERVICES	DIR: EGK	PRESENTER: SW
STRATEGIC PLAN:	Governance	LEG: SS	

RELEVANT LEGISLATION:

Provincial (cite) – Municipal Government Act, R.S.A Chapter M-26, Section 340

Council Bylaw/Policy (cite) – Bylaw 22-889 Tax Payment Plan

RECOMMENDED ACTION:

MOTION: That Council direct Administration to update Bylaw 22-889 Tax Payment Plan.

BACKGROUND/PROPOSAL:

Alberta Land Titles is currently four months behind in processing ownership changes. This has presented challenges for new property owners to enroll in Greenview's Tax Installment Payment Plan (TIPP).

Administration had received several new applications for the TIPP this year. January is a very busy time for Administration and spreading the processing of the applications throughout the year would lessen the burden of implementation.

Administration is proposing the following changes to allow for continuous enrollment in TIPP:

3.1 Change to "The owner or interested party as proven by legal documentation...". The new owner(s) will be added to the tax roll so TIPP flag can be triggered for the new owner in the financial system.

3.2 Change the completion date of the application to be 20th of each month. This will allow Administration time to set up the new accounts before the last working day of the month when the electronic funds transfer is processed.

3.3 – Change deadline to 20th of each month.

4.1 – Change wording to allow for calculations to be done regardless if enrollment date is before or after tax notices are issued.

5.1 – Will not be eligible unless account is deemed to be in good standing, this would mean that no penalties, utility transfers, or enforcement service fees are outstanding.

7.4 – Change to read, that if Greenview cancels the agreement, the ratepayer, if so chooses, would have to re-enroll when the account is back in good standing.

With the implementation of these changes, Bylaw 22-889 would have to be repealed and replaced.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the proposed changes is that Greenview will have a Tax Payment Plan Bylaw that better accommodates ratepayers.
2. The benefit of Council accepting the proposed changes is that it eases the burden of application processing for Administration.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. The disadvantage of Council accepting the proposed changes is penalties are not applied at tax deadlines, as all applicants have until December 31 to become paid in full.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to make additional recommendations.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

The staffing implications to the recommended changes would lessen the burden on Administration at a very busy time of year.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

If Council accepts the motion to update TIPP, Bylaw 22-889 will be repealed and a new Bylaw created with the assistance of Legislative Services to be presented for Council's approval.

ATTACHMENT(S):

- MGA s340(1)
- Bylaw 22-889

property tax bylaw to raise the revenue to pay the requisitions referred to in section 326(1)(a)(ii) or (vi).

RSA 2000 cM-26 s334;2016 c24 s50;2017 c13 s1(29)

Sending tax notices

335(1) The tax notices must be sent before the end of the year in which the taxes are imposed.

(2) If the mailing address of a taxpayer is unknown

- (a) a copy of the tax notice must be sent to the mailing address of the taxable property or business, and
- (b) if the mailing address of the taxable property or business is also unknown, the tax notice must be retained by the municipality and is deemed to have been sent to the taxpayer.

1994 cM-26.1 s335

Certification of date of sending tax notice

336(1) A designated officer must certify the date the tax notices are sent under section 335.

(2) The certification of the date referred to in subsection (1) is evidence that the tax notices have been sent and that the taxes have been imposed.

1994 cM-26.1 s336

Deemed receipt of tax notice

337 A tax notice is deemed to have been received 7 days after it is sent.

1994 cM-26.1 s337

Correction of tax notice

338 If it is discovered that there is an error, omission or misdescription in any of the information shown on a tax notice, the municipality may prepare and send an amended tax notice to the taxpayer.

1994 cM-26.1 s338

Incentives

339 A council may by bylaw provide incentives for payment of taxes by the dates set out in the bylaw.

1994 cM-26.1 s339

Instalments

340(1) A council may by bylaw permit taxes to be paid by instalments, at the option of the taxpayer.

(2) A person who wishes to pay taxes by instalments must make an agreement with the council authorizing that method of payment.

(3) When an agreement under subsection (2) is made, the tax notice, or a separate notice enclosed with the tax notice, must state

- (a) the amount and due dates of the instalments to be paid in the remainder of the year, and
- (b) what happens if an instalment is not paid.

1994 cM-26.1 s340

Deemed receipt of tax payment

341 A tax payment that is sent by mail to a municipality is deemed to have been received by the municipality on the date of the postmark stamped on the envelope.

1994 cM-26.1 s341

Receipt for payment of taxes

342 When taxes are paid to a municipality and the person who paid the tax requests a receipt, the municipality must provide a receipt.

RSA 2000 cM-26 s342;2017 c13 s1(30);2021 c22 s4

Application of tax payment

343(1) A tax payment must be applied first to tax arrears.

(2) If a person does not indicate to which taxable property or business a tax payment is to be applied, a designated officer must decide to which taxable property or business owned by the taxpayer the payment is to be applied.

1994 cM-26.1 s343

Penalty for non-payment in current year

344(1) A council may by bylaw impose penalties in the year in which a tax is imposed if the tax remains unpaid after the date shown on the tax notice.

(2) A penalty under this section is imposed at the rate set out in the bylaw.

(3) The penalty must not be imposed sooner than 30 days after the tax notice is sent out.

1994 cM-26.1 s344

Penalty for non-payment in other years

345(1) A council may by bylaw impose penalties in any year following the year in which a tax is imposed if the tax remains unpaid after December 31 of the year in which it is imposed.



BYLAW No. 22-889 of the Municipal District of Greenview No. 16

A Bylaw of the Municipal District of Greenview No. 16 in the Province of Alberta, to provide for the payment of taxes by instalments.

Whereas, Section 340(1) of the Municipal Government Act, R.S.A. Chapter M-26, as amended provides that Council may by bylaw permit taxes to be paid by instalments, at the option of the taxpayer; and

Whereas, Section 340(2) of the Municipal Government Act, provides that a person who wishes to pay taxes by instalments must make an agreement with the council authorizing that method of payment;

Whereas, Section 340(3) of the Municipal Government Act, provides that when an agreement of this nature is made, the tax notice must state the amount and due dates of the instalments to be paid in the remainder of the year, and what happens if an instalment is not paid.

Therefore, the Council of the M.D. of Greenview No. 16, duly assembled, enacts as follows:

1. TITLE

1.1. This Bylaw may be cited as “Tax Payment Plan”.

2. Definitions

2.1. In this bylaw, unless the context otherwise requires:

- A) **Greenview** means the municipal corporation of the M.D. of Greenview No. 16.
- B) **Tax Payment Plan** means the tax payment program and application.

3. Authorization

- 3.1. The owner as registered on the tax roll shall be given the option to pay taxes by a pre-authorized transfer of funds from their bank account to Greenview in twelve monthly instalments, in an amount calculated as per Section 4 of this Bylaw, providing all previous outstanding tax balances are paid in full.
- 3.2. To apply for the Tax Payment Plan, the application form must be completed, signed and returned to a Greenview Administration Office accompanied by the appropriate

banking information, no later than January 10th of the year in which the taxpayer wishes to enroll in the Tax Payment Plan.

- 3.3. Any application received after the enrolment deadline of January 10th shall take effect the following calendar year.
- 3.4. The Tax Payment Plan agreement does not transfer from one property tax owner to a purchaser of the property in the event of a sale of a parcel of land.

4. **Monthly payments**

- 4.1. Monthly payments are calculated by dividing the annual tax levy from the preceding year by twelve (12) for the payment amount for January to April. The monthly payments from May to December will be automatically adjusted once the current year's tax levy has been determined. The current and remaining tax balance owing is divided by seven (8) months to create a zero balance owing by December 31st. The transfer of funds will occur on the last business day of every month.
- 4.2. Greenview will determine the monthly payment for each participant in the Tax Payment Plan. The option of additional or lesser monthly payment amounts by the property owner will not be permitted.
- 4.3. The tax roll will be exempt from penalties provided monthly payments, as established by Greenview, are up to date.

5. **Outstanding Charges**

- 5.1. A property owner will not be eligible for this program if there is any amount owing on the tax roll after the enrolment deadline stipulated in Section 3.3.

6. **Withdrawal**

- 6.1. Once a participant is enrolled in the Tax Payment Plan, such participant is automatically renewed each year and does not require a new application to be made every year to continue ongoing monthly tax payments.
- 6.2. A participating taxpayer may, at any time, withdraw from the Tax Payment Plan by giving no less than two (2) weeks' notice in writing. No monies paid into the plan will be returned, refunded or transferred to a Greenview utility account. The monies will remain on the tax roll and be deemed as a prepayment of property taxes.

7. **Cancellation**

- 7.1. Greenview will cancel participation in the Tax Payment Plan if an instalment payment fails to be honoured. Penalties will be added to the tax roll per section 8.

- 7.2. Any transfer of outstanding amounts to the applicable tax roll, in accordance with Section 553 of the Municipal Government Act, will automatically disqualify participation in the Tax Payment Plan and the property owner will be removed immediately from the Tax Payment Plan.
- 7.3. Notice of removal from the Tax Payment Plan pursuant to Sections 7.1 and 7.2 of this Bylaw shall be sent to the taxpayer, by ordinary mail, to the taxpayer's last known mailing address as listed on the tax roll.
- 7.4. If participation in the Tax Payment Plan is cancelled by Greenview pursuant to Section 7.1, 7.2 or 7.3, the taxpayer shall not be eligible to participate in the Tax Payment Plan until the taxation year following the cancellation, if the taxpayer chooses to re-enroll in the program. Completion of a new application form by the taxpayer is required.
- 7.5. Upon sale of the property, the participant will be automatically removed from the Tax Payment Plan.

8. Fees and Penalties

- 8.1. A bank return fee will be levied on payments which are not honoured by the financial institution on which they are drawn. The charges shall be added on to the taxes owing for each affected tax roll.
- 8.2. If participation in the Tax Payment Plan is cancelled or withdrawn for any reason before the tax due date in any year, a penalty will be applied to the tax roll, in accordance with the current tax rate or tax penalty bylaw, thirty (30) days after cancellation or withdrawal.

9. Indemnification

- 9.1. The onus of providing correct banking information to Greenview lies with the taxpayer. If incorrect information results in a monthly payment(s) not being made or being dishonoured by the financial institution, Greenview assumes no responsibility for such rejection of said payment.

10. Responsibility

- 10.1. Tax Payment Plan participants are responsible for verifying that the pre-authorized payments are being made as per the application agreement signed by the participant. If they are not, the onus is on the taxpayer to notify Greenview to rectify the error.

11. Repeal

11.1. Bylaw 20-849 "Tax Payment Plan" is hereby repealed.

12. **Severability**

12.1. If any portion of this Bylaw is declared invalid by a court of competent jurisdiction, then the invalid portion must be severed and the remainder of the Bylaw is deemed valid.

13. **COMING INTO FORCE**

13.1. This Bylaw shall come into force and effect upon the day of final passing and signing.

Read a first time this 25 day of January, 2022.

Read a second time this 25 day of January, 2022.

Read a third time this 22 day of February, 2022.

REEVE

Tyler Olsen

CHIEF ADMINISTRATIVE OFFICER

Stacey Wabick



REQUEST FOR DECISION

SUBJECT:	Mountain Métis Nation Association Grant Request		
SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER:
DEPARTMENT:	COMMUNITY SERVICES	DIR: MH	PRESENTER: LL
STRATEGIC PLAN:	Culture, Social & Emergency Services	LEG: SS	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – Policy 8002-Community Grants

RECOMMENDED ACTION:

MOTION: That Council approve an operating grant in the amount of \$60,000.00 to the Mountain Métis Nation Association for the Youth Connections and Youth Summer Camp Programs, with funds to come from the Community Services Grants and Sponsorships budget.

BACKGROUND/PROPOSAL:

Administration received a 2023 grant application from the Mountain Métis Nation Association with a request for an operating grant of \$80,000.00 for the Youth Connections Program and \$15,175.00 for the Summer Camp Program for a total of \$95,175.00. In addition to the application and attachments submitted, Administration requested additional information, which is provided in the attachments.

When the grants were reviewed at the December 20th Committee of the Whole meeting the Mountain Métis Nation Association grant application was deferred until after their presentation to Committee of the Whole. Representatives from Mountain Métis Nation Association presented their request to Committee of the Whole in January 2023.

Historically, Greenview has supported the Mountain Métis Nation Association with an operating grant for the Youth Connections Program and Green View FCSS has supported the Mountain Métis Nation Association with an operating grant for the Summer Camp Program. A summary of the 2022 quarterly reports for the Youth Connections Program are attached. To date Green View FCSS has not received a report on the 2022 summer camp.

Administration recommends supporting the Mountain Métis Nation Association with an operating grant of \$60,000.00 to be used for the Youth Connections Program and the Summer Camp Program, with the condition that the organization applies to Green View FCSS for any future operating grant requests for the Summer Camp Program.

The balance of the 2023 Community Services Grants and Sponsorships budget is approximately \$750,923.91.00.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the recommended motion is that Mountain Métis Nation Association can make a fiscal plan accordingly with the response of their application.
2. The benefit of Council accepting the recommended motion is that Council would be supporting programming that enriches the health & wellness of youth in the Grande Cache area.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to take no action or to make alterations to the recommended motion.

FINANCIAL IMPLICATION:

Direct Costs: \$60,000.00

Ongoing / Future Costs: N/A

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will advise Mountain Métis Nation Association of Council's decision.

ATTACHMENT(S):

- Grant Application
- Additional Information
- Quarterly Report Summaries

2023 Grant Application (October 15, 2022 deadline)

Row 16

Name of Organization	Mountain Metis Nation Association
Address of Organization	Box 1468, Grande Cache, AB. T0E 0Y0
Form Date Field	113
Contact Name	Alvin Findlay
Phone Number	780-827-2002
Purpose of Organization	<p>The Mountain Métis Nation Association (MMNA) has been a registered non-profit organization since 1994. The MMNA works to improve the quality of life for the Indigenous population of Grande Cache through youth programs, access to historical and cultural resources, and hosting local cultural events. The mission of the Mountain Métis is to enhance the cultural, social, and economic well-being of our community and our vision is to be a prosperous and engaging community with a sense of cultural pride; and our traditional lands and history will be recognized through knowledge sharing. The Mountain Métis Nation Association operates a program for youth called 'Youth Connections,' which is the purpose of this funding application. Established in 2000, the mission of Youth Connections is to "improve the cultural, society, education, economic and personal advancements of Grande Cache Youth." This program provides both Indigenous and non-Indigenous youth between the ages of 10-17 with access to after school programs, summer cultural camps, and homework help. Youth Connections offers free programs and services to all youth residing in Grande Cache and the surrounding Cooperatives and Enterprises. A full-time Coordinator works to organize and run the program. A Youth Connections Mentor works part-time to assist the Coordinator for programming, and transportation. Programs are offered weekly for 1-4 hours, depending on the program or service, and weekend programming varies from 2-5 hours.</p>
Purpose Continued	
Position of Contact Person	President
What act are you registered under?	Alberta Society's Act
Registration No.	506192293
Grant Type	Operating Grant

Total Amount Requested	95,175.00
Proposed Project	<p>2023 Operating Funding Request: \$80,000 (funding note: Last year the MD reduced our operating funding to \$60,000. Youth Connections was able to proceed with operations due to additional dollars that were left over from our Casino funds – these extra funds are no longer available for the 2023 program year.) 2023 Summer Camp Request: \$15,175 The Mountain Métis Nation Association is grateful for the MD of Greenview's annual contribution to fund our Youth Connections Program. Funds from this grant application will be used to cover the 2023 Operating Costs of running the Youth Connections Program as well as to support our annual Summer Camp. **A more detailed description of our program is attached as a separate document. Our operating budget and summer camp budget are also attached to this application.** The MD of Greenview has been our main program funder for the operating costs of this program in Grande Cache, and without Greenview's support, the program would not be able to continue to benefit our community's youth. Youth Connections provides after school programming to local youth, including workshops, cultural teachings, career skills development, and access to sports and recreational activities. Each year MMNA has provided after school homework help, snacks, and recreational activities to youth in partnering schools to support their learning, social belonging, and connection with their community. Please see attached documents for more information on our Youth Connections Programming.</p>
Have you previously applied for a grant from MD	
Previous Grant App from MD	Yes
Final Completion Report Provided to MD	Yes
Grant funds applied for from other sources?	No
Grant Funds Received from other sources?	
Have you performed any other fundraising projects?	No
Agreement	Mountain Metis Nation Association
Grant Purpose	\$60,000 - 2022 Youth Connections Operating Funds \$2,000 2022 Summer Camp (from Greenview FCSS) \$80,000 - 2021 Youth Connections Operating Funds \$16,000 - 2021 Summer Camp (from Greenview FCSS)

Year Grant Received	2000 2021
Amount of Grant	60,000 + 2,000 + 80,000 + 16000
List the donae, purpose and amount	not for 2023
What type of fundraising & how much did you raise?	
Signature	Alvin Findlay
Date	10/14/22
Financial Statement	
Administration Recommendations	
Email	mna1994@telus.net
Column41	
MD Logo	
Email Comm.	
Column44	
List for Recognition	The MD of Greenview would be recognized on our Facebook Pages (both the Mountain Métis Nation and Youth Connections pages) as well as in our quarterly newsletter which is both printed and emailed to our membership list.

Metis Nation of Alberta Association
Local Council #1994 of Grande Cache

For the year ended August 31, 2022

Statements reviewed and approved by:

Name ALVIN FINDLAY
Position PRESIDENT
Address Box 1195
City GRANDE CACHE
Postal Code T0E 0Y0
Phone No. 780-827-1644
Signature [Signature]

Name Karen Barrett
Position Secretary/Treasurer
Address Box 223
City Grande Cache, AB.
Postal Code T0E 0Y0
Phone No. 780-827-6134
Signature [Signature]

I, Cindy Johner confirm that I have audited the financial statement for
Metis Nation of Alberta Association Local Council #1994 of Grande Cache
for the year ending August 31, 2022

Cindy Johner
Cindy Johner
10327 137 Avenue NW
Edmonton, AB T5E 1Y9
780-660-4243

Metis Nation of Alberta Association Local Council #1994 of Grande Cache
For the Year Ended August 2022

Balance Sheet

	2021	2022
Current Assets		
Cash	244118	237069
Investment Accounts		
Pre-paid expenses		
Total	244118	237069
Fixed Assets		
Property and equipment		
Total	0	0
Other Assets		
Charity		
Total	0	0
Total Assets	244118	237069
Current Liabilities		
Accounts payable		0
Opening Balance Equity		
Retained Earnings	198523	233926
Profit for the year	45595	3143
Total	244118	237069
Long-term Liabilities		
Loans Payable	0	0
Total	0	0
Owner Equity		
Accrued Interest		
Accumulated retained earnings		
Total	0	0
Total Liabilities & Stockholder Equity	244118	237069

Local Council #1994 of Grande Cache
Revenue/Expenditures
Year Ending 2022

	Revenue	Expenses	Profit(loss)
General	\$ 473,152.13	\$ 463,817.74	\$ 9,334.39
Casino	\$ 12.40	\$ 17,010.00	\$ (16,997.60)
Youth Connection	\$ 139,264.21	\$ 136,523.58	\$ 2,740.63
Hide - A - Way	\$ 36,503.00	\$ 28,437.17	\$ 8,065.83
			\$ 3,143.25

Metis Local 1994 (General)
Income Statement
Year Ending 2022

Revenue

\$ 473,152.13

Expenses

Utilities	\$ 4,373.50
Rent	\$ 28,350.00
Phone/Internet	\$ 4,872.24
Mobile Home Expense	\$ 5,100.00
Office Supplies	\$ 15,873.72
Building Expense	\$ 400.00
Janitorial	\$ 2,721.00
Credit Card	\$ 17,869.84
Bank Fees	\$ 230.93
Insurance/Taxes	\$ 3,226.88
Vehicle	\$ 3,479.09
Contract Wages	\$ 60,781.83
CRA Payroll Deductions	\$ 43,692.92
Consult Wages	\$ 71,868.16
Travel	\$ 24,560.29
Meeting	\$ 131.32
Legal Fees	\$ 61,420.61
Project Expenses	\$ 3,739.44
Misc.	\$ 800.00
Donations/Gifts	\$ 1,270.00
Scholarships	\$ 14,641.48
Entertainment	\$ 11,150.00
Catering	\$ 3,264.14

Transfers to:

Hide-A-Way	\$ -
Youth Connection	\$ 80,000.00

\$ 463,817.39

Net Profit(loss)

\$ 9,334.74

Closing Bank Account Balance
August 31/21

\$ 170,563.37

Metis Local 1994 (Casino)
Income Statement
Year Ending 2022

Revenue

\$12.40

Expenses

Rent \$9,450.00

Youth Horsemanship \$7,560.00

\$17,010.00

Net Profit(loss)

-\$16,997.60

Closing Bank Account Balance
August 31/21

\$25,721.24

Metis Local 1994 (Youth Connection)
Income Statement
Period ending August 31, 2022

Revenue

\$ 139,264.21

Staff Expenses

Wages	\$ 50,138.91
MERC	\$ 12,603.09
Surplus	

Total Staff Expenses \$ 62,742.00

Operating Expenses

Administrative/Advertising	\$ 971.83
Cultural Activities	\$ 1,125.00
Educational Support	\$ 701.40
Program Supplies	\$ 14,932.29
Credit Card	\$ 1,414.89
Social/Hospitality	\$ 2,240.12
Summer Camp	\$ 10,547.81
Winter Camp	\$ 11,785.00
Travel	\$ 4,080.66
Camp Equipment	\$ 5,527.00
Donations	\$ 1,700.00
Co-op Nutrition Program	\$ 799.10
Camp/Boat Rentals	\$ 2,800.00
Transfers to General	\$ 15,000.00
Bank Fees	\$ 156.48

Total Operating Expenses \$ 73,781.58

Total Expenses \$ 136,523.58

Net Profit(loss) \$ 2,740.63

Closing Bank Account Balance	
August 31/21	\$19,075.58

Metis Local 1994 (Hide - A - Way)
Income Statement
Year Ending 2022

Revenue

\$ 36,503.00

Expenses

Bank Fees

Maintenance

Camp Supplies \$ 1,896.86

Phone/Internet \$ 2,197.60

Property Tax \$ 1,068.80

Travel \$ 7,384.00

Staff Wages \$ 8,627.31

Utilities \$ 7,062.60

Damage Deposit Returns \$ 200.00

\$ 28,437.17

Net Profit(loss)

\$ 8,065.83

Closing Bank Account Balance

August 31/21 \$ 21,709.16



Mountain Métis Nation Association – Youth Connections 2023 Operating Grant Project Description

2023 Operating Funding Request: \$80,000

(funding note: Last year the MD reduced our operating funding to \$60,000. Youth Connections was able to proceed with operations due to additional dollars that were left over from our Casino funds – these extra funds are no longer available for the 2023 program year.)

2023 Summer Camp Request: \$15,175

The Mountain Métis Nation Association is grateful for the MD of Greenview's annual contribution to fund our Youth Connections Program. Funds from this grant application will be used to cover the 2023 Operating Costs of running the Youth Connections Program as well as to support our annual Summer Camp. A detailed operating budget and summer camp budget are attached to this application.

The MD of Greenview has been our main program funder for the operating costs of this program in Grande Cache, and without Greenview's support, the program would not be able to continue to benefit our community's youth. Youth Connections provides after school programming to local youth, including workshops, cultural teachings, career skills development, and access to sports and recreational activities. Each year MMNA has provided after school homework help, snacks, and recreational activities to youth in three-partnering schools to support their learning, social belonging, and connection with their community.

Annually, there is an estimated 60-100 unique youth that participate in the Youth Connections Program activities. Most of the youth are Indigenous, who reside or originate from the Cooperatives and Enterprises located in the Municipal District of Greenview, or live in the Hamlet of Grande Cache.

Program statistics are gathered yearly by documenting youth attendance and participation numbers per program activity. **Stats from the past three years, include:**

2019-2020 Program Year: 883 youth signatures were collected by program activity registration; 76% self-identified as Indigenous.

2020–2021 Program Year: 938 youth signatures were collected by program activity registration; 68% self-identified as Indigenous.

2021–2022 Program Year: 873 youth signatures were collected by program activity registration; 70% self-identified as Indigenous.

The Youth Connections Program offers:

- In school, online, and after school tutorial services for youth requiring extra support and encouragement
- After school snack programs
- Community Youth and Government engagement activities and workshops, including youth leadership training programs
- Assistance with post-secondary planning and funding applications – provide on-going support services in person and online for future achievements; assist youth to apply for post-secondary, employment training, recreational opportunities, and special award bursaries. Annually, MMNA provides a cheque reward to graduating Metis youth and a dinner celebration for the youth and their families
- Career and Employment Development Training Programs: Job search and readiness training interview skill building, resume writing, First Aid r certification, and Learners Licence preparation workshops
- Weekend programming such as cultural activities, workshops, and life and career development as well as sports engagement
- Cultural Awareness Programs, including Cree Classes, Cultural Dance & Music, Indigenous Beading, and Land Based Activities
- Extra-curricular activities such as swimming, baseball, skating, floor hockey, basketball, crafting, and holiday celebrations. In 2021 we introduced an Equestrian horse-riding Program and a Kickboxing Class which both continue to be offered to youth in 2022.
- Transportation support

The Mountain Métis Nation has been recognized within the community and the province for developing specialized youth programs that are beneficial to the community of Grande Cache, and has been noted as an important project for Grande Cache youth by the Government and community partnership organizations. The Youth Connections Program has greatly impacted our community's youth, providing long-term benefits including positive influence on their sense of identity and citizenship, their desire to pursue further education, and their resilience and ability to seek community support. Due to economic, geographic, and intergenerational trauma factors, several Indigenous youths do not have access to positive and healthy support systems. The Youth Connections Program is a key component in their lives

that supports the development of healthy lifestyles, cultural identity, and positive relationships. MMNA has been successfully providing this program to Grande Cache youth, ages 10-17, for over 15 years.

The main goals of the Youth Connections Program include:

- Youth participants will directly benefit as the main stakeholder of the project.
- Youth will develop a stronger sense of belonging and will be supported to fair better within the local school system.
- Youth will gain and participate in self-esteem building, leadership training, and career planning
- Youth will develop Indigenous Cultural Awareness of the historical contributions of Indigenous people from the area and Province from past to present.

2023 Summer Camp

Youth Connections offers a 4-day Youth Summer Camp located at Hide-A-Way Camp each year in August for 20 local youth to attend. Previously, Greenview FCSS has funded this annual program; this year MMNA is requesting funds directly through the MD of Greenview Grant portal.

Camp activities include:

- Greeting Circle, Camp Rules, Bear Safety and Name Game: When youth first arrive and settle in they gather in a circle and the camp staff introduce themselves, explain camp rules and bear safety. Youth then introduce themselves and work together in a team building exercise as an ice breaker.
- Fiddle Lessons: MMNA brings in a fiddle instructor to provide lessons each day for the four days. MMNA provides fiddles for all the youth to use.
- Traditional Herb Gathering, Medicine Teaching and Gathering: Youth learn how to gather natural herbs for medicine, how to make a traditional muskeg tea that can be used for multiple medicinal uses and how to make traditional Indian Ice Cream.
- Board Games: Games are provided for the youth to enjoy before bedtime.
- Morning Fitness: Different games are played each morning including relay races, hikes, capture the flag, tug of war, and Zumba dance.
- Metis Jigging: traditional Metis jigging is a time-honored tradition where the youth get to learn over the course of 4 days. A professional Metis jigger is brought in to share their knowledge and gift of dance with the youth.
- Swimming: Youth enjoy trips to Pierre Greys Lakes to enjoy swimming and fishing off the bridge. While at Pierre Greys Lakes, the Youth also hike to the famous Pierre Grey Trading post and learn about the Métis history of the area.
- Outdoor Games: Prey Predator is enjoyed each year - a game of quick thinking and survival (a favourite among the youth). Sports, including kickball, dodgeball & Badminton are also played.
- Every Child Matters: Each year, youth participants participate in a craft and/or activity. Previously, we have painted orange rocks and arranged them on the hill side by Pierre Greys Entrance.
- Campfire Snacks and Games: Each night snacks are handed out by the campfire and stories are shared. Youth enjoy a round dance around the fire and play campfire games.

MOUNTAIN METIS NATION ASSOCIATION - YOUTH CONNECTIONS
JANUARY TO DECEMBER 2023 BUDGET

	Total Budget	January	February	March	April	May	June	July	August	September	October	November	December
STAFF EXPENSES													
Program Coordinator	\$ 30,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
Youth Mentor	\$ 20,000	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667	\$ 1,667
MERC (VP, CPP, EI)	\$ 6,000	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Total Staff Expenses	\$ 56,000	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667	\$ 4,667
OPERATING EXPENSES													
Administrative Supplies	\$ 2,000	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167
Cultural Activities	\$ 2,000	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167
Bank/Accounting charges	\$ 1,000	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83
Educational Support	\$ 2,000	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167	\$ 167
Month End Events	\$ 1,000	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83
Program Supplies	\$ 1,000	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83
Rent/Utilities	\$ 3,000	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250
Social/Hospitality	\$ 7,000	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583
Staff Training	\$ 1,000	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83
Travel	\$ 4,000	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333
Total Operating Expenses	\$ 24,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
TOTAL EXPENDITURES	\$ 80,000												

Mountain Metis Nation Association

2023 Youth Connections Summer Camp Budget

	August 2023	Budget
Youth Supervisors	Wages (x4)	\$2,700.00
Camp Cook	Wages	\$1,000.00
Kitchen Helper	Wages	\$650.00
Contract Services	Jigging & Fiddling Instructors	\$3,450.00
Travel	Tranportation to and from the camp (gas/mileage)	\$275.00
Camp Food	Coop Groceries	\$2,300.00
Gifts & Honarariam	Elder Honorariums	\$300.00
Administration & Camp Supplies	Program & Activities Supplies	\$1,000.00
Camp Rental	4 Days at Hide A Way Camp	\$3,500.00
	2023 Budget:	\$15,175.00

From: kristinamna.kristinamna@telus.net
To: [Lisa Lenentine](#)
Cc: [mna1994](#)
Subject: Youth Connections
Date: December 14, 2022 1:16:07 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Lisa,

Thank you for your email. Please see below our response to your questions: If you require additional clarification, please feel free to contact me.

1. Can they present their request to Committee of the Whole in January? It would be January 17th in DeBolt, I have attached the delegation request form. **Yes, we are hoping to have a representative present in-person. We will make sure to fill out a delegation form.**
2. Is there a reason they didn't apply for a grant for summer camp from Green View FCSS this year, like they have in the past? **We felt it made more sense to apply for everything under the same grant to keep it all together. If the MD prefers us to keep it separate, we can do that.**
3. Could they provide letters of support from the community for the Youth Connections Program and Summer Camp Program? **Yes, we are in the process of collecting letters of support and can provide them to you by next week.**
4. Is there a reason they have not requested funding elsewhere for either of these programs? **The MD funding supports the majority of operating costs for the Youth Connections to run each year, and we are grateful for the MD's support over the past 10 years. Each year we do seek additional funding from other sources to assist with specific youth connections programs and activities (i.e winter camp(s), nutritional program, equestrian program, etc.). MMNA has not requested sole operating funding elsewhere because we have had an ongoing long-term relationship with the M.D of Greenview for many years.**

Thank you,

--

Kristina Hallock, M.E.S
Executive Director, Mountain Metis Nation Association
Direct Line: 780-783-0430, Office: 780-827-2002
Box 1468, Grande Cache, AB, T0E 0Y0
Website: mountainmetis.com

Youth Connections REPORTING PERIOD: January, February, and March 2022

Summary: Please see attached supporting documents for further information regarding outcomes, numbers, and breakdowns.

January 2022

January was a month of preparing for presentations to secure funding, meetings with the schools and other organizations to plan future activities for youth. Specifically, Youth Connections focused on a presentation to present to the Municipal District of Greenview to renew annual funding for the Program. Other communication focused on reaching out to the schools in Grande Cache in hopes of offering homework help now that COVID restrictions were lifted in March. As well, building partnerships with other organizations in town, such as FCSS and the tourism center, were also accomplished in order to provide a variety of youth activities.

In January we also hired a new Youth Mentor to help facilitate and assist the Youth Coordinator in delivering program activities. Staff training was conducted by the coordinator.

Youth Connections also developed a Youth Connections Program Policy and Camp Policy to provide to parents, youth and volunteers who enter the program. The Policy packages provide clear communication on what we offer, our safety policies and code of conduct and protocol so all players are well informed.

February 2022

Youth Connections started up the Nutrition Program offering this program to 25 families in Grande Cache. Each Monday we drop off nutrition bags to families who live in Grande Cache and the surrounding cooperatives and enterprise. We have received positive feedback from parents on how happy they are that we have started the program up again. The nutrition program is sponsored by Second Harvest food and Rescue.

Youth Connections developed a working relationship with Careers Internship. Careers works with schools to provide meaningful employment or work experience for youth. They also connect the schools with employers who offer paid internships in a variety of in-demand fields such as Skilled trades, Forestry, Agricultural, Energy and Health. Since this partnership is recent, we have had one youth so far sign up for this program.

March 2022

Kick Boxing is an ongoing program with Youth Connections which is offered every week for an hour. In total, 24 youth have participated. The program is taught by a certified kickboxing teacher, and we are utilizing the boxing equipment which was donated last term from True North Aid.

The kickboxing program improves strength and conditioning with fun and engaging workouts. It has positive effects on Youth mental health, learning invaluable self-defence skills, and developing problem-solving abilities.

Mid-month, Youth Connections accommodated Four Youth who participated in the Spirit Seekers Conference in Grande Prairie. The first night was the grand opening which featured pow wow dancing and drumming as well as awards. The second day was filled with workshops that each youth picked including Movement in Medicine, Teen Healthy Relationships, Career Fair, The Importance of Positive Self talk, Indigenous Ways of Song/ Knowing, Exploring and Expressing Art, Mental Health 101 and Significance of Youth in Society. The evening was concluded with a Tea dance that took place at the Grande Prairie Friendship Centre.

At the end of the month, Youth Connections held their second Youth Winter Camp at Hide A-Way Camp which was sponsored by True North Aid, Weyerhaeuser, and TC Energy.

Twelve youth from Grande Cache participated in the 2- night camp. The youth enjoyed hiking, board games, 3 crafting programs, and evening bon fires and movies.

There were 2 male supervisors and 2 female supervisors who taught the youth about nature. It was an amazing weekend, and we cannot wait to offer our annual Summer Camp.

Youth Connections hosted an end of month movie night. The movie was chosen by the Youth: (Ghostbuster: Afterlife) and youth enjoyed popcorn and snacks. The evening was a success as youth expressed how fun it was to socialize with their peers and watch a movie together.

Youth Connections Quarterly Report: REPORTING PERIOD: April, May, June 2022

Summary: Please see attached supporting documents for further information regarding outcomes, numbers, and breakdowns.

April 2022

In April, we partnered with FCSS and B.E.S.T in Spring-Tastic Afternoon Program with 15 youth making Feather Macrame.

Youth Connections continued the Nutrition Program offering this program to 20 families in Grande Cache. Every Monday we drop off nutrition bags to families in Grande Cache and the Co-operatives. We have received positive feedback from parents on how happy they are that we have started the program up again. This program is sponsored by Second Harvest and ends this quarterly report.

The Kick Boxing is an ongoing program where 27 youth participated each Friday at the Metis Centre. The program offers youth improved strength and conditioning, fun and engaging workouts, positive effects on mental health, learning invaluable self-defence skills, and developing problem-solving abilities. This program ended this quarterly report and will resume in September 2022.

In the 'Welcoming Spring' Program, youth were able to create their own bird Houses & bird feeders, as well as pots and plants.

Youth Connections also partnered with Mighty Peace Watershed Alliance where Youth learned about lake sampling, chlorophyll filtration and identifying small stream and river water quality. At the end of the program, youth had the opportunity to learn how to fly a drone, which is sometimes used by biologist to take aerial footage of lakes and rivers. The youth expressed how they loved flying the drone and taking pictures of nature.

Youth Connections partnered up with the Hinton Youth Centre and enjoyed a day at the trampoline Park and other fun activities at the Hinton Youth Center. This established relationship building skills with youth from another town.

In the Pizza and Game Night program, youth assisted with making their own personalized pan pizza finishing the evening with board games with friends.

Personalized Tote bags: this program was such a great turn out and it was nice to see all the creativity burst out of youth. All youth were proud of their tote bag creations.

At the end of April, we offered a movie night to Youth. We showcased the Batman movie which was such a great turn out. Several youths were excited to watch the new batman movie with friends and family.

May 2022

In May, a Mothers' Day program provided youth with materials to create a self portrait and cooking gloves for their mothers.

Other programs offered in May include Kickboxing, the Nutrition Program, Food and Board Games that continued throughout the Month of May. Other activities in May include Minecraft Selfie which youth did creative drawing for an hour. The Wall Décor program received a lot of positive feedback from parents saying their kids had a lot of fun making their wall décor and thanking Youth Connections for putting on this program. Youth learned new skills participating in this program such as a learning how to do a double half hitch knot and larks head knot. The end of the month was concluded with a movie night where we played the movie Morbius and provided snacks.

June 2022

Kickboxing, Nutrition Program, Food and Board Games that continued into the month of June as well as ending in June.

Youth Connections offered an Indigenous week, full of cultural programming and instructed by local indigenous artists. The programs consisted of beading sunglasses and creating dreamcatchers.

A lot of positive feed back from parents and community members was expressed such as “awesome- great job and creativity” and “Absolutely beautiful.” Several of the youth had a great time learning new skills and knowledge regarding the history behind dream catchers.

Youth Connections Quarterly Report: July, August, September 2022

Summary: Please see attached supporting documents for further information regarding outcomes, numbers, and breakdowns.

July 2022

During the summer months, Youth Connections took the opportunity to reconnect with Lisa Beckstead from the B.E.S.T Program and, Elk Ridge Riding Quarters. As a result, these partnerships provided a variety of program options for our youth summer activities. Youth Connections constantly strives to enhance the services provided to the youth of Grande Cache.

In collaboration with the B.E.S.T program, a five-day Mental Health week was offered to youth, which consisted of positive self talk and mindfulness through the art of baking. Youth Connections had several positive outcomes with this program, including high participation rates, social connections, and skill building.

Another program Youth Connections hosted was Cree class, instructed by local indigenous knowledge holder, Merlin Hallock. Parents were pleased with the program and were happy that this program is available for their youth.

Ongoing Programs

The Equestrian Program, which began in July, is an ongoing program running until the end of September. We had an overwhelming response to the program and together with U-bar Trails, we were able to accommodate 13 youth.

Youth Connections presented month end Movie night. Youth expressed how they really enjoy month end movies nights and look forward to this each month. Popcorn, snacks, and juice were provided to participating youth during the movie night.

August 2022

In August, Youth Connections hosted a four-day program of 'Loom Beading.' Youth Connections Coordinator instructed the beading loom sessions. Youth were able to complete their own beaded looms which they could take home. Youth really enjoyed this program, and it was deemed a success.

Youth Connections partnered up with the B.E.S.T Program to provide a Rock painting activity. Youth got creative and painted dotted animals, garden rocks, and some youth placed their painted rocks around Grande Cache.

Around mid-August, Youth Connections hosted their annual summer five-day camp. Morning programs consisted of hikes, and 'Uniquely Me Yoga' offered in partnership with the B.E.S.T Program. Jigging, fiddle lessons, beading and sewing with a local Elder, swimming, outdoor teambuilding games, campfires with smores and hot dogs and movie nights were provided as the afternoon and evening programs.

September 2022

At the end of September, Youth Connections wrapped up the 12-week horsemanship equestrian Program offered at U-Bar trails. In total, 13 youth participated in the program and developed essential horsemanship skills such as trotting, riding, and taking care of a horse. At the end of the program, each youth were awarded with a certificate of completion, followed by a dinner, and the opportunity to ride their favorite horses.

Every Child Matters: On September 30th, the National Day for Truth and Reconciliation, Youth Connections commemorated and honoured the Survivors of residential schools, as well as their families and communities, and remembered the children who never came home by offering an orange shirt day program for youth.

Teaming up with Prints & Wear Shop, youth were provided with the materials to design their own unique orange shirt. We would like to thank Milner Power for contributing to this Program by providing Youth with materials and paints to create their own orange shirts.

Youth Connections REPORTING PERIOD: October, November, December 2022 Summary

October 2022

Kick Boxing started again in the month of October and this program has been ongoing with Youth Connections (YC). It is offered every Friday for one hour. The program is taught by a certified kickboxing instructor, and we are utilizing the boxing equipment which was donated from True North Aid last year.

The kickboxing program improves strength and conditioning with fun and engaging workouts. It has positive effects on Youth mental health, learning invaluable self-defence skills, and developing problem-solving abilities. In total, 11 youth consistently participated in this program.

Towards the end of October, YC offered Halloween themed arts and craft activities such as build your own 'haunted fairy house,' and a 'Pumpkin Carving Contest.' The haunted fairy house activity had 16 youth participate and the pumpkin carving contest had a total of 22 youth registered. The pumpkin carving contest provided the top 3 winners with an Amazon gift card.

November 2022

In November, we hired a new Youth Mentor to help facilitate and assist the Youth Coordinator in delivering program activities. Staff training was conducted by the coordinator.

YC hosted several Christmas themed activities such as create your own 'gnome' and 'ugly Christmas sweater.' We had 24 youth participate in the gnome activity and 32 participate in the ugly sweater activity.

Kickboxing classes continued every Friday at the Mountain Metis Center, resulting in consistent participation numbers throughout the month.

December 2022

In December, we partnered up with Kenny's place to give youth the opportunity for a free and supervised experience of the Polar Express community event. We had 24 youth registered for this program. As well, to wrap up the end of the year, YC teamed up with Grande Cache Community Events to help decorate the campground by youth registered in the program. This was an outdoor event, where youth also enjoyed sipping hot chocolate and socializing with friends. These seasonally- themed activities turned out to be a huge hit!

Another activity offered this month was 'Do it yourself' vision boards. This program was also popular as it allowed youth to create their vision boards using a 3-step phase. Planning, Making and Using the vision boards helped youth brainstorm ideas, build the vision board, and use it in

the future to work towards their goals and feel motivated and inspired. We had 11 youth participate in this program.

December was also a month of preparing for presentations to secure funding, meetings with the schools and other organizations to plan future activities for youth. Specifically, Youth Connections focused on a presentation to present to the Municipal District of Greenview to renew annual funding for the Program. Other communication focused on reaching out to the schools in Grande Cache in order to work actively in the schools in the new year. Communications with the schools was a positive turn out, and Youth Connections will be offering tutorial services and career internship support in the new year!



REQUEST FOR DECISION

SUBJECT:	Peace Wapiti Academy Sponsorship		
SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER:
DEPARTMENT:	COMMUNITY SERVICES	DIR: MH	PRESENTER: LL
STRATEGIC PLAN:	Culture, Social & Emergency Services	LEG: SS	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – Policy 8004-Greenview Sponsorships and Donations

RECOMMENDED ACTION:

MOTION: That Council take no action on a sponsorship request in the amount of \$1,500.00 to the Peace Wapiti Academy for the fishing education program.

BACKGROUND/PROPOSAL:

The Peace Wapiti Academy have submitted a sponsorship request in the amount of \$1,500.00 to purchase fishing rods for the new fishing education program which is part of their Outdoor Education and Environmental Science course offerings.

The Peace Wapiti Academy is a grade 9 to 12 high school located in Grande Prairie, Alberta with a population of approximately 620 students. The Peace Wapiti Academy serves the rural areas around Grande Prairie, including approximately 10% of students from Grovedale and area.

This new fishing education program will be introduced to students as part of the Outdoor Education and Environmental Science courses and is intended to teach students the rules and regulations about fishing in Alberta. In addition, the Peace Wapiti Academy will be the “**Fish in Schools (FinS)**” program through the Government of Alberta. The school does not currently have fishing equipment at the school to use when taking the students out to learn and practice the skills for the program. The school is looking to purchase a class set of fishing rods, approximately 30 rods at \$50.00 each. This program would include students having hands on experience at local fishing spots including the Grovedale Fish Pond. This program will run during the summer and winter months with the goal of students becoming better stewards of local resource and teaching them the skills required to be able to fish independently, regardless of their background.

An application to the Alberta Conservation Association is in progress for approximately \$3000.00 in funding to purchase equipment. The Peace Academy is also seeking support-in-kind from the County of Grande Prairie and sponsorship from other local businesses.

If Council were to choose to sponsor, recognition for Greenview would include stickers on the fishing rods with Greenview's logo and/or name as well as social media posts.

Greenview has not received previous sponsorship requests from the Peace Wapiti Academy.

The balance of the 2023 Community Services Grants and Sponsorships budget is approximately \$750,923.91.00.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council taking no action on the recommended motion is that while an estimate of 10% of the student population is from Greenview there is no data supporting if Greenview residents will enroll in the program.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. The disadvantage to the recommended motion is that this program may require funds from elsewhere which may or may not impact students from Greenview.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to provide to sponsor the program.

FINANCIAL IMPLICATION:

Direct Costs: N/A

Ongoing / Future Costs: N/A

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will advise the Peace Wapiti Academy of Council's decision.

ATTACHMENT(S):

- Sponsorship Application

Greenview Sponsorship and Donation Request Form

Row 33

Organization or Person Requesting Funds	Peace Wapiti Academy
Date of Application	01/17/23
Form Date Field	122
Date of Event	01/31/23
Phone Number	(780) 513-9504
Purpose of Organization	matthewvavrek@pwpsd.ca, juliancansell@pwpsd.ca, stephaniemackay@pwpsd.ca
Mailing Address	11410 104 St., Grande Prairie, AB, T8V 2Z1
Funding Request Total	\$1,500.00
Type of sponsorship request	Event
Describe your organization	Peace Wapiti Academy is a Grade 9 to 12 high school in Grande Prairie, Alberta, with approximately 620 students. Our school has a large Outdoor Education and Environmental Science program that continues to grow every year. Our school serves the rural areas surrounding Grande Prairie, including the community of Grovedale and the residences in that region.
Intended Purpose	This coming year, our school will be starting a fishing education program as part of our broader Outdoor Education And Environmental Science course offerings. This program is intended to teach students about both the rules and regulations around fishing in Alberta, as well as to help them develop the skills needed to be able to get out and fish for themselves. We will also be running a fish rearing program called the Fish in Schools (or FinS) Program through the Government of Alberta. The rainbow trout come from The Bow Habitat station which integrates within the government program, as a way of promoting stewardship for our natural spaces. While we already have many of the components for this program in place, such as the in-class instruction and connections with FinS that will provide our school with fish eggs to rear, we do not presently have fishing equipment at the school to use when we go out to learn and practice the skills we are teaching for the program. We are applying to the MD for funding to be able to purchase a class set of fishing rods (30 rods at approximately \$50 each), to be used by our classes.

Direct Goals	We will be teaching students about conservation and stewardship of our natural resources as it relates to fishing and angling in the region as well as learn about the variety of both introduced fish and native fish present in our waters. We want to make this program hands-on, and plan on taking our students to local fishing spots both in the summer and the winter, to teach them the different techniques needed for each. Longer term, we hope to encourage students to become better stewards of our local resources, and to give them the skills they need to be able to fish independently, regardless of their background.
Where/When?	The trout eggs arrive in mid January at the school, and will be starting the fishing education program 2 weeks later when the new semester starts in February. We expect that this program will become an ongoing and permanent part of our Outdoor Education and Environmental Science courses.
Benefit to residents of Greenview	Peace Wapiti Academy is the high school that serves the community of Grovedale and the surrounding population. We will also be releasing the trout we raise into the Grovedale fish pond, pending final approval from government biologists, and we will be visiting a number of different fishing locations within the MD boundaries.
Funding from others	We are working on an application to the Alberta Conservation Association for approximately \$3000 of additional funding to purchase items such as ice fishing equipment and additional fishing tackle. We are also in contact with the County of Grande Prairie about support-in-kind, as they do have a number of different resources and groups that they are putting us in contact with for the program. I have also reached out to the Alberta Fish and Game Association about possible funding through their group, as well as local businesses that carry fishing supplies to see if they can provide any discounts or donations of equipment.
Recognition	We would like to request, along with the funding, if the MD can potentially provide us with stickers that say "Municipal District of Greenview No.16" or something similar that we can then place on all the equipment that we purchase with the funds, so we can note to all of our students that use the rods that they were donated by the MD. We would also post on our social media pages and newsletters about the funding, especially when we have opportunities to take photos of the rods in use.
Previous Donation	We do not know of any recent donations.
Grant Funds Received from other sources?	
Have you performed any other fundraising projects?	
Agreement	
Grant Purpose	

**Year Grant
Received**

Amount of Grant

**List the donatee,
purpose and
amount**

**What type of
fundraising & how
much did you
raise?**

Signature

Date

**Financial
Statement**

**Administration
Recommendations**

Email

Column41

MD Logo

Email Comm.

Column44

**List for
Recognition**

Contact Name(s) Matthew Vavrek, Julian Camsell and Stephanie Mackay

Column47

Logo Permission

**Agreement with
Statement**

Signature1 Matthew Vavrek

FOIP Disclosure



REQUEST FOR DECISION

SUBJECT: Support for Heart River Housing Loan

SUBMISSION TO: REGULAR COUNCIL MEETING

MEETING DATE: February 14, 2023

DEPARTMENT: FINANCE

STRATEGIC PLAN: Economy

REVIEWED AND APPROVED FOR SUBMISSION

CAO: SW

DIR: EGK

LEG: SS

MANAGER: CG

PRESENTER: CG

RELEVANT LEGISLATION:

Provincial (cite) – Municipal Government Act (RSA 2000, C m-26) Sections 264-268

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Council direct Administration to support Heart River Housing with funding up to \$8,000,000 for construction on their Falher project through development of an appropriate bylaw.

BACKGROUND/PROPOSAL:

Heart River Housing presented at Committee of the Whole on December 20, 2022. At that time, they presented the plans for construction in 2023 to address seniors housing in Falher. The project has a budget of \$11.25 million, of which \$3.2 million they are planning to fund from reserves, and they are applying for grants and co-investment loans through Canada Mortgage and Housing Corporation (CMHC) and the Province of Alberta.

Heart River Housing Foundation was pursuing a grant through CMHC, but that has been over subscribed and they are now investigating a co-investment loan. This process can take up to 120 days, with construction scheduled to begin May 1, 2023. Heart River Housing would like the assurance that Greenview will support this project in the event that they are unsuccessful with the CMHC application. CMHC funding is preferable to Heart River Housing and Greenview, as it will have a lower interest rate than what will be possible through Greenview support, and it would not impact Greenview's borrowing capacity. In the event that CMHC funding is not successful, it is hoped that they will get \$2 million in funding from the Municipal District of Smoky River, in the form of a loan or loan guarantee. They are asking that Greenview support the remaining \$6 million.

There are three options available to Greenview to support this project:

1. A loan of the funds, such a loan would be taken from our reserves and reduce the flexibility that Greenview has in addressing its financial requirements. It would also be suggested that the interest charged on the loan be equal to what current investments are earning to minimise the impact of the reserves being taken out of the investment portfolio.
2. Obtain a loan and loan the amount to Heart River Housing. This would be more complicated and could have a double impact on Greenview as the loan received and given could impact the debt limit.

3. Guarantee a loan for Heart River Housing, by guaranteeing the loan, Heart River Housing Foundation would get a rate comparable to that which Greenview would be eligible for and be named directly in loan, with Greenview needing to step in to cover the loan in the case of default. This also has an impact on Greenview's debt limit.

It is recommended that the third option is the best for Greenview and Heart River Housing, but this may change due to discussions with the lending agent. Through Greenview's investment services provider, Greenview has been able to connect Heart River Housing with CIBC Commercial Banking, which is able to provide much more favourable loan rates with greater flexibility than Heart River Housing was considering at the time of their presentation to Committee of the Whole. Due to the need to pause the process with CIBC until there is more clarity from CMHC, it is likely that rates will change before it is brought back for bylaw. At this time, it looks like the recommended upset limit in the bylaw of 7%. This will allow Heart River Housing to take advantage of some of the benefits being offered to access funding through the construction and deal with potential interest changes over the construction period. This is a combination of flexibility and certainty that other providers have not been able to provide.

Although Heart River Housing has asked for support in the amount of \$6,000,000, Administration is recommending that Council give direction for \$8,000,000. This will give Administration some flexibility to work with changing funding and costs as the situation unfolds.

Greenview's debt limits will be recalculated based on 2022 results, but as of December 31, 2021 the unused debt limit was \$170,491,813. There is not a high risk of default on providing a guarantee, as the amounts required to service the debt has already been factored into Heart River Housing Foundation's requisitions.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of the recommended action is that it will allow Greenview to provide Heart River Housing with access to the necessary funds, without impacting reserves or investments.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. The disadvantage to the recommended motion is that it may reduce Greenview's access to debt for the period that the loan is outstanding.

ALTERNATIVES CONSIDERED:

Alternative #1: Council could direct Administration to pursue one of the other options for funding Heart River Housing, however Administration does not recommend this as they put additional strain on Greenview's financial resources.

Alternative #2: Council could direct Administration to not support Heart River Housing funding needs, however Administration does not recommend this as it would prevent Heart River Housing Foundation from securing the needed funding and put the project in jeopardy.

Alternative #3: Council could direct Administration to create a support Heart River Housing to a different level or with other restrictions on the funding, however Administration does not recommend this as it is the funding that has been requested for support or may impact the ability to come to terms that meet those restrictions.

FINANCIAL IMPLICATION:

Direct Costs: N/A

Ongoing / Future Costs: No Cost unless default, but a reduction if debt capacity

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Once Council makes a decision, Administration will support Heart River Housing through the financial process and bring back an appropriate borrowing bylaw as soon as it is deemed necessary.

ATTACHMENT(S):

Municipal Government Act (RSA 2000, C m-26) Sections 264-268

Loans and Guarantees

Purpose of loans and guarantees

- 264(1)** A municipality may only lend money or guarantee the repayment of a loan if
- (a) the loan or guarantee is made under subsection (2) or (3),
 - (b) the loan is made to one of its controlled corporations, or

(c) the guarantee is made in respect of a loan between a lender and one of its controlled corporations.

(2) A municipality may

(a) lend money to a non-profit organization, or

(b) guarantee the repayment of a loan between a lender and a non-profit organization if the council considers that the money loaned or money obtained under the loan that is guaranteed will be used for a purpose that will benefit the municipality.

(3) A municipality that intends to purchase gas from and become a shareholder of the designated seller within the meaning of section 30(1) of the *Gas Distribution Act*, SA 1994 cG-1.5 as it read on June 30, 1998, may make a loan to the designated seller as part of the capitalization of the designated seller by its shareholders.

1994 cM-26.1 s264;1998 c26 s13

Loan bylaws

265(1) A municipality may only lend money to a non-profit organization, one of its controlled corporations or the designated seller within the meaning of section 30(1) of the *Gas Distribution Act*, SA 1994 cG-1.5 as it read on June 30, 1998, if the loan is authorized by bylaw.

(2) The bylaw authorizing the loan must set out

(a) the amount of money to be loaned and, in general terms, the purpose for which the money that is loaned is to be used;

(b) the minimum rate of interest, the term and the terms of repayment of the loan;

(c) the source or sources of the money to be loaned.

(3) The bylaw that authorizes the loan must be advertised.

1994 cM-26.1 s265;1998 c26 s13

Guarantee bylaw

266(1) A municipality may only guarantee the repayment of a loan between a lender and a non-profit organization or one of its controlled corporations if the guarantee is authorized by bylaw.

(2) The bylaw authorizing the guarantee must set out

(a) the amount of money to be borrowed under the loan to be guaranteed and, in general terms, the purpose for which the money is borrowed;

(b) the rate of interest under the loan or how the rate of interest is calculated, the term and the terms of repayment of the loan;

(c) the source or sources of the money to be used to pay the principal and interest owing under the loan if the municipality is required to do so under the guarantee.

(3) The bylaw that authorizes the guarantee must be advertised.

1994 cM-26.1 s266

267 Repealed 1998 c24 s14.

Debt limit

268 No municipality may lend money or guarantee the repayment of a loan referred to in section 264 if making the loan or guarantee will cause the municipality to exceed its debt limit, unless the loan or guarantee is approved by the Minister.

1994 cM-26.1 s268



REQUEST FOR DECISION

SUBJECT:	Minister of Municipal Affairs Funding Impact Letter		
SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER: CG
DEPARTMENT:	FINANCE	DIR: EGK	PRESENTER: CG
STRATEGIC PLAN:	Economy	LEG: SS	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Council direct Administration to submit a letter to the Minister of Municipal Affairs detailing the impact of the provincial tax holiday decisions to Greenview finances.

BACKGROUND/PROPOSAL:

Over the course of the last five years there have been several changes made to the ability of municipalities to tax drilling, changing grant funding related to infrastructure and the costs of items such as policing. These changes have resulted in a significant impact to municipalities that are passed on to their ratepayers.

Several municipalities are writing letters to the Minister of Municipal Affairs to identify to the Province what the impacts of these decisions have been. These funding and policy decisions result in the burden being passed to the rate payers. This burden can take the form of additional taxes, loss of services or changed service levels to address the impact. At Greenview, Administration has largely been able to address them through cutting costs or choosing not to do certain projects, but as recent budget discussions have indicated, even that flexibility has been greatly reduced and we are needing to consider other options to meet our budgetary responsibilities.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the recommended motion is that Greenview will be presenting the impact of Provincial decisions and presenting it in conjunction with the other like-minded municipalities.

DISADVANTAGES OF THE RECOMMENDED ACTION:

There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to not direct Administration to submit the letter, however Administration does not recommend this as it would prevent the Minister from knowing what Greenview's situation is.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

If Council is in favour of the motion, a letter will be sent to the Minister.

ATTACHMENT(S):

- Draft Letter



MUNICIPAL DISTRICT OF GREENVIEW

[Click here to enter a date.](#)

Honourable Rebecca Schulz
Minister of Municipal Affairs
320 Legislature Building
10800 – 97 Ave.
Edmonton, AB T5K 2B6

Dear Minister Schulz,

RE: End to Tax Break on Drilling

On October 19, 2020 the Alberta Government announced new wells and pipelines property tax exemption for 2021 to 2024.

The goal of the decision was that the property tax exemptions for the new wells and pipelines would be an incentive for new development activity. As we enter into 2023 we are now into the full effects of the Government of Alberta decision and the financial impacts it has had on Counties and Municipal Districts across Alberta.

Since the decision on the tax exemptions of October 2020 oil prices have rebounded and we feel the Government of Alberta should re-evaluate this exemption moving forward in 2023.

The below outlines the true cost to the MD of Greenview No.16 not only due to the tax holiday but also in other financial areas where MD of Greenview No. 16 has been hit hard:

- Lost municipal tax revenue for 2021 to 2023 assessment years is \$6,124,873 an average of \$2,041,624 per year

- Lost well drilling tax in 2021 \$6,061,139, based on (2021 is an estimated amount assuming rates had stayed the same) Well drilling tax contributed to Greenview finances;

2020	\$6,081,635
2019	\$9,100,776
2018	\$11,248,080
2017	\$12,362,452

for an average of \$9,132,418 per year.

- Police funding increased to \$1,145,271 since 2018
- MSI funding has increased by \$326,444 from 2018
- Total annual impact to Greenviews finances;

Tax Holiday	\$2,041,624
Well Drilling	\$9,132,418
Police Funding	<u>\$1,145,271</u>
Subtotal	\$12,319,313
Less MSI increase	<u>\$326,444</u>

The annual net loss to Greenviews finances; \$11,992,869

As you can see the implication of the decisions made by the Government of Alberta in the past number of years has significantly impacted Rural Albertans in a time when our local economies are hurting and families are working hard to make ends meet.

Sincerely,

Tyler Olsen
Reeve
MD of Greenview No. 16

cc: Premier Danielle Smith
Minister of Energy Pete Guthrie
Minister of Jobs, Economy and Northern Development Brian Jean
MLA Central Peace-Notley district Todd Loewen
Alberta Counties, Municipal Districts and Rural Municipalities of Alberta



REQUEST FOR DECISION

SUBJECT: **Beaver Harvest Incentive Program Policy Suspension**
SUBMISSION TO: REGULAR COUNCIL MEETING REVIEWED AND APPROVED FOR SUBMISSION
MEETING DATE: February 14, 2023 CAO: SW MANAGER: SK
DEPARTMENT: AGRICULTURE DIR: MH PRESENTER: SK
STRATEGIC PLAN: Governance LEG:

RELEVANT LEGISLATION:

Provincial - N/A

Council Bylaw/Policy—Policy 6321: Beaver Bounty Program

RECOMMENDED ACTION:

MOTION: That Council accept the report on the Beaver Harvest Incentive Program for information, as presented.

MOTION: That Council direct Administration to suspend Policy 6321: Beaver Harvest Incentive Program, until December 31, 2023, at which time the program will be reviewed.

BACKGROUND/PROPOSAL:

To encourage public participation in controlling beaver populations, Council implemented the Beaver Harvest Incentive Program in 2020. On September 27th, 2022, the following Notice of Motion was made:

Moved by: COUNCILLOR DAVE BERRY *that Council direct Administration to provide a report on the efficacy of Greenview's bounty programs and potential options to cancel and or replace them.*

The Beaver Harvest Incentive Program has been active since the fall of 2020. In that time, the public submitted 808 beaver carcasses. While participation has fallen dramatically in 2022, the number of problem beaver addressed by Problem Wildlife Staff has remained relatively static. This may suggest that the program is not effective in lessening the problem beaver requiring removal by Greenview staff. Beaver populations fluctuate naturally, with population increases observed in years that support an increased population. Maintaining effective Problem Wildlife Programming may be more impactful than continuing with the Beaver Harvest Incentive Program. Administration recommends revising Policy 6321 to include an activation or suspension of the program based on the assessment of population by impact to Greenview's infrastructure.

On November 30th, 2022, the Agricultural Service Board made the following motion:

MOTION: 22.11.139 Moved by: COUNCILLOR DAVE BERRY *that the Agricultural Service Board recommend to Council to direct Administration to suspend indefinitely Policy 6321: Beaver Harvest Incentive Program to*

activate or close the program upon assessment of beaver population numbers and impact on Greenview infrastructure.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of the first recommended motion is that Council will be informed, as to the analysis of the Beaver Harvest Incentive Program, to better inform a potential decision on the efficacy of this programming.
2. The benefit of the second recommended motion is that Council will retain the Policy 6321, should it be required in future years.
3. An additional benefit of the second recommended motion is that Council will suspend the program for 2023, saving funds from the 2023 Agricultural Services budget.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. One disadvantage to the second recommended motion is that the suspension of the Beaver Harvest Incentive Program may be perceived negatively by ratepayers.

ALTERNATIVES CONSIDERED:

Alternative #1: That Council repeal Policy 6321: Beaver Harvest Incentive Program. Council has the alternative to repeal Policy 6321 entirely, should they so choose. Administration does not recommend this, as if populations increase dramatically, Council may wish to revisit the program, necessitating re-drafting of the policy, and all the appropriate administrative steps required, instead of a motion in Council to re-activate.

FINANCIAL IMPLICATION:

Direct Costs: Should Council follow the recommended motion, Policy 6321 will be suspended, which would result in a budgeted savings of \$15,000 for 2023, if the program is not activated.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will notify MD of Greenview residents of the suspension of the program, if Council approves the recommended motion.

ATTACHMENT(S):

- Policy 6321: Beaver Harvest Incentive Program
- Beaver Harvest Incentive Program figures

Greenview Beaver Bounty Program Information

Beaver Bounty (2.5 yrs):

Initiated in 2020, 808 carcasses have been submitted to date for a total of **\$24,240**.

Avg annual expenditure (Bounty payments): **\$ 9,696**

Avg Unique Participants per yr: **36**

Avg # carcasses per yr: **323.2**

Beaver Hunting Incentive			
Year	# Unique Participants	# Carcasses	Payout by Year
2020	17	102	\$3,060.00
2021	47	456	\$13,680.00
2022	26	250	\$7,500.00
TOTAL	90	808	\$24,240.00

Problem Wildlife Beaver Harvest	
Year	Total
2021	300
2022	258

Title: Beaver Harvest Program

Policy No: 6321

Effective Date: July 12, 2022

Motion Number: 22.07.416

Supersedes Policy No: 6321

Review Date: July, 2025



Purpose: Greenview is committed to protecting municipal infrastructure from water movement problems related to problematic beaver activity. Greenview will implement the policy and procedures to provide for the harvest of beavers and/or removal of beaver dams, for the purpose of preventing damage to infrastructure and flooding caused by problem beavers.

1. DEFINITIONS

- 1.1 Eligible participant** means a registered landowner within the boundaries of Greenview or, with written permission, their designate. Greenview Wildlife Personnel are ineligible to participate in the incentive program.
- 1.2 Financial compensation** means the sum set out in this policy which is payable to eligible participants once program criteria has been satisfied.
- 1.3 Greenview** means the Municipal District of Greenview No. 16.
- 1.4 Problem Beaver** means a beaver whose activity causes operational and/or structural issues to municipal infrastructure, private infrastructure, or agricultural lands.

2. POLICY STATEMENT

- 2.1** Greenview Administration shall prioritize the harvesting of beaver and/or removal of beaver dams in the following order:
 - A) Areas that occur on Greenview land and cause operational and/or structural integrity issues to municipal infrastructure (i.e., roads, bridges, culverts etc.) at no cost to the landowner.
 - B) Areas that occur on Greenview land that is currently or has the potential to cause damage/flooding to private land such as yard sites and agricultural crops, and pastureland at no cost to the landowner.
 - C) Areas that occur on drainage ditches registered by Greenview to prevent flooding of agricultural land at no cost to the landowner.
- 2.2** Greenview shall hold a valid Damage Control License authorizing the removal of beavers.
- 2.3** Greenview shall implement a Beaver Harvest Incentive Program that will pay a bounty for each beaver harvested by a ratepayer or resident within the municipal boundaries of Greenview in accordance with the policy procedure.

- A) The bounty for this program shall be established by the current Schedules of Fees Bylaw
 - i. The bounty may be paid by means of electronic funds transfer.
- B) Problem Wildlife personnel employed or specifically contracted by Greenview are exempt from this program.

2.4 Greenview will maintain a license authorizing the appropriate handling and use of explosives for the purpose of blasting beaver dams (i.e., licensed magazine, certified blaster).

2.5 Landowners with beaver issues on private, leased or grazing lands are encouraged to rectify the issue independently.

3. PROCEDURE

3.1. All beaver dam removal on designated watercourses must comply with all relevant acts (i.e., Fisheries Act, Alberta's Water Act, Public Lands Act etc.).

3.2. The Manager of Agricultural Services, or their designate, shall work with internal departments and the public on harvesting and/or removing beaver dams in accordance with section 2.1 of this policy.

3.3. The Manager of Agricultural Services, or their designate, shall ensure the delivery of the Beaver Harvest Incentive Program.

3.4. Beavers harvested under the Beaver Harvest Incentive Program will be compensated upon a signed declaration of the following:

- a) The legal land location where the beaver was harvested.
- b) The date of harvest.
- c) The harvest was conducted in a lawful manner, in accordance with current legislation.
- d) The participant had permission to harvest on said land.
- e) The beaver tail is marked by a Greenview employee, in the presence of the individual who harvested the animal.

3.5. Disposal of all beavers submitted under the Beaver Harvest Incentive Program will be the responsibility of the person submitting the carcass/tail after proper submission procedures have taken place.

3.6. Greenview personnel may conduct random sight checks to ensure the integrity of the Beaver Harvest Program.



REQUEST FOR DECISION

SUBJECT:	Analysis of Greenview Wolf Harvest Incentive		
SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER: SK
DEPARTMENT:	AGRICULTURE	DIR: MH	PRESENTER: SK
STRATEGIC PLAN:	Governance	LEG: SS	

RELEVANT LEGISLATION:

Provincial N/A

Council Bylaw/Policy– Policy 6303: Wolf Harvest Incentive

RECOMMENDED ACTION:

MOTION: That Council accept the report on the Analysis of the Greenview Wolf Harvest Incentive Program for information, as presented.

MOTION: That Council approve the 2023 Predation Mitigation Strategy to augment predation mitigation, addressed in Policy 6303: Wolf Harvest Incentive.

BACKGROUND/PROPOSAL:

To encourage public participation in controlling wolf populations, Council implemented the Wolf Harvest Incentive Program in 2012. Since that time, 866 wolves have been harvested for a total expenditure of \$259,800 or an annual expenditure average of \$24,742.86. The annual harvest average is 83 wolves with unique participants annually sitting at 36 individuals. On September 27th, 2022, the following Notice of Motion was made:

Moved by: COUNCILLOR DAVE BERRY that Council direct Administration to provide a report on the efficacy of Greenview's bounty programs and potential options to cancel and or replace them.

When all wolf harvest incentive submissions were plotted on a map of Greenview, there was widespread collection, with some areas exhibiting a higher density than others. When the Government of Alberta's cases of confirmed predation were mapped, there was a strong geographic emphasis. This analysis suggests that Greenview may have a geographically specific predation issue that could be addressed with a geographically targeted approach to predation mitigation.

Administration analyzed available data to determine if the Wolf Harvest Incentive impacted confirmed predation. This analysis revealed that when confirmed cases of predations go up, harvest incentive submissions also go up. This may suggest more wolves on the landscape as opposed to the program reducing predation. While no direct correlation between the hunting incentive and a reduction in cases of

predation was found, no correlation was detected to suggest that the hunting incentive increased cases of predation either.

Administration acknowledges that not all cases of predation are reported or confirmed, and these numbers would increase cases of predation, resulting in the program having less of an impact than is reflected in current figures. With the data available, Administration noted that the Wolf Harvest Incentive Program may not reduce livestock predation in Greenview. However, we encourage producers to report predation so that we can verify numbers in the future.

In acknowledgement of the geographical emphasis discovered through this analysis, Administration presented a Predation Mitigation Strategy with the Agricultural Services annual workplan that identifies three levels of priority within four geographic areas. This plan was presented to the Agricultural Service Board on November 23rd, 2022. The strategy involves communication, education, prevention, and mitigation, with deliverables provided to gauge efficacy into the future. Administration offers the strategy for Council's consideration as an option to enrich the current Wolf Harvest Incentive Program.

While Problem Wildlife efforts have been a service within Greenview for some time, the application of the programming has not had clear measurables developed in relation to the activities and services provided. The proposed plan provides these components, resulting in a solid framework for the targeted application of the Problem Wildlife program to assist local livestock producers.

On November 30th, the Predation Mitigation Strategy was presented to the Agricultural Service Board, resulting in the following motions:

MOTION: 22.11.138 *Moved by: COUNCILLOR DAVE BERRY that the Agricultural Service Board recommend to Council accept the report on Analysis of Greenview Wolf Harvest Incentive and Beaver Bounty Programs for information, as presented.*

MOTION: 22.11.140 *Moved by: COUNCILLOR DAVE BERRY that the Agricultural Service Board direct Administration to provide an annual report on the Wolf Harvest Incentive Program and Predation Mitigation Strategy to be presented at the November 2023 Agricultural Service Board meeting.*

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of the first recommended action is that Council will be informed as to the analysis of the Wolf Harvest Incentive Program to better inform a potential decision on the efficacy of this programming.
2. The benefit of the second recommended action is that Administration will provide a report on the progress of the strategy annually to gauge efficacy.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. One disadvantage to the recommended action is that Administration was unable to conclusively determine the programs level of efficacy, which was what the Notice of Motion requested. While analysis is suggestive of the programs having little impact, this cannot be definitively confirmed.
2. A second disadvantage to the recommended action is that offering a Predation Mitigation Strategy may run into the issue of ratepayers being dissatisfied with the increase in services as trapping efforts mitigate specific wolf issues. Some ratepayers will view this as being denied the potential wolf harvest incentive funds when the animal is trapped by problem wildlife staff. Potential mitigation of this would involve staff assisting landowners in being successful in their efforts as opposed to educating the wolves on various trapping methods. Another mitigation would be a reduction or elimination of the harvest incentive.

ALTERNATIVES CONSIDERED:

Alternative #1: That Council rescinds Policy 6303: Wolf Harvest Incentive. Council has the alternative to rescind Policy 6303, should they so choose. Administration has not recommended this, as submissions in the Wolf Hunting Incentive Program have decreased and can be maintained in conjunction with the proposed mitigation strategy.

FINANCIAL IMPLICATION:

Direct Costs: N/A

STAFFING IMPLICATION:

There are no additional staff required to implement the recommended motion. Instead, the Predation Mitigation Strategy impacts workload by providing a plan to target efforts of staff to achieve the best results.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Should Council follow the recommended motion, Administration will continue to administer the Wolf Hunting Incentive program as directed by Council, to the budgetary maximum, annually.

ATTACHMENT(S):

- Policy 6306: Wolf Harvest Incentive
- Wolf Harvest Incentive Submissions: Map
- Confirmed Predation: Map
- Wolf Harvest and Confirmed Predation Overlay: Map
- Harvest Incentive Data Document
- Predation Mitigation Priority Areas: Map
- 2022 Predation Mitigation Strategy

Title: WOLF HARVEST INCENTIVE PROGRAM

Policy No: 6306

Effective Date: January 22, 2018

Motion Number: 18.01.41

Supersedes Policy No: AG 10

Review Date:



MUNICIPAL DISTRICT OF GREENVIEW NO. 16

"A Great Place to Live, Work and Play"

Purpose: Greenview supports wolf population control efforts in order to reduce livestock predation. Greenview will implement the policy and procedures to provide for a Wolf Harvest Incentive Program, for the purpose of promoting the lawful harvesting of wolves within the designated wolf harvest area of Greenview.

DEFINITIONS

Eligible Participant means the registered landowner of property within the boundaries of Greenview, or their designate (stated through written permission), verified by VSI membership or Administration. Greenview's Problem Wildlife Officer is not eligible to participate in the Wolf Harvest Incentive Program.

Financial Compensation means the monies received for lawfully harvested adult wolf by eligible participants.

POLICY

1. The Wolf Harvest Incentive Program will be in effect only on lands within 8 kilometers of private property, active grazing leases, and Provincial Grazing Reserves (agricultural area) within the boundaries of Greenview.
 - a. The Wolf Harvest Incentive Program will be limited to eligible participants or their designate.
 - b. Wolves harvested outside of Greenview will not qualify for compensation.
 - c. Individuals wishing to participate in the program will be required to register with the Manager of Agricultural Services or his/her designate, in advance of participation in the program.
2. Council shall, during budget deliberations, establish a budget for the Wolf Harvest Incentive Program.
3. By resolution of Council, the Wolf Harvest Incentive Program shall be activated or terminated.

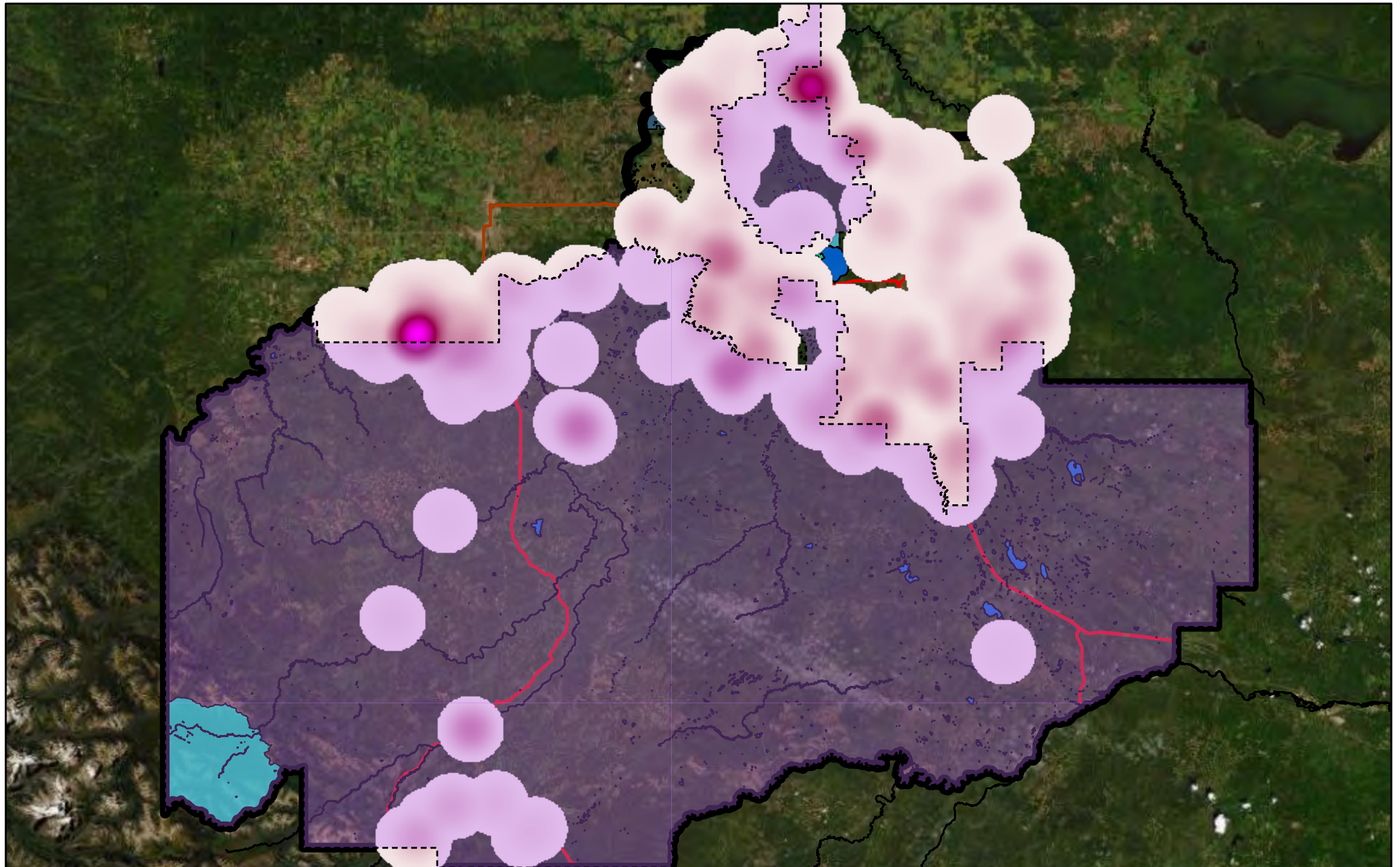
PROCEDURE

1. Individuals participating in the wolf Harvest Incentive Program shall follow all Federal and Provincial Legislation and regulations including, but not limited to the Wildlife Act and Wildlife

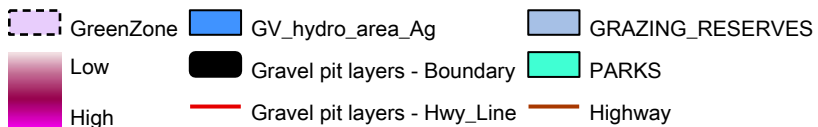
regulations, the Firearms Act, the Petty Trespass Act, and Alberta Hunting and Trapping Regulations, and any amendments or successor legislations thereto.

2. Greenview's Wolf Harvest Incentive Program will be reviewed annually.
3. The manager of Agriculture Services, or their designate, shall arrange appointments with eligible participants for the examination and marking of adult wolves to qualify for financial compensation through the Wolf Harvest Incentive Program.
4. Greenview shall pay financial compensation as per the Schedule of Fees, for each eligible adult wolf carcass presented to the designated receiving location.
5. Eligible participants requesting financial compensation shall enter into a Contract of Participation Agreement, at the time of marking the carcass with the Manager of Agriculture Services or their designate.
6. Entire wolf carcasses (or head only, if agreed upon with the Manager, Agriculture Services or their designate) shall be delivered to a location designated by Greenview Agriculture Services, for examination and marking, and authorization of payment of compensation;
 - a. Examination of the carcass will be performed to verify the animal has been destroyed by means other than vertebrate toxicant.
 - b. The carcass will be marked by a representative of Greenview; a carcass that has been previously marked will be rejected.
 - c. If eligible, the claimant will be provided with a financial compensation authorization (mailed via Canada Post to participant).
7. To request authorization for financial compensation, the eligible participant will provide proof of permission from the owner or authorized occupant of the land upon which the harvest was conducted, and declare the following:
 - a. The legal land location where the wolf was harvested.
 - b. The date of harvest.
 - c. The harvest was conducted in a lawful manner, in accordance with current legislation.
 - d. The participant is the legal landowner or the authorized occupant of the land; and/or
 - e. The participant had permission to harvest on said land.
8. In accordance with Provincial Legislation, the eligible participant shall be responsible for disposal of all parts of the carcass.
9. Participants shall be removed from the list of eligible participants and shall forfeit all benefit from said program, if it is determined that have not adhered to the Policy as set by Council or the Contract of Participation.
10. Disputes over eligible claims for compensation will be settled at the discretion of the Manager of Agricultural Services, whose decision will be final and binding.

Wolf Harvest Incentive Submissions



11/7/2022

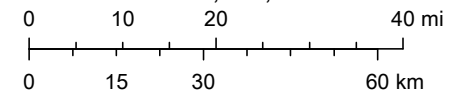


World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

1:2,250,000



Earthstar Geographics

Reducing Predation on Agricultural Lands in Greenview

What are the primary considerations of the department related to predation mitigation?

- Achieving a measurable and demonstratable reduction in the occurrence of livestock predation within Greenview
- Emphasis on geographically documented problem areas as delineated through available data by the provincial government, resulting in a downward trend of predation throughout the municipality
- Build strong relationships with Greenview ratepayers to better understand and address predation concern
- Cooperate with and work alongside other government agencies

Communication: <i>Working with the Greenview Communications Department, develop a Communication Strategy to make ratepayers aware of the Mitigation Strategy's existence, and develop educational resources such as brochures, best management practices, and advertising seminars to provide tools to livestock producers to reduce the risk of predation on their operation.</i>		
STRATEGY	ACTION	MEASURES
a. Develop brochures and other educational components of program with communications to ensure in line with corporate communication requirements and guidelines	a. Develop content for brochures, best management practices, awareness campaign and advertising for hosted seminars to be used in extension and outreach efforts	<ul style="list-style-type: none"> • # of work orders initiated because of communication efforts • # brochures handed out • # of views of articles • # website clicks
b. Develop a communication strategy with the communications department to increase profile of mitigation strategy	b. Develop a tasteful campaign to increase awareness of assistance available to livestock producers through Greenview Problem Wildlife Programming	<ul style="list-style-type: none"> • # producers inquiring re: programming • # links clicked • # calls re: programming • # work orders resultant

Education: <i>The first step in reducing predation kills in agricultural lands is to educate landowners and agricultural producers on current and historical issues in their respective areas and throughout the municipality. Increasing public awareness and being able to address issues on a personal and case by case basis will allow the producers the opportunity for management changes that can aid in reducing predation numbers. Educating licensed trappers on the losses incurred by agricultural producers may encourage them to increase trapping efforts to better benefit their community and neighbours.</i>		
STRATEGY	ACTION	MEASURES
a. Consult with stakeholders on a case-by-case basis through work order requests, other points of contact	a. Investigate potential onsite predation draws to the area, the where and why of specific situations through consultation and discussion with stakeholders	<ul style="list-style-type: none"> • # site visits • # predation draws eliminated • # landowner concerns addressed

b. Consult and educate stakeholders on best management practices	b. Create an educational campaign to address predation issues while working with communications to properly advertise the campaign	<ul style="list-style-type: none"> • # of educational resources produced • # of educational resources distributed • # of seminars and workshops
c. Inform stakeholders who may experience predation of recommended practices	c. Compile a multitude of ways to combat predation through management styles	<ul style="list-style-type: none"> • utilize problem wildlife website space
d. Increased awareness of night confinement for small livestock producers, night based best management practices	d. Work with small livestock producers to prevent predation by promoting night confinement within a barn or covered outbuilding to address predation, increase awareness of the use of timed lighting in pasture situations	<ul style="list-style-type: none"> • # producers adopting night based best management practices • # producers accessing BMP resources • # work orders generated for site visits/assistance • # of inquiries
e. Inform all relevant stakeholders of predation issues occurring within their area, the seasonality of the issue, where it is reasonable to assume they may experience similar issues	e. Build relationships with producers and ensure they are aware of local predation problems	<ul style="list-style-type: none"> • # stakeholders contacted • # reported increases in predation to Ag Services • # phone calls fielded
f. increase awareness of Guardian Animals as a predation deterrent	f. Prevent livestock predation through the promotion and increased adoption of the use of guard dogs, donkeys and llamas.	<ul style="list-style-type: none"> • # producers implementing guardian animals • # work orders, site visits or conversations related to guardian animals • # of resources offered to producers re: guardian animals

Prevention: Preventing the opportunity for livestock loss by changes to current management practices. This can be achieved through discussions, meetings, workshops, brochures, pamphlets, videos, social media outreach, etc. Being accessible to the public to discuss these issues is key in addressing the problems as they are often on a case-by-case basis. Greenview staff strives to provide the above services with the highest level of customer service to properly and efficiently serve Greenview ratepayers as requested and needed.

STRATEGY	ACTION	MEASURES
a. Employ BearSmart Tactics to reduce predation from problem bears	a. Use methods from the BearSmart organization to increase education and awareness of management practices that can reduce bear and human interactions. Creating yards and human lived areas that do not attract bears will help reduce the amount of	<ul style="list-style-type: none"> • # BearSmart presentation give • # attending • # resources dispersed • Create BearSmart Communities • Bylaw to reduce bear/human conflict

	bears going through acreages and smaller operations, or into corral and confined systems.	
b. Explore the potential of a nuisance bylaw to reduce wolf baiting adjacent to livestock operations	b. Working with Enforcement services and legislative services to explore the potential, need, and difficulties of including wolf baiting as a nuisance if it is unwanted by adjacent livestock operations but allowing for baiting if addressing identified problem pack	<ul style="list-style-type: none"> •# stakeholder meetings •# interested producers •# drafts •Amendment passed, PRC •Amendment passed, Council
c. Target proven predation areas by working with private landowners during winter	c. in removing specific, problem predators causing predation to livestock and not overharvesting predators in areas without predation, this will help keep aggressive predators away from livestock herds.	<ul style="list-style-type: none"> •# specific stakeholders worked with •# targeted removals of problem predators •Emphasis on geographical Priority Areas •Offer assistance to registered and registered and resident trappers, RFMA holders re: Foot holding, snaring, bait stations
d. Recognized improvement in the management of deadstock on livestock operations	d. Working with livestock producers to educate and encourage a reduction in natural disposal and the sphere of influence caused by the mismanagement of deadstock	<ul style="list-style-type: none"> •# implementing on-site composting, burial •# producers moving deadstock piles from proximity to pasture/birthing area •# producers inquiring about methods other than natural disposal
e. Carcass pile locations in relation to predation issues, showing a downward trend with actions taken	e. Carcass pile locations and or trapper bait piles, should be looked at and possible removed or relocated to eliminate potential conflict with producers, heavy predator removal may be required in these locations to bring down problem predation issues.	<ul style="list-style-type: none"> •# problem sites identified •# assistance provided in relocation •# of predators removed that frequent sites •# conversations with trappers re: bait station locations, work towards possible solutions or compromise
f. Increased awareness of herd management styles impact on overall predation in livestock operations	f. Minimizing livestock loss by promoting changes to current management practices, through	<ul style="list-style-type: none"> •# discussions re: herd mgmt. •# written resources distributed •# workshops held

	education, resources, and consultation.	<ul style="list-style-type: none"> • # demonstrated practice change • # that Increase surveillance during July-September
g. Fencing reviewed and ensured to be intact and appropriate for livestock enclosed	g. Assist livestock producers identifying and implementing the best fencing practices for their operation, including wire mesh, electric, and barbed wire.	<ul style="list-style-type: none"> • # producers implementing improved fencing • # onsite visits where fencing observed and advised on • # referrals from enforcement services for livestock out of fenced area reduced

Mitigation: Acknowledging that the municipality does face issues with predation, contacting landowners in areas of high predation and offering Greenview's support and resources in a variety of ways including but not limited to educational resources, site visits, recommendations of management practices, snaring and trapping assistance of problem wildlife in documented problem areas.

STRATEGY	ACTION	MEASURES
a. Harnessing willing participation from RFMA and Resident Trappers through cooperation and assistance to mitigate education of problem predators and increase reach	a. Individuals wishing to submit wolves for the incentive will be offered assistance to increase the likelihood of success and decrease the likelihood of problem predators being educated as to trapping efforts and technique	<ul style="list-style-type: none"> • # resident and registered trappers assisted • # documented offers of assistance • # participatory RFMA trappers • # of ATA members and licensed trappers PW staff develop working relationships with
b. Acknowledgment of Greenview's predation issues caused by problem wildlife	b. Contact landowners who are facing both current and historical predation problems to offer assistance through various Greenview supports	<ul style="list-style-type: none"> • # site visits • # stakeholders offered assistance • # stakeholders contacted
c. Assist producers experiencing or adjacent to predation priority areas on private land in proximity to incidents of livestock predation	c. Make contact and build relationships with producers experiencing predation and offer assistance based on area of priority	<ul style="list-style-type: none"> • # producers assisted • # producers contacted • # sites trapped • # problem wildlife removed

Challenges to Strategy Implementation

- Need for more predator trapping equipment, difficulty accessing lands due to location, difficulty to access lands due to location potential accessibility issues
 - The department is ensuring that all required traps and snaring equipment have been procured. Special attention will be paid to skidoo needs with a potential capital ask to purchase a basic skidoo, if need is demonstrated.

- Landowner refusal or potential upset as some ratepayers may feel that by Greenview staff removing the wolves, they are losing out on the opportunity to participate in the wolf bounty program.
 - Working with landowners potentially interested in Harvest Incentive to increase likelihood of success, reduce potential education of problem predators to trapping methods.
- Seasonal limitations as enforced by the designated trapping season
 - Strengthen relationships with key contacts to allow for adjustments to current damage control license and potential expansion on allowable actions by Greenview Problem Wildlife staff.

Greenview Hunting Incentive Program Information

Wolf Hunting Incentive (10.5 yrs):

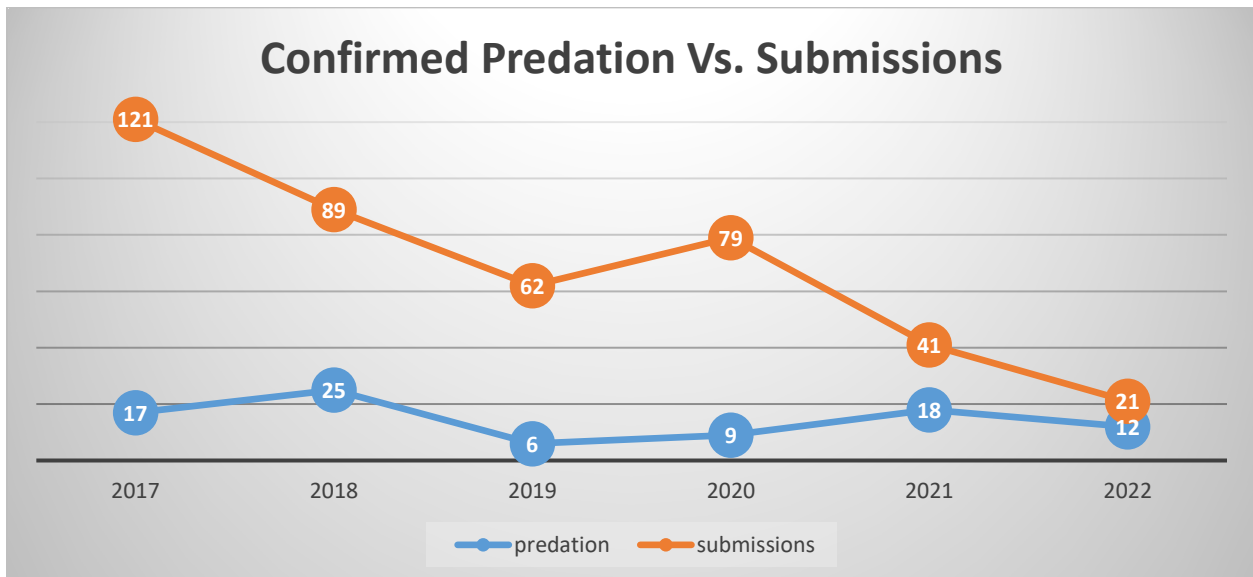
Initiated in 2012, 866 carcasses have been submitted to date for a total of **\$259,800**.

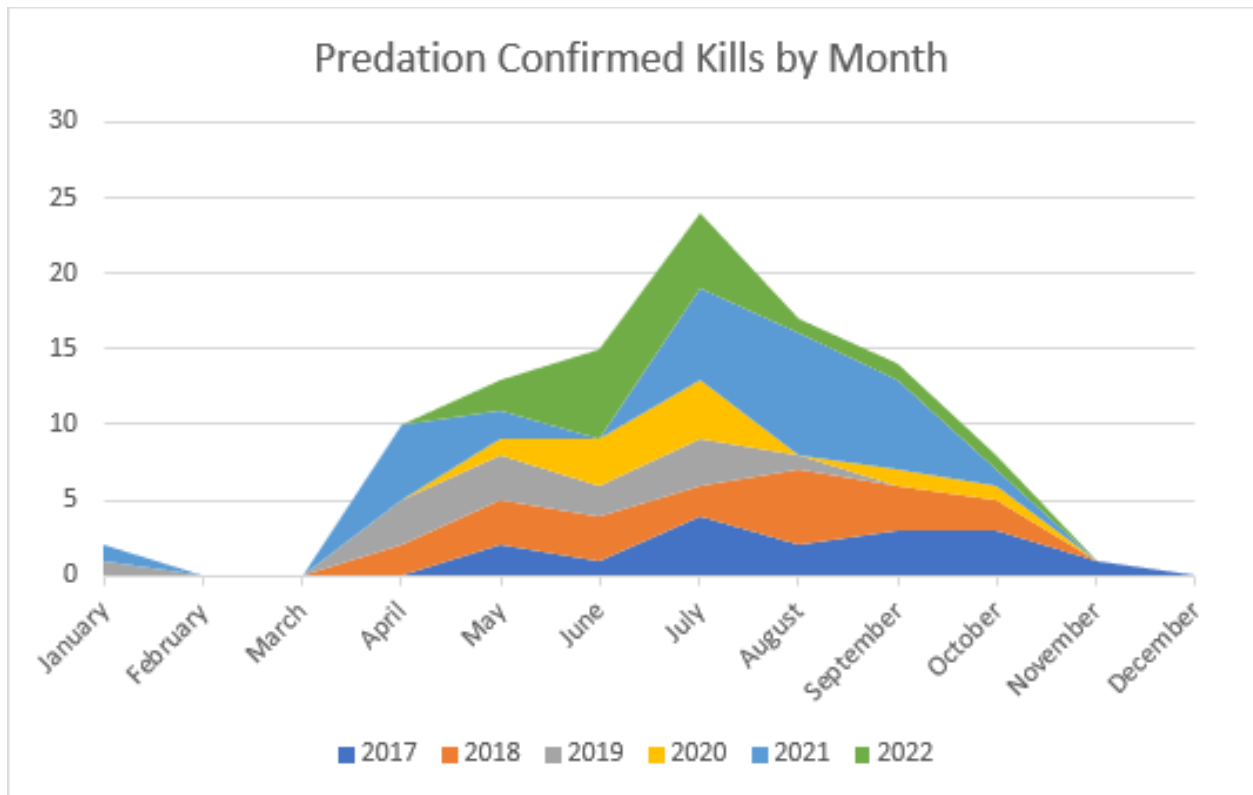
Avg annual expenditure (Bounty payments): **\$24,742.86**

Avg Unique Participants per yr: **36.2**

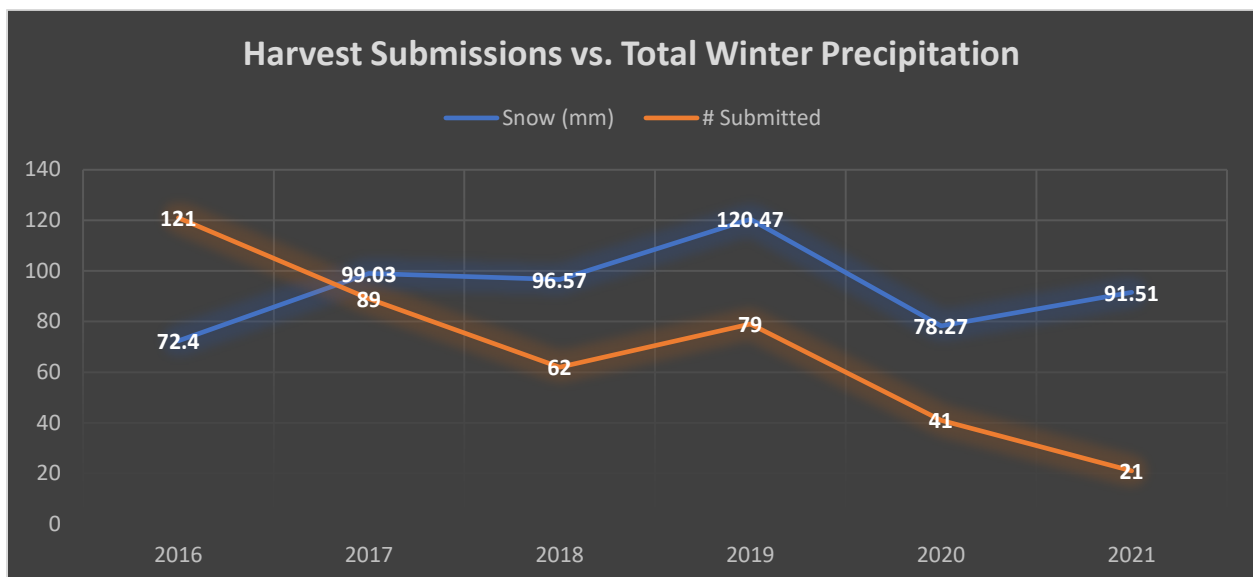
Avg # carcasses per yr: **82.5**

Wolf Hunting Incentive			
Year	# Unique Participants	# Carcasses	Payout by Year
2012	32	70	\$21,000.00
2013	30	53	\$15,900.00
2014	30	48	\$14,400.00
2015	41	98	\$29,400.00
2016	63	154	\$46,200.00
2017	44	99	\$29,700.00
2018	32	90	\$27,000.00
2019	27	56	\$16,800.00
2020	43	114	\$34,200.00
2021	24	64	\$19,200.00
2022	15	20	\$6,000.00
TOTAL	381	866	\$259,800.00





this chart is not cumulative and is instead set to show the seasonality of predation within Greenview



	Year	Frost Free Days	Snow (mm)	Bear Kills	Wolf Kills	Sub.	PWO Days
Year	1						
Frost Free Days	-0.039	1					
Snow (mm)	0.180	-0.873	1				
Bear Kills	0.662	0.205	-0.358	1			
Wolf Kills	-0.328	0.573	-0.479	0.223	1		
Submitted	-0.941	0.053	-0.072	-0.864	0.188	1	
PWO Days	0.263	-0.843	0.843	0.003	-0.198	-0.331	1

Year	Frost Free Days	Snow (mm)	Bear Kills	Wolf Kills	Sub	PWO Days
2016	180	72.4		17	121	0
2017	163	99.03	1	25	89	238
2018	147	96.57	2	13	62	365
2019	147	120.47	9	9	79	365
2020	181	78.27	1	22	41	170
2021	167	91.51	13	12	21	262

Correlation between two variables can be either a positive correlation, a negative correlation, or no correlation. Let's look at examples of each of these three types:

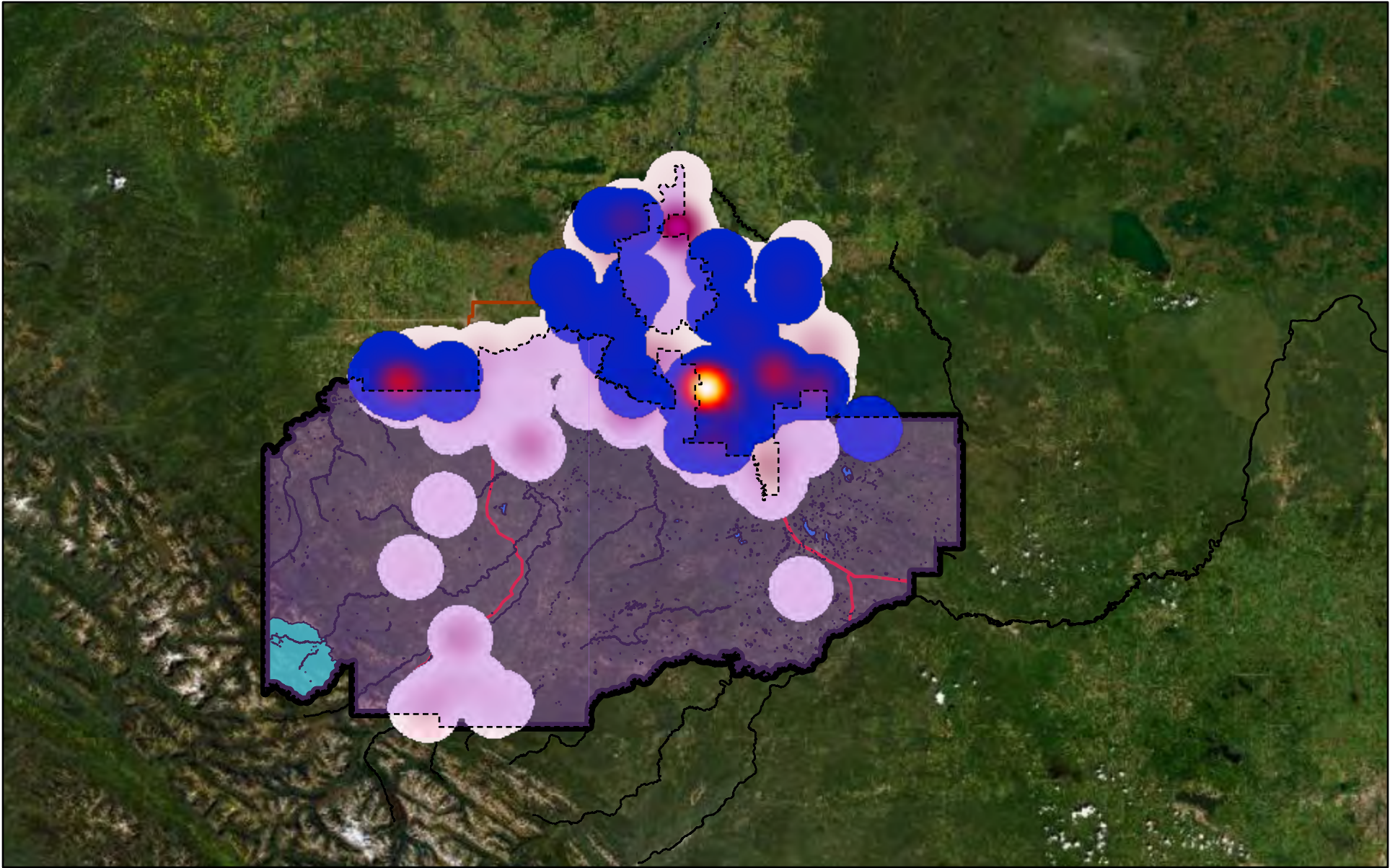
- **Positive correlation:** A positive correlation between two variables means both the variables move in the same direction. An increase in one variable leads to an increase in the other variable and vice versa. IE, spending more time on a treadmill burns more calories.
- **Negative correlation:** A negative correlation between two variables means that the variables move in opposite directions. An increase in one variable leads to a decrease in the other variable and vice versa. IE, increasing the speed of a vehicle decreases the time you take to reach your destination.
- **Weak/Zero correlation:** No correlation exists when one variable does not affect the other. IE, there is no correlation between the number of years of school a person has attended and the letters in his/her name.

Observations from Correlation Analysis:

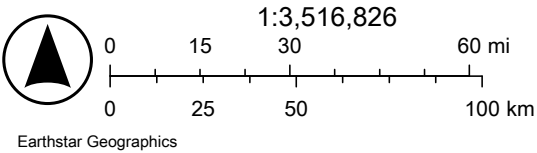
- Frost Free Days positive correlation to bear kills, stronger positive correlation in wolf kills
- Active PW Program days, negative correlation to harvest submissions and confirmed wolf predation
- Snowfall and confirmed wolf predation have a negative correlation, but submissions do not appear to be correlated to amount of snow
- Confirmed wolf kills and harvest submissions have a positive correlation
- Bear Kills and Wolf Harvest Incentive submissions have a negative correlation

- Active PWO days have a strong positive correlation with amount of snow received.

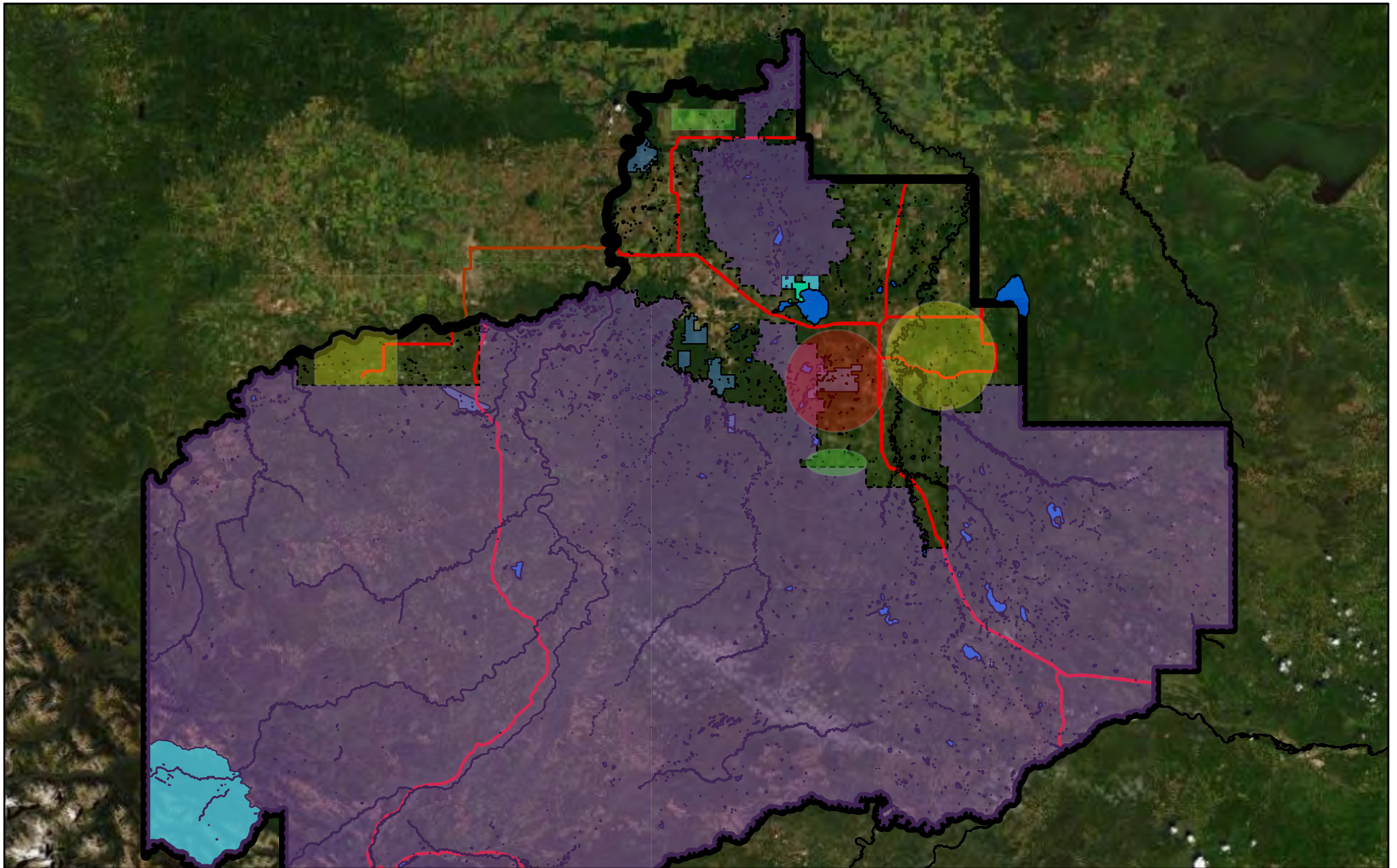
Wolf Harvest Incentive and Confirmed Predation Overlay



11/8/2022

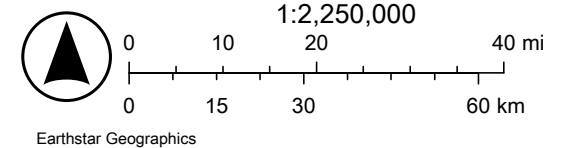


Predation Mitigation Priority Areas

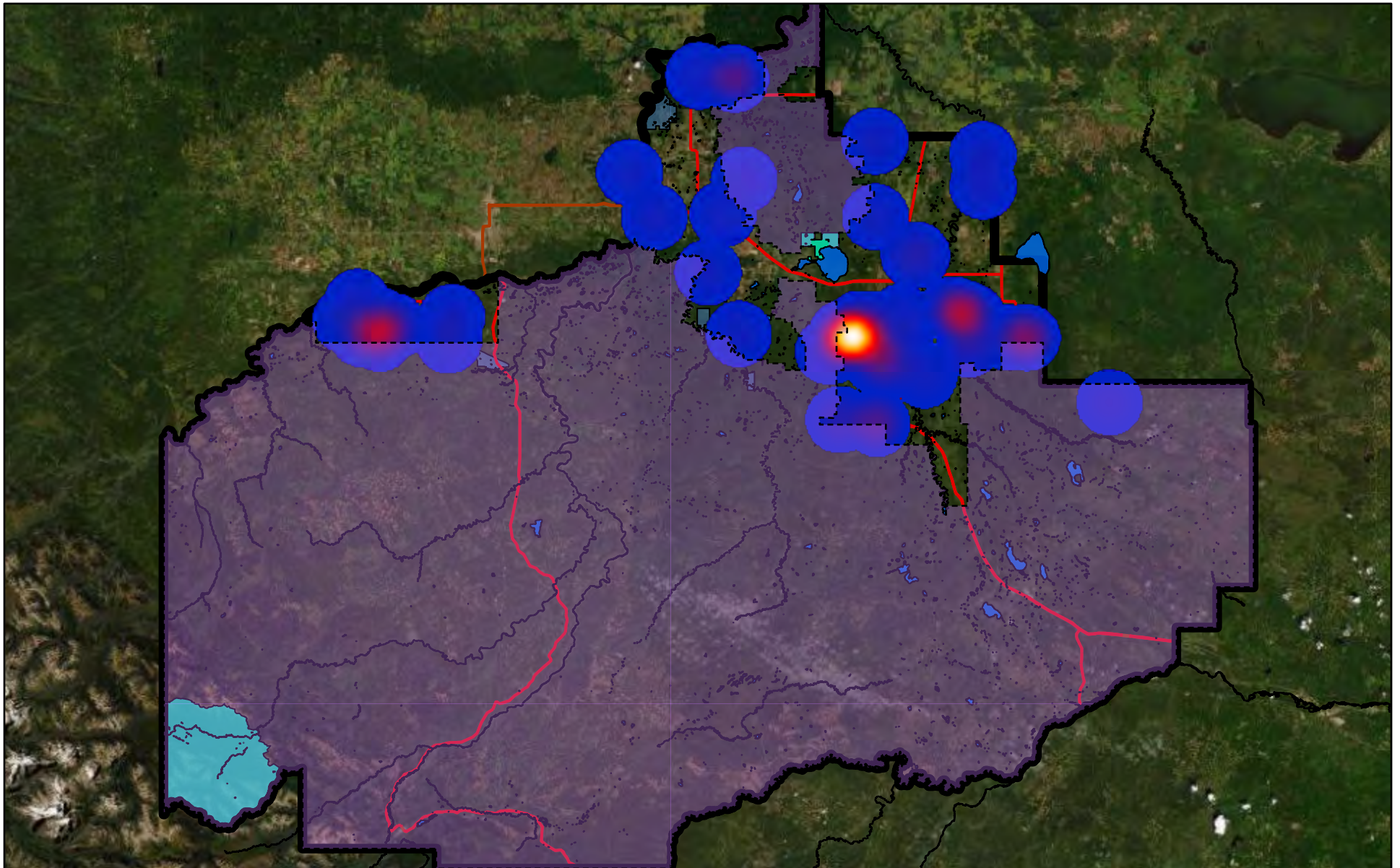


11/7/2022

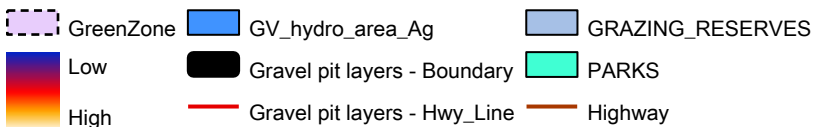
FocusAreas 3
 1 GreenZone
 2 GV_hydro_area_Ag GRAZING_RESERVES
 Gravel pit layers - Boundary
 Gravel pit layers - Hwy_Line
 Highway
 PARKS
 World Imagery



Predation Issues Map



11/7/2022



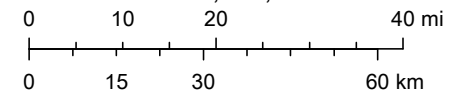
World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

90

1:2,250,000



Earthstar Geographics



REQUEST FOR DECISION

SUBJECT:	Grande Cache Medical Clinic Cooperation Board Appointment		
SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER:
DEPARTMENT:	CAO SERVICES	DIR: MH	PRESENTER: LL
STRATEGIC PLAN:	Culture, Social & Emergency Services	LEG: SS	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Council appoint Councillor Duane Didow to the Grande Cache Medical Clinic Corporation Board for a 2-year term ending at the 2024 Annual Organizational Meeting.

BACKGROUND/PROPOSAL:

The Grande Cache Medical Clinic Corporation is a non-profit organization run by volunteers with the goal of setting up a sustainable medical clinic for Grande Cache and area residents.

The Grande Cache Medical Clinic Corporation welcomes a Greenview Councillor to be appointed to their board.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of accepting the recommended action is Greenview will have representation on this community board.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: Council may choose not to accept the recommended action or to appoint an alternate Greenview Councillor.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will inform the Grande Cache Medical Clinic Corporation Board of Council's decision.

ATTACHMENT(S):

N/A



REQUEST FOR DECISION

SUBJECT:	Water Well for Sunset House Waterpoint		
SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER: DB
DEPARTMENT:	ENVIRONMENTAL SERVICES	DIR: RA	PRESENTER: RA
STRATEGIC PLAN:	Environment	LEG:	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Council accept the additional information requested at the November 15, 2022, Committee of the Whole meeting regarding the Sunset House Waterpoint.

MOTION: That Council direct Administration to drill a water well for the Sunset House Waterpoint to a maximum depth of 700 feet.

MOTION: That Council direct Administration to convert the Sunset House Waterpoint to non-potable and install a small treatment system within the Sunset House Community Hall, with funds to come from the Environmental Reserves.

BACKGROUND/PROPOSAL:

At the August 23, 2022, Regular Council Meeting, Councillor Berry made a Notice of Motion “that Council direct Administration to drill a water well for the Sunset House Waterpoint to a maximum depth of 445 feet”.

At the September 13, 2022, Regular Council meeting, Council deferred the following motion to the November 15, 2022, Committee of the Whole meeting,
That Council direct Administration to drill a water well for the Sunset House Waterpoint to a maximum depth of 700 feet.

DEFERRED

On November 15, 2022, Committee of the Whole made the following motion to accept for information;
That Committee of the Whole accept the information provided regarding the Sunset House Waterpoint as presented.

As Committee of the Whole did not make a ruling regarding the second motion attached to the November 15th, 2022, RFD, Administration has included said motion to this RFD as a house keeping item. Council will

need to defeat this item if they choose to follow Administrations recommendation to convert the existing water point to non potable.

At the Committee of the Whole meeting, it was requested that Administration investigate the following points further;

1. Drill Deeper
 - \$340,000 to complete drilling and tie into well with the possibility the new well will not achieve the desired quality and quantity
2. Exploring for water in the area
 - 3,720,000 for well, exploration and installation and may not meet the desired outcome.
3. Cost to bring water from Snipe Lake or Little Smoky River to the Hall
 - Snipe Lake \$15,000,000 Pumping station and pipeline, WTP upgrades, different treatment requirements than existing WTP.
 - Little Smoky River \$25,000,000.00 for intake, pumping station and pipeline. High Capital and O&M costs.
4. Non-Potable water source
 - \$30,000 will not meet the potable water needs of the surrounding community.

The well at Sunset House water point is not performing as desired and appearing to be on a downward slide. Administration does not want to affect any existing residential water wells and is looking for further direction.

Administration recommends converting to non-potable water at the Sunset House Waterpoint due to the high financial obligation caused by the existing water wells inability to sustain the demand required and any future upgrades.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of accepting the motion is that Administration can continue to supply a water source (non-potable) to the Sunset House Community while staying on course with Council Strategic Plan to “Maintain fiscal responsibility”.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. The disadvantage of Council directing Administration to drill up to 700 feet is the uncertainty to accomplish the desired result.
2. The disadvantage of Council directing Administration to convert the Sunset House Waterpoint to non-potable is that the Sunset House Community will have to truck potable water to their homes from Valleyview or Sweathouse.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to accept the second motion to drill to a maximum depth of 700 feet. However, Administration does not recommend this action as a rough cost estimate could be up to \$340,000.00 that has not been approved in the 2023 Capital Budget and it may affect existing residential water wells.

FINANCIAL IMPLICATION:

Direct: \$30,000.00

Future: Ongoing maintenance costs.

STAFFING IMPLICATION:

During the year, annual building maintenance and roughly 2 hours per week (plus travel time) and will be assigned to maintain the water point.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Once Council makes a decision Administration will proceed accordingly.

ATTACHMENT(S):

January 4, 2023
File: 2021-3024

TEL: 780.451.7666

Roger Autio
Director of Infrastructure & Engineering
MD of Greenview
4806 – 36 Avenue,
PO Box 1079,
Valleyview, AB
T0H 3N0

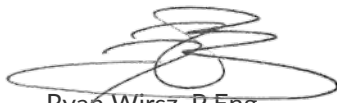
Re: SUNSET HOUSE WTP UPGRADE OPTIONS UPDATE

Dear Mr. Autio:

As requested in your November 21, 2022 email to myself, enclosed is a list of the updated option requests, complete with their corresponding high-level opinion of probable cost and “pros and cons”. AE trusts that this information is adequate for your council meeting on January 24, 2023.

If you need any further information or require AE in attendance for the council meeting, please do not hesitate to contact the undersigned.

Yours truly,



Ryan Wirsz, P.Eng.
Project Manager

Encl. Sunset House WTP Upgrade Options Update

Sunset House WTP Upgrade Options Update

Greenview's November 2022 Option Requests	Opinion of Probable Capital Cost	Advantages	Disadvantages
<p>"1 – Drilling Deeper"</p> <p>AE Assumptions: Well would be drilled at WTP location.</p>	<p>\$340,000 (\$100,000 to complete drilling, \$240,000 to tie well into WTP). Similar option as Option #1B of the Sunset House Water Treatment Plant Upgrade Options report, dated May 2022.</p>	<ul style="list-style-type: none"> • Low capital cost and similar O&M costs. • Similar treatment technology required as existing. 	<ul style="list-style-type: none"> • Possibility new well will not achieve the desired quality and quantity.
<p>"2 – Why we stopped drilling at the depth we did?"</p> <p>AE Assumptions: This is regarding the well (Well #2) drilled in June/July of 2021 at WTP location.</p>	<p>The objective in 2021 was to drill to the depth of the existing well (109.7 m), establish a new well and increase supply to the community. Upon drilling the new well, the team observed two water producing zones, an upper sandstone zone and a lower sandstone zone. The lower sandstone zone is where the existing well is located. Poor yields were observed when initial water quantity testing was completed on the lower sandstone zone. The team sealed off the lower sandstone zone and developed the upper sandstone zone. The objective changed from drawing raw water solely from the lower sandstone zone to drawing from the lower sandstone zone (existing well) and upper sandstone zone (new well). This change opened the possibility of drawing raw water from two different supplies. Unfortunately, not enough additional quantity was obtained to meet current or future community demands. At the time, this was the best course of action to pursue as this upgrade could have been completed for reasonable cost and there would have been minimal changes to the WTP's operations and maintenance activities.</p> <p>Drilling deeper could have been completed back in 2021, however, as outlined in AE's "Sunset House WTP Upgrade Options" presentation, dated November 15, 2022, 69 out of 73 wells are drilled to a depth less than 150 m and there are no guarantees that drilling deeper will produce better yielding wells. Furthermore, drilling deeper typically requires more water treatment to achieved potable water standards.</p> <p>Finally, Alberta's Water Act regulates the withdrawal, diversion and use of groundwater. A licence is required to withdraw water for all purposes other than household (less than 1,250 m³/year) or traditional agricultural uses (6,250 m³/year). This requirement is in place to protect the sustainability of aquifers that supply users throughout the province.</p>		

Greenview's November 2022 Option Requests	Opinion of Probable Capital Cost	Advantages	Disadvantages
<p>"3 – Exploring for water in the area"</p> <p>AE Assumptions: No more than 3.5 km from WTP.</p>	<p>\$3,720,000 (\$500,000 for well exploration and installation of production and observation wells and \$3,220,000 for land purchase and development, utilities, 3.5 km of piping and tying well into WTP)</p> <p>Same option as Option #2 of the Sunset House Water Treatment Plant Upgrade Options report, dated May 2022.</p>	<ul style="list-style-type: none"> • Similar O&M costs. • Similar treatment technology required as existing. 	<ul style="list-style-type: none"> • High cost of well exploration. • Possibility new well will not achieve the desired quality and quantity. • If well exploration is successful there may be a high cost of the pipeline to connect well to WTP.
<p>"4 – Cost to pipe water from the Little Smoky River"</p> <p>AE Assumptions: No more than 20 km from WTP.</p>	<p>\$25,000,000 (\$18,000,000 for intake, pumping station and pipeline, \$7,000,000 for WTP upgrades, see Option #6 below for WTP cost breakdown). Similar option as Option #3 of the Sunset House Water Treatment Plant Upgrade Options report, dated May 2022.</p>	<ul style="list-style-type: none"> • Large quantity of water available • Could serve as a large regional system servicing all communities in the surrounding area. 	<ul style="list-style-type: none"> • Different treatment requirements than existing WTP. • High capital and O&M costs.
<p>"5 – Cost to pipe water from the Snipe Lake"</p> <p>AE Assumptions: No more than 5 km from WTP.</p>	<p>\$15,000,000 (\$8,000,000 for intake, pumping station and pipeline, \$7,000,000 for WTP upgrades, see Option #6 below for WTP cost breakdown). Similar option as Option #3 of the Sunset House Water Treatment Plant Upgrade Options report, dated May 2022.</p>	<ul style="list-style-type: none"> • Moderate quantity of water available 	<ul style="list-style-type: none"> • Probably not adequate raw water supply to serve as a large regional system servicing all communities in the surrounding area. • Different treatment requirements than existing WTP • High capital and O&M costs.

Greenview's November 2022 Option Requests	Opinion of Probable Capital Cost	Advantages	Disadvantages
<p>"6 - Cost to move the existing building to a better location (where we will have water, example river or lake)"</p> <p>AE Assumptions: Location at Snipe Lake and existing WTP would be abandoned.</p>	<p>\$7,000,000 (Underground concrete potable storage reservoir, building over reservoir, treatment equipment and supporting utilities) Same option as Option #3 of the Sunset House Water Treatment Plant Upgrade Options report, dated May 2022.</p>	<ul style="list-style-type: none"> A raw water supply change from groundwater to surface water will require different treatment technology and regulations be followed. As such, the current treatment technology would be abandoned and O&M training would most likely be required for the operations staff. Will the community make the drive to the new WTP or will they go elsewhere? What will Greenview do with the existing WTP? AE recommends not considering this option further until more details are understood: the proposed location of the new WTP, the future of the existing WTP, community feedback is received, etc. 	
<p>"7 - Cost to pipe water from Sweathouse"</p> <p>AE Assumptions: Water is potable from Sweathouse. No more than 15 km between WTPs.</p>	<p>\$5,500,000 Similar option as Option #4a of the Sunset House Water Treatment Plant Upgrade Options report, dated May 2022.</p>	<ul style="list-style-type: none"> Reduces current O&M by removing the Sunset House raw water well and WTP. AE has concerns that the Sweathouse raw water supply will not remain sustainable. Note, this statement has not been substantiated, its merely an observation at this point. At a minimum, a pump test should be completed on the Sweathouse well prior to considering this option further. AE has concerns that Greenview operations will have to flush the transmission main to maintain water quality. Flushing quantities may not be available. Flushing efforts should be included in the water demand calculations prior to considering this option further. 	

Greenview's November 2022 Option Requests	Opinion of Probable Capital Cost	Advantages	Disadvantages
<p>"8 - Cost to convert to a non potable site"</p> <p>AE Assumptions: Sunset House Community Hall potable water needs not considered in this option.</p>	<p>\$20,000 (Bypass modification at the existing WTP) Same option as Option #5a of the Sunset House Water Treatment Plant Upgrade Options report, dated May 2022.</p>	<ul style="list-style-type: none"> Eliminates the amount of water loss due to the treatment process. 	<ul style="list-style-type: none"> Does not meet the potable water needs of the surrounding community, including the community hall. Requires truckfill users to travel farther to access potable water. Existing well may continue to lose production capacity.
<p>"9 - Cost to put in a small system for just the community hall"</p> <p>AE Assumptions: Assumes Option #8 above will be completed, in addition to this option, and the community hall can accommodate a treatment system.</p>	<p>\$10,000 (onsite treatment, storage tank and pumping system at the community hall) Same option as Option #5b of the Sunset House Water Treatment Plant Upgrade Options report, dated May 2022.</p>	<ul style="list-style-type: none"> Reduces the amount of water loss due to the treatment process. Potable water level-of-service to the community hall remains unchanged. 	<ul style="list-style-type: none"> Does not meet the potable water needs of the surrounding community, excluding the community hall. Requires truckfill users to travel farther to access potable water. Existing well may continue to lose production capacity.



REQUEST FOR DECISION

SUBJECT:	Water Well for Sunset House Waterpoint		
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	November 15, 2022	CAO:	MANAGER: DB
DEPARTMENT:	ENVIRONMENTAL SERVICES	DIR: RA	PRESENTER: RA
STRATEGIC PLAN:	Environment	LEG: SS	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Committee of the Whole accept the information provided regarding the Sunset House Waterpoint as presented.

MOTION: That Committee of the Whole recommend to Council to direct Administration to drill a water well for the Sunset House Waterpoint to a maximum depth of 700 feet.

BACKGROUND/PROPOSAL:

At the August 23, 2022, Regular Council Meeting, Councillor Berry made a Notice of Motion “that Council direct Administration to drill a water well for the Sunset House Waterpoint to a maximum depth of 445 feet”.

At the September 13, 2022, Regular Council meeting, Council deferred the following motion,
That Council direct Administration to drill a water well for the Sunset House Waterpoint to a maximum depth of 700 feet.

DEFERRED

Sunset House Waterpoint water well to be deferred until Committee of the Whole meeting November 15, 2022.

When contemplating this motion, Administration recommends the consideration of the following:

1. Allowing for a report to be presented to Committee of the Whole before the work is to be done to detail costs, potential of drilling existing well to a further depth versus drilling of new well and potential outcomes. This can be accomplished by a consultant (Associated Engineering) presenting said report to be presented to Committee of the Whole.
2. Based on previous experience an extreme rough cost estimate could be up to \$150,000 to accomplish the motion. Administration does have a capital budget under WD21001 or the 2023 Capital Budget.

The well at Sunset House water point is not performing as desired and appearing to be on a downward slide. Administration does not want to affect any existing residential water wells and looking for further direction.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of accepting the motion is that Greenview will have clearer understanding the conditions of the Sunset House water well.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. The disadvantage of the motion is that uncertainty exists if drilling a water well to up to 700 feet will accomplish the desired result.

ALTERNATIVES CONSIDERED:

Alternative #1: That Committee of the Whole recommend to Council to take no action on drilling to a maximum depth of 700 feet at the Sunset House Waterpoint and to investigate options.

FINANCIAL IMPLICATION:

The financial implications of the motion are direct costs associated with the drilling of a new water well at the Sunset House Waterpoint with a direct depth required.

STAFFING IMPLICATION:

Staffing implications directly relate to the action of drilling the water well at the Sunset House Waterpoint.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Once Council makes a decision Administration will proceed accordingly.

ATTACHMENT(S):

- Sunset House Water Report

FOR INFORMATION PURPOSE ONLY

REPORT

Municipal District of Greenview No. 16

Sunset House Water Treatment Plant Upgrade Options



FEBRUARY 2022

FOR INFORMATION PURPOSE ONLY

CONFIDENTIALITY AND © COPYRIGHT

This document is for the sole use of the addressee and Associated Engineering Alberta Ltd. The document contains proprietary and confidential information that shall not be reproduced in any manner or disclosed to or discussed with any other parties without the express written permission of Associated Engineering Alberta Ltd. Information in this document is to be considered the intellectual property of Associated Engineering Alberta Ltd. in accordance with Canadian copyright law.

This report was prepared by Associated Engineering Alberta Ltd. for the account of Municipal District of Greenview No. 16. The material in it reflects Associated Engineering Alberta Ltd.'s best judgement, in the light of the information available to it, at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Associated Engineering Alberta Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

EXECUTIVE SUMMARY

In 2014, Stantec designed the water treatment plant (WTP), currently in operation at Sunset House. The WTP is equipped with one raw water well, 2013 WSW. The 2013 WSW's production capacity has declined over the years to the point where the WTP's production capacity is no longer able to keep up with community demands. In 2021, Associated Engineering (AE) retained Walts Waterwells (WW), a drilling contractor, to drill and construct a new groundwater well, Well #2, next to the existing well. Well #2 was drilled to a depth of 115.82 m but because a very low yield was observed along the sandstone, at this depth, the well was backfilled to 43.58 m. A slotted casing was installed between 41.6 m and 43.28 m. Because these wells are in different fractured rock aquifers, it was interpreted that two different sources combined together would yield a higher overall capacity. Subsequently, a 24-hour pumping test was completed that fell short of completion at 22 hours because the groundwater level in the well drew down to the pump intake. At this point, the Municipal District of Greenview No. 16 (MD) asked AE to review WTP upgrade options so that the MD could provide direction.

In this report, AE has conducted a high-level investigation of the following water supply options for the Sunset House WTP:

- Option 1a – Reclaim Well #2.
- Option 1b - Connecting the second raw water well drilled in 2021.
- Option 2 - Desktop review of other potential groundwater sources available.
- Option 3 - Desktop review of surface water sources available and potential WTP upgrade requirements.
- Option 4a and 4b - Supply of potable water from Valleyview, both piped and hauled.
- Option 5 - Converting the WTP to non-potable.
- Option 6 - Shutting down the Sunset House WTP.
- Compare the options, based on capital and O&M costs.

After completing the review AE concluded:

- Options #1a, #1b, #2, #5 and #6 are not sustainable and/or reduce the level of service to the community (quality and/or quantity).
 - 15 m³/day Required (Current Peak Day Demand); 7.5 m³/day to 14.7 m³/day Available.
 - Existing wells may continue lose production capacity.
 - Non-potable option requires community to source potable water elsewhere.
 - Sweathouse WTP's diversion licence appears to be oversubscribed currently and should be reviewed before transferring Sunset House demands to Sweathouse's WTP.
- Options #2, #3 and #4a are very high in capital costs but provide sustainable potable water for the foreseeable future and increase the level of service to the community (quantity).
 - Capital costs range from 3,720,000 to \$11,000,000.
- Option #4b is feasible but dose not make sense as the community is already hauling water.

Moving forward, The MD will need to determine what level of service the community of Sunset House requires and how that aligns with the MD's capital, operations and maintenance allocations. MD operations should look into the 60% in-plant losses at Sunset House WTP. MD operations should review the Sweathouse WTP's diversion licence as it appears the diversion licence is oversubscribed with current Sweathouse demands.

TABLE OF CONTENTS

SECTION	PAGE NO.
Executive Summary	i
Table of Contents	ii
List of Tables	iii
1 Introduction	1-1
1.1 Background	1-1
1.2 Well Yield Issues	1-1
1.3 Report Scope of Work	1-2
2 Sunset House Current Conditions	2-1
2.1 Existing Water Treatment Plant	2-1
2.2 Water Demands	2-1
2.3 Water Quality	2-2
3 Water Treatment Plant Upgrade Options	3-1
3.1 Option# 1 – Connect Water Well #2	3-1
3.2 Option# 2 – Other Groundwater Sources	3-1
3.3 Option #3 – Surface Water	3-3
3.4 Option#4a – Supply of Potable Water from Valleyview	3-4
3.5 Option#4b – Truck Haul from Valleyview	3-4
3.6 Option#5 – Converting the Sunset House Water Treatment Plant to Non-potable	3-4
3.7 Option #6 – Shutdown the Sunset House WTP	3-5
4 Cost and Option Assessment	4-1
4.1 Order of Probable Capital Cost	4-1
4.2 Order of Probable Operation and Maintenance Cost	4-2
4.3 Options Summary	4-3
5 Summary	5-1
5.1 Existing System Summary	5-1
5.2 Upgrade Options Summary	5-1
6 Next Steps	6-1
Closure	
Appendix A – Desktop AWWID Well Summary	
Appendix B – Water Well Drilling Report	
Appendix C – Sunset House Cross-Section	

LIST OF TABLES

PAGE NO.

Table 2-1 Summary of the Raw Water from 2018-2021	2-1
Table 2-2 Summary of the Potable Water from 2018-2021	2-1
Table 3-1 AWWID Summary of Wells with Higher Yields in 10 km Area	3-2
Table 4-1 Total Project Order of Magnitude Capital Cost	4-2
Table 4-2 Order of Probable Operations and Maintenance Incremental Cost Changes	4-3
Table 4-3 Upgrade Options – Advantages and Disadvantages	4-3

FOR INFORMATION PURPOSE ONLY

1 INTRODUCTION

1.1 Background

In 2021, Associated Engineering (AE) retained Walts Waterwells (WW), a drilling contractor, to drill and construct a new groundwater well next to the existing well (2013 WSW), connected to the Sunset House water treatment plant (WTP). The well was drilled to a depth of 115.82 m but because a very low yield was observed along the sandstone, at this depth, the well was backfilled to 43.58 m. Slotted casing was installed between 41.6 m and 43.28 m. The yield in this shallower zone was higher than what was evident for the same zone in which well 2013 WSW is installed in. Because these wells are in different fractured rock aquifers, it was interpreted that there would be no connection between the two aquifers, and hence, no well interference, and that it would be two different sources combined to get a higher yield. Subsequently, a 24-hour pumping test was completed that fell short of completion at 22 hours because the groundwater level in the well drew down to the pump intake.

1.2 Well Yield Issues

A Q20 sustainable yield was calculated using the Aqtesolv software program and the Province approved Modified Moell method. The model predictions indicated that the well can be sustainably operated at 3.2 m³/day, as it only showed a recovery of 64%, during testing at a higher rate.

The question of why the new well did not perform equivalent to or better than the existing well can be answered mostly as follows:

- Geology at any given point can be quite variable even with similar lithological sequences, including variable thickness, pinching of layers, structural movement due to faults and dykes to name a few.
- Fractured bedrock will have fracturing that may not connect in all places, while weathering is also quite variable, depending on the physical properties of the material, when the material was deposited, or later pressures due to many factors changing the properties through various processes.
- It is important to realize that groundwater accumulates in these porous spaces created by fracturing or weathering and that they may not be effectively connected to each other to cause significant groundwater flow.
- These connections can vary significantly in depth vertically over a short horizontal space; hence, wells could have variable results at similar depths.

Without an extensive geophysical groundwater survey, using various methods, or through a well drilling exploration program, the risk of not having a successful well in any given position remains high. This is typically different in unconsolidated, well-layered sand and gravel aquifers, as similar yields can be obtained with wells that are spaced larger distances away, but a risk remains that there could be clayey intrusions in between that can cause variable results.

Unfortunately, this is the risk with groundwater resources that makes it extremely difficult to not only delineate sources but also manage and maintain aquifers. Because of the reasons mentioned above, it is also true that going deeper with a well may not necessarily yield higher groundwater flow, unless distinct reasons, such as a more favourable thickness of fractured rock, exist at that depth.

1.3 Report Scope of Work

In 2021, AE assisted the Municipal District of Greenview No. 16 (MD) with drilling of a second raw water well for the Sunset House WTP. The yield from the new well was lower than hoped for and may not be worth the costs of connecting. The MD has asked AE to develop a report (this report) to outline possible options moving forward. In this report, AE has conducted a high-level investigation of the following water supply options for the Sunset House WTP:

- Connecting the second raw water well drilled in 2021.
- Desktop review of other potential groundwater sources available.
- Desktop review of surface water sources available and potential WTP upgrade requirements.
- Supply of potable water from Valleyview, both piped and hauled.
- Converting the WTP to non-potable.
- Shutting down the Sunset House WTP.
- Compare the options, based on capital and O&M costs.

2 SUNSET HOUSE CURRENT CONDITIONS

2.1 Existing Water Treatment Plant

The existing Sunset House Water Treatment Plant (WTP) was designed by Stantec Engineering, in 2014. The facility consists of a raw water well (2013 WSW) that supplies raw water to a single raw water tank. 2013 WSW has a maximum rate of diversion of 31 m³/day with a maximum annual diversion volume of 6,205 m³/year (17 m³/day). The raw water is chlorinated prior to entering the raw water storage tank. The chlorinated water enters the treatment process which consist of activated carbon filter, ion exchange vessel and reverse osmosis membrane filter. The treated water is chlorinated and is stored in two treated water storage tanks; each tank has a storage capacity of 25 m³.

2.2 Water Demands

The water demands experienced at the Sunset House WTP were summarized from the Operation's handwritten monthly log sheets. **Table 2-1** summarizes the raw well water usage for 2018-2021; the table shows the annual raw water usage from the well and the average daily water usage. The annual and average daily usages do not exceed the license amounts, but the MD reports that 2013 WSW does not keep up to demands. For the purposes of this report, AE considers 2013 WSW's current maximum annual diversion volume achievable at 4,108 m³/year (11.5 m³/day). Additionally, the raw water flow meter shows significant increase in 2020 (92% increase from 2019) and 2021 (45% increase from 2020).

Table 2-1
Summary of the Raw Water from 2018-2021

Item	2018	2019	2020	2021
Annual Raw Water Usage (m ³)	1949	1477	2833	4108
Average Raw Water Daily Usage (m ³ /day)	5.5	4.2	7.9	11.5

The Sunset House WTP services the Sunset House Hall and a truckfill. **Table 2-2** summarizes the annual truckfill and hall usage and average daily potable usage. Based on a visual inspection of the handwritten data, the peak daily usage of the Sunset House WTP was approximately 15 m³/day.

Table 2-2
Summary of the Potable Water from 2018-2021

Item	2018	2019	2020	2021
Annual Truckfill Water Usage (m ³)	1344	1224	1849	1717
Annual Hall Water Usage (m ³)	22	47	21	58
Average Potable Water Daily Usage (m ³ /day)	3.8	3.5	5.2	4.9

The water usage data shows an interesting trend; since 2018, the raw water usage has increased by 110%, while the potable usage has only increased 30% over the same period. The raw water trend needs to be investigated to determine where the extra raw water demand is being generated from, as the data provided by the MD was insufficient to determine this. An investigation of the in-plant losses needs to occur to determine where this additional loss is coming from, including a review of all treatment equipment and calibration of all flow meters.

Based on the WTP operational records, in 2021, the Sunset House WTP had 60% of in-plant loss, for comparison, the Sweathouse WTP in-loss range was 35%. As both plants have the same equipment installed, with similar raw water quality, an unknown factor at the Sunset House WTP is leading to exceptional in-plant losses at the facility, especially in 2021.

2.3 Water Quality

Treatability objectives for any water treatment facility are defined by the maximum acceptable concentration (MAC) and aesthetic objectives (AE), defined in Health Canada's Guideline for Canadian Drinking Water. The MAC limits have been established for certain substances that are known or suspected to cause adverse effects on health. The concentrations have been set at values intended to safeguard health based on lifetime consumption. The AO limits apply to certain substances or characteristics of drinking water that can affect its acceptance by consumers or interfere with practices for supplying good quality water. **Table 2-3** summarizes the Sunset House WTP raw water quality data that exceed the MAC or AO.

Table 2-7
Sunset House Well Water Quality Treatment Parameter Summary

Analyte	Unit	GCDWQ Limit	GCDWQ Type	Groundwater
Ammonia, as N	mg/L	—	—	1.04 ¹
Total Organic Carbon	mg/L	—	—	6.78 ²
Sodium	mg/L	200	AO	480
Total Dissolved Solids	mg/L	500	AO	1080

¹ Ammonia concentrations are to be treated with chlorine to be completely oxidized.

² Total Organic Carbon's operational guidance value is 2.0 mg/L to prevent the formation of disinfection by-products.

3 WATER TREATMENT PLANT UPGRADE OPTIONS

3.1 Option# 1 – Connect Water Well #2

AE's hydrogeological team has estimated that Well #2 can sustainably produce 3.2 m³/day and that the water quality is similar to 2013 WSW. Therefore, there are two options to move forward with Well #2:

- Option #1a – Reclaim Well #2 and do not connect to existing facility.
- Option #1b – Connect Well #2 and supplement the existing WTP's feed water.

Herein, only Option #1b is further explored as Option #1a will simply follow the provincial well reclamation process.

3.1.1 Modification Outside the Existing WTP

AE proposes the outside pipeline alignment navigate around the rink and playground. Installation of this pipeline will use a combination of directional drill and open cut approaches to minimize disruption to the surface features.

3.1.2 Modifications Inside the Existing WTP

AE proposes the pipeline coming into the existing WTP connect to the existing raw water storage tank. More specifically, AE proposes that Well #2 be connected to the existing raw water piping entering the raw water storage tank. This connection will allow for minimal piping and tank changes, while allowing individual flow monitoring of each raw water well.

It should be noted that Option #1b will not allow the community to access the full 3.2 m³/day, as WTP production waste must be considered (e.g., if Well #2 can provide 3.2 m³/day and the WTP's production waste is 50%, then the community can only receive 1.6 m³/day).

3.2 Option# 2 – Other Groundwater Sources

3.2.1 Desktop Review of Other Potential Groundwater Source Available

The Alberta Water Well Database (AWWID) is the main source of well information in the Province for assessing yield potential of a specific geographic location in the absence of specific hydrogeology reports. AE completed online searches for any related reports for the area, but none were found, apart from a regional investigation by AER¹ (AER report). The AER report shows the bedrock is dipping towards the southwest of the site, with higher surface topography east of the site. Recharge is likely to occur in these higher areas where bedrock outcrop as opposed to the less permeable till clay (18 m thick) overlying the bedrock at the site in which very low recharge occurs. The report further indicates a paleovalley thalweg approximately 14 km to the west of the site. The infill material of these valleys is variable with sand, gravel, fine grained silt, clay, and till. Gravel and sand aquifers in the area are also believed to be relatively thin and yields in these typically do not exceed 50 m³/day.

The report does not show the various sandstone and shale layers within the formation in the project area, as this is a regional investigation. The AWWID data in the next section shows this information at a higher resolution. These alternating shale and sandstone layers are, therefore, referred to as layers within a sequence of multiple layers.

¹ Hartman, G.M.D, Klassen, J., Jayawardane, L. and Timmer, E.R. 2020. Regional Shallow Stratigraphy and Hydrogeology of the Grande Prairie-Valleyview Area, Northwestern Alberta.

3.2.2 AWWID Data

The AWWID data summary suggests that wells associated with the paleovalley thalweg approximately situated along the Little Smoky River are on average more productive than the sandstone bedrock aquifers. Ten wells along this area are summarized in **Table 1, Appendix A**. Although the records indicate yields of more than 454 L/min (653.8 m³/day), when downloading the actual well logs, it shows the recommended yield after short-duration testing is typically 3 to 10 times lower than the drilling/development estimated yields on some wells. GIC 9486291 shows sand and gravel between 77 and 121 m depth, while GIC 1665617 has a 3 m sand and gravel at 76 m depth, which is water-bearing. The rest of the wells have some to none sand and gravel and confirm the infill material of the paleovalley, as described by the AER report. The well log reported an average yield of this area to the west is 39.8 L/min (57.3 m³/day).

Within a 10 km radius (10 km area) from the existing wells, the AWWID (**Table 3-2, Appendix A**) indicates 20 well records that have relevant associated data with it. Again, the drilling/development average estimated yield is 44.4 L/min (63.9 m³/day), while the well log reported an average yield of this area in a 10 km radius is 28 L/min (40.32 m³/day). The highest tested rate recorded is 45.5 L/min (65.52 m³/day) in four of the wells summarized in **Table 1**. AWWID well logs are attached hereto in **Appendix B**.

Table 3-1
AWWID Summary of Wells with Higher Yields in 10 km Area

Well ID	Yield (L/s)	Yield (m ³ /day)	Depth Screened (m)	Lithology Screened	Sandstone Layer in Sequence (number from surface)	Distance from Existing Well (km)
9486216 – 2013 WSW	0.45	39.3	103-109	Gray sandstone/shale	5	0 km
396172	0.76	65.5	141-150	Gray sandstone/shale	8	3 km east
396220	0.76	65.5	97-111	Sandstone/shale	5	2.4 km south
396602	0.76	65.5	131-145	Sandstone/shale	Logging not clear	3.5 km west
396629	0.76	65.5	91-103	Sandstone/shale	Logging not clear	0.9 km northeast
1665763	0.46	39.3	121-128	Gray sandstone/shale	6	0.5 km northeast

Table 3-2 indicates that the screened depth in water-bearing sandstones is variable, which is to be expected in dipping strata. It also shows that it is derived from different sandstone/shale sequences and could be related to the grain and thickness of the sandstone, but that there is a high likelihood that it could be related to the shale/sandstone contact and the amount of weathering present. It should also be noted that although these rates are higher (but what would be required for Sunset House supply requirements) than the existing well, GIC 9486216, the yields seem to decline over time with the production of the well (as shown by 9486216 - 2013 WSW operating at around 11.5 m³/day). This indicates that the recharge to these deeper sandstone sequences is lower than average production. Unfortunately, there is no direct correlation to be drawn from these various wells to indicate if wells need to be drilled deeper or not and that success is variable with depth.

A cross-section between GIC 9486216 and the new 2021 well ([Appendix C](#)) indicates a possible reason for the higher initial rates with declining rates over time. The different sandstone shale sequences are not correlating between the wells and that some of the sandstone layers can be in the form of lenses and or pinching layers. This could explain the lower recharge to the isolated aquifers as they may not be laterally extensive. It should be noted, however, that those different individuals will log these wells differently and that some sandstone layers might have been omitted but, in this case, connection is not likely for the lower sandstone layers in the sequence.

Based on the information for the area, the following conclusions can be made:

- Within a 10 km radius from the site, most production wells are within the deeper sandstone/shale layers in the sequence between 90 and 150 m depth.
- The highest yield reported for these wells are 65.5 m³/day.
- Further to the west, along the Little Smoky River, an old paleovalley exists that are infilled with a mix of material and bedrock below it at depth. Groundwater wells established within this area indicated higher average yields of 39.8 L/min (57.3 m³/day), in the sandstone bedrock, compared to the 10 km area well average of 28 L/min (40.3 m³/day).
- There are only a small number of wells installed in shallower sand and gravel, along the paleovalley and yields are typically less than 50 m³/day¹.
- Although wells within the sandstone have higher initial yields, declining yields are evident over time due to production; this is likely because of slow recharge to the sandstone layers in the 10 km radius when compared to sandstone layers along the paleovalley. Recharge to the fill material overlying the sandstone layers along the paleovalley might be recharged quicker and at a higher rate, hence, resulting in more sustainable production rates.
- Sandstone and shale sequences might not be laterally extensive, and hence, reduced aquifer recharge and volumes available to certain wells.

The following are some options that can be investigated further:

- Additional groundwater could be sourced from deeper wells within a radius of 1 km from Sunset House to augment the existing two wells assuming the second well drilled in 2021 is also tied in.
- A deeper well can be drilled to 150 m depth to see if the deeper sand and shale sequences yields better results. AE contacted the drilling contractor (Walts Water Wells) who indicated that it is not possible to drill the new well deeper, which means a new well would have to be drilled.
- The only other alternative is to complete exploration along the Little Smoky River for a slightly higher yield, potentially higher recharge rates, and more sustainable production.

3.3 Option #3 – Surface Water

3.3.1 Desktop Review of Other Surface Water Sources

AE completed a desktop review of possible surface water options for use as an alternative supply to the Sunset House WTP. Two possible sources were identified, using nearby Snipe Lake or the possible construction of a dugout to collect surface water from nearby surroundings. To bring surface water from Snipe Lake to the existing WTP, an intake installed in the lake and a raw water pipeline of 4.5 km would be required.

It is anticipated that the surface water dugout will be the lowest cost option due to the higher cost for the construction of an intake and raw water line.

3.3.2 Potential Water Treatment Upgrades

For surface water to be treated at the existing water treatment plant, the plant would need to be upgraded to meet the additional water treatment requirements for surface water. The existing water treatment plant would require the following additions to allow for treating surface water:

- Tube settler clarifier with coagulant and polymer chemical system;
- Dual media filters;
- Reverse Osmosis (existing WTP equipment – organic carbon control);
- Ultraviolet disinfection; and
- A building expansion.

Based on the available space at the existing WTP, a building expansion is required to house the additional equipment. The existing reverse osmosis system would be retained in the new surface water treatment system to provide organic carbon control to deal with the disinfection by-product formation commonly seen in surface waters of this type.

3.4 Option#4a – Supply of Potable Water from Valleyview

The option to provide water servicing from the Town of Valleyview to Sunset House was analyzed in a previous AE report (Valleyview Rural Water Line Study Update (January 2022)) and subsequently eliminated due to:

- **High capital costs** (\$11 million) to construct a 27.3 km long watermain and a booster station and dedicate right of way beside Highway 669. Note land acquisition or right of way approval costs are not included in the cost estimate.
- **High operation and maintenance costs** to maintain the booster station and potential re-chlorination needs.
- **Low water demand**, based on existing records; the average daily consumption is only 5.5 m³/day, or less than 1,850 m³/year.
- **Low water turnover rate** as we estimate it will require 161 days to turn over the water in a 27.3 km long, 100 mm diameter pipe. This is assuming the water demand is 17 m³/day, which is the average maximum daily consumption from 2020 to 2021.

A regional pipeline from Valleyview is not feasible due to the low demands and high residence time in the pipe, which leads to severe water quality degradation and disinfection residual loss, etc.

3.5 Option#4b – Truck Haul from Valleyview

Due to the amount of treated water required for the Sunset House truckfill and community hall, a long pipeline would not be feasible as mentioned above. However, the Sunset House WTP could be converted to receive truckfill water from Valleyview. On average, four truckloads of water per week would be required to meet the current demands at the WTP. The number of loads per week would be lower in the winter but higher in summer to deal with current seasonal peak summer demands.

3.6 Option#5 – Converting the Sunset House Water Treatment Plant to Non-potable

The operations of the reverse osmosis system generate a significant amount of rejected waste through the process. Based on the 2021 operational data provided by the MD, up to 60% of the raw water is being lost. This additional loss doubles the amount of raw water that needs to be pumped from the raw water well, and significantly increases the amount of water pulled from the aquifer.

If the Sunset House WTP system was decommissioned and only produced non-potable water, this would eliminate more than half of the raw water lost by the facilities. If the system becomes non-potable, this non-potable plant will require some of the customers, who require potable water to go to either the Valleyview WTP or the Sweathouse WTP.

The most significant effect would be on Sunset House Hall, as it would not have potable water for the community functions hosted at the facility. Water would need to be trucked in from the Sweathouse WTP and stored in the Sunset House treated water tanks for the community hall's usage.

3.7 Option #6 – Shutdown the Sunset House WTP

The MD of Greenview could shutdown the Sunset House WTP, due to the lack of a current, sustainable groundwater source. This option would see the all the truckfill customers diverted to the Sweathouse WTP or Valleyview to fill their tanks at those truckfills. This course of action would cause an increasing demand at the Valleyview and Sweathouse WTPs. Due to the Valleyview WTP's current capacity, if the entire Sunset House truckfill usage was transferred to the Valleyview WTP, the WTP would not see a significant impact on their potable water demand.

The Sweathouse WTP customers currently consume $3.3 \text{ m}^3/\text{day}$ of potable water. To make this amount of potable water WTP requires $4.8 \text{ m}^3/\text{day}$ of raw water. The Sweathouse well Licence No. 00030957 has a maximum rate of diversion of $36 \text{ m}^3/\text{day}$ with a maximum annual diversion volume of $1,364 \text{ m}^3/\text{year}$ ($3.7 \text{ m}^3/\text{day}$). Currently, the Sweathouse's diversion licence is over subscribed; therefore, transferring Sunset's demand to Sweathouse is not advisable until Sweathouse's raw water sustainability is reviewed in further detail.

FOR INFORMATION PURPOSE ONLY

4 COST AND OPTION ASSESSMENT

4.1 Order of Probable Capital Cost

Due to the conceptual nature of this study and the understanding that there exist unknown variables beyond the scope of this study, the estimates presented herein includes a contingency and engineering allowance of 50% of the total estimated capital costs. AE does not guarantee the accuracy of this opinion of probable costs. The actual final cost of the project will be determined through the bidding and construction process.

Table 4-1 summarizes the opinion of probable costs for the various options for the Sunset House Water Treatment Plant. A cost allowance was not included for land acquisitions for the facility's expansion in the capital cost estimate; purchasing land has a significant effect on capital costs.

The following assumptions were made:

- Options #1b: Connect Well#2
 - 100 meters of pipeline to connect the well to the raw water tank;
 - Installation of pit-less adapter and new well pump;
 - Minor additional electrical or control upgrades are required; and
 - Capital cost does not include cost already spend on drilling Well #2 (approximately \$85K).
- Option #2 – Other Groundwater Source
 - 3500 meters waterline allowance to bring water from the new well;
 - Installation of pit-less adapter and new well pump;
 - Additional electrical or control upgrades are required; and
 - New electrical service to the new well site area.
- Option #3 – Convert to Surface Water Treatment Plant
 - Dugout surface water collection system;
 - Building expansion; and
 - Treatment upgrades.
- Option #4a – Regional Line from Valleyview
 - Capital costs were taken from Valleyview Rural Water Line Study Update (January 2022).
- Option #4b – Truck Hauling from Valleyview
 - Decommissioning cost for the WTP and wells of \$40,000; and
 - Minor piping changes to allow for offloading of the water trucks.
- Option #5 – Non-potable
 - Small process modification to bypass the treatment system.
- Option #6 – Decommission WTP
 - Decommissioning cost for the WTP and wells of \$40,000; and
 - Equipment would be reused by the MD at another facility.

Table 4-1
Total Project Order of Magnitude Capital Cost

Option	Cost
Option #1a – Reclaim Well	\$15,000
Option #1b – Well#2 Supplement WTP	\$240,000
Option #2 – Other Groundwater Source	\$3,720,000
Option #3 – Surface Water WTP	\$6,810,000
Option #4a – Regional Line	\$11,000,000
Option #4b – Water Truck	\$50,000
Option #5 – Non-Potable	\$20,000
Option #6 – Decommission WTP	\$40,000

4.2 Order of Probable Operation and Maintenance Cost

The operational costs were based on the following:

- Energy cost of \$0.15/kWh.
- Chemical cost of \$7.05/kg.
- No additional operator required.
- Truck hauling cost of \$300 for 10 m³ loads.

Table 4-2 summarizes the order of magnitude for the probable operational and maintenance O&M cost changes for the implementation of the various options, as follows:

- Option #1a – Reclamation of Well #2 will have no impact to the current O&M costs at the Sunset House WTP.
- Options #1b and #2 have small cost increases, ranging from \$2,000 to \$5,000, associated with these options for the costs of the additional power and pumps required.
- Option #3 – Surface water treatment plant will have the second largest increase to the O&M costs, as this option has additional costs to power the treatment process, increased chemical usage for the new treatment process and increased heating costs for a larger building.
- Option #4a – Regional line has the third highest additional O&M cost associated with operating a booster station and chemical usage to boost disinfectant residual in the pipeline.
- Option #4b has the highest O&M cost implications of all the options, due to the high cost of trucking water.
- Option #5 and #6 will save O&M costs by lowering the service standard at the facility.

Table 4-2
Order of Probable Operations and Maintenance Incremental Cost Changes

Option	Cost
Option #1a - Reclaim Well	\$—
Option #1b - Well#2 Supplement	\$2,000
Option #2 - Other Groundwater Source	\$5,000
Option #3 - Surface Water WTP	\$49,000
Option #4a - Regional Line	\$21,000
Option #4b - Water Truck	\$60,000
Option #5 - Raw Water Only	-\$5,000
Option #6 - Decommission WTP	-\$23,000

4.3 Options Summary

Table 4-3 summarize the advantages and disadvantage of the various upgrade options presented in this report.

Table 4-3
Upgrade Options – Advantages and Disadvantages

Well #2 Options	Advantages	Disadvantages
Option #1a - Reclaim Well #2	<ul style="list-style-type: none"> Lower capital cost. 	<ul style="list-style-type: none"> Water demand concern from the community is not addressed: <ul style="list-style-type: none"> 15 m³/day Required; 4.6 m³/day Available (60% of 11.5 m³/day) Existing well may continue lose production capacity.
Option #1b - Well#2 Supplement	<ul style="list-style-type: none"> Minimal changes to existing WTP. Provides additional 1.3 m³/day of potable water (60% of 3.2 m³/day) 	<ul style="list-style-type: none"> Water demand concern from the community is not addressed: <ul style="list-style-type: none"> 15 m³/day Required; 5.9 m³/day Available Medium capital cost. Additional well O&M costs. Wells may continue lose production capacity.
Option #2 - Other Groundwater Source	<ul style="list-style-type: none"> If drilling program is successful, provides a sustainable water source for WTP. 	<ul style="list-style-type: none"> High cost of the pipeline to connect well to WTP. High cost of well exploration. Possibility new well will not achieve the desired flow rate.
Option #3 - Surface Water WTP		<ul style="list-style-type: none"> Limited surface water source near the existing WTP. High capital cost to achieve required treated water volumes. High O&M cost.
Option #4a – Regional Line from Valleyview	<ul style="list-style-type: none"> Sustainable source. 	<ul style="list-style-type: none"> High capital cost. High O&M cost. High residence time in pipeline leading to severe water quality degradation.

Well #2 Options	Advantages	Disadvantages
Option #4b – Truckfill from Valleyview	<ul style="list-style-type: none"> Sustainable source. Moderate capital cost. 	<ul style="list-style-type: none"> Highest O&M cost.
Option #5 - Raw Water Only	<ul style="list-style-type: none"> Eliminates the amount of water loss due to the treatment process. 	<ul style="list-style-type: none"> Does not meet the potable water needs of the community. Requires truckfill users to travel farther to access potable water. Does not provide potable water to the community hall. Well may continue lose production capacity.
Option #6 - Decommission WTP	<ul style="list-style-type: none"> Eliminate need for raw water well at the site. 	<ul style="list-style-type: none"> Does not meet the potable water needs of the community. Requires truckfill users to travel farther to access potable water. Does not provide potable water to the community hall.

5 SUMMARY

Based on the Sunset House Water Treatment Plant Option Assessment, Associated Engineering finds the following:

5.1 Existing System Summary

- The raw water usage has increased 110% between 2018 and 2021, while the potable water usage has only increased 30%, during the same period.
 - Average day raw water usage was 5.5 m³/day, in 2018 and 11.5 m³/day, in 2021.
 - Average potable demand (truckfill and hall) was 3.8 m³/day, in 2018 and 4.9 m³/day, in 2021.
 - In-plant plant loss have doubled between 2018 and 2021, indicating an issue with the treatment system, leading to additional waste being generated.

5.2 Upgrade Options Summary

- Option #1a (Reclaim Well #2) - Demand shortages and concerns around well sustainability are still present regardless of whether the in-plant losses can be restored back to 35%.
 - 15 m³/day Required (Current Peak Day Demand); 7.5 m³/day Available (35% of 11.5 m³/day – 2013 WSW).
 - Existing well may continue lose production capacity. 2013 WSW was initially licenced for maximum rate of diversion of 31 m³/day with a maximum annual diversion volume of 6,205 m³/year (17 m³/day).
- Option #1b (Well #2 Supplement) - If Well #2 is connected to the Sunset House WTP and an in-plant loss of 35% can be restored, the well's sustainable yield of 3.2 m³/day would translate to 2.1 m³/day of additional potable water. If the in-plant losses cannot be restored, the additional potable water supply can only be 1.6 m³/d. Again, demand shortages and concerns around well sustainability are still present, regardless of whether or not the in-plant losses can be restored back to 35% and Well #2 can be connected.
 - 15 m³/day Required (Current Peak Day Demand); 9.6 m³/day Available (35% of 11.5 m³/day – 2013 WSW + 3.2 m³/day – Well #2).
 - Existing wells may continue lose production capacity as shown above in Option #1a.
- Option #2 (Other Groundwater Source) – The addition of a well in an area with a higher groundwater yield has a significant amount of capital cost associated with this option, due to the distance away from the existing water treatment plant.
- Option #3 (Surface Water WTP) and #4a (Regional Line) – Both the addition of surface water treatment and a regional line have the highest overall costs and will have additional operation and maintenance costs higher than the current facility.
- Option #4b (Water Truck) – Trucking water from Valleyview has a reasonable cost but may not make sense as the community members are typically hauling water from Sunset House truckfill already.
- Option #5 (Raw Water Only) – Demand shortages and concerns around well sustainability are still present.
 - 15 m³/day Required (Current Peak Day Demand); 11.5 m³/day – 2013 WSW or 14.7 m³/day with Well #2 connected.
 - Existing wells may continue lose production capacity as shown above in Option #1a.
- Option #6 (Decommission WTP) – Valleyview WTP has the additional capacity to handle the potable water requirements if the Sunset House WTP was no longer available to produce potable water.
 - The Sweathouse WTP would require a further review as currently the diversion licence is oversubscribed with current Sweathouse demands.

6 NEXT STEPS

The Municipal District of Greenview No. 16 will need to determine what level of service the Community of Sunset House requires and how that aligns with the MD's capital, operations and maintenance allocations. MD operations should look into the 60% in-plant losses at the Sunset House Water Treatment Plant and should review the Sweathouse Water Treatment Plant's diversion licence, as it appears the diversion licence is oversubscribed with the current Sweathouse water demands.

CLOSURE

This report was prepared for the Municipal District of Greenview No. 16 to investigate the water supply options for the Sunset House Water Treatment Plant.

The services provided by Associated Engineering Alberta Ltd. in the preparation of this report were conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty expressed or implied is made.

Respectfully submitted,
Associated Engineering Alberta Ltd.

Ryan Wirsz, P.Eng.
Project Manager

Nicholai Kristel, P.Eng.
Process Engineer



Reconnaissance Report

[View in Imperial](#)
[Export to Excel](#)

Groundwater Wells

Please click the water Well ID to generate the Water Well Drilling Report.

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (m)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (m)	TEST RATE (L/min)	SC_DIA (cm)
352201	NE	18	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1990-08-31	134.11	New Well	Domestic		5	12	CARON, ROLAND	39.62	227.30	14.12
381429	NE	33	70	21	5	SAVILLE WATER WELL DRILLING LTD.	1994-05-27	121.92	New Well	Domestic & Stock		5	12	THOMAS, PETER	45.72	90.92	14.12
396349	NW	21	70	21	5	SAVILLE WATER WELL DRILLING LTD.	1975-09-22	85.34	New Well	Unknown		2		JOHNSON, JAMES			0.00
396350	NE	21	70	21	5	UNKNOWN DRILLER	1968-07-10	60.96	Coal Test Hole	Investigation		5		RCA			0.00
396351	NE	21	70	21	5	MOORES WW DRLG	1980-06-13	103.63	New Well	Domestic	1	6		HAMMON, BRUCE	0.00	45.46	14.12
396358	NW	27	70	21	5	SAVILLE WATER WELL DRILLING LTD.	1983-05-13	112.47	New Well	Domestic & Stock	1	6		PETERSON, TERENCE	12.19	68.19	13.97
396360	3	28	70	21	5	KENASTON DRLG	1962-07-28	67.06	New Well	Observation	3	6		ALTA HIGHWAYS			14.27
396363	NW	28	70	21	5	MOORES WW DRLG		48.77	New Well	Domestic & Stock		3		WELL, SHERYL &DARRYL	0.00	90.92	14.12
396380	SE	33	70	21	5	SAVILLE WATER WELL DRILLING LTD.	1971-10-17	68.58	Unknown			3		THOMAS, JOHN	12.19	36.37	0.00
396682	NE	19	71	20	5	UNKNOWN DRILLER	1968-07-15	45.72	Coal Test Hole	Investigation		3		RCA# COAL SURVEY			0.00
396738	SW	10	71	21	5	SAVILLE WATER WELL DRILLING LTD.	1972-09-04	77.72	New Well	Unknown	1	6		MCNABB, DONALD F.	0.00	11.37	11.68
396740	13	14	71	21	5	UNKNOWN DRILLER	1950-02-21	573.02	Structure Test Hole	Industrial				HUDSON'S BAY OIL & GAS #V-6			0.00
396741	SW	15	71	21	5	UNKNOWN DRILLER		112.78	Chemistry	Domestic	1			CRAIG, J.F.			0.00
396744	5	24	71	21	5	UNKNOWN DRILLER	1950-02-02	503.83	Structure Test Hole	Industrial				HUDSON'S BAY OIL & GAS #V-7			0.00
396766	SW	1	71	21	5	UNKNOWN DRILLER		48.77	Chemistry	Domestic	1			FELL, DON	12.19		0.00
465036	SW	10	71	21	5	SAVILLE WATER WELL DRILLING LTD.	1990-02-18	79.25	New Well	Domestic		11	20	MCNABB, DON	33.53	90.92	14.12
1665617	1	23	71	21	5	SAVILLE DRILLING LTD.	2006-10-10	82.30	New Well	Domestic		5	25	HOLMEN, DON	30.78	68.19	14.13
1877525	1	2	71	21	5	GOLDEN PEACE DRILLING LTD.	2008-09-03	85.34	New Well	Domestic		9	21	THIESSEN, JERRY	28.65	22.73	15.24
2093625	1	28	70	21	5	UNKNOWNDRILLINGCOMP11			Old Well-Yield	Observation				ALBERTA ENVIRONMENT			
9486291	SE	13	71	21	5	BRAD SAVILLE ENTERPRISES LTD.	2016-05-17	176.78	New Well	Domestic & Stock		9	16	PETRYSHEN, SCOTT&MICHELLE	27.80	454.61	14.12

Table 2 - AWWID Wells Within 10 Km Radius of Sunset House



Reconnaissance Report

[View in Metric](#)

[Export to Excel](#)

Groundwater Wells

Please click the water Well ID to generate the Water Well Drilling Report.

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
340580	SW	8	71	19	5	SAVILLE DRILLING LTD.	2002-04-28	480.00	New Well	Domestic & Stock		12	22	MUZYCHYN, JIM	308.00	4.00	5.56
341200	SW	35	70	19	5	SAVILLE DRILLING LTD.	2002-08-27	460.00	New Well	Domestic & Stock		14	22	TREMBLAY, VERN	289.00	5.00	5.56
352429	NW	16	71	20	5	GOLDEN PEACE DRILLING LTD.	1990-06-30	300.00	New Well- Decommissioned	Domestic		12		HAMMON, KEN	35.00	8.00	0.00
352430	NW	16	71	20	5	GOLDEN PEACE DRILLING LTD.	1990-07-02	110.00	New Well	Domestic		4		HAMMON, KEN	29.00	15.00	5.50
354136	NW	22	71	20	5	MOORE, DENNIS RAYMOND	1988-07-15	380.00	New Well	Domestic		12	24	PETERSON, ANTHONY	277.00	8.00	5.56
354707	SW	10	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1977-10-07	125.00	New Well	Domestic		3		KICENIUK, PETER	31.00	1.50	4.50
354708	SW	16	71	20	5	GOLDEN PEACE DRILLING LTD.	1988-03-29	320.00	New Well	Domestic		12		LAVENTURE, DENIS	206.00	14.00	5.50
357159	SE	2	71	19	5	UNKNOWN DRILLER		30.00	Chemistry	Domestic				SUNSET HOUSE GOLF & MARINA			0.00
357160	SE	20	71	20	5	UNKNOWN DRILLER		220.00	Chemistry	Domestic				SEWERYN, NICK			0.00
361870	SE	32	70	19	5	UNKNOWN DRILLER		0.00	Spring	Domestic				MCINNIS, RICHARD T			0.00
363773	SW	23	71	20	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic				MAJOR, SOPHIE			0.00
365807	SE	35	70	19	5	GOLDEN PEACE DRILLING LTD.	1989-08-16	360.00	New Well	Domestic & Stock		16		NORMAN, CARON	271.00	4.00	5.50
366493	SE	13	70	19	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				RYE, BRIAN			0.00
366642	NE	36	70	20	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				EAST SMOKY SCHOOL DIV			0.00
367924	4	18	70	18	5	UNKNOWN DRILLER	1951-11-23	1,027.00	Core Hole	Industrial				GULF OIL#SNIPE LK CH2			0.00
367926		18	70	18	5	UNKNOWN DRILLER	1952-01-17	860.00	Core Hole	Industrial				GULF OIL#SNIPE LK CH15			0.00
367928	4	19	70	18	5	UNKNOWN DRILLER		717.00	Core Hole	Industrial				GULF OIL#SNIPE LK CH25			0.00
367940		30	70	18	5	UNKNOWN DRILLER	1952-01-15	635.00	Core Hole	Industrial				GULF OIL#SNIPE LK CH16			0.00
372318	SW	10	71	20	5	UNKNOWN DRILLER		90.00	Chemistry	Domestic	<u>1</u>			KICENIUK, PETE	66.00		0.00
376319	12	22	71	20	5	WATER RESOURCES	1968-05-25	75.00	New Well	Domestic	<u>1</u>	7		PETERSON, TONY #441-H			0.00

Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
383110	NW	22	71	20	5	MOORE, DENNIS RAYMOND	1984-08-02	320.00	Deepened	Domestic		4		PETERSON, TONY	175.00	2.50	0.00
383112	NW	22	71	20	5	UNKNOWN DRILLER		225.00	Chemistry	Domestic	2			PETERSON, ANTHONY			0.00
383131		36	70	20	5	GOLDEN PEACE DRILLING LTD.	1983-08-09	380.00	New Well	Domestic	2	16		EAST SMOKY SCHOOL DIV	289.00	6.00	5.56
389023	NW	31	70	19	5	T-CAR HOLDINGS LTD.	1994-08-24	321.00	New Well	Domestic		13	25	GREENVIEW, MD OF 16	226.00	6.00	5.50
394225	4	19	70	19	5	WATER RESOURCES	1968-07-30	75.00	Test Hole	Investigation		7		ALTA ENV/WATER RES#439H			0.00
396126	NE	1	70	19	5	UNKNOWN DRILLER		52.00	Chemistry	Domestic				WASYLCIW, JOHN			0.00
396128	SH	4	70	19	5	ALBERTA ENVIRONMENT/EARTH SCIENCES DIVISION	1984-01-31	55.00	Test Hole	Investigation		4			12.70		2.00
396129	SH	7	70	19	5	UNKNOWN DRILLER		11.00	Chemistry	Domestic	1			MARIN, RON			0.00
396130	SW	13	70	19	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic	1			BROOKS, LLOYD			0.00
396131	6	13	70	19	5	UNKNOWN DRILLER	1968-08-11	150.00	Coal Test Hole	Investigation		13		RCA			0.00
396134	NW	13	70	19	5	UNKNOWN DRILLER		30.00	Chemistry	Domestic	1			BROOKS, GLEN	20.00		0.00
396137	13	13	70	19	5	UNKNOWN DRILLER	1981-01-26	50.00	Flowing Shot Hole	Industrial				NORTHERN GEOPH#SP245			0.00
396138	13	13	70	19	5	UNKNOWN DRILLER	1981-01-26	50.00	Flowing Shot Hole	Industrial				NORTHERN GEOPH#SP253			0.00
396139	NE	13	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1974-05-31	330.00	New Well	Domestic & Stock		13		BROOKS, GLEN	0.00	6.00	4.60
396140	16	14	70	19	5	UNKNOWN DRILLER	1981-01-26	50.00	Flowing Shot Hole	Industrial				NORTHERN GEOPH#SP257			0.00
396141	NW	17	70	19	5	MOORE, DENNIS RAYMOND	1988-07-12	587.00	New Well	Domestic & Stock		19	24	GRIFFIN, MARVIN	375.00	10.00	5.56
396142	SH	19	70	19	5	UNKNOWN DRILLER	1969-07-04	76.00	Test Hole	Domestic		3		VANSTONE, MARGARET			0.00
396145	NE	19	70	19	5	UNKNOWN DRILLER	1968-07-12	210.00	Coal Test Hole	Investigation		13		RCA			0.00
396147	SE	20	70	19	5	UNKNOWN DRILLER	1972-02-18	0.00	Spring	Domestic & Stock	3			DEBRE, HENRY			0.00
396149	NE	22	70	19	5	UNKNOWN DRILLER	1968-08-13	30.00	Coal Test Hole	Investigation		2		RCA			0.00



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396151	14	23	70	19	5	MID-WEST WATER WELLS LTD.	1985-09-29	160.00	New Well	Industrial		7		KENTING DRLG 10	90.00	50.00	5.50
396155	14	23	70	19	5	MID-WEST WATER WELLS LTD.	1985-03-29	155.00	New Well	Industrial		7		KENTING DRLG 10	92.00	20.00	5.50
396158	2	26	70	19	5	UNKNOWN DRILLER		0.00	Flowing Shot Hole	Industrial				#SP46-11881			0.00
396160	NE	27	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1976-10-05	117.00	New Well	Domestic & Stock	<u>1</u>	5		WHITING, JAMES	90.00	10.00	4.60
396169	NE	27	70	19	5	UNKNOWN DRILLER		80.00	Chemistry	Domestic	<u>1</u>			WHITING, JAMES	50.00		0.00
396172	NW	29	70	19	5	GOLDEN PEACE DRILLING LTD.	1988-06-01	500.00	New Well	Domestic & Stock		23		RADFORD, ED	398.00	30.00	5.50
396180	4	31	70	19	5	L M WW LTD	1974-08-22	440.00	New Well	Industrial		13		GARNETT DRLG RIG 3	240.00	10.00	5.50
396187	NW	31	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1981-01-15	220.00	New Well	Unknown		7		SUNSET HOUSE COMMUNITY	160.00	3.00	5.50
396192	NE	31	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1973-10-25	315.00	New Well	Unknown	<u>1</u>	8		MUZYCHYN, NICK	231.00	3.00	0.00
396195	NW	32	70	19	5	UNKNOWN DRILLER		40.00	Chemistry	Domestic	<u>1</u>			HUGGARD, NORA			0.00
396196	NW	32	70	19	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				MAY, RODNEY			0.00
396197	NE	32	70	19	5	UNKNOWN DRILLER	1968-08-09	150.00	Coal Test Hole	Investigation		9		RCA			0.00
396199	NW	34	70	19	5	UNKNOWN DRILLER		120.00	Chemistry	Domestic	<u>2</u>			DEAN, JAMES	85.00		0.00
396200	NE	34	70	19	5	UNKNOWN DRILLER	1968-08-10	150.00	Coal Test Hole	Investigation		12		RCA			0.00
396202	NE	34	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1972-08-21	90.00	New Well	Unknown	<u>2</u>	4		COOGAN, DAVID	64.00	6.00	0.00
396204	SW	35	70	19	5	UNKNOWN DRILLER		40.00	Chemistry	Domestic	<u>2</u>			WASYLCIW, JOHN	22.00		0.00
396206	NE	12	70	20	5	UNKNOWN DRILLER	1968-07-21	180.00	Coal Test Hole	Investigation		6		RCA			0.00
396208	SE	13	70	20	5	J&L OIL SALES	1975-10-28	75.00	Dry Hole	Domestic		1		MORIN, RON			0.00
396209	SE	13	70	20	5	UNKNOWN DRILLER		16.00	Chemistry	Domestic	<u>1</u>			MARIN, ALFRED			0.00
396210	1	13	70	20	5	ALBERTA ENVIRONMENT/EARTH SCIENCES DIVISION	1968-07-30	75.00	New Well	Investigation		4					0.00



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396211	7	13	70	20	5	L M WW LTD	1972-10-27	420.00	New Well	Industrial	<u>1</u>	7		UNOTEX PETRO CORP	175.00	30.00	5.00
396211	7	13	70	20	5	L M WW LTD	1972-10-27	420.00	New Well	Industrial	<u>1</u>	7	34	UNOTEX PETRO CORP	162.30	30.00	5.00
396217	NE	19	70	20	5	UNKNOWN DRILLER	1968-07-12	150.00	Coal Test Hole	Investigation		3		RCA			0.00
396218	NE	21	70	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		4		RCA			0.00
396219	NE	23	70	20	5	UNKNOWN DRILLER	1968-07-12	180.00	Coal Test Hole	Investigation		4		RCA			0.00
396220	SE	25	70	20	5	MOORE, DENNIS RAYMOND	1988-07-08	365.00	New Well	Domestic & Stock		11	24	HUBAR, ALVIN	240.00	10.00	5.56
396256	SW	29	70	20	5	GOLDEN PEACE DRILLING LTD.	1989-03-07	500.00	New Well	Domestic & Stock		25		HANSEN, MARYJO/ROD	132.00	60.00	5.50
396261	SW	30	70	20	5	MOORE, DENNIS RAYMOND	1981-11-26	240.00	New Well	Domestic		5		BERENT, ART	110.00	3.00	4.60
396264	NE	32	70	20	5	GOLDEN PEACE DRILLING LTD.	1988-07-14	420.00	New Well	Domestic		12		KLIMP, W.ROD	186.00	50.00	5.50
396322	SW	34	70	20	5	SAVILLE WATER WELL DRILLING LTD.	1988-12-09	300.00	New Well	Domestic & Stock		9	20	CHATEAUNEUF, ARTHUR	175.00	8.00	5.50
396328	NW	34	70	20	5	GOLDEN PEACE DRILLING LTD.	1987-06-09	260.00	New Well	Domestic & Stock		9		BLISS, VENETA	150.00	8.00	5.50
396332	NE	34	70	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		4		RCA			0.00
396334	NE	34	70	20	5	HOPPER WATER WELL DRILLING LTD.	1988-10-21	380.00	New Well	Domestic & Stock		7		BLESS, LAWERENCE	197.00	4.00	5.50
396336	NE	36	70	20	5	UNKNOWN DRILLER	1968-07-12	180.00	Coal Test Hole	Investigation		13		RCA			0.00
396570	SW	17	71	18	5	UNKNOWN DRILLER		64.00	Chemistry	Industrial	<u>1</u>			IMPERIAL OIL ENT LTD	16.00		0.00
396572	NE	19	71	18	5	UNKNOWN DRILLER	1968-08-12	150.00	Coal Test Hole	Investigation		3		RCA# COAL SURVEY			0.00
396589	SW	2	71	19	5	UNKNOWN DRILLER		46.00	Chemistry	Domestic	<u>2</u>			FENTON, WILLIAM R.	12.00		0.00
396594	SW	2	71	19	5	GOLDEN PEACE DRILLING LTD.	1989-09-02	305.00	New Well	Domestic		17		COOGAN, DAVID	230.00	12.00	5.50
396596	SW	5	71	19	5	UNKNOWN DRILLER		90.00	Chemistry	Domestic	<u>1</u>			SUNSET HOUSE GENERAL STORE	80.00		0.00
396598	NW	5	71	19	5	UNKNOWN DRILLER	1946-09-01	100.00	Well Inventory	Domestic		1		PROCCOPIUK			0.00



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396600	NW	5	71	19	5	UNKNOWN DRILLER		80.00	Chemistry	Domestic	<u>1</u>			BUDS GENERAL STORE	20.00		0.00
396602	SE	6	71	19	5	MOORE, DENNIS RAYMOND	1988-07-18	478.00	New Well	Domestic		10	24	DANYLIUK, STEVE	305.00	10.00	5.56
396604	NH	7	71	19	5	UNKNOWN DRILLER		12.00	Chemistry	Domestic	<u>1</u>			MALIN, R.	7.00		0.00
396606	SW	8	71	19	5	UNKNOWN DRILLER		14.00	Chemistry	Domestic	<u>2</u>			HANSON, DENNIS	3.00		0.00
396608	NW	8	71	19	5	J&L OIL SALES	1975-10-29	90.00	Dry Hole	Domestic		1		DESCHENEUX, BILLY			0.00
396610	13	17	71	19	5	RAPID WATER DRLG	1979-10-12	280.00	New Well	Domestic	<u>1</u>	18		RIBAR, STEVE	242.00	2.00	4.60
396612	1	18	71	19	5	J&L OIL SALES	1975-10-29	20.00	New Well- Decommissioned	Domestic		1		BROWN, GERRY			0.00
396613	NE	18	71	19	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic	<u>1</u>			EDGINTON, G.			0.00
396614	SE	19	71	19	5	UNKNOWN DRILLER		18.00	Chemistry	Domestic	<u>1</u>			BROWN, PAULINE	10.00		0.00
396615	SE	19	71	19	5	SAVILLE WATER WELL DRILLING LTD.	1980-06-14	300.00	New Well	Domestic & Stock	<u>1</u>	6		BROWN, JERRY	220.00	5.00	5.60
396616	NE	19	71	19	5	UNKNOWN DRILLER	1968-07-17	150.00	Coal Test Hole	Investigation		3		RCA# COAL SURVEY			0.00
396617	1	20	71	19	5	SAVILLE WATER WELL DRILLING LTD.	1986-06-13	400.00	New Well	Domestic & Stock	<u>1</u>	15		HUBER, ALBERT	296.00	15.00	5.50
396619	SW	25	71	19	5	SAVILLE & TROTTLER	1969-12-09	288.00	New Well	Unknown		6		HALBERSON, RALPH	190.00	5.00	0.00
396621	SE	30	71	19	5	UNKNOWN DRILLER		192.00	Chemistry	Domestic	<u>2</u>			KIRICHUK, G.	30.00		0.00
396622	SE	30	71	19	5	SAVILLE WATER WELL DRILLING LTD.	1989-08-04	420.00	New Well	Domestic & Stock		13		KIRICHUK, GEORGE	290.00	15.00	5.56
396629	NE	2	71	20	5	MOORE, DENNIS RAYMOND	1986-03-03	340.00	New Well	Domestic & Stock	<u>1</u>	5	28	TORSTENSEN, CONRAD	249.00	10.00	5.56
396652	13	3	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1981-09-30	265.00	New Well	Domestic & Stock	<u>1</u>	9		SERVERYN, STEVE	203.00	7.00	5.50
396654	NE	4	71	20	5	WATER RESOURCES	1970-08-07	245.00	New Well	Unknown		9		ALTA ENV #0515E DANULIUK, D.			0.00
396661	NE	8	71	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		3		RCA# COAL SURVEY			0.00
396663	NE	8	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1988-11-12	280.00	New Well	Domestic & Stock		13		KICENIUK, MIKE	190.00	15.00	5.50



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396665	NE	10	71	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		9		RCA# COAL SURVEY			0.00
396667	NE	12	71	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		11		RCA# COAL SURVEY			0.00
396669	13	14	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1979-12-07	240.00	New Well	Domestic & Stock		9		PETRYSHEN, KAVIN	170.00	2.00	4.60
396671	4	15	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1980-05-08	260.00	New Well	Domestic & Stock	<u>1</u>	16		KLIMP, MARY A.	200.00	7.00	5.50
396671	4	15	71	20	5	BRAD SAVILLE ENTERPRISES LTD.	2011-10-19	280.00	Deepened	Domestic & Stock		3	14	KLIMP, BARRY	217.00	6.00	
396672	SW	15	71	20	5	UNKNOWN DRILLER		165.00	Chemistry	Domestic	<u>1</u>			KLIMP, MARVIN	145.00		0.00
396674	1	16	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1985-08-06	260.00	New Well	Domestic & Stock		14		HAMMAN, ROBERT	180.00	8.00	5.50
396676	SE	16	71	20	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic	<u>1</u>			HAMMON			0.00
396677	16	16	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1981-07-09	380.00	New Well	Domestic & Stock	<u>1</u>	14		PETRYSHEN, EMIL	290.00	4.00	5.50
396683	SE	20	71	20	5	UNKNOWN DRILLER		180.00	Chemistry	Domestic	<u>1</u>			SEWERYN, NICK			0.00
396689	16	21	71	20	5	WATER RESOURCES	1968-07-31	75.00	Test Hole	Investigation		7		PETERSEN, TONY			0.00
396690	NE	21	71	20	5	UNKNOWN DRILLER	1968-07-13	165.00	Coal Test Hole	Investigation		11		RCA# COAL SURVEY			0.00
396693	SE	22	71	20	5	UNKNOWN DRILLER		150.00	Chemistry	Domestic	<u>1</u>			CARSON, M.	35.00		0.00
396694	SE	22	71	20	5	UNKNOWN DRILLER		141.00	Chemistry	Domestic	<u>1</u>			BELANGER, DARREL	111.50		0.00
396695	NW	22	71	20	5	UNKNOWN DRILLER		210.00	Chemistry	Domestic	<u>1</u>			PETERSEN, TONY	40.00		0.00
396698	NW	22	71	20	5	UNKNOWN DRILLER		16.00	Chemistry	Domestic	<u>1</u>			PETERSEN, ANTHONY	10.00		0.00
396699	4	23	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1975-09-18	180.00	New Well	Unknown	<u>1</u>	4		HODGSON, A.	150.00	2.00	4.60
396702	4	23	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1987-08-26	200.00	New Well	Domestic & Stock		12		HODGSON, ALVAH	121.00	5.00	5.50
396703	NE	23	71	20	5	UNKNOWN DRILLER	1968-07-15	180.00	Coal Test Hole	Investigation		10		RCA# COAL SURVEY			0.00
396705	1	25	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1986-03-11	300.00	New Well	Domestic & Stock		13		DIXON, ROBERT	217.00	15.00	5.50



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396706	SE	27	71	20	5	UNKNOWN DRILLER		150.00	Chemistry	Domestic	3			KLASSEN, NORMAN	50.00		0.00
401670	NE	36	70	20	5	WATER RESOURCES	1970-08-06	200.00	Dry Hole	Unknown		10		ALTA ENV #0514E			0.00
401672	SE	6	71	19	5	WATER RESOURCES	1970-08-06	275.00	Test Hole	Investigation		13		ALTA ENV #0513E	187.00	5.00	0.00
415982	NW	20	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1995-08-23	620.00	New Well	Domestic		18	19	HANSEN, KELLY	429.00	10.00	5.56
442569	4	18	70	18	5	UNKNOWN DRILLER	1951-11-23	1,027.00	Core Hole	Industrial				CANADIAN GULF OIL CO			0.00
466860	SW	19	70	19	5	SAVILLE DRILLING LTD.	1996-09-19	360.00	New Well	Domestic		11	19	SHEANE, TERRY	174.00	25.00	5.56
468709	SE	27	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1997-08-18	166.00	New Well	Domestic		6	17	KLASSEN, JOAN	89.00	6.00	5.56
490805	SE	22	71	20	5	SAVILLE DRILLING LTD.	1997-10-15	160.00	New Well	Domestic		6	16	BIEGANEK, DARREL	123.00	3.00	5.56
492607	15	18	70	19	5	KRAMPS, JEROME A.	1998-07-27	453.00	New Well	Domestic		13	8	BROWN, CLIFFORD & VIVIAN	250.00	18.00	5.56
492607	15	18	70	19	5	GOLDEN PEACE DRILLING LTD.			Existing Well- Decommissioned	Unknown				BROWN, CLIFFORD & VIVIAN			
492615	NW	22	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1998-10-21	400.00	New Well	Domestic & Stock		13	11	PETERSON, TONY	285.00	15.00	5.50
492616	NE	23	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1998-09-12	95.00	New Well	Domestic		4	6	SNIDER, ANDY	60.00	10.00	5.56
493256	NW	33	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1999-06-24	420.00	New Well	Domestic & Stock		14	21	LEWCHUK, WILLIAM	220.00	13.00	5.50
496037	SW	13	70	19	5	ALKEN BASIN DRILLING LTD.	2000-02-08	380.00	New Well	Domestic		13	20	ARNOLD, LARRY	193.00	20.00	5.50
496528	NW	23	70	19	5	ALKEN BASIN DRILLING LTD.	2000-06-22	100.00	New Well	Domestic		6	7	ARNOLD, LARRY	50.00	25.00	5.50
497295	SE	9	71	20	5	SAVILLE DRILLING LTD.	2000-08-17	210.00	New Well	Domestic & Stock		8	11	BERRY, DAVE	113.00	25.00	5.50
1415006	NW	32	70	19	5	KRAMPS, DARCY	2002-09-12	378.00	New Well	Domestic		14	15	MCINNIS, RICHARD	210.00	10.00	6.00
1665763	4	5	71	19	5	SAVILLE DRILLING LTD.	2007-08-09	440.00	New Well	Domestic		14	20	GOLANY, GARY	202.00	10.00	5.56
1665857	13	17	71	19	5	SAVILLE DRILLING LTD.	2008-09-10	350.00	New Well	Domestic		6	25	JOHNSTON, PENNY	241.00		5.56
1716259	SE	2	71	19	5	SUMMERS DRILLING LTD.	2015-10-23	292.00	New Well	Commercial		46	26	WILLISCROFT BROS. CONST.	162.69	6.30	6.00



Reconnaissance Report

[View in Metric](#)

[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
1716260	SE	2	71	19	5	SUMMERS DRILLING LTD.	2015-10-23	173.00	New Well	Commercial		19	25	WILLISCROFT BROS CONST.	52.11	6.00	6.00
1877504	13	11	71	20	5	GOLDEN PEACE DRILLING LTD.	2006-08-07	300.00	New Well	Domestic		8	25	WERKLUND, KURTIS	190.00	5.00	6.63
1877505	13	11	71	20	5	GOLDEN PEACE DRILLING LTD.	2006-12-02	420.00	New Well- Decommissioned	Domestic		8	19	WERKLUND, KURTIS	330.00	3.50	6.63
1877516	15	18	70	19	5	GOLDEN PEACE DRILLING LTD.	2004-06-30	460.00	New Well	Domestic		9	13	BROWN, CLIFFORD AND VIVIAN	250.00		5.56
2094240	SE	20	71	19	5	UNKNOWNDRILLINGCOMP11	1973-06-30	60.00	Well Inventory	Domestic & Stock		1		HUBER, ALBERT	14.00		
9486009	8	4	71	20	5	BRAD SAVILLE ENTERPRISES LTD.	2010-06-10	315.00	New Well	Domestic		7	16	BELCOURT, JOHN	205.00	10.00	5.56
9486164	4	15	71	20	5	BRAD SAVILLE ENTERPRISES LTD.	2012-09-20	460.00	New Well	Domestic & Stock		15	18	KLIMP, BARRY	348.00	4.00	5.56
9486216	NE	36	70	20	5	BRAD SAVILLE ENTERPRISES LTD.	2013-11-08	360.00	New Well	Municipal		16	26	MD OF GREENVIEW	279.62	6.00	5.56
9486308	16	7	71	19	5	BRAD SAVILLE ENTERPRISES LTD.	2016-08-18	346.00	New Well	Domestic & Stock		15	14	ROBERT L ROHLOFF	278.00	7.00	5.56
9486345	4	1	71	19	5	BRAD SAVILLE ENTERPRISES LTD.	2018-06-18	80.00	New Well	Domestic & Stock		8	15	WHITING, JAMES	36.00	4.00	5.56
9491063	3	25	71	20	5	SAVILLE DRILLING SERVICES LTD.	2011-09-21	388.00	New Well	Domestic		19	15	PLANTE, RENE	224.10	50.00	5.56
9491127	9	35	70	19	5	SAVILLE DRILLING SERVICES LTD.	2013-08-11	250.00	New Well	Domestic		35	18	CARTER, KEN	140.70	25.00	5.56
9641005	4	36	70	19	5	FULL METAL DRILLING INC	2013-05-18	280.00	New Well	Domestic		10	21	OUIMET, KARLE	93.00	10.00	5.56

APPENDIX B – WATER WELL DRILLING REPORT

FOR INFORMATION PURPOSE ONLY

\\ae.ca\data\working\edm\2021-3024-001_dcc_prod\yrf_sunset_wtp_option.docx





Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 9486216
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2014/05/15

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name MD OF GREENVIEW		Address 4802 - 36 AVENUE		Town VALLEYVIEW		Province ALBERTA		Country CANADA	Postal Code T0H 3N0		
Location	1/4 or LSD NE	SEC 36	TWP 70	RGE 20	W of MER 5	Lot	Block	Plan	Additional Description		
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>55.108030</u> Longitude <u>-116.902490</u>					Elevation <u>749.81 m</u>	
_____ m from _____					How Location Obtained Hand held autonomous GPS 20-30m					How Elevation Obtained Hand held autonomous GPS 20-30m	

Drilling Information	
Method of Drilling Rotary - Air	Type of Work New Well
Proposed Well Use Municipal	

Formation Log			Measurement in Metric	
Depth from ground level (m)	Water Bearing	Lithology Description		
5.49		Clay		
18.29		Gray Clay		
18.59		Gravel		
23.77	Yes	Gray Coarse Grained Sandstone		
33.53		Gray Shale		
35.66		Gray Coarse Grained Sandstone		
39.62		Dark Gray Shale		
46.63	Yes	Gray Coarse Grained Sandstone		
54.86		Gray Shale		
56.39		Dark Gray Shale		
57.00	Yes	Fractured Shale		
59.44		Gray Shale		
66.45	Yes	Gray Coarse Grained Sandstone		
103.02		Gray Shale		
109.12	Yes	Dark Gray Coarse Grained Sandstone		
109.73		Dark Gray Shale & Coal		

Yield Test Summary			Measurement in Metric	
Recommended Pump Rate <u>27.28 L/min</u>				
Test Date	Water Removal Rate (L/min)	Static Water Level (m)		
2013/11/09	27.28	85.23		

Well Completion				Measurement in Metric	
Total Depth Drilled	Finished Well Depth	Start Date	End Date		
109.73 m	109.73 m	2013/11/08	2013/11/08		
Borehole					
Diameter (cm)	From (m)	To (m)			
19.99	0.00	100.58			
12.70	100.58	109.73			
Surface Casing (if applicable)			Well Casing/Liner		
Steel			Plastic		
Size OD :		<u>14.12 cm</u>	Size OD :		<u>11.43 cm</u>
Wall Thickness :		<u>0.655 cm</u>	Wall Thickness :		<u>0.544 cm</u>
Bottom at :		<u>102.72 m</u>	Top at :		<u>6.10 m</u>
			Bottom at :		<u>109.73 m</u>
Perforations					
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)	
103.63	109.73	0.051	7.62		
Perforated by Machine					
Annular Seal Bentonite Chips/Tablets					
Placed from		<u>0.00 m</u>	to		<u>100.58 m</u>
Amount		<u>40.00 Bags</u>			
Other Seals					
Type			At (m)		
Drive Shoe			102.72		
Screen Type					
Size OD :		<u>cm</u>			
From (m)	To (m)	Slot Size (cm)			
Attachment _____					
Top Fittings _____		Bottom Fittings _____			
Pack					
Type _____		Grain Size _____			
Amount _____					

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well CHASE SAVILLE	Certification No 75496A
Company Name BRAD SAVILLE ENTERPRISES LTD.	Copy of Well report provided to owner Date approval holder signed Yes 2013/11/09



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 9486216
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2014/05/15

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric			
Owner Name		Address			Town		Province		Country		Postal Code		
MD OF GREENVIEW		4802 - 36 AVENUE			VALLEYVIEW		ALBERTA		CANADA		T0H 3N0		
Location		1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description			
		NE	36	70	20	5							
Measured from Boundary of						GPS Coordinates in Decimal Degrees (NAD 83)							
_____ m from						Latitude 55.108030 Longitude -116.902490						Elevation 749.81 m	
_____ m from						How Location Obtained						How Elevation Obtained	
						Hand held autonomous GPS 20-30m						Hand held autonomous GPS 20-30m	

Additional Information										Measurement in Metric	
Distance From Top of Casing to Ground Level										91.44 cm	
Is Artesian Flow										Is Flow Control Installed	
Rate _____ L/min										Describe _____	
Recommended Pump Rate										27.28 L/min	
Recommended Pump Intake Depth (From TOC)										103.02 m	
Pump Installed										Depth _____ m	
Type _____										Make _____ H.P. _____	
										Model (Output Rating) _____	
Did you Encounter Saline Water (>4000 ppm TDS)										Depth _____ m	
Gas _____										Depth _____ m	
										Well Disinfected Upon Completion Yes	
										Geophysical Log Taken _____	
										Submitted to ESRD _____	
										Sample Collected for Potability _____	
										Submitted to ESRD _____	
Additional Comments on Well											

Yield Test			Taken From Top of Casing		Measurement in Metric	
			Depth to water level			
Test Date	Start Time	Static Water Level				
2013/11/09	8:20 AM	85.23 m				
			Pumping (m)	Elapsed Time	Recovery (m)	
				Minutes:Sec		
Method of Water Removal			69.99	0:00	95.70	
Type Pump			86.87	1:00	94.79	
Removal Rate 27.28 L/min			88.42	2:00	92.96	
Depth Withdrawn From 103.02 m			89.49	3:00	91.65	
			90.28	4:00	90.62	
			90.95	5:00	89.79	
			91.50	6:00	89.12	
			91.78	7:00	88.61	
			91.99	8:00	88.21	
			92.14	9:00	87.87	
			92.23	10:00	87.63	
			92.45	12:00	87.26	
			92.60	14:00	87.02	
			92.75	16:00	86.84	
			92.87	18:00	86.72	
			92.99	20:00	86.62	
			93.27	25:00	86.50	
			93.48	30:00	86.41	
			93.73	35:00	86.35	
			93.91	40:00	86.29	
			94.34	50:00	86.20	
			94.67	60:00	86.14	
			95.07	75:00	86.08	
			95.31	90:00	85.98	
			95.59	105:00	85.92	
			95.70	120:00	85.65	

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
WELL	9092.18 L	2013/11/08 5:00 AM

Contractor Certification			
Name of Journeyman responsible for drilling/construction of well		Certification No	
CHASE SAVILLE		75496A	
Company Name		Copy of Well report provided to owner	Date approval holder signed
BRAD SAVILLE ENTERPRISES LTD.		Yes	2013/11/09



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396172
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/06/09

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name RADFORD, ED		Address P.O. BOX 1056 VALLEYVIEW		Town		Province		Country	Postal Code	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description	
	NW	29	70	19	5					
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)					
_____ m from _____					Latitude <u>55.094142</u> Longitude <u>-116.867517</u>			Elevation _____ m		
_____ m from _____					How Location Obtained			How Elevation Obtained		
					Map			Not Obtained		

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic & Stock	

Formation Log			Measurement in Metric
Depth from ground level (m)	Water Bearing	Lithology Description	
11.58		Till	
16.76		Shale	
17.07		Coal	
21.34		Shale	
21.64		Coal	
32.00		Shale	
32.31		Coal	
43.59		Shale	
44.81		Gray Sandstone	
53.95		Shale	
58.83		Gray Sandstone	
64.01		Shale	
66.45		Gray Sandstone	
102.11		Shale	
103.94		Gray Sandstone	
119.79		Shale	
121.01		Gray Sandstone	
123.44		Shale	
125.58		Gray Sandstone	
129.54		Shale	
131.98		Gray Sandstone	
138.68		Shale	
152.40		Gray Sandstone	

Yield Test Summary			Measurement in Metric
Recommended Pump Rate <u>27.28 L/min</u>			
Test Date	Water Removal Rate (L/min)	Static Water Level (m)	
1988/06/01	136.38	121.31	

Well Completion				Measurement in Metric
Total Depth Drilled	Finished Well Depth	Start Date	End Date	
152.40 m		1988/05/31	1988/06/01	
Borehole				
Diameter (cm)	From (m)	To (m)		
0.00	0.00	152.40		
Surface Casing (if applicable)		Well Casing/Liner		
Steel		Steel		
Size OD : <u>13.97 cm</u>		Size OD : <u>11.68 cm</u>		
Wall Thickness : <u>0.620 cm</u>		Wall Thickness : <u>0.396 cm</u>		
Bottom at : <u>140.21 m</u>		Top at : <u>139.60 m</u>		
		Bottom at : <u>152.40 m</u>		
Perforations				
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)
141.43	150.88	1.270		20.32
Perforated by Torch				
Annular Seal Driven				
Placed from <u>0.61 m</u> to <u>0.00 m</u>				
Amount _____				
Other Seals				
Type		At (m)		
Screen Type				
Size OD : <u>0.00 cm</u>				
From (m)	To (m)	Slot Size (cm)		
Attachment _____				
Top Fittings _____		Bottom Fittings _____		
Pack				
Type _____		Grain Size _____		
Amount _____				

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name GOLDEN PEACE DRILLING LTD.	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396172
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/06/09

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name		Address		Town		Province		Country		Postal Code
RADFORD, ED		P.O. BOX 1056 VALLEYVIEW								
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description	
NW		29	70	19	5					
Measured from Boundary of				GPS Coordinates in Decimal Degrees (NAD 83)				Elevation		
_____ m from				Latitude 55.094142 Longitude -116.867517				_____ m		
_____ m from				How Location Obtained				How Elevation Obtained		
				Map				Not Obtained		

Additional Information										Measurement in Metric
Distance From Top of Casing to Ground Level _____ cm										
Is Artesian Flow _____										
Rate _____ L/min										
Is Flow Control Installed _____										
Describe _____										
Recommended Pump Rate		27.28 L/min		Pump Installed		Depth		m		
Recommended Pump Intake Depth (From TOC)		137.16 m		Type		Make		H.P.		
								Model (Output Rating)		
Did you Encounter Saline Water (>4000 ppm TDS)		_____		Depth		m		Well Disinfected Upon Completion		
Gas		_____		Depth		m		Geophysical Log Taken		
								Submitted to ESRD		
								Sample Collected for Potability		
								Submitted to ESRD		
Additional Comments on Well										

Yield Test			Taken From Ground Level	Measurement in Metric
			Depth to water level	
Test Date	Start Time	Static Water Level	Pumping (m)	Elapsed Time
1988/06/01	12:00 AM	121.31 m		Minutes:Sec
				Recovery (m)
Method of Water Removal				
Type Air				
Removal Rate		136.38 L/min		
Depth Withdrawn From		152.40 m		
If water removal period was < 2 hours, explain why				

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well	Certification No
UNKNOWN NA DRILLER	1
Company Name	Copy of Well report provided to owner
GOLDEN PEACE DRILLING LTD.	Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396220
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/08/22

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name HUBAR, ALVIN		Address P.O. BOX 22		Town SUNSET HOUSE		Province AB		Country CA	Postal Code	
Location	1/4 or LSD SE	SEC 25	TWP 70	RGE 20	W of MER 5	Lot	Block	Plan	Additional Description	
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)					
_____ m from _____					Latitude <u>55.086867</u> Longitude <u>-116.905840</u>			Elevation _____ m		
_____ m from _____					How Location Obtained			How Elevation Obtained		
					Map			Not Obtained		

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic & Stock	

Formation Log			Measurement in Metric
Depth from ground level (m)	Water Bearing	Lithology Description	
21.34		Till	
35.05		Brown Shale	
41.45		Green Shale	
50.29		Brown Shale	
52.12		Green Shale	
64.01		Brown Shale	
79.25		Green Shale	
86.87		Gray Shale	
96.01		Brown Shale	
99.06		Gray Shale	
111.25		Sandstone	

Yield Test Summary			Measurement in Metric
Recommended Pump Rate			45.46 L/min
Test Date	Water Removal Rate (L/min)	Static Water Level (m)	
1988/07/08	45.46	73.15	

Well Completion			Measurement in Metric
Total Depth Drilled	Finished Well Depth	Start Date	End Date
111.25 m		1988/07/08	1988/07/08
Borehole			
Diameter (cm)	From (m)	To (m)	
0.00	0.00	111.25	
Surface Casing (if applicable)		Well Casing/Liner	
Steel		Steel	
Size OD :	14.12 cm	Size OD :	
Wall Thickness :	0.478 cm	Wall Thickness :	
Bottom at :	36.58 m	Top at :	
		Bottom at :	
Perforations			
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)
97.54	111.25	0.318	20.32
Perforated by Torch			
Annular Seal Driven			
Placed from 0.00 m to 0.00 m			
Amount			
Other Seals			
Type		At (m)	
Screen Type			
Size OD : 0.00 cm			
From (m)	To (m)	Slot Size (cm)	
Attachment			
Top Fittings		Bottom Fittings	
Pack			
Type	Unknown	Grain Size	
Amount	Unknown		

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name MOORE, DENNIS RAYMOND	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396602
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/08/22

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name DANYLIUK, STEVE		Address P.O. BOX 70 SUNSET HOUSE			Town		Province		Country	Postal Code	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	SE	6	71	19	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>55.116521</u> Longitude <u>-116.905230</u>					Elevation _____ m	
_____ m from _____					How Location Obtained					How Elevation Obtained	
					Map					Estimated	

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic	

Formation Log			Measurement in Metric	
Depth from ground level (m)	Water Bearing	Lithology Description		
45.72		Shaly Till & Rocks		
54.86		Green Shale		
79.25		Gray Shale		
85.34		Sandstone		
92.66		Brown Shale		
99.06		Green Shale		
109.73		Gray Shale		
117.35		Brown Shale		
131.06		Gray Shale		
145.69		Sandstone		

Yield Test Summary			Measurement in Metric	
Recommended Pump Rate <u>45.46 L/min</u>				
Test Date	Water Removal Rate (L/min)	Static Water Level (m)		
1988/07/18	45.46	92.96		

Well Completion				Measurement in Metric	
Total Depth Drilled	Finished Well Depth	Start Date	End Date		
145.69 m		1988/07/16	1988/07/18		
Borehole					
Diameter (cm)	From (m)	To (m)			
0.00	0.00	145.69			
Surface Casing (if applicable)			Well Casing/Liner		
Steel			Steel		
Size OD : <u>14.12 cm</u>			Size OD : <u>11.68 cm</u>		
Wall Thickness : <u>0.478 cm</u>			Wall Thickness : <u>0.396 cm</u>		
Bottom at : <u>51.21 m</u>			Top at : <u>49.68 m</u>		
			Bottom at : <u>145.69 m</u>		
Perforations					
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)	
131.06	145.69	0.318		20.32	
Perforated by Torch					
Annular Seal Driven					
Placed from <u>50.90 m</u> to <u>51.21 m</u>					
Amount _____					
Other Seals					
Type				At (m)	
Screen Type					
Size OD : <u>0.00 cm</u>					
From (m)		To (m)		Slot Size (cm)	
Attachment _____					
Top Fittings _____			Bottom Fittings _____		
Pack					
Type _____			Grain Size _____		
Amount _____					

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name MOORE, DENNIS RAYMOND	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396602
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/08/22

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name		Address		Town		Province		Country		Postal Code	
DANYLIUK, STEVE		P.O. BOX 70 SUNSET HOUSE									
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	SE	6	71	19	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from					Latitude 55.116521 Longitude -116.905230					Elevation _____ m	
_____ m from					How Location Obtained					How Elevation Obtained	
					Map					Estimated	

Additional Information										Measurement in Metric	
Distance From Top of Casing to Ground Level _____ cm											
Is Artesian Flow _____											
Rate _____ L/min											
Is Flow Control Installed _____											
Describe _____											
Recommended Pump Rate					45.46 L/min					Pump Installed _____	Depth _____ m
Recommended Pump Intake Depth (From TOC)					121.92 m					Type _____	Make _____ H.P. _____
										Model (Output Rating) _____	
Did you Encounter Saline Water (>4000 ppm TDS) _____					Depth _____ m					Well Disinfected Upon Completion _____	
Gas _____					Depth _____ m					Geophysical Log Taken _____	
										Submitted to ESRD _____	
					Sample Collected for Potability _____					Submitted to ESRD _____	
Additional Comments on Well											

Yield Test			Taken From Ground Level	Measurement in Metric
			Depth to water level	
Test Date	Start Time	Static Water Level		
1988/07/18	12:00 AM	92.96 m		
Method of Water Removal			Pumping (m)	Elapsed Time Minutes:Sec
Type Air				
Removal Rate 45.46 L/min				
Depth Withdrawn From 121.92 m				
If water removal period was < 2 hours, explain why				
				Recovery (m)
				0:00 121.92
				0:30 119.63
				1:00 117.35
				1:30 115.06
				2:00 112.78
				3:00 108.20
				4:00 104.55
				5:00 101.47
				6:00 99.61
				7:00 98.39
				8:00 97.44
				9:00 96.83
				10:00 96.23
				12:00 95.31
				14:00 94.67
				16:00 94.37
				18:00 94.12
				20:00 93.88
				25:00 93.51
				30:00 93.33
				35:00 93.27
				40:00 93.21
				50:00 93.12
				60:00 93.06

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well	Certification No
UNKNOWN NA DRILLER	1
Company Name	Copy of Well report provided to owner Date approval holder signed
MOORE, DENNIS RAYMOND	



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396629
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1986/05/16

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name TORSTENSEN, CONRAD		Address GEN DEL, SUNSET HOUSE		Town		Province		Country		Postal Code	
Location	1/4 or LSD NE	SEC 2	TWP 71	RGE 20	W of MER 5	Lot	Block	Plan	Additional Description		
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>55.123743</u> Longitude <u>-116.956575</u>					Elevation _____ m	
_____ m from _____					How Location Obtained					How Elevation Obtained	
					Map					Not Obtained	

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic & Stock	

Formation Log			Measurement in Metric	
Depth from ground level (m)	Water Bearing	Lithology Description		
73.15		Till		
76.50		Green Shale		
80.77		Brown Shale		
89.92		Gray Shale		
103.63		Sandstone		

Yield Test Summary			Measurement in Metric	
Recommended Pump Rate <u>45.46</u> L/min				
Test Date	Water Removal Rate (L/min)	Static Water Level (m)		
1986/03/03	45.46	75.90		

Well Completion				Measurement in Metric	
Total Depth Drilled	Finished Well Depth	Start Date	End Date		
103.63 m		1986/03/02	1986/03/03		
Borehole					
Diameter (cm)	From (m)	To (m)			
0.00	0.00	103.63			
Surface Casing (if applicable)			Well Casing/Liner		
Steel			Steel		
Size OD :	<u>14.12</u> cm		Size OD :		<u>11.68</u> cm
Wall Thickness :	<u>0.478</u> cm		Wall Thickness :		<u>0.391</u> cm
Bottom at :	<u>75.29</u> m		Top at :		<u>73.15</u> m
			Bottom at : <u>103.63</u> m		
Perforations					
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)	
91.44	103.63	0.318		20.32	
Perforated by Torch					
Annular Seal Driven					
Placed from <u>74.98</u> m to <u>75.29</u> m					
Amount _____					
Other Seals					
Type			At (m)		
Screen Type					
Size OD : <u>0.00</u> cm					
From (m)		To (m)		Slot Size (cm)	
Attachment _____					
Top Fittings _____			Bottom Fittings _____		
Pack					
Type _____			Grain Size _____		
Amount _____					

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name MOORE, DENNIS RAYMOND	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396629
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1986/05/16

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name		Address			Town		Province		Country	Postal Code	
TORSTENSEN, CONRAD		GEN DEL, SUNSET HOUSE									
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	NE	2	71	20	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from					Latitude 55.123743 Longitude -116.956575					Elevation _____ m	
_____ m from					How Location Obtained					How Elevation Obtained	
					Map					Not Obtained	

Additional Information										Measurement in Metric	
Distance From Top of Casing to Ground Level _____ cm											
Is Artesian Flow _____											
Rate _____ L/min											
Is Flow Control Installed _____											
Describe _____											
Recommended Pump Rate					45.46 L/min					Pump Installed _____	Depth _____ m
Recommended Pump Intake Depth (From TOC)					91.44 m					Type _____	Make _____ H.P. _____
										Model (Output Rating) _____	
Did you Encounter Saline Water (>4000 ppm TDS) _____					Depth _____ m					Well Disinfected Upon Completion _____	
Gas _____					Depth _____ m					Geophysical Log Taken _____	
										Submitted to ESRD _____	
Additional Comments on Well										Sample Collected for Potability _____ Submitted to ESRD <u>Yes</u>	

Yield Test			Taken From Ground Level	Measurement in Metric	
			Depth to water level		
Test Date	Start Time	Static Water Level	Pumping (m)	Elapsed Time	Recovery (m)
1986/03/03	12:00 AM	75.90 m		Minutes:Sec	
Method of Water Removal				0:00	91.44
Type Air				0:30	90.07
Removal Rate 45.46 L/min				1:00	89.31
Depth Withdrawn From 91.44 m				1:30	88.24
				2:00	87.17
				3:00	85.04
				4:00	82.91
				5:00	80.77
				6:00	78.64
				7:00	77.69
				8:00	76.96
				9:00	76.66
				10:00	76.47
				12:00	76.29
				14:00	76.20
				16:00	76.17
				18:00	76.11
				20:00	76.08
				25:00	76.05
				30:00	76.05
				35:00	76.05
				40:00	76.08
				50:00	76.05
				60:00	76.05
				75:00	76.05
				90:00	76.05
				105:00	76.05
				120:00	76.05

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification		
Name of Journeyman responsible for drilling/construction of well		Certification No
UNKNOWN NA DRILLER		1
Company Name	Copy of Well report provided to owner Date approval holder signed	
MOORE, DENNIS RAYMOND		



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 1665763
GoA Well Tag No.
Drilling Company Well ID
Date Report Received

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name GOLANY, GARY		Address P.O. BOX 1		Town SUNSET HOUSE		Province ALBERTA		Country CA	Postal Code T0H 1M0	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description	
	4	5	71	19	5					
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)					
_____ m from _____					Latitude <u>55.113220</u> Longitude <u>-116.898090</u>			Elevation <u>763.52</u> m		
_____ m from _____					How Location Obtained			How Elevation Obtained		
					Hand held autonomous GPS 20-30m			Hand held autonomous GPS 20-30m		

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic	

Formation Log			Measurement in Metric
Depth from ground level (m)	Water Bearing	Lithology Description	
21.34		Dark Brown Clay	
60.96		Gray Shale	
67.06		Gray Medium Grained Sandstone	
80.77		Gray Shale	
85.04		Gray Fine Grained Sandstone	
86.26		Gray Shale	
94.49		Gray Fine Grained Sandstone	
103.63		Dark Gray Shale	
106.68		Gray Sandstone	
109.73		Gray Shale	
114.30		Gray Medium Grained Sandstone	
121.92		Gray Shale	
126.49	Yes	Gray Water Bearing Sandstone	
134.11		Gray Shale	

Yield Test Summary			Measurement in Metric
Recommended Pump Rate <u>27.28</u> L/min			
Test Date	Water Removal Rate (L/min)	Static Water Level (m)	
2007/08/09	45.46	61.57	

Well Completion			Measurement in Metric
Total Depth Drilled	Finished Well Depth	Start Date	End Date
134.11 m		2007/08/09	2007/08/09
Borehole			
Diameter (cm)	From (m)	To (m)	
17.15	0.00	134.11	
Surface Casing (if applicable)		Well Casing/Liner	
Steel		Plastic	
Size OD : <u>14.13</u> cm		Size OD : <u>11.43</u> cm	
Wall Thickness : <u>0.655</u> cm		Wall Thickness : <u>0.544</u> cm	
Bottom at : <u>31.70</u> m		Top at : <u>5.49</u> m	
		Bottom at : <u>134.11</u> m	
Perforations			
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)
121.92	128.02	0.051	7.62
Perforated by Machine			
Annular Seal Driven			
Placed from <u>27.43</u> m to <u>31.70</u> m			
Amount _____			
Other Seals			
Type		At (m)	
Screen Type			
Size OD : _____ cm			
From (m)	To (m)	Slot Size (cm)	
Attachment _____			
Top Fittings _____		Bottom Fittings _____	
Pack			
Type <u>Unknown</u>		Grain Size _____	
Amount _____		Unknown	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well CHASE SAVILLE	Certification No 75496A
Company Name SAVILLE DRILLING LTD.	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 1665763
GoA Well Tag No.
Drilling Company Well ID
Date Report Received

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name GOLANY, GARY		Address P.O. BOX 1		Town SUNSET HOUSE		Province ALBERTA		Country CA	Postal Code T0H 1M0	
Location	1/4 or LSD 4	SEC 5	TWP 71	RGE 19	W of MER 5	Lot	Block	Plan	Additional Description	
Measured from Boundary of _____ m from _____ m from					GPS Coordinates in Decimal Degrees (NAD 83) Latitude 55.113220 Longitude -116.898090 How Location Obtained Hand held autonomous GPS 20-30m			Elevation 763.52 m How Elevation Obtained Hand held autonomous GPS 20-30m		

Additional Information				Measurement in Metric
Distance From Top of Casing to Ground Level		91.44 cm		
Is Artesian Flow		Is Flow Control Installed		
Rate _____ L/min		Describe _____		
Recommended Pump Rate		27.28 L/min		Pump Installed Yes
Recommended Pump Intake Depth (From TOC)		121.31 m		Type SUB @ 398'
				Make BERKLEY H.P. 1
				Model (Output Rating)
Did you Encounter Saline Water (>4000 ppm TDS)		Depth _____ m		Well Disinfected Upon Completion
Gas _____		Depth _____ m		Geophysical Log Taken
				Submitted to ESRD
Additional Comments on Well		Sample Collected for Potability		Submitted to ESRD
WATER USED FOR DRILLING FROM SE-4-67-22-W5 2007/08/09 8:00 AM 900 GALLONS, BOREHOLE DIAMETER 6.75" & 5"				

Yield Test			Taken From Ground Level	Measurement in Metric
			Depth to water level	
Test Date 2007/08/09	Start Time 12:00 AM	Static Water Level 61.57 m	Pumping (m)	Elapsed Time Minutes:Sec
			61.57	0:00
				1:00
				2:00
				3:00
				4:00
				5:00
				6:00
				7:00
				8:00
				9:00
				10:00
				12:00
				14:00
				16:00
				20:00
				25:00
				30:00
				35:00
				40:00
			128.02	120:00

Method of Water Removal	
Type Air	
Removal Rate	45.46 L/min
Depth Withdrawn From	134.11 m
If water removal period was < 2 hours, explain why MEASUREMENTS FROM TOP OF CASING	

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well CHASE SAVILLE	Certification No 75496A
Company Name SAVILLE DRILLING LTD.	Copy of Well report provided to owner Date approval holder signed

APPENDIX C – SUNSET HOUSE CROSS-SECTION

FOR INFORMATION PURPOSE ONLY



PROJECT NO.: 2021-3024.000
DATE: January 2022
DRAWN BY: BR

CROSS SECTION A-A'

Sunset WTP Raw Water Well Addition

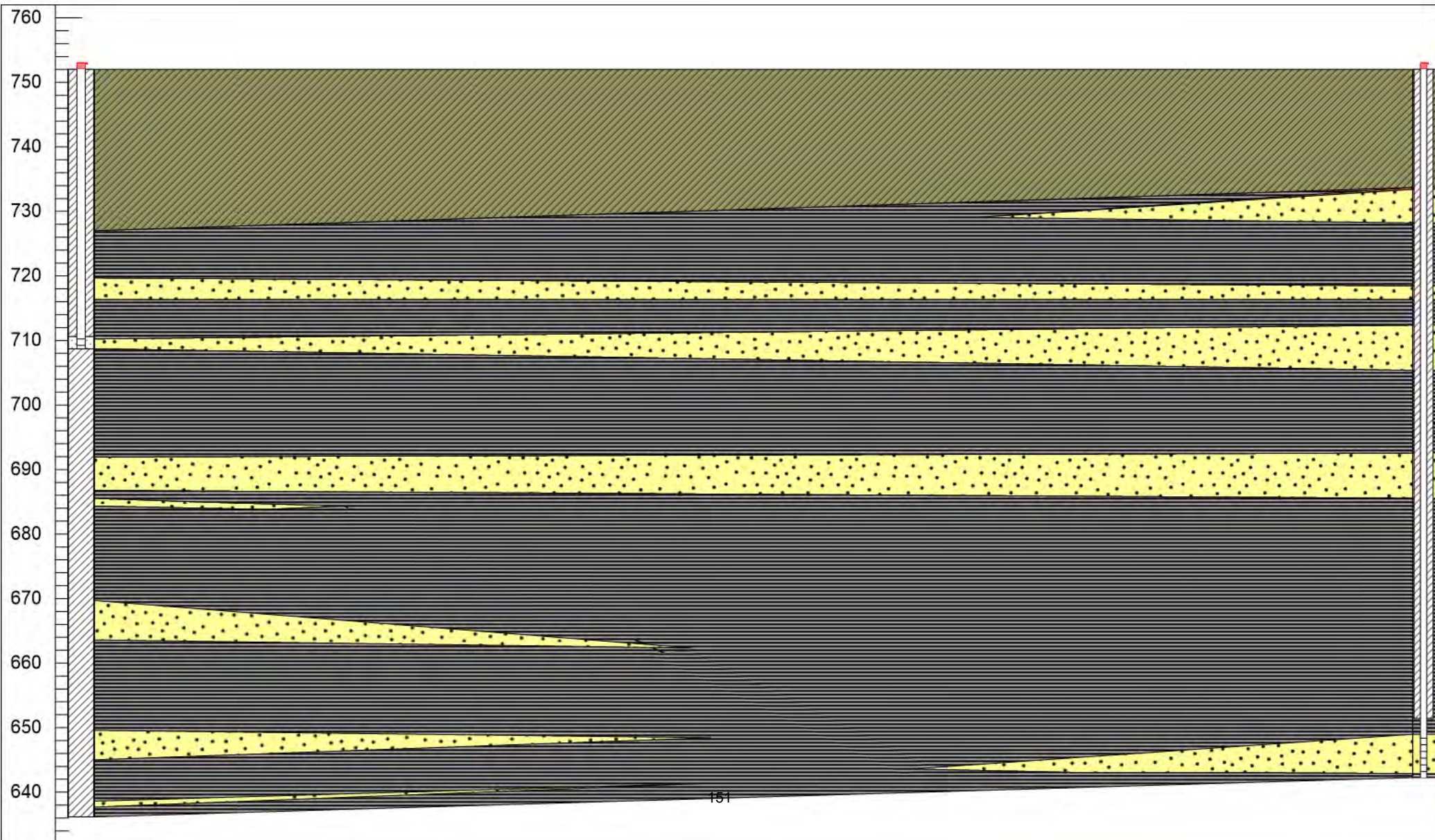
Hydrogeological Investigation

Legend

- Gravel
- Sandstone
- Shale
- Silty Clay

Well #2

GIC Well ID 9486216





Associated
Engineering



Platinum
member



Sunset House WTP Upgrade Options

MD of Greenview Council Presentation

Ryan Wirsz, P. Eng.

Sean Nicoll, P.Eng.

November 15, 2022

Agenda

- Background
- 2014 Capacity
- 2021 Capacity vs Demands
- Raw Water Well Findings
- WTP Upgrade Options Requested/Proposed
- Other Water Well Exploration “Option #2”
- Municipal vs. Residential Water Well Costs

Background

- Sunset House WTP built in 2014 to serve Hall and Truckfill
- MD of Greenview turning away truckfill users over the past few years due to Sunset House WTP capacity limitations.

2014 Capacity

2014 Capacities:

- Water well (2013 WSW): 31 m³/d max., 17 m³/d avg.
- Treatment process: 82 m³/d max. treated (40% waste).
- Potable water production: 18 m³/d max. rate, 10 m³/d avg.

2021 Capacity vs Demands

2021 Capacities:

- Water well (2013 WSW): 11.5 m³/d max. (estimated from operator logs)
- Treatment process: 82 m³/d max. treated (40% waste).
- Potable water production: 7 m³/d max. rate

2018-2021 Demands:

- Potable water demand: 15 m³/d peak day, 5 m³/d avg.

Raw Water Well Findings

- July 2020 AE completed a down-hole camera survey and recommended cleaning and pre and post pump tests.
- MD of Greenview and Saville Drilling completed cleaning, but not pump tests.
- Capacity of water well (2013 WSW) did not improve.
- MD of Greenview, Saville Drilling and AE discussed next steps to drill a new production well.

Raw Water Well Findings Cont.

- Well #2 drilled Aug 2021
- Produced 10 m³/d max., 4 m³/d avg.
- Combined flow improves the situation but its not a long term solution.

Table 4-1
Well #2 Construction Details

Borehole Location	Well #2
Northing	6106812
Easting	506359
Elevation (mamsl)	752
Legal Land Description	LSD 9-36-070-20 W5M
Borehole Data	
Borehole Depth (m bgs)	115.82
Static Water Level (m btoc)	10.49
Well Construction	
Solid Casing ID (mm)	141.29
Casing Material	Steel
Depth (m bgs)	43.58
Slot Size	Hand-Cut (every 2 feet)
Screen Material	PVC
Lithology of Screen Zone	Sandstone
Slotted Casing Depth (m bgs)	41.60 to 43.28
Filter Pack	None-Natural Formation Only
Construction completion date	July 5, 2021

Notes: Coordinates were recorded using a handheld GPS and are in UTM Zone 11.

WTP Upgrade Options Requested/Proposed

Option 1a – Reclaim Well #2.

Option 1b – Connect Well #2.

Option 2 – Other groundwater sources available.

Option 3 – Surface water sources available.

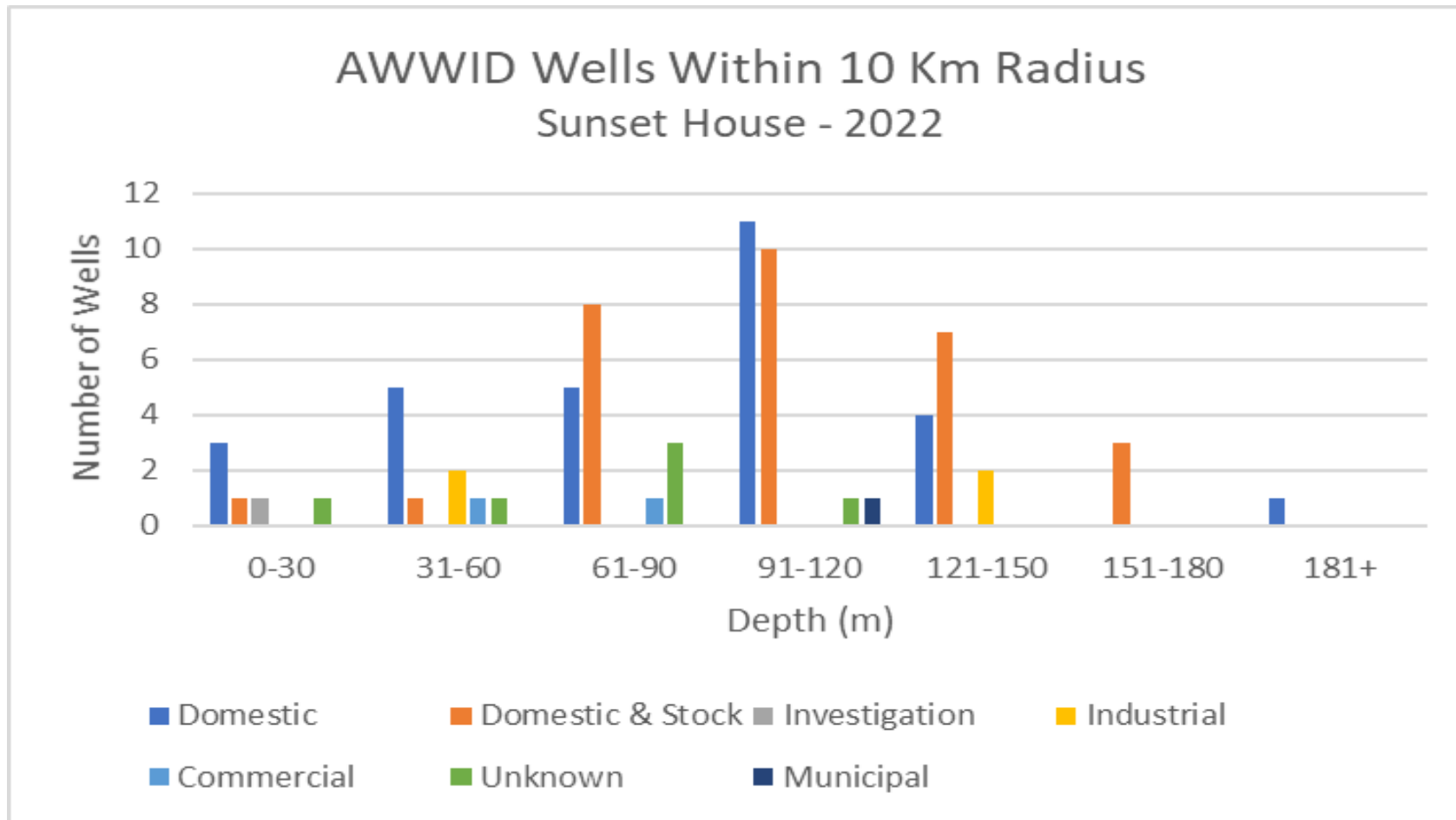
Option 4a and 4b – Supply of potable water from Valleyview.

Option 5 – Converting the WTP to non-potable.

Option 6 – Shutting down the WTP.

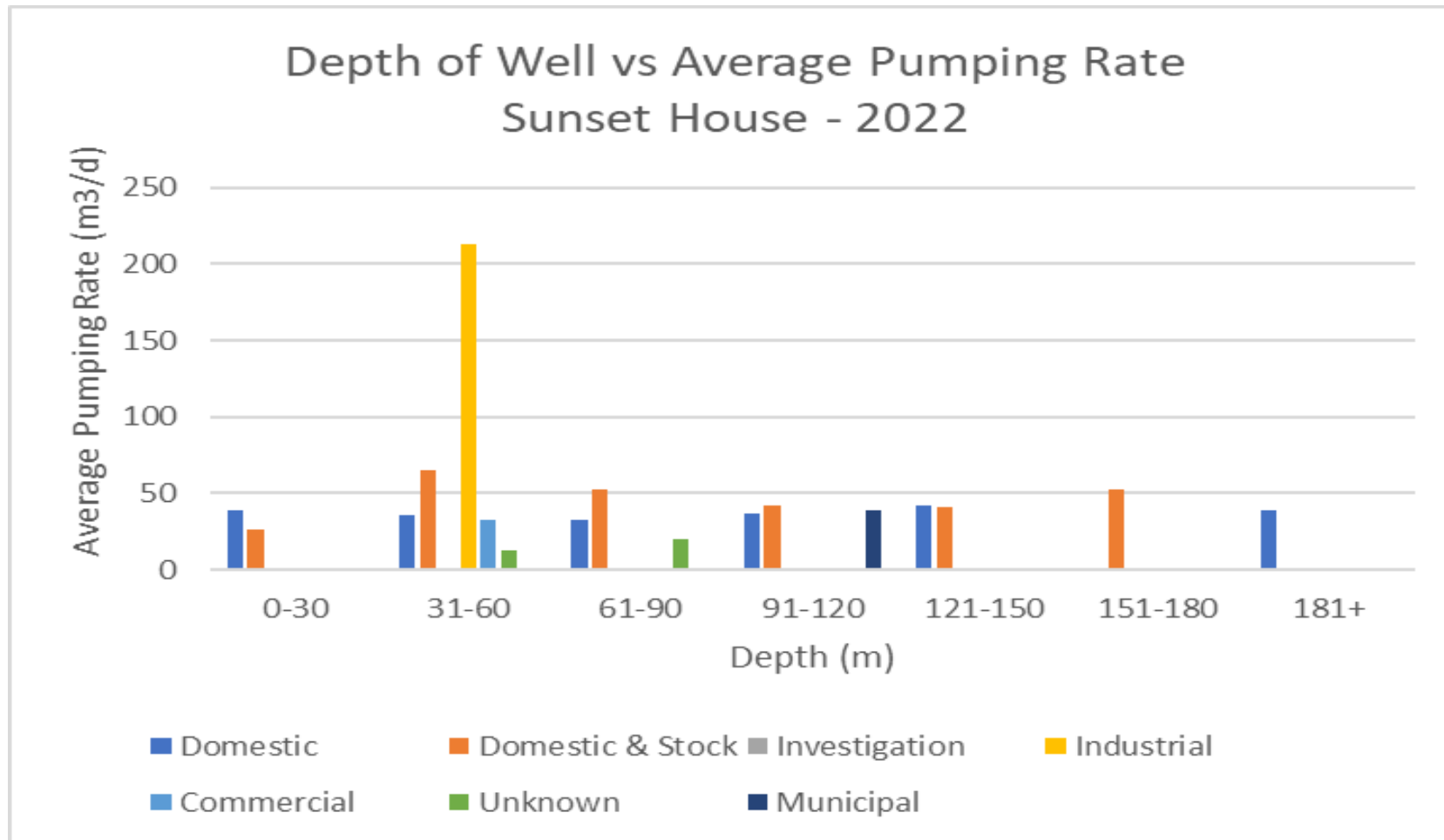
Option 7 – Using both the treated and wastewater streams.

Other Water Well Exploration “Option #2”



73 Water Wells Total, 69 less than 150 m (500 ft) deep.

Other Water Well Exploration “Option #2” Cont.



Average pumping rate 38 m³/d (excluding industrial)

Municipal vs. Residential Water Well Costs

- Drilling
- Testing Requirements
- Water Sampling
- Qualified Environmental Professional
- Monitoring and Reporting
- Licensing
- Others: Power, Pitless Adaptor, etc.



Questions?

Ryan Wirsz , wirszr@ae.ca

REPORT

Municipal District of Greenview No. 16

Sunset House Water Treatment Plant Upgrade Options



FEBRUARY 2022

CONFIDENTIALITY AND © COPYRIGHT

This document is for the sole use of the addressee and Associated Engineering Alberta Ltd. The document contains proprietary and confidential information that shall not be reproduced in any manner or disclosed to or discussed with any other parties without the express written permission of Associated Engineering Alberta Ltd. Information in this document is to be considered the intellectual property of Associated Engineering Alberta Ltd. in accordance with Canadian copyright law.

This report was prepared by Associated Engineering Alberta Ltd. for the account of Municipal District of Greenview No. 16. The material in it reflects Associated Engineering Alberta Ltd.'s best judgement, in the light of the information available to it, at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Associated Engineering Alberta Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

EXECUTIVE SUMMARY

In 2014, Stantec designed the water treatment plant (WTP), currently in operation at Sunset House. The WTP is equipped with one raw water well, 2013 WSW. The 2013 WSW's production capacity has declined over the years to the point where the WTP's production capacity is no longer able to keep up with community demands. In 2021, Associated Engineering (AE) retained Walts Waterwells (WW), a drilling contractor, to drill and construct a new groundwater well, Well #2, next to the existing well. Well #2 was drilled to a depth of 115.82 m but because a very low yield was observed along the sandstone, at this depth, the well was backfilled to 43.58 m. A slotted casing was installed between 41.6 m and 43.28 m. Because these wells are in different fractured rock aquifers, it was interpreted that two different sources combined together would yield a higher overall capacity. Subsequently, a 24-hour pumping test was completed that fell short of completion at 22 hours because the groundwater level in the well drew down to the pump intake. At this point, the Municipal District of Greenview No. 16 (MD) asked AE to review WTP upgrade options so that the MD could provide direction.

In this report, AE has conducted a high-level investigation of the following water supply options for the Sunset House WTP:

- Option 1a – Reclaim Well #2.
- Option 1b - Connecting the second raw water well drilled in 2021.
- Option 2 - Desktop review of other potential groundwater sources available.
- Option 3 - Desktop review of surface water sources available and potential WTP upgrade requirements.
- Option 4a and 4b - Supply of potable water from Valleyview, both piped and hauled.
- Option 5 - Converting the WTP to non-potable.
- Option 6 - Shutting down the Sunset House WTP.
- Compare the options, based on capital and O&M costs.

After completing the review AE concluded:

- Options #1a, #1b, #2, #5 and #6 are not sustainable and/or reduce the level of service to the community (quality and/or quantity).
 - 15 m³/day Required (Current Peak Day Demand); 7.5 m³/day to 14.7 m³/day Available.
 - Existing wells may continue lose production capacity.
 - Non-potable option requires community to source potable water elsewhere.
 - Sweathouse WTP's diversion licence appears to be oversubscribed currently and should be reviewed before transferring Sunset House demands to Sweathouse's WTP.
- Options #2, #3 and #4a are very high in capital costs but provide sustainable potable water for the foreseeable future and increase the level of service to the community (quantity).
 - Capital costs range from 3,720,000 to \$11,000,000.
- Option #4b is feasible but dose not make sense as the community is already hauling water.

Moving forward, The MD will need to determine what level of service the community of Sunset House requires and how that aligns with the MD's capital, operations and maintenance allocations. MD operations should look into the 60% in-plant losses at Sunset House WTP. MD operations should review the Sweathouse WTP's diversion licence as it appears the diversion licence is oversubscribed with current Sweathouse demands.

TABLE OF CONTENTS

SECTION	PAGE NO.
Executive Summary	i
Table of Contents	ii
List of Tables	iii
1 Introduction	1-1
1.1 Background	1-1
1.2 Well Yield Issues	1-1
1.3 Report Scope of Work	1-2
2 Sunset House Current Conditions	2-1
2.1 Existing Water Treatment Plant	2-1
2.2 Water Demands	2-1
2.3 Water Quality	2-2
3 Water Treatment Plant Upgrade Options	3-1
3.1 Option# 1 – Connect Water Well #2	3-1
3.2 Option# 2 – Other Groundwater Sources	3-1
3.3 Option #3 – Surface Water	3-3
3.4 Option#4a – Supply of Potable Water from Valleyview	3-4
3.5 Option#4b – Truck Haul from Valleyview	3-4
3.6 Option#5 – Converting the Sunset House Water Treatment Plant to Non-potable	3-4
3.7 Option #6 – Shutdown the Sunset House WTP	3-5
4 Cost and Option Assessment	4-1
4.1 Order of Probable Capital Cost	4-1
4.2 Order of Probable Operation and Maintenance Cost	4-2
4.3 Options Summary	4-3
5 Summary	5-1
5.1 Existing System Summary	5-1
5.2 Upgrade Options Summary	5-1
6 Next Steps	6-1
Closure	
Appendix A – Desktop AWWID Well Summary	
Appendix B – Water Well Drilling Report	
Appendix C – Sunset House Cross-Section	

LIST OF TABLES

PAGE NO.

Table 2-1 Summary of the Raw Water from 2018-2021	2-1
Table 2-2 Summary of the Potable Water from 2018-2021	2-1
Table 3-1 AWWID Summary of Wells with Higher Yields in 10 km Area	3-2
Table 4-1 Total Project Order of Magnitude Capital Cost	4-2
Table 4-2 Order of Probable Operations and Maintenance Incremental Cost Changes	4-3
Table 4-3 Upgrade Options – Advantages and Disadvantages	4-3

1 INTRODUCTION

1.1 Background

In 2021, Associated Engineering (AE) retained Walts Waterwells (WW), a drilling contractor, to drill and construct a new groundwater well next to the existing well (2013 WSW), connected to the Sunset House water treatment plant (WTP). The well was drilled to a depth of 115.82 m but because a very low yield was observed along the sandstone, at this depth, the well was backfilled to 43.58 m. Slotted casing was installed between 41.6 m and 43.28 m. The yield in this shallower zone was higher than what was evident for the same zone in which well 2013 WSW is installed in. Because these wells are in different fractured rock aquifers, it was interpreted that there would be no connection between the two aquifers, and hence, no well interference, and that it would be two different sources combined to get a higher yield. Subsequently, a 24-hour pumping test was completed that fell short of completion at 22 hours because the groundwater level in the well drew down to the pump intake.

1.2 Well Yield Issues

A Q20 sustainable yield was calculated using the Aqtesolv software program and the Province approved Modified Moell method. The model predictions indicated that the well can be sustainably operated at 3.2 m³/day, as it only showed a recovery of 64%, during testing at a higher rate.

The question of why the new well did not perform equivalent to or better than the existing well can be answered mostly as follows:

- Geology at any given point can be quite variable even with similar lithological sequences, including variable thickness, pinching of layers, structural movement due to faults and dykes to name a few.
- Fractured bedrock will have fracturing that may not connect in all places, while weathering is also quite variable, depending on the physical properties of the material, when the material was deposited, or later pressures due to many factors changing the properties through various processes.
- It is important to realize that groundwater accumulates in these porous spaces created by fracturing or weathering and that they may not be effectively connected to each other to cause significant groundwater flow.
- These connections can vary significantly in depth vertically over a short horizontal space; hence, wells could have variable results at similar depths.

Without an extensive geophysical groundwater survey, using various methods, or through a well drilling exploration program, the risk of not having a successful well in any given position remains high. This is typically different in unconsolidated, well-layered sand and gravel aquifers, as similar yields can be obtained with wells that are spaced larger distances away, but a risk remains that there could be clayey intrusions in between that can cause variable results.

Unfortunately, this is the risk with groundwater resources that makes it extremely difficult to not only delineate sources but also manage and maintain aquifers. Because of the reasons mentioned above, it is also true that going deeper with a well may not necessarily yield higher groundwater flow, unless distinct reasons, such as a more favourable thickness of fractured rock, exist at that depth.

1.3 Report Scope of Work

In 2021, AE assisted the Municipal District of Greenview No. 16 (MD) with drilling of a second raw water well for the Sunset House WTP. The yield from the new well was lower than hoped for and may not be worth the costs of connecting. The MD has asked AE to develop a report (this report) to outline possible options moving forward. In this report, AE has conducted a high-level investigation of the following water supply options for the Sunset House WTP:

- Connecting the second raw water well drilled in 2021.
- Desktop review of other potential groundwater sources available.
- Desktop review of surface water sources available and potential WTP upgrade requirements.
- Supply of potable water from Valleyview, both piped and hauled.
- Converting the WTP to non-potable.
- Shutting down the Sunset House WTP.
- Compare the options, based on capital and O&M costs.

2 SUNSET HOUSE CURRENT CONDITIONS

2.1 Existing Water Treatment Plant

The existing Sunset House Water Treatment Plant (WTP) was designed by Stantec Engineering, in 2014. The facility consists of a raw water well (2013 WSW) that supplies raw water to a single raw water tank. 2013 WSW has a maximum rate of diversion of 31 m³/day with a maximum annual diversion volume of 6,205 m³/year (17 m³/day). The raw water is chlorinated prior to entering the raw water storage tank. The chlorinated water enters the treatment process which consist of activated carbon filter, ion exchange vessel and reverse osmosis membrane filter. The treated water is chlorinated and is stored in two treated water storage tanks; each tank has a storage capacity of 25 m³.

2.2 Water Demands

The water demands experienced at the Sunset House WTP were summarized from the Operation's handwritten monthly log sheets. **Table 2-1** summarizes the raw well water usage for 2018-2021; the table shows the annual raw water usage from the well and the average daily water usage. The annual and average daily usages do not exceed the license amounts, but the MD reports that 2013 WSW does not keep up to demands. For the purposes of this report, AE considers 2013 WSW's current maximum annual diversion volume achievable at 4,108 m³/year (11.5 m³/day). Additionally, the raw water flow meter shows significant increase in 2020 (92% increase from 2019) and 2021 (45% increase from 2020).

Table 2-1
Summary of the Raw Water from 2018-2021

Item	2018	2019	2020	2021
Annual Raw Water Usage (m ³)	1949	1477	2833	4108
Average Raw Water Daily Usage (m ³ /day)	5.5	4.2	7.9	11.5

The Sunset House WTP services the Sunset House Hall and a truckfill. **Table 2-2** summarizes the annual truckfill and hall usage and average daily potable usage. Based on a visual inspection of the handwritten data, the peak daily usage of the Sunset House WTP was approximately 15 m³/day.

Table 2-2
Summary of the Potable Water from 2018-2021

Item	2018	2019	2020	2021
Annual Truckfill Water Usage (m ³)	1344	1224	1849	1717
Annual Hall Water Usage (m ³)	22	47	21	58
Average Potable Water Daily Usage (m ³ /day)	3.8	3.5	5.2	4.9

The water usage data shows an interesting trend; since 2018, the raw water usage has increased by 110%, while the potable usage has only increased 30% over the same period. The raw water trend needs to be investigated to determine where the extra raw water demand is being generated from, as the data provided by the MD was insufficient to determine this. An investigation of the in-plant losses needs to occur to determine where this additional loss is coming from, including a review of all treatment equipment and calibration of all flow meters.

Based on the WTP operational records, in 2021, the Sunset House WTP had 60% of in-plant loss, for comparison, the Sweathouse WTP in-loss range was 35%. As both plants have the same equipment installed, with similar raw water quality, an unknown factor at the Sunset House WTP is leading to exceptional in-plant losses at the facility, especially in 2021.

2.3 Water Quality

Treatability objectives for any water treatment facility are defined by the maximum acceptable concentration (MAC) and aesthetic objectives (AE), defined in Health Canada's Guideline for Canadian Drinking Water. The MAC limits have been established for certain substances that are known or suspected to cause adverse effects on health. The concentrations have been set at values intended to safeguard health based on lifetime consumption. The AO limits apply to certain substances or characteristics of drinking water that can affect its acceptance by consumers or interfere with practices for supplying good quality water. **Table 2-3** summarizes the Sunset House WTP raw water quality data that exceed the MAC or AO.

Table 2-7
Sunset House Well Water Quality Treatment Parameter Summary

Analyte	Unit	GCDWQ Limit	GCDWQ Type	Groundwater
Ammonia, as N	mg/L	—	—	1.04 ¹
Total Organic Carbon	mg/L	—	—	6.78 ²
Sodium	mg/L	200	AO	480
Total Dissolved Solids	mg/L	500	AO	1080

¹ Ammonia concentrations are to be treated with chlorine to be completely oxidized.

² Total Organic Carbon's operational guidance value is 2.0 mg/L to prevent the formation of disinfection by-products.

3 WATER TREATMENT PLANT UPGRADE OPTIONS

3.1 Option# 1 – Connect Water Well #2

AE's hydrogeological team has estimated that Well #2 can sustainably produce 3.2 m³/day and that the water quality is similar to 2013 WSW. Therefore, there are two options to move forward with Well #2:

- Option #1a – Reclaim Well #2 and do not connect to existing facility.
- Option #1b – Connect Well #2 and supplement the existing WTP's feed water.

Herein, only Option #1b is further explored as Option #1a will simply follow the provincial well reclamation process.

3.1.1 Modification Outside the Existing WTP

AE proposes the outside pipeline alignment navigate around the rink and playground. Installation of this pipeline will use a combination of directional drill and open cut approaches to minimize disruption to the surface features.

3.1.2 Modifications Inside the Existing WTP

AE proposes the pipeline coming into the existing WTP connect to the existing raw water storage tank. More specifically, AE proposes that Well #2 be connected to the existing raw water piping entering the raw water storage tank. This connection will allow for minimal piping and tank changes, while allowing individual flow monitoring of each raw water well.

It should be noted that Option #1b will not allow the community to access the full 3.2 m³/day, as WTP production waste must be considered (e.g., if Well #2 can provide 3.2 m³/day and the WTP's production waste is 50%, then the community can only receive 1.6 m³/day).

3.2 Option# 2 – Other Groundwater Sources

3.2.1 Desktop Review of Other Potential Groundwater Source Available

The Alberta Water Well Database (AWWID) is the main source of well information in the Province for assessing yield potential of a specific geographic location in the absence of specific hydrogeology reports. AE completed online searches for any related reports for the area, but none were found, apart from a regional investigation by AER¹ (AER report). The AER report shows the bedrock is dipping towards the southwest of the site, with higher surface topography east of the site. Recharge is likely to occur in these higher areas where bedrock outcrop as opposed to the less permeable till clay (18 m thick) overlying the bedrock at the site in which very low recharge occurs. The report further indicates a paleovalley thalweg approximately 14 km to the west of the site. The infill material of these valleys is variable with sand, gravel, fine grained silt, clay, and till. Gravel and sand aquifers in the area are also believed to be relatively thin and yields in these typically do not exceed 50 m³/day.

The report does not show the various sandstone and shale layers within the formation in the project area, as this is a regional investigation. The AWWID data in the next section shows this information at a higher resolution. These alternating shale and sandstone layers are, therefore, referred to as layers within a sequence of multiple layers.

¹ Hartman, G.M.D, Klassen, J., Jayawardane, L. and Timmer, E.R. 2020. Regional Shallow Stratigraphy and Hydrogeology of the Grande Prairie-Valleyview Area, Northwestern Alberta.

3.2.2 AWWID Data

The AWWID data summary suggests that wells associated with the paleovalley thalweg approximately situated along the Little Smoky River are on average more productive than the sandstone bedrock aquifers. Ten wells along this area are summarized in [Table 1, Appendix A](#). Although the records indicate yields of more than 454 L/min (653.8 m³/day), when downloading the actual well logs, it shows the recommended yield after short-duration testing is typically 3 to 10 times lower than the drilling/development estimated yields on some wells. GIC 9486291 shows sand and gravel between 77 and 121 m depth, while GIC 1665617 has a 3 m sand and gravel at 76 m depth, which is water-bearing. The rest of the wells have some to none sand and gravel and confirm the infill material of the paleovalley, as described by the AER report. The well log reported an average yield of this area to the west is 39.8 L/min (57.3 m³/day).

Within a 10 km radius (10 km area) from the existing wells, the AWWID ([Table 3-2, Appendix A](#)) indicates 20 well records that have relevant associated data with it. Again, the drilling/development average estimated yield is 44.4 L/min (63.9 m³/day), while the well log reported an average yield of this area in a 10 km radius is 28 L/min (40.32 m³/day). The highest tested rate recorded is 45.5 L/min (65.52 m³/day) in four of the wells summarized in [Table 1](#). AWWID well logs are attached hereto in [Appendix B](#).

Table 3-1
AWWID Summary of Wells with Higher Yields in 10 km Area

Well ID	Yield (L/s)	Yield (m ³ /day)	Depth Screened (m)	Lithology Screened	Sandstone Layer in Sequence (number from surface)	Distance from Existing Well (km)
9486216 – 2013 WSW	0.45	39.3	103-109	Gray sandstone/shale	5	0 km
396172	0.76	65.5	141-150	Gray sandstone/shale	8	3 km east
396220	0.76	65.5	97-111	Sandstone/shale	5	2.4 km south
396602	0.76	65.5	131-145	Sandstone/shale	Logging not clear	3.5 km west
396629	0.76	65.5	91-103	Sandstone/shale	Logging not clear	0.9 km northeast
1665763	0.46	39.3	121-128	Gray sandstone/shale	6	0.5 km northeast

[Table 3-2](#) indicates that the screened depth in water-bearing sandstones is variable, which is to be expected in dipping strata. It also shows that it is derived from different sandstone/shale sequences and could be related to the grain and thickness of the sandstone, but that there is a high likelihood that it could be related to the shale/sandstone contact and the amount of weathering present. It should also be noted that although these rates are higher (but what would be required for Sunset House supply requirements) than the existing well, GIC 9486216, the yields seem to decline over time with the production of the well (as shown by 9486216 - 2013 WSW operating at around 11.5 m³/day). This indicates that the recharge to these deeper sandstone sequences is lower than average production. Unfortunately, there is no direct correlation to be drawn from these various wells to indicate if wells need to be drilled deeper or not and that success is variable with depth.

A cross-section between GIC 9486216 and the new 2021 well ([Appendix C](#)) indicates a possible reason for the higher initial rates with declining rates over time. The different sandstone shale sequences are not correlating between the wells and that some of the sandstone layers can be in the form of lenses and or pinching layers. This could explain the lower recharge to the isolated aquifers as they may not be laterally extensive. It should be noted, however, that those different individuals will log these wells differently and that some sandstone layers might have been omitted but, in this case, connection is not likely for the lower sandstone layers in the sequence.

Based on the information for the area, the following conclusions can be made:

- Within a 10 km radius from the site, most production wells are within the deeper sandstone/shale layers in the sequence between 90 and 150 m depth.
- The highest yield reported for these wells are 65.5 m³/day.
- Further to the west, along the Little Smoky River, an old paleovalley exists that are infilled with a mix of material and bedrock below it at depth. Groundwater wells established within this area indicated higher average yields of 39.8 L/min (57.3 m³/day), in the sandstone bedrock, compared to the 10 km area well average of 28 L/min (40.3 m³/day).
- There are only a small number of wells installed in shallower sand and gravel, along the paleovalley and yields are typically less than 50 m³/day¹.
- Although wells within the sandstone have higher initial yields, declining yields are evident over time due to production; this is likely because of slow recharge to the sandstone layers in the 10 km radius when compared to sandstone layers along the paleovalley. Recharge to the fill material overlying the sandstone layers along the paleovalley might be recharged quicker and at a higher rate, hence, resulting in more sustainable production rates.
- Sandstone and shale sequences might not be laterally extensive, and hence, reduced aquifer recharge and volumes available to certain wells.

The following are some options that can be investigated further:

- Additional groundwater could be sourced from deeper wells within a radius of 1 km from Sunset House to augment the existing two wells assuming the second well drilled in 2021 is also tied in.
- A deeper well can be drilled to 150 m depth to see if the deeper sand and shale sequences yields better results. AE contacted the drilling contractor (Walts Water Wells) who indicated that it is not possible to drill the new well deeper, which means a new well would have to be drilled.
- The only other alternative is to complete exploration along the Little Smoky River for a slightly higher yield, potentially higher recharge rates, and more sustainable production.

3.3 Option #3 – Surface Water

3.3.1 Desktop Review of Other Surface Water Sources

AE completed a desktop review of possible surface water options for use as an alternative supply to the Sunset House WTP. Two possible sources were identified, using nearby Snipe Lake or the possible construction of a dugout to collect surface water from nearby surroundings. To bring surface water from Snipe Lake to the existing WTP, an intake installed in the lake and a raw water pipeline of 4.5 km would be required.

It is anticipated that the surface water dugout will be the lowest cost option due to the higher cost for the construction of an intake and raw water line.

3.3.2 Potential Water Treatment Upgrades

For surface water to be treated at the existing water treatment plant, the plant would need to be upgraded to meet the additional water treatment requirements for surface water. The existing water treatment plant would require the following additions to allow for treating surface water:

- Tube settler clarifier with coagulant and polymer chemical system;
- Dual media filters;
- Reverse Osmosis (existing WTP equipment – organic carbon control);
- Ultraviolet disinfection; and
- A building expansion.

Based on the available space at the existing WTP, a building expansion is required to house the additional equipment. The existing reverse osmosis system would be retained in the new surface water treatment system to provide organic carbon control to deal with the disinfection by-product formation commonly seen in surface waters of this type.

3.4 Option#4a – Supply of Potable Water from Valleyview

The option to provide water servicing from the Town of Valleyview to Sunset House was analyzed in a previous AE report (Valleyview Rural Water Line Study Update (January 2022)) and subsequently eliminated due to:

- **High capital costs** (\$11 million) to construct a 27.3 km long watermain and a booster station and dedicate right of way beside Highway 669. Note land acquisition or right of way approval costs are not included in the cost estimate.
- **High operation and maintenance costs** to maintain the booster station and potential re-chlorination needs.
- **Low water demand**, based on existing records; the average daily consumption is only 5.5 m³/day, or less than 1,850 m³/year.
- **Low water turnover rate** as we estimate it will require 161 days to turn over the water in a 27.3 km long, 100 mm diameter pipe. This is assuming the water demand is 17 m³/day, which is the average maximum daily consumption from 2020 to 2021.

A regional pipeline from Valleyview is not feasible due to the low demands and high residence time in the pipe, which leads to severe water quality degradation and disinfection residual loss, etc.

3.5 Option#4b – Truck Haul from Valleyview

Due to the amount of treated water required for the Sunset House truckfill and community hall, a long pipeline would not be feasible as mentioned above. However, the Sunset House WTP could be converted to receive truckfill water from Valleyview. On average, four truckloads of water per week would be required to meet the current demands at the WTP. The number of loads per week would be lower in the winter but higher in summer to deal with current seasonal peak summer demands.

3.6 Option#5 – Converting the Sunset House Water Treatment Plant to Non-potable

The operations of the reverse osmosis system generate a significant amount of rejected waste through the process. Based on the 2021 operational data provided by the MD, up to 60% of the raw water is being lost. This additional loss doubles the amount of raw water that needs to be pumped from the raw water well, and significantly increases the amount of water pulled from the aquifer.

If the Sunset House WTP system was decommissioned and only produced non-potable water, this would eliminate more than half of the raw water lost by the facilities. If the system becomes non-potable, this non-potable plant will require some of the customers, who require potable water to go to either the Valleyview WTP or the Sweathouse WTP.

The most significant effect would be on Sunset House Hall, as it would not have potable water for the community functions hosted at the facility. Water would need to be trucked in from the Sweathouse WTP and stored in the Sunset House treated water tanks for the community hall's usage.

3.7 Option #6 – Shutdown the Sunset House WTP

The MD of Greenview could shutdown the Sunset House WTP, due to the lack of a current, sustainable groundwater source. This option would see the all the truckfill customers diverted to the Sweathouse WTP or Valleyview to fill their tanks at those truckfills. This course of action would cause an increasing demand at the Valleyview and Sweathouse WTPs. Due to the Valleyview WTP's current capacity, if the entire Sunset House truckfill usage was transferred to the Valleyview WTP, the WTP would not see a significant impact on their potable water demand.

The Sweathouse WTP customers currently consume $3.3 \text{ m}^3/\text{day}$ of potable water. To make this amount of potable water WTP requires $4.8 \text{ m}^3/\text{day}$ of raw water. The Sweathouse well Licence No. 00030957 has a maximum rate of diversion of $36 \text{ m}^3/\text{day}$ with a maximum annual diversion volume of $1,364 \text{ m}^3/\text{year}$ ($3.7 \text{ m}^3/\text{day}$). Currently, the Sweathouse's diversion licence is over subscribed; therefore, transferring Sunset's demand to Sweathouse is not advisable until Sweathouse's raw water sustainability is reviewed in further detail.

4 COST AND OPTION ASSESSMENT

4.1 Order of Probable Capital Cost

Due to the conceptual nature of this study and the understanding that there exist unknown variables beyond the scope of this study, the estimates presented herein includes a contingency and engineering allowance of 50% of the total estimated capital costs. AE does not guarantee the accuracy of this opinion of probable costs. The actual final cost of the project will be determined through the bidding and construction process.

Table 4-1 summarizes the opinion of probable costs for the various options for the Sunset House Water Treatment Plant. A cost allowance was not included for land acquisitions for the facility's expansion in the capital cost estimate; purchasing land has a significant effect on capital costs.

The following assumptions were made:

- Options #1b: Connect Well#2
 - 100 meters of pipeline to connect the well to the raw water tank;
 - Installation of pit-less adapter and new well pump;
 - Minor additional electrical or control upgrades are required; and
 - Capital cost does not include cost already spend on drilling Well #2 (approximately \$85K).
- Option #2 – Other Groundwater Source
 - 3500 meters waterline allowance to bring water from the new well;
 - Installation of pit-less adapter and new well pump;
 - Additional electrical or control upgrades are required; and
 - New electrical service to the new well site area.
- Option #3 – Convert to Surface Water Treatment Plant
 - Dugout surface water collection system;
 - Building expansion; and
 - Treatment upgrades.
- Option #4a – Regional Line from Valleyview
 - Capital costs were taken from Valleyview Rural Water Line Study Update (January 2022).
- Option #4b – Truck Hauling from Valleyview
 - Decommissioning cost for the WTP and wells of \$40,000; and
 - Minor piping changes to allow for offloading of the water trucks.
- Option #5 – Non-potable
 - Small process modification to bypass the treatment system.
- Option #6 – Decommission WTP
 - Decommissioning cost for the WTP and wells of \$40,000; and
 - Equipment would be reused by the MD at another facility.

Table 4-1
Total Project Order of Magnitude Capital Cost

Option	Cost
Option #1a – Reclaim Well	\$15,000
Option #1b – Well#2 Supplement WTP	\$240,000
Option #2 – Other Groundwater Source	\$3,720,000
Option #3 – Surface Water WTP	\$6,810,000
Option #4a – Regional Line	\$11,000,000
Option #4b – Water Truck	\$50,000
Option #5 – Non-Potable	\$20,000
Option #6 – Decommission WTP	\$40,000

4.2 Order of Probable Operation and Maintenance Cost

The operational costs were based on the following:

- Energy cost of \$0.15/kWh.
- Chemical cost of \$7.05/kg.
- No additional operator required.
- Truck hauling cost of \$300 for 10 m³ loads.

Table 4-2 summarizes the order of magnitude for the probable operational and maintenance O&M cost changes for the implementation of the various options, as follows:

- Option #1a – Reclamation of Well #2 will have no impact to the current O&M costs at the Sunset House WTP.
- Options #1b and #2 have small cost increases, ranging from \$2,000 to \$5,000, associated with these options for the costs of the additional power and pumps required.
- Option #3 – Surface water treatment plant will have the second largest increase to the O&M costs, as this option has additional costs to power the treatment process, increased chemical usage for the new treatment process and increased heating costs for a larger building.
- Option #4a – Regional line has the third highest additional O&M cost associated with operating a booster station and chemical usage to boost disinfectant residual in the pipeline.
- Option #4b has the highest O&M cost implications of all the options, due to the high cost of trucking water.
- Option #5 and #6 will save O&M costs by lowering the service standard at the facility.

Table 4-2
Order of Probable Operations and Maintenance Incremental Cost Changes

Option	Cost
Option #1a - Reclaim Well	\$—
Option #1b - Well#2 Supplement	\$2,000
Option #2 - Other Groundwater Source	\$5,000
Option #3 - Surface Water WTP	\$49,000
Option #4a - Regional Line	\$21,000
Option #4b - Water Truck	\$60,000
Option #5 - Raw Water Only	-\$5,000
Option #6 - Decommission WTP	-\$23,000

4.3 Options Summary

Table 4-3 summarize the advantages and disadvantage of the various upgrade options presented in this report.

Table 4-3
Upgrade Options – Advantages and Disadvantages

Well #2 Options	Advantages	Disadvantages
Option #1a - Reclaim Well #2	<ul style="list-style-type: none"> Lower capital cost. 	<ul style="list-style-type: none"> Water demand concern from the community is not addressed: <ul style="list-style-type: none"> 15 m³/day Required; 4.6 m³/day Available (60% of 11.5 m³/day) Existing well may continue lose production capacity.
Option #1b - Well#2 Supplement	<ul style="list-style-type: none"> Minimal changes to existing WTP. Provides additional 1.3 m³/day of potable water (60% of 3.2 m³/day) 	<ul style="list-style-type: none"> Water demand concern from the community is not addressed: <ul style="list-style-type: none"> 15 m³/day Required; 5.9 m³/day Available Medium capital cost. Additional well O&M costs. Wells may continue lose production capacity.
Option #2 - Other Groundwater Source	<ul style="list-style-type: none"> If drilling program is successful, provides a sustainable water source for WTP. 	<ul style="list-style-type: none"> High cost of the pipeline to connect well to WTP. High cost of well exploration. Possibility new well will not achieve the desired flow rate.
Option #3 - Surface Water WTP		<ul style="list-style-type: none"> Limited surface water source near the existing WTP. High capital cost to achieve required treated water volumes. High O&M cost.
Option #4a – Regional Line from Valleyview	<ul style="list-style-type: none"> Sustainable source. 	<ul style="list-style-type: none"> High capital cost. High O&M cost. High residence time in pipeline leading to severe water quality degradation.

Well #2 Options	Advantages	Disadvantages
Option #4b – Truckfill from Valleyview	<ul style="list-style-type: none"> Sustainable source. Moderate capital cost. 	<ul style="list-style-type: none"> Highest O&M cost.
Option #5 - Raw Water Only	<ul style="list-style-type: none"> Eliminates the amount of water loss due to the treatment process. 	<ul style="list-style-type: none"> Does not meet the potable water needs of the community. Requires truckfill users to travel farther to access potable water. Does not provide potable water to the community hall. Well may continue lose production capacity.
Option #6 - Decommission WTP	<ul style="list-style-type: none"> Eliminate need for raw water well at the site. 	<ul style="list-style-type: none"> Does not meet the potable water needs of the community. Requires truckfill users to travel farther to access potable water. Does not provide potable water to the community hall.

5 SUMMARY

Based on the Sunset House Water Treatment Plant Option Assessment, Associated Engineering finds the following:

5.1 Existing System Summary

- The raw water usage has increased 110% between 2018 and 2021, while the potable water usage has only increased 30%, during the same period.
 - Average day raw water usage was 5.5 m³/day, in 2018 and 11.5 m³/day, in 2021.
 - Average potable demand (truckfill and hall) was 3.8 m³/day, in 2018 and 4.9 m³/day, in 2021.
 - In-plant plant loss have doubled between 2018 and 2021, indicating an issue with the treatment system, leading to additional waste being generated.

5.2 Upgrade Options Summary

- Option #1a (Reclaim Well #2) - Demand shortages and concerns around well sustainability are still present regardless of whether the in-plant losses can be restored back to 35%.
 - 15 m³/day Required (Current Peak Day Demand); 7.5 m³/day Available (35% of 11.5 m³/day – 2013 WSW).
 - Existing well may continue lose production capacity. 2013 WSW was initially licenced for maximum rate of diversion of 31 m³/day with a maximum annual diversion volume of 6,205 m³/year (17 m³/day).
- Option #1b (Well #2 Supplement) - If Well #2 is connected to the Sunset House WTP and an in-plant loss of 35% can be restored, the well's sustainable yield of 3.2 m³/day would translate to 2.1 m³/day of additional potable water. If the in-plant losses cannot be restored, the additional potable water supply can only be 1.6 m³/d. Again, demand shortages and concerns around well sustainability are still present, regardless of whether or not the in-plant losses can be restored back to 35% and Well #2 can be connected.
 - 15 m³/day Required (Current Peak Day Demand); 9.6 m³/day Available (35% of 11.5 m³/day – 2013 WSW + 3.2 m³/day – Well #2).
 - Existing wells may continue lose production capacity as shown above in Option #1a.
- Option #2 (Other Groundwater Source) – The addition of a well in an area with a higher groundwater yield has a significant amount of capital cost associated with this option, due to the distance away from the existing water treatment plant.
- Option #3 (Surface Water WTP) and #4a (Regional Line) – Both the addition of surface water treatment and a regional line have the highest overall costs and will have additional operation and maintenance costs higher than the current facility.
- Option #4b (Water Truck) – Trucking water from Valleyview has a reasonable cost but may not make sense as the community members are typically hauling water from Sunset House truckfill already.
- Option #5 (Raw Water Only) – Demand shortages and concerns around well sustainability are still present.
 - 15 m³/day Required (Current Peak Day Demand); 11.5 m³/day – 2013 WSW or 14.7 m³/day with Well #2 connected.
 - Existing wells may continue lose production capacity as shown above in Option #1a.
- Option #6 (Decommission WTP) – Valleyview WTP has the additional capacity to handle the potable water requirements if the Sunset House WTP was no longer available to produce potable water.
 - The Sweathouse WTP would require a further review as currently the diversion licence is oversubscribed with current Sweathouse demands.

6 NEXT STEPS

The Municipal District of Greenview No. 16 will need to determine what level of service the Community of Sunset House requires and how that aligns with the MD's capital, operations and maintenance allocations. MD operations should look into the 60% in-plant losses at the Sunset House Water Treatment Plant and should review the Sweathouse Water Treatment Plant's diversion licence, as it appears the diversion licence is oversubscribed with the current Sweathouse water demands.

CLOSURE

This report was prepared for the Municipal District of Greenview No. 16 to investigate the water supply options for the Sunset House Water Treatment Plant.

The services provided by Associated Engineering Alberta Ltd. in the preparation of this report were conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty expressed or implied is made.

Respectfully submitted,
Associated Engineering Alberta Ltd.

Ryan Wirsz, P.Eng.
Project Manager

Nicholai Kristel, P.Eng.
Process Engineer

APPENDIX A – DESKTOP AWWID WELL SUMMARY



Table 1 - AWWID Wells Along the Paleovalley



Reconnaissance Report

[View in Imperial](#)
[Export to Excel](#)

Groundwater Wells

Please click the water Well ID to generate the Water Well Drilling Report.

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (m)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (m)	TEST RATE (L/min)	SC_DIA (cm)
352201	NE	18	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1990-08-31	134.11	New Well	Domestic		5	12	CARON, ROLAND	39.62	227.30	14.12
381429	NE	33	70	21	5	SAVILLE WATER WELL DRILLING LTD.	1994-05-27	121.92	New Well	Domestic & Stock		5	12	THOMAS, PETER	45.72	90.92	14.12
396349	NW	21	70	21	5	SAVILLE WATER WELL DRILLING LTD.	1975-09-22	85.34	New Well	Unknown		2		JOHNSON, JAMES			0.00
396350	NE	21	70	21	5	UNKNOWN DRILLER	1968-07-10	60.96	Coal Test Hole	Investigation		5		RCA			0.00
396351	NE	21	70	21	5	MOORES WW DRLG	1980-06-13	103.63	New Well	Domestic	1	6		HAMMON, BRUCE	0.00	45.46	14.12
396358	NW	27	70	21	5	SAVILLE WATER WELL DRILLING LTD.	1983-05-13	112.47	New Well	Domestic & Stock	1	6		PETERSON, TERENCE	12.19	68.19	13.97
396360	3	28	70	21	5	KENASTON DRLG	1962-07-28	67.06	New Well	Observation	3	6		ALTA HIGHWAYS			14.27
396363	NW	28	70	21	5	MOORES WW DRLG		48.77	New Well	Domestic & Stock		3		WELL, SHERYL & DARRYL	0.00	90.92	14.12
396380	SE	33	70	21	5	SAVILLE WATER WELL DRILLING LTD.	1971-10-17	68.58	Unknown			3		THOMAS, JOHN	12.19	36.37	0.00
396682	NE	19	71	20	5	UNKNOWN DRILLER	1968-07-15	45.72	Coal Test Hole	Investigation		3		RCA# COAL SURVEY			0.00
396738	SW	10	71	21	5	SAVILLE WATER WELL DRILLING LTD.	1972-09-04	77.72	New Well	Unknown	1	6		MCNABB, DONALD F.	0.00	11.37	11.68
396740	13	14	71	21	5	UNKNOWN DRILLER	1950-02-21	573.02	Structure Test Hole	Industrial				HUDSON'S BAY OIL & GAS #V-6			0.00
396741	SW	15	71	21	5	UNKNOWN DRILLER		112.78	Chemistry	Domestic	1			CRAIG, J.F.			0.00
396744	5	24	71	21	5	UNKNOWN DRILLER	1950-02-02	503.83	Structure Test Hole	Industrial				HUDSON'S BAY OIL & GAS #V-7			0.00
396766	SW	1	71	21	5	UNKNOWN DRILLER		48.77	Chemistry	Domestic	1			FELL, DON	12.19		0.00
465036	SW	10	71	21	5	SAVILLE WATER WELL DRILLING LTD.	1990-02-18	79.25	New Well	Domestic		11	20	MCNABB, DON	33.53	90.92	14.12
1665617	1	23	71	21	5	SAVILLE DRILLING LTD.	2006-10-10	82.30	New Well	Domestic		5	25	HOLMEN, DON	30.78	68.19	14.13
1877525	1	2	71	21	5	GOLDEN PEACE DRILLING LTD.	2008-09-03	85.34	New Well	Domestic		9	21	THIESSEN, JERRY	28.65	22.73	15.24
2093625	1	28	70	21	5	UNKNOWN DRILLINGCOMP11			Old Well-Yield	Observation				ALBERTA ENVIRONMENT			
9486291	SE	13	71	21	5	BRAD SAVILLE ENTERPRISES LTD.	2016-05-17	176.78	New Well	Domestic & Stock		9	16	PETRYSHEN, SCOTT & MICHELLE	27.80	454.61	14.12

Table 2 - AWWID Wells Within 10 Km Radius of Sunset House



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

Groundwater Wells

Please click the water Well ID to generate the Water Well Drilling Report.

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
340580	SW	8	71	19	5	SAVILLE DRILLING LTD.	2002-04-28	480.00	New Well	Domestic & Stock		12	22	MUZYCHYN, JIM	308.00	4.00	5.56
341200	SW	35	70	19	5	SAVILLE DRILLING LTD.	2002-08-27	460.00	New Well	Domestic & Stock		14	22	TREMBLAY, VERN	289.00	5.00	5.56
352429	NW	16	71	20	5	GOLDEN PEACE DRILLING LTD.	1990-06-30	300.00	New Well- Decommissioned	Domestic		12		HAMMON, KEN	35.00	8.00	0.00
352430	NW	16	71	20	5	GOLDEN PEACE DRILLING LTD.	1990-07-02	110.00	New Well	Domestic		4		HAMMON, KEN	29.00	15.00	5.50
354136	NW	22	71	20	5	MOORE, DENNIS RAYMOND	1988-07-15	380.00	New Well	Domestic		12	24	PETERSON, ANTHONY	277.00	8.00	5.56
354707	SW	10	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1977-10-07	125.00	New Well	Domestic		3		KICENIUK, PETER	31.00	1.50	4.50
354708	SW	16	71	20	5	GOLDEN PEACE DRILLING LTD.	1988-03-29	320.00	New Well	Domestic		12		LAVENTURE, DENIS	206.00	14.00	5.50
357159	SE	2	71	19	5	UNKNOWN DRILLER		30.00	Chemistry	Domestic				SUNSET HOUSE GOLF & MARINA			0.00
357160	SE	20	71	20	5	UNKNOWN DRILLER		220.00	Chemistry	Domestic				SEWERYN, NICK			0.00
361870	SE	32	70	19	5	UNKNOWN DRILLER		0.00	Spring	Domestic				MCINNIS, RICHARD T			0.00
363773	SW	23	71	20	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic				MAJOR, SOPHIE			0.00
365807	SE	35	70	19	5	GOLDEN PEACE DRILLING LTD.	1989-08-16	360.00	New Well	Domestic & Stock		16		NORMAN, CARON	271.00	4.00	5.50
366493	SE	13	70	19	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				RYE, BRIAN			0.00
366642	NE	36	70	20	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				EAST SMOKY SCHOOL DIV			0.00
367924	4	18	70	18	5	UNKNOWN DRILLER	1951-11-23	1,027.00	Core Hole	Industrial				GULF OIL#SNIPE LK CH2			0.00
367926		18	70	18	5	UNKNOWN DRILLER	1952-01-17	860.00	Core Hole	Industrial				GULF OIL#SNIPE LK CH15			0.00
367928	4	19	70	18	5	UNKNOWN DRILLER		717.00	Core Hole	Industrial				GULF OIL#SNIPE LK CH25			0.00
367940		30	70	18	5	UNKNOWN DRILLER	1952-01-15	635.00	Core Hole	Industrial				GULF OIL#SNIPE LK CH16			0.00
372318	SW	10	71	20	5	UNKNOWN DRILLER		90.00	Chemistry	Domestic	<u>1</u>			KICENIUK, PETE	66.00		0.00
376319	12	22	71	20	5	WATER RESOURCES	1968-05-25	75.00	New Well	Domestic	<u>1</u>	7		PETERSON, TONY #441-H			0.00



Reconnaissance Report

[View in Metric](#)

[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
383110	NW	22	71	20	5	MOORE, DENNIS RAYMOND	1984-08-02	320.00	Deepened	Domestic		4		PETERSON, TONY	175.00	2.50	0.00
383112	NW	22	71	20	5	UNKNOWN DRILLER		225.00	Chemistry	Domestic	2			PETERSON, ANTHONY			0.00
383131		36	70	20	5	GOLDEN PEACE DRILLING LTD.	1983-08-09	380.00	New Well	Domestic	2	16		EAST SMOKY SCHOOL DIV	289.00	6.00	5.56
389023	NW	31	70	19	5	T-CAR HOLDINGS LTD.	1994-08-24	321.00	New Well	Domestic		13	25	GREENVIEW, MD OF 16	226.00	6.00	5.50
394225	4	19	70	19	5	WATER RESOURCES	1968-07-30	75.00	Test Hole	Investigation		7		ALTA ENV/WATER RES#439H			0.00
396126	NE	1	70	19	5	UNKNOWN DRILLER		52.00	Chemistry	Domestic				WASYLCIW, JOHN			0.00
396128	SH	4	70	19	5	ALBERTA ENVIRONMENT/EARTH SCIENCES DIVISION	1984-01-31	55.00	Test Hole	Investigation		4			12.70		2.00
396129	SH	7	70	19	5	UNKNOWN DRILLER		11.00	Chemistry	Domestic	1			MARIN, RON			0.00
396130	SW	13	70	19	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic	1			BROOKS, LLOYD			0.00
396131	6	13	70	19	5	UNKNOWN DRILLER	1968-08-11	150.00	Coal Test Hole	Investigation		13		RCA			0.00
396134	NW	13	70	19	5	UNKNOWN DRILLER		30.00	Chemistry	Domestic	1			BROOKS, GLEN	20.00		0.00
396137	13	13	70	19	5	UNKNOWN DRILLER	1981-01-26	50.00	Flowing Shot Hole	Industrial				NORTHERN GEOPH#SP245			0.00
396138	13	13	70	19	5	UNKNOWN DRILLER	1981-01-26	50.00	Flowing Shot Hole	Industrial				NORTHERN GEOPH#SP253			0.00
396139	NE	13	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1974-05-31	330.00	New Well	Domestic & Stock		13		BROOKS, GLEN	0.00	6.00	4.60
396140	16	14	70	19	5	UNKNOWN DRILLER	1981-01-26	50.00	Flowing Shot Hole	Industrial				NORTHERN GEOPH#SP257			0.00
396141	NW	17	70	19	5	MOORE, DENNIS RAYMOND	1988-07-12	587.00	New Well	Domestic & Stock		19	24	GRIFFIN, MARVIN	375.00	10.00	5.56
396142	SH	19	70	19	5	UNKNOWN DRILLER	1969-07-04	76.00	Test Hole	Domestic		3		VANSTONE, MARGARET			0.00
396145	NE	19	70	19	5	UNKNOWN DRILLER	1968-07-12	210.00	Coal Test Hole	Investigation		13		RCA			0.00
396147	SE	20	70	19	5	UNKNOWN DRILLER	1972-02-18	0.00	Spring	Domestic & Stock	3			DEBRE, HENRY			0.00
396149	NE	22	70	19	5	UNKNOWN DRILLER	1968-08-13	30.00	Coal Test Hole	Investigation		2		RCA			0.00



Reconnaissance Report

[View in Metric](#)

[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396151	14	23	70	19	5	MID-WEST WATER WELLS LTD.	1985-09-29	160.00	New Well	Industrial		7		KENTING DRLG 10	90.00	50.00	5.50
396155	14	23	70	19	5	MID-WEST WATER WELLS LTD.	1985-03-29	155.00	New Well	Industrial		7		KENTING DRLG 10	92.00	20.00	5.50
396158	2	26	70	19	5	UNKNOWN DRILLER		0.00	Flowing Shot Hole	Industrial				#SP46-11881			0.00
396160	NE	27	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1976-10-05	117.00	New Well	Domestic & Stock	<u>1</u>	5		WHITING, JAMES	90.00	10.00	4.60
396169	NE	27	70	19	5	UNKNOWN DRILLER		80.00	Chemistry	Domestic	<u>1</u>			WHITING, JAMES	50.00		0.00
396172	NW	29	70	19	5	GOLDEN PEACE DRILLING LTD.	1988-06-01	500.00	New Well	Domestic & Stock		23		RADFORD, ED	398.00	30.00	5.50
396180	4	31	70	19	5	L M WW LTD	1974-08-22	440.00	New Well	Industrial		13		GARNETT DRLG RIG 3	240.00	10.00	5.50
396187	NW	31	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1981-01-15	220.00	New Well	Unknown		7		SUNSET HOUSE COMMUNITY	160.00	3.00	5.50
396192	NE	31	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1973-10-25	315.00	New Well	Unknown	<u>1</u>	8		MUZYCHYN, NICK	231.00	3.00	0.00
396195	NW	32	70	19	5	UNKNOWN DRILLER		40.00	Chemistry	Domestic	<u>1</u>			HUGGARD, NORA			0.00
396196	NW	32	70	19	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				MAY, RODNEY			0.00
396197	NE	32	70	19	5	UNKNOWN DRILLER	1968-08-09	150.00	Coal Test Hole	Investigation		9		RCA			0.00
396199	NW	34	70	19	5	UNKNOWN DRILLER		120.00	Chemistry	Domestic	<u>2</u>			DEAN, JAMES	85.00		0.00
396200	NE	34	70	19	5	UNKNOWN DRILLER	1968-08-10	150.00	Coal Test Hole	Investigation		12		RCA			0.00
396202	NE	34	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1972-08-21	90.00	New Well	Unknown	<u>2</u>	4		COOGAN, DAVID	64.00	6.00	0.00
396204	SW	35	70	19	5	UNKNOWN DRILLER		40.00	Chemistry	Domestic	<u>2</u>			WASYLCIW, JOHN	22.00		0.00
396206	NE	12	70	20	5	UNKNOWN DRILLER	1968-07-21	180.00	Coal Test Hole	Investigation		6		RCA			0.00
396208	SE	13	70	20	5	J&L OIL SALES	1975-10-28	75.00	Dry Hole	Domestic		1		MORIN, RON			0.00
396209	SE	13	70	20	5	UNKNOWN DRILLER		16.00	Chemistry	Domestic	<u>1</u>			MARIN, ALFRED			0.00
396210	1	13	70	20	5	ALBERTA ENVIRONMENT/EARTH SCIENCES DIVISION	1968-07-30	75.00	New Well	Investigation		4					0.00



Reconnaissance Report

[View in Metric](#)

[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396211	7	13	70	20	5	L M WW LTD	1972-10-27	420.00	New Well	Industrial	<u>1</u>	7		UNOTEX PETRO CORP	175.00	30.00	5.00
396211	7	13	70	20	5	L M WW LTD	1972-10-27	420.00	New Well	Industrial	<u>1</u>	7	34	UNOTEX PETRO CORP	162.30	30.00	5.00
396217	NE	19	70	20	5	UNKNOWN DRILLER	1968-07-12	150.00	Coal Test Hole	Investigation		3		RCA			0.00
396218	NE	21	70	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		4		RCA			0.00
396219	NE	23	70	20	5	UNKNOWN DRILLER	1968-07-12	180.00	Coal Test Hole	Investigation		4		RCA			0.00
396220	SE	25	70	20	5	MOORE, DENNIS RAYMOND	1988-07-08	365.00	New Well	Domestic & Stock		11	24	HUBAR, ALVIN	240.00	10.00	5.56
396256	SW	29	70	20	5	GOLDEN PEACE DRILLING LTD.	1989-03-07	500.00	New Well	Domestic & Stock		25		HANSEN, MARYJO/ROD	132.00	60.00	5.50
396261	SW	30	70	20	5	MOORE, DENNIS RAYMOND	1981-11-26	240.00	New Well	Domestic		5		BERENT, ART	110.00	3.00	4.60
396264	NE	32	70	20	5	GOLDEN PEACE DRILLING LTD.	1988-07-14	420.00	New Well	Domestic		12		KLIMP, W.ROD	186.00	50.00	5.50
396322	SW	34	70	20	5	SAVILLE WATER WELL DRILLING LTD.	1988-12-09	300.00	New Well	Domestic & Stock		9	20	CHATEAUNEUF, ARTHUR	175.00	8.00	5.50
396328	NW	34	70	20	5	GOLDEN PEACE DRILLING LTD.	1987-06-09	260.00	New Well	Domestic & Stock		9		BLISS, VENETA	150.00	8.00	5.50
396332	NE	34	70	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		4		RCA			0.00
396334	NE	34	70	20	5	HOPPER WATER WELL DRILLING LTD.	1988-10-21	380.00	New Well	Domestic & Stock		7		BLESS, LAWERENCE	197.00	4.00	5.50
396336	NE	36	70	20	5	UNKNOWN DRILLER	1968-07-12	180.00	Coal Test Hole	Investigation		13		RCA			0.00
396570	SW	17	71	18	5	UNKNOWN DRILLER		64.00	Chemistry	Industrial	<u>1</u>			IMPERIAL OIL ENT LTD	16.00		0.00
396572	NE	19	71	18	5	UNKNOWN DRILLER	1968-08-12	150.00	Coal Test Hole	Investigation		3		RCA# COAL SURVEY			0.00
396589	SW	2	71	19	5	UNKNOWN DRILLER		46.00	Chemistry	Domestic	<u>2</u>			FENTON, WILLIAM R.	12.00		0.00
396594	SW	2	71	19	5	GOLDEN PEACE DRILLING LTD.	1989-09-02	305.00	New Well	Domestic		17		COOGAN, DAVID	230.00	12.00	5.50
396596	SW	5	71	19	5	UNKNOWN DRILLER		90.00	Chemistry	Domestic	<u>1</u>			SUNSET HOUSE GENERAL STORE	80.00		0.00
396598	NW	5	71	19	5	UNKNOWN DRILLER	1946-09-01	100.00	Well Inventory	Domestic		1		PROCCOPIUK			0.00



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396600	NW	5	71	19	5	UNKNOWN DRILLER		80.00	Chemistry	Domestic	<u>1</u>			BUDS GENERAL STORE	20.00		0.00
396602	SE	6	71	19	5	MOORE, DENNIS RAYMOND	1988-07-18	478.00	New Well	Domestic		10	24	DANYLIUK, STEVE	305.00	10.00	5.56
396604	NH	7	71	19	5	UNKNOWN DRILLER		12.00	Chemistry	Domestic	<u>1</u>			MALIN, R.	7.00		0.00
396606	SW	8	71	19	5	UNKNOWN DRILLER		14.00	Chemistry	Domestic	<u>2</u>			HANSON, DENNIS	3.00		0.00
396608	NW	8	71	19	5	J&L OIL SALES	1975-10-29	90.00	Dry Hole	Domestic		1		DESCHENEUX, BILLY			0.00
396610	13	17	71	19	5	RAPID WATER DRLG	1979-10-12	280.00	New Well	Domestic	<u>1</u>	18		RIBAR, STEVE	242.00	2.00	4.60
396612	1	18	71	19	5	J&L OIL SALES	1975-10-29	20.00	New Well- Decommissioned	Domestic		1		BROWN, GERRY			0.00
396613	NE	18	71	19	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic	<u>1</u>			EDGINTON, G.			0.00
396614	SE	19	71	19	5	UNKNOWN DRILLER		18.00	Chemistry	Domestic	<u>1</u>			BROWN, PAULINE	10.00		0.00
396615	SE	19	71	19	5	SAVILLE WATER WELL DRILLING LTD.	1980-06-14	300.00	New Well	Domestic & Stock	<u>1</u>	6		BROWN, JERRY	220.00	5.00	5.60
396616	NE	19	71	19	5	UNKNOWN DRILLER	1968-07-17	150.00	Coal Test Hole	Investigation		3		RCA# COAL SURVEY			0.00
396617	1	20	71	19	5	SAVILLE WATER WELL DRILLING LTD.	1986-06-13	400.00	New Well	Domestic & Stock	<u>1</u>	15		HUBER, ALBERT	296.00	15.00	5.50
396619	SW	25	71	19	5	SAVILLE & TROTTLER	1969-12-09	288.00	New Well	Unknown		6		HALBERSON, RALPH	190.00	5.00	0.00
396621	SE	30	71	19	5	UNKNOWN DRILLER		192.00	Chemistry	Domestic	<u>2</u>			KIRICHUK, G.	30.00		0.00
396622	SE	30	71	19	5	SAVILLE WATER WELL DRILLING LTD.	1989-08-04	420.00	New Well	Domestic & Stock		13		KIRICHUK, GEORGE	290.00	15.00	5.56
396629	NE	2	71	20	5	MOORE, DENNIS RAYMOND	1986-03-03	340.00	New Well	Domestic & Stock	<u>1</u>	5	28	TORSTENSEN, CONRAD	249.00	10.00	5.56
396652	13	3	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1981-09-30	265.00	New Well	Domestic & Stock	<u>1</u>	9		SERVERYN, STEVE	203.00	7.00	5.50
396654	NE	4	71	20	5	WATER RESOURCES	1970-08-07	245.00	New Well	Unknown		9		ALTA ENV #0515E DANULIUK, D.			0.00
396661	NE	8	71	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		3		RCA# COAL SURVEY			0.00
396663	NE	8	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1988-11-12	280.00	New Well	Domestic & Stock		13		KICENIUK, MIKE	190.00	15.00	5.50



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396665	NE	10	71	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		9		RCA# COAL SURVEY			0.00
396667	NE	12	71	20	5	UNKNOWN DRILLER	1968-07-13	150.00	Coal Test Hole	Investigation		11		RCA# COAL SURVEY			0.00
396669	13	14	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1979-12-07	240.00	New Well	Domestic & Stock		9		PETRYSHEN, KAVIN	170.00	2.00	4.60
396671	4	15	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1980-05-08	260.00	New Well	Domestic & Stock	<u>1</u>	16		KLIMP, MARY A.	200.00	7.00	5.50
396671	4	15	71	20	5	BRAD SAVILLE ENTERPRISES LTD.	2011-10-19	280.00	Deepened	Domestic & Stock		3	14	KLIMP, BARRY	217.00	6.00	
396672	SW	15	71	20	5	UNKNOWN DRILLER		165.00	Chemistry	Domestic	<u>1</u>			KLIMP, MARVIN	145.00		0.00
396674	1	16	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1985-08-06	260.00	New Well	Domestic & Stock		14		HAMMAN, ROBERT	180.00	8.00	5.50
396676	SE	16	71	20	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic	<u>1</u>			HAMMON			0.00
396677	16	16	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1981-07-09	380.00	New Well	Domestic & Stock	<u>1</u>	14		PETRYSHEN, EMIL	290.00	4.00	5.50
396683	SE	20	71	20	5	UNKNOWN DRILLER		180.00	Chemistry	Domestic	<u>1</u>			SEWERYN, NICK			0.00
396689	16	21	71	20	5	WATER RESOURCES	1968-07-31	75.00	Test Hole	Investigation		7		PETERSEN, TONY			0.00
396690	NE	21	71	20	5	UNKNOWN DRILLER	1968-07-13	165.00	Coal Test Hole	Investigation		11		RCA# COAL SURVEY			0.00
396693	SE	22	71	20	5	UNKNOWN DRILLER		150.00	Chemistry	Domestic	<u>1</u>			CARSON, M.	35.00		0.00
396694	SE	22	71	20	5	UNKNOWN DRILLER		141.00	Chemistry	Domestic	<u>1</u>			BELANGER, DARREL	111.50		0.00
396695	NW	22	71	20	5	UNKNOWN DRILLER		210.00	Chemistry	Domestic	<u>1</u>			PETERSEN, TONY	40.00		0.00
396698	NW	22	71	20	5	UNKNOWN DRILLER		16.00	Chemistry	Domestic	<u>1</u>			PETERSEN, ANTHONY	10.00		0.00
396699	4	23	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1975-09-18	180.00	New Well	Unknown	<u>1</u>	4		HODGSON, A.	150.00	2.00	4.60
396702	4	23	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1987-08-26	200.00	New Well	Domestic & Stock		12		HODGSON, ALVAH	121.00	5.00	5.50
396703	NE	23	71	20	5	UNKNOWN DRILLER	1968-07-15	180.00	Coal Test Hole	Investigation		10		RCA# COAL SURVEY			0.00
396705	1	25	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1986-03-11	300.00	New Well	Domestic & Stock		13		DIXON, ROBERT	217.00	15.00	5.50



Reconnaissance Report

[View in Metric](#)
[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
396706	SE	27	71	20	5	UNKNOWN DRILLER		150.00	Chemistry	Domestic	3			KLASSEN, NORMAN	50.00		0.00
401670	NE	36	70	20	5	WATER RESOURCES	1970-08-06	200.00	Dry Hole	Unknown		10		ALTA ENV #0514E			0.00
401672	SE	6	71	19	5	WATER RESOURCES	1970-08-06	275.00	Test Hole	Investigation		13		ALTA ENV #0513E	187.00	5.00	0.00
415982	NW	20	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1995-08-23	620.00	New Well	Domestic		18	19	HANSEN, KELLY	429.00	10.00	5.56
442569	4	18	70	18	5	UNKNOWN DRILLER	1951-11-23	1,027.00	Core Hole	Industrial				CANADIAN GULF OIL CO			0.00
466860	SW	19	70	19	5	SAVILLE DRILLING LTD.	1996-09-19	360.00	New Well	Domestic		11	19	SHEANE, TERRY	174.00	25.00	5.56
468709	SE	27	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1997-08-18	166.00	New Well	Domestic		6	17	KLASSEN, JOAN	89.00	6.00	5.56
490805	SE	22	71	20	5	SAVILLE DRILLING LTD.	1997-10-15	160.00	New Well	Domestic		6	16	BIEGANEK, DARREL	123.00	3.00	5.56
492607	15	18	70	19	5	KRAMPS, JEROME A.	1998-07-27	453.00	New Well	Domestic		13	8	BROWN, CLIFFORD & VIVIAN	250.00	18.00	5.56
492607	15	18	70	19	5	GOLDEN PEACE DRILLING LTD.			Existing Well- Decommissioned	Unknown				BROWN, CLIFFORD & VIVIAN			
492615	NW	22	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1998-10-21	400.00	New Well	Domestic & Stock		13	11	PETERSON, TONY	285.00	15.00	5.50
492616	NE	23	71	20	5	SAVILLE WATER WELL DRILLING LTD.	1998-09-12	95.00	New Well	Domestic		4	6	SNIDER, ANDY	60.00	10.00	5.56
493256	NW	33	70	19	5	SAVILLE WATER WELL DRILLING LTD.	1999-06-24	420.00	New Well	Domestic & Stock		14	21	LEWCHUK, WILLIAM	220.00	13.00	5.50
496037	SW	13	70	19	5	ALKEN BASIN DRILLING LTD.	2000-02-08	380.00	New Well	Domestic		13	20	ARNOLD, LARRY	193.00	20.00	5.50
496528	NW	23	70	19	5	ALKEN BASIN DRILLING LTD.	2000-06-22	100.00	New Well	Domestic		6	7	ARNOLD, LARRY	50.00	25.00	5.50
497295	SE	9	71	20	5	SAVILLE DRILLING LTD.	2000-08-17	210.00	New Well	Domestic & Stock		8	11	BERRY, DAVE	113.00	25.00	5.50
1415006	NW	32	70	19	5	KRAMPS, DARCY	2002-09-12	378.00	New Well	Domestic		14	15	MCINNIS, RICHARD	210.00	10.00	6.00
1665763	4	5	71	19	5	SAVILLE DRILLING LTD.	2007-08-09	440.00	New Well	Domestic		14	20	GOLANY, GARY	202.00	10.00	5.56
1665857	13	17	71	19	5	SAVILLE DRILLING LTD.	2008-09-10	350.00	New Well	Domestic		6	25	JOHNSTON, PENNY	241.00		5.56
1716259	SE	2	71	19	5	SUMMERS DRILLING LTD.	2015-10-23	292.00	New Well	Commercial		46	26	WILLISCROFT BROS. CONST.	162.69	6.30	6.00



Reconnaissance Report

[View in Metric](#)

[Export to Excel](#)

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
1716260	SE	2	71	19	5	SUMMERS DRILLING LTD.	2015-10-23	173.00	New Well	Commercial		19	25	WILLISCROFT BROS CONST.	52.11	6.00	6.00
1877504	13	11	71	20	5	GOLDEN PEACE DRILLING LTD.	2006-08-07	300.00	New Well	Domestic		8	25	WERKLUND, KURTIS	190.00	5.00	6.63
1877505	13	11	71	20	5	GOLDEN PEACE DRILLING LTD.	2006-12-02	420.00	New Well- Decommissioned	Domestic		8	19	WERKLUND, KURTIS	330.00	3.50	6.63
1877516	15	18	70	19	5	GOLDEN PEACE DRILLING LTD.	2004-06-30	460.00	New Well	Domestic		9	13	BROWN, CLIFFORD AND VIVIAN	250.00		5.56
2094240	SE	20	71	19	5	UNKNOWNDRILLINGCOMP11	1973-06-30	60.00	Well Inventory	Domestic & Stock		1		HUBER, ALBERT	14.00		
9486009	8	4	71	20	5	BRAD SAVILLE ENTERPRISES LTD.	2010-06-10	315.00	New Well	Domestic		7	16	BELCOURT, JOHN	205.00	10.00	5.56
9486164	4	15	71	20	5	BRAD SAVILLE ENTERPRISES LTD.	2012-09-20	460.00	New Well	Domestic & Stock		15	18	KLIMP, BARRY	348.00	4.00	5.56
9486216	NE	36	70	20	5	BRAD SAVILLE ENTERPRISES LTD.	2013-11-08	360.00	New Well	Municipal		16	26	MD OF GREENVIEW	279.62	6.00	5.56
9486308	16	7	71	19	5	BRAD SAVILLE ENTERPRISES LTD.	2016-08-18	346.00	New Well	Domestic & Stock		15	14	ROBERT L ROHLOFF	278.00	7.00	5.56
9486345	4	1	71	19	5	BRAD SAVILLE ENTERPRISES LTD.	2018-06-18	80.00	New Well	Domestic & Stock		8	15	WHITING, JAMES	36.00	4.00	5.56
9491063	3	25	71	20	5	SAVILLE DRILLING SERVICES LTD.	2011-09-21	388.00	New Well	Domestic		19	15	PLANTE, RENE	224.10	50.00	5.56
9491127	9	35	70	19	5	SAVILLE DRILLING SERVICES LTD.	2013-08-11	250.00	New Well	Domestic		35	18	CARTER, KEN	140.70	25.00	5.56
9641005	4	36	70	19	5	FULL METAL DRILLING INC	2013-05-18	280.00	New Well	Domestic		10	21	OUIMET, KARLE	93.00	10.00	5.56

APPENDIX B – WATER WELL DRILLING REPORT





Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 9486216
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2014/05/15

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name MD OF GREENVIEW		Address 4802 - 36 AVENUE		Town VALLEYVIEW		Province ALBERTA		Country CANADA	Postal Code T0H 3N0		
Location	1/4 or LSD NE	SEC 36	TWP 70	RGE 20	W of MER 5	Lot	Block	Plan	Additional Description		
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>55.108030</u> Longitude <u>-116.902490</u>					Elevation <u>749.81 m</u>	
_____ m from _____					How Location Obtained Hand held autonomous GPS 20-30m					How Elevation Obtained Hand held autonomous GPS 20-30m	

Drilling Information	
Method of Drilling Rotary - Air	Type of Work New Well
Proposed Well Use Municipal	

Formation Log			Measurement in Metric	
Depth from ground level (m)	Water Bearing	Lithology Description		
5.49		Clay		
18.29		Gray Clay		
18.59		Gravel		
23.77	Yes	Gray Coarse Grained Sandstone		
33.53		Gray Shale		
35.66		Gray Coarse Grained Sandstone		
39.62		Dark Gray Shale		
46.63	Yes	Gray Coarse Grained Sandstone		
54.86		Gray Shale		
56.39		Dark Gray Shale		
57.00	Yes	Fractured Shale		
59.44		Gray Shale		
66.45	Yes	Gray Coarse Grained Sandstone		
103.02		Gray Shale		
109.12	Yes	Dark Gray Coarse Grained Sandstone		
109.73		Dark Gray Shale & Coal		

Yield Test Summary			Measurement in Metric	
Recommended Pump Rate <u>27.28 L/min</u>				
Test Date	Water Removal Rate (L/min)	Static Water Level (m)		
2013/11/09	27.28	85.23		

Well Completion				Measurement in Metric	
Total Depth Drilled	Finished Well Depth	Start Date	End Date		
109.73 m	109.73 m	2013/11/08	2013/11/08		
Borehole					
Diameter (cm)		From (m)	To (m)		
19.99		0.00	100.58		
12.70		100.58	109.73		
Surface Casing (if applicable)			Well Casing/Liner		
Steel			Plastic		
Size OD : <u>14.12 cm</u>		Size OD : <u>11.43 cm</u>			
Wall Thickness : <u>0.655 cm</u>		Wall Thickness : <u>0.544 cm</u>			
Bottom at : <u>102.72 m</u>		Top at : <u>6.10 m</u>			
		Bottom at : <u>109.73 m</u>			
Perforations					
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)	
103.63	109.73	0.051	7.62		
Perforated by Machine					
Annular Seal Bentonite Chips/Tablets					
Placed from <u>0.00 m</u> to <u>100.58 m</u>					
Amount <u>40.00 Bags</u>					
Other Seals					
Type		At (m)			
Drive Shoe		102.72			
Screen Type					
Size OD : _____ cm					
From (m)	To (m)	Slot Size (cm)			
Attachment _____					
Top Fittings _____		Bottom Fittings _____			
Pack					
Type _____		Grain Size _____			
Amount _____					

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well CHASE SAVILLE	Certification No 75496A
Company Name BRAD SAVILLE ENTERPRISES LTD.	Copy of Well report provided to owner Date approval holder signed Yes 2013/11/09



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 9486216
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2014/05/15

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name		Address			Town		Province		Country	Postal Code	
MD OF GREENVIEW		4802 - 36 AVENUE			VALLEYVIEW		ALBERTA		CANADA	T0H 3N0	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	NE	36	70	20	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from					Latitude 55.108030 Longitude -116.902490					Elevation 749.81 m	
_____ m from					How Location Obtained					How Elevation Obtained	
					Hand held autonomous GPS 20-30m					Hand held autonomous GPS 20-30m	

Additional Information				Measurement in Metric	
Distance From Top of Casing to Ground Level				91.44 cm	
Is Artesian Flow				Is Flow Control Installed	
Rate _____ L/min				Describe _____	
Recommended Pump Rate		27.28 L/min		Pump Installed	Depth _____ m
Recommended Pump Intake Depth (From TOC)		103.02 m		Type _____	Make _____ H.P. _____
				Model (Output Rating) _____	
Did you Encounter Saline Water (>4000 ppm TDS)		Depth _____ m		Well Disinfected Upon Completion Yes	
Gas _____		Depth _____ m		Geophysical Log Taken _____	
				Submitted to ESRD _____	
Additional Comments on Well				Sample Collected for Potability _____ Submitted to ESRD _____	

Yield Test			Taken From Top of Casing		Measurement in Metric	
			Depth to water level			
Test Date	Start Time	Static Water Level				
2013/11/09	8:20 AM	85.23 m				
Method of Water Removal						
Type Pump						
Removal Rate 27.28 L/min						
Depth Withdrawn From 103.02 m						
If water removal period was < 2 hours, explain why						
			Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)	
			69.99	0:00	95.70	
			86.87	1:00	94.79	
			88.42	2:00	92.96	
			89.49	3:00	91.65	
			90.28	4:00	90.62	
			90.95	5:00	89.79	
			91.50	6:00	89.12	
			91.78	7:00	88.61	
			91.99	8:00	88.21	
			92.14	9:00	87.87	
			92.23	10:00	87.63	
			92.45	12:00	87.26	
			92.60	14:00	87.02	
			92.75	16:00	86.84	
			92.87	18:00	86.72	
			92.99	20:00	86.62	
			93.27	25:00	86.50	
			93.48	30:00	86.41	
			93.73	35:00	86.35	
			93.91	40:00	86.29	
			94.34	50:00	86.20	
			94.67	60:00	86.14	
			95.07	75:00	86.08	
			95.31	90:00	85.98	
			95.59	105:00	85.92	
			95.70	120:00	85.65	

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
WELL	9092.18 L	2013/11/08 5:00 AM

Contractor Certification		
Name of Journeyman responsible for drilling/construction of well		Certification No
CHASE SAVILLE		75496A
Company Name	Copy of Well report provided to owner	Date approval holder signed
BRAD SAVILLE ENTERPRISES LTD.	Yes	2013/11/09



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396172
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/06/09

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name RADFORD, ED		Address P.O. BOX 1056 VALLEYVIEW			Town		Province		Country	Postal Code	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
NW		29	70	19	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>55.094142</u> Longitude <u>-116.867517</u>					Elevation _____ m	
_____ m from _____					How Location Obtained					How Elevation Obtained	
					Map					Not Obtained	

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic & Stock	

Formation Log			Measurement in Metric	
Depth from ground level (m)	Water Bearing	Lithology Description		
11.58		Till		
16.76		Shale		
17.07		Coal		
21.34		Shale		
21.64		Coal		
32.00		Shale		
32.31		Coal		
43.59		Shale		
44.81		Gray Sandstone		
53.95		Shale		
58.83		Gray Sandstone		
64.01		Shale		
66.45		Gray Sandstone		
102.11		Shale		
103.94		Gray Sandstone		
119.79		Shale		
121.01		Gray Sandstone		
123.44		Shale		
125.58		Gray Sandstone		
129.54		Shale		
131.98		Gray Sandstone		
138.68		Shale		
152.40		Gray Sandstone		

Yield Test Summary			Measurement in Metric	
Recommended Pump Rate <u>27.28</u> L/min				
Test Date	Water Removal Rate (L/min)	Static Water Level (m)		
1988/06/01	136.38	121.31		

Well Completion				Measurement in Metric	
Total Depth Drilled	Finished Well Depth	Start Date	End Date		
152.40 m		1988/05/31	1988/06/01		
Borehole					
Diameter (cm)	From (m)	To (m)			
0.00	0.00	152.40			
Surface Casing (if applicable)			Well Casing/Liner		
Steel			Steel		
Size OD : <u>13.97</u> cm			Size OD : <u>11.68</u> cm		
Wall Thickness : <u>0.620</u> cm			Wall Thickness : <u>0.396</u> cm		
Bottom at : <u>140.21</u> m			Top at : <u>139.60</u> m		
			Bottom at : <u>152.40</u> m		
Perforations					
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)	
141.43	150.88	1.270		20.32	
Perforated by Torch					
Annular Seal Driven					
Placed from <u>0.61</u> m to <u>0.00</u> m					
Amount _____					
Other Seals					
Type			At (m)		
Screen Type					
Size OD : <u>0.00</u> cm					
From (m)	To (m)	Slot Size (cm)			
Attachment _____					
Top Fittings _____			Bottom Fittings _____		
Pack					
Type _____			Grain Size _____		
Amount _____					

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name GOLDEN PEACE DRILLING LTD.	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396172
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/06/09

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name		Address			Town		Province		Country	Postal Code	
RADFORD, ED		P.O. BOX 1056 VALLEYVIEW									
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	NW	29	70	19	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from					Latitude 55.094142 Longitude -116.867517					Elevation _____ m	
_____ m from					How Location Obtained					How Elevation Obtained	
					Map					Not Obtained	

Additional Information										Measurement in Metric
Distance From Top of Casing to Ground Level _____ cm										
Is Artesian Flow _____										
Rate _____ L/min										
Is Flow Control Installed _____										
Describe _____										
Recommended Pump Rate					27.28 L/min		Pump Installed _____		Depth _____ m	
Recommended Pump Intake Depth (From TOC)					137.16 m		Type _____		Make _____ H.P. _____	
Model (Output Rating) _____										
Did you Encounter Saline Water (>4000 ppm TDS) _____					Depth _____ m		Well Disinfected Upon Completion _____			
Gas _____					Depth _____ m		Geophysical Log Taken _____			
Submitted to ESRD _____										
Sample Collected for Potability _____ Submitted to ESRD _____										
Additional Comments on Well _____										

Yield Test			Taken From Ground Level	Measurement in Metric
			Depth to water level	
Test Date	Start Time	Static Water Level		
1988/06/01	12:00 AM	121.31 m		
			Pumping (m)	Elapsed Time Minutes:Sec
				Recovery (m)
Method of Water Removal				
Type Air				
Removal Rate 136.38 L/min				
Depth Withdrawn From 152.40 m				
If water removal period was < 2 hours, explain why				

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well	Certification No
UNKNOWN NA DRILLER	1
Company Name	Copy of Well report provided to owner Date approval holder signed
GOLDEN PEACE DRILLING LTD.	



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396220
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/08/22

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name HUBAR, ALVIN		Address P.O. BOX 22		Town SUNSET HOUSE		Province AB		Country CA	Postal Code		
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	SE	25	70	20	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>55.086867</u> Longitude <u>-116.905840</u>					Elevation _____ m	
_____ m from _____					How Location Obtained _____					How Elevation Obtained _____	
					Map _____					Not Obtained	

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic & Stock	

Formation Log			Measurement in Metric	
Depth from ground level (m)	Water Bearing	Lithology Description		
21.34		Till		
35.05		Brown Shale		
41.45		Green Shale		
50.29		Brown Shale		
52.12		Green Shale		
64.01		Brown Shale		
79.25		Green Shale		
86.87		Gray Shale		
96.01		Brown Shale		
99.06		Gray Shale		
111.25		Sandstone		

Yield Test Summary			Measurement in Metric	
Recommended Pump Rate <u>45.46</u> L/min				
Test Date	Water Removal Rate (L/min)	Static Water Level (m)		
1988/07/08	45.46	73.15		

Well Completion				Measurement in Metric	
Total Depth Drilled	Finished Well Depth	Start Date	End Date		
111.25 m		1988/07/08	1988/07/08		
Borehole					
Diameter (cm)	From (m)	To (m)			
0.00	0.00	111.25			
Surface Casing (if applicable)			Well Casing/Liner		
Steel			Steel		
Size OD : <u>14.12</u> cm			Size OD : <u>11.43</u> cm		
Wall Thickness : <u>0.478</u> cm			Wall Thickness : <u>0.396</u> cm		
Bottom at : <u>36.58</u> m			Top at : <u>35.05</u> m		
			Bottom at : <u>111.25</u> m		
Perforations					
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)	
97.54	111.25	0.318		20.32	
Perforated by Torch					
Annular Seal Driven					
Placed from <u>0.00</u> m to <u>0.00</u> m					
Amount _____					
Other Seals					
Type				At (m)	
Screen Type					
Size OD : <u>0.00</u> cm					
From (m)		To (m)		Slot Size (cm)	
Attachment _____					
Top Fittings _____			Bottom Fittings _____		
Pack					
Type <u>Unknown</u>			Grain Size _____		
Amount _____			Unknown		

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name MOORE, DENNIS RAYMOND	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396602
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/08/22

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name DANYLIUK, STEVE		Address P.O. BOX 70 SUNSET HOUSE			Town		Province		Country	Postal Code	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	SE	6	71	19	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>55.116521</u> Longitude <u>-116.905230</u>					Elevation _____ m	
_____ m from _____					How Location Obtained _____					How Elevation Obtained _____	
					Map _____					Estimated _____	

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic	

Formation Log			Measurement in Metric		
Depth from ground level (m)	Water Bearing	Lithology Description			
45.72		Shaly Till & Rocks			
54.86		Green Shale			
79.25		Gray Shale			
85.34		Sandstone			
92.66		Brown Shale			
99.06		Green Shale			
109.73		Gray Shale			
117.35		Brown Shale			
131.06		Gray Shale			
145.69		Sandstone			

Yield Test Summary			Measurement in Metric		
Recommended Pump Rate <u>45.46</u> L/min					
Test Date	Water Removal Rate (L/min)	Static Water Level (m)			
1988/07/18	45.46	92.96			

Well Completion				Measurement in Metric			
Total Depth Drilled	Finished Well Depth	Start Date	End Date				
145.69 m		1988/07/16	1988/07/18				
Borehole							
Diameter (cm)	From (m)	To (m)					
0.00	0.00	145.69					
Surface Casing (if applicable)				Well Casing/Liner			
Steel				Steel			
Size OD :		<u>14.12</u> cm	Size OD :		<u>11.68</u> cm		
Wall Thickness :		<u>0.478</u> cm	Wall Thickness :		<u>0.396</u> cm		
Bottom at :		<u>51.21</u> m	Top at :		<u>49.68</u> m		
			Bottom at :		<u>145.69</u> m		
Perforations							
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)			
131.06	145.69	0.318		20.32			
Perforated by Torch							
Annular Seal Driven							
Placed from		<u>50.90</u> m	to		<u>51.21</u> m		
Amount _____							
Other Seals							
Type				At (m)			
Screen Type							
Size OD :		<u>0.00</u> cm					
From (m)	To (m)	Slot Size (cm)					
Attachment _____							
Top Fittings _____				Bottom Fittings _____			
Pack							
Type _____		Grain Size _____					
Amount _____							

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name MOORE, DENNIS RAYMOND	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396602
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1988/08/22

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name DANYLIUK, STEVE		Address P.O. BOX 70 SUNSET HOUSE			Town		Province		Country	Postal Code
Location	1/4 or LSD SE	SEC 6	TWP 71	RGE 19	W of MER 5	Lot	Block	Plan	Additional Description	
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)					
_____ m from _____					Latitude <u>55.116521</u> Longitude <u>-116.905230</u>			Elevation _____ m		
_____ m from _____					How Location Obtained			How Elevation Obtained		
					Map			Estimated		

Additional Information										Measurement in Metric
Distance From Top of Casing to Ground Level _____ cm										
Is Artesian Flow _____										
Rate _____ L/min										
Is Flow Control Installed _____										
Describe _____										
Recommended Pump Rate _____ 45.46 L/min										
Recommended Pump Intake Depth (From TOC) _____ 121.92 m										
Pump Installed _____										
Type _____										
Depth _____ m										
Make _____										
H.P. _____										
Model (Output Rating) _____										
Did you Encounter Saline Water (>4000 ppm TDS) _____										
Depth _____ m										
Well Disinfected Upon Completion _____										
Gas _____										
Depth _____ m										
Geophysical Log Taken _____										
Submitted to ESRD _____										
Sample Collected for Potability _____										
Submitted to ESRD _____										
Additional Comments on Well _____										

Yield Test			Taken From Ground Level	Measurement in Metric	
			Depth to water level		
Test Date 1988/07/18	Start Time 12:00 AM	Static Water Level 92.96 m			
Method of Water Removal					
Type Air					
Removal Rate _____ 45.46 L/min					
Depth Withdrawn From _____ 121.92 m					
If water removal period was < 2 hours, explain why					
			Pumping (m)	Elapsed Time Minutes:Sec	
				Recovery (m)	
				0:00	121.92
				0:30	119.63
				1:00	117.35
				1:30	115.06
				2:00	112.78
				3:00	108.20
				4:00	104.55
				5:00	101.47
				6:00	99.61
				7:00	98.39
				8:00	97.44
				9:00	96.83
				10:00	96.23
				12:00	95.31
				14:00	94.67
				16:00	94.37
				18:00	94.12
				20:00	93.88
				25:00	93.51
				30:00	93.33
				35:00	93.27
				40:00	93.21
				50:00	93.12
				60:00	93.06

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name MOORE, DENNIS RAYMOND	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396629
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1986/05/16

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name TORSTENSEN, CONRAD		Address GEN DEL, SUNSET HOUSE		Town		Province		Country	Postal Code	
Location	1/4 or LSD NE	SEC 2	TWP 71	RGE 20	W of MER 5	Lot	Block	Plan	Additional Description	
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)					
_____ m from _____					Latitude <u>55.123743</u> Longitude <u>-116.956575</u>			Elevation _____ m		
_____ m from _____					How Location Obtained			How Elevation Obtained		
					Map			Not Obtained		

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic & Stock	

Formation Log			Measurement in Metric
Depth from ground level (m)	Water Bearing	Lithology Description	
73.15		Till	
76.50		Green Shale	
80.77		Brown Shale	
89.92		Gray Shale	
103.63		Sandstone	

Yield Test Summary			Measurement in Metric
Recommended Pump Rate <u>45.46</u> L/min			
Test Date	Water Removal Rate (L/min)	Static Water Level (m)	
1986/03/03	45.46	75.90	

Well Completion				Measurement in Metric
Total Depth Drilled	Finished Well Depth	Start Date	End Date	
103.63 m		1986/03/02	1986/03/03	
Borehole				
Diameter (cm)	From (m)	To (m)		
0.00	0.00	103.63		
Surface Casing (if applicable)		Well Casing/Liner		
Steel		Steel		
Size OD : <u>14.12</u> cm		Size OD : <u>11.68</u> cm		
Wall Thickness : <u>0.478</u> cm		Wall Thickness : <u>0.391</u> cm		
Bottom at : <u>75.29</u> m		Top at : <u>73.15</u> m		
		Bottom at : <u>103.63</u> m		
Perforations				
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)
91.44	103.63	0.318		20.32
Perforated by Torch				
Annular Seal Driven				
Placed from <u>74.98</u> m to <u>75.29</u> m				
Amount _____				
Other Seals				
Type		At (m)		
Screen Type				
Size OD : <u>0.00</u> cm				
From (m)	To (m)	Slot Size (cm)		
Attachment _____				
Top Fittings _____		Bottom Fittings _____		
Pack				
Type _____		Grain Size _____		
Amount _____				

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name MOORE, DENNIS RAYMOND	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 396629
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1986/05/16

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name		Address		Town		Province		Country		Postal Code	
TORSTENSEN, CONRAD		GEN DEL, SUNSET HOUSE									
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	NE	2	71	20	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from					Latitude 55.123743 Longitude -116.956575					Elevation _____ m	
_____ m from					How Location Obtained					How Elevation Obtained	
					Map					Not Obtained	

Additional Information										Measurement in Metric
Distance From Top of Casing to Ground Level _____ cm										
Is Artesian Flow _____										
Rate _____ L/min										
Is Flow Control Installed _____										
Describe _____										
Recommended Pump Rate _____ 45.46 L/min										
Recommended Pump Intake Depth (From TOC) _____ 91.44 m										
Pump Installed _____										
Type _____										
Depth _____ m										
Make _____										
H.P. _____										
Model (Output Rating) _____										
Did you Encounter Saline Water (>4000 ppm TDS) _____										
Depth _____ m										
Well Disinfected Upon Completion _____										
Gas _____										
Depth _____ m										
Geophysical Log Taken _____										
Submitted to ESRD _____										
Sample Collected for Potability _____										
Submitted to ESRD <u>Yes</u>										
Additional Comments on Well _____										

Yield Test			Taken From Ground Level	Measurement in Metric
			Depth to water level	
Test Date	Start Time	Static Water Level		
1986/03/03	12:00 AM	75.90 m		
Method of Water Removal				
Type Air				
Removal Rate _____ 45.46 L/min				
Depth Withdrawn From _____ 91.44 m				
If water removal period was < 2 hours, explain why				
	Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)	
		0:00	91.44	
		0:30	90.07	
		1:00	89.31	
		1:30	88.24	
		2:00	87.17	
		3:00	85.04	
		4:00	82.91	
		5:00	80.77	
		6:00	78.64	
		7:00	77.69	
		8:00	76.96	
		9:00	76.66	
		10:00	76.47	
		12:00	76.29	
		14:00	76.20	
		16:00	76.17	
		18:00	76.11	
		20:00	76.08	
		25:00	76.05	
		30:00	76.05	
		35:00	76.05	
		40:00	76.08	
		50:00	76.05	
		60:00	76.05	
		75:00	76.05	
		90:00	76.05	
		105:00	76.05	
		120:00	76.05	

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification		
Name of Journeyman responsible for drilling/construction of well		Certification No
UNKNOWN NA DRILLER		1
Company Name		Copy of Well report provided to owner
MOORE, DENNIS RAYMOND		Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 1665763
GoA Well Tag No.
Drilling Company Well ID
Date Report Received

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name GOLANY, GARY		Address P.O. BOX 1		Town SUNSET HOUSE		Province ALBERTA		Country CA	Postal Code T0H 1M0		
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	4	5	71	19	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>55.113220</u> Longitude <u>-116.898090</u>					Elevation <u>763.52</u> m	
_____ m from _____					How Location Obtained					How Elevation Obtained	
					Hand held autonomous GPS 20-30m					Hand held autonomous GPS 20-30m	

Drilling Information	
Method of Drilling Rotary	Type of Work New Well
Proposed Well Use Domestic	

Formation Log			Measurement in Metric	
Depth from ground level (m)	Water Bearing	Lithology Description		
21.34		Dark Brown Clay		
60.96		Gray Shale		
67.06		Gray Medium Grained Sandstone		
80.77		Gray Shale		
85.04		Gray Fine Grained Sandstone		
86.26		Gray Shale		
94.49		Gray Fine Grained Sandstone		
103.63		Dark Gray Shale		
106.68		Gray Sandstone		
109.73		Gray Shale		
114.30		Gray Medium Grained Sandstone		
121.92		Gray Shale		
126.49	Yes	Gray Water Bearing Sandstone		
134.11		Gray Shale		

Yield Test Summary			Measurement in Metric	
Recommended Pump Rate <u>27.28</u> L/min				
Test Date	Water Removal Rate (L/min)	Static Water Level (m)		
2007/08/09	45.46	61.57		

Well Completion			Measurement in Metric	
Total Depth Drilled	Finished Well Depth	Start Date	End Date	
134.11 m		2007/08/09	2007/08/09	
Borehole				
Diameter (cm)	From (m)	To (m)		
17.15	0.00	134.11		
Surface Casing (if applicable)		Well Casing/Liner		
Steel		Plastic		
Size OD : <u>14.13</u> cm		Size OD : <u>11.43</u> cm		
Wall Thickness : <u>0.655</u> cm		Wall Thickness : <u>0.544</u> cm		
Bottom at : <u>31.70</u> m		Top at : <u>5.49</u> m		
		Bottom at : <u>134.11</u> m		
Perforations				
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)
121.92	128.02	0.051		7.62
Perforated by Machine				
Annular Seal Driven				
Placed from <u>27.43</u> m to <u>31.70</u> m				
Amount _____				
Other Seals				
Type		At (m)		
Screen Type				
Size OD : _____ cm				
From (m)		To (m)		Slot Size (cm)
Attachment _____				
Top Fittings _____		Bottom Fittings _____		
Pack				
Type <u>Unknown</u>		Grain Size _____		
Amount _____		Unknown		

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well CHASE SAVILLE	Certification No 75496A
Company Name SAVILLE DRILLING LTD.	Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 1665763

GoA Well Tag No.

Drilling Company Well ID

Date Report Received

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name GOLANY, GARY		Address P.O. BOX 1		Town SUNSET HOUSE		Province ALBERTA		Country CA	Postal Code T0H 1M0	
Location	1/4 or LSD 4	SEC 5	TWP 71	RGE 19	W of MER 5	Lot	Block	Plan	Additional Description	
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)			Elevation		
_____ m from					Latitude 55.113220 Longitude -116.898090			763.52 m		
_____ m from					How Location Obtained			How Elevation Obtained		
					Hand held autonomous GPS 20-30m			Hand held autonomous GPS 20-30m		

Additional Information										Measurement in Metric
Distance From Top of Casing to Ground Level										91.44 cm
Is Artesian Flow										Rate _____ L/min
Is Flow Control Installed										Describe _____
Recommended Pump Rate										27.28 L/min
Recommended Pump Intake Depth (From TOC)										121.31 m
Pump Installed Yes										Depth _____ m
Type SUB @ 398'										Make BERKLEY H.P. 1
										Model (Output Rating) _____
Did you Encounter Saline Water (>4000 ppm TDS)										Depth _____ m
Gas _____										Depth _____ m
Well Disinfected Upon Completion										Geophysical Log Taken _____
										Submitted to ESRD _____
Sample Collected for Potability										Submitted to ESRD _____
Additional Comments on Well										
WATER USED FOR DRILLING FROM SE-4-67-22-W5 2007/08/09 8:00 AM 900 GALLONS, BOREHOLE DIAMETER 6.75" & 5"										

Yield Test			Taken From Ground Level	Measurement in Metric
			Depth to water level	
Test Date 2007/08/09	Start Time 12:00 AM	Static Water Level 61.57 m		
Method of Water Removal				
Type Air				
Removal Rate 45.46 L/min				
Depth Withdrawn From 134.11 m				
If water removal period was < 2 hours, explain why				
MEASUREMENTS FROM TOP OF CASING				
			Pumping (m)	Elapsed Time Minutes:Sec
			61.57	0:00
				1:00
				2:00
				3:00
				4:00
				5:00
				6:00
				7:00
				8:00
				9:00
				10:00
				12:00
				14:00
				16:00
				20:00
				25:00
				30:00
				35:00
				40:00
			128.02	120:00
				Recovery (m)
				128.02
				123.14
				117.04
				112.17
				108.51
				105.77
				103.63
				101.80
				100.58
				99.36
				97.54
				96.01
				93.88
				92.05
				85.95
				80.47
				76.20
				73.15
				70.71
				61.57

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well CHASE SAVILLE	Certification No 75496A
Company Name SAVILLE DRILLING LTD.	Copy of Well report provided to owner Date approval holder signed

APPENDIX C – SUNSET HOUSE CROSS-SECTION



PROJECT NO.: 2021-3024.000
DATE: January 2022
DRAWN BY: BR

CROSS SECTION A-A'

Sunset WTP Raw Water Well Addition

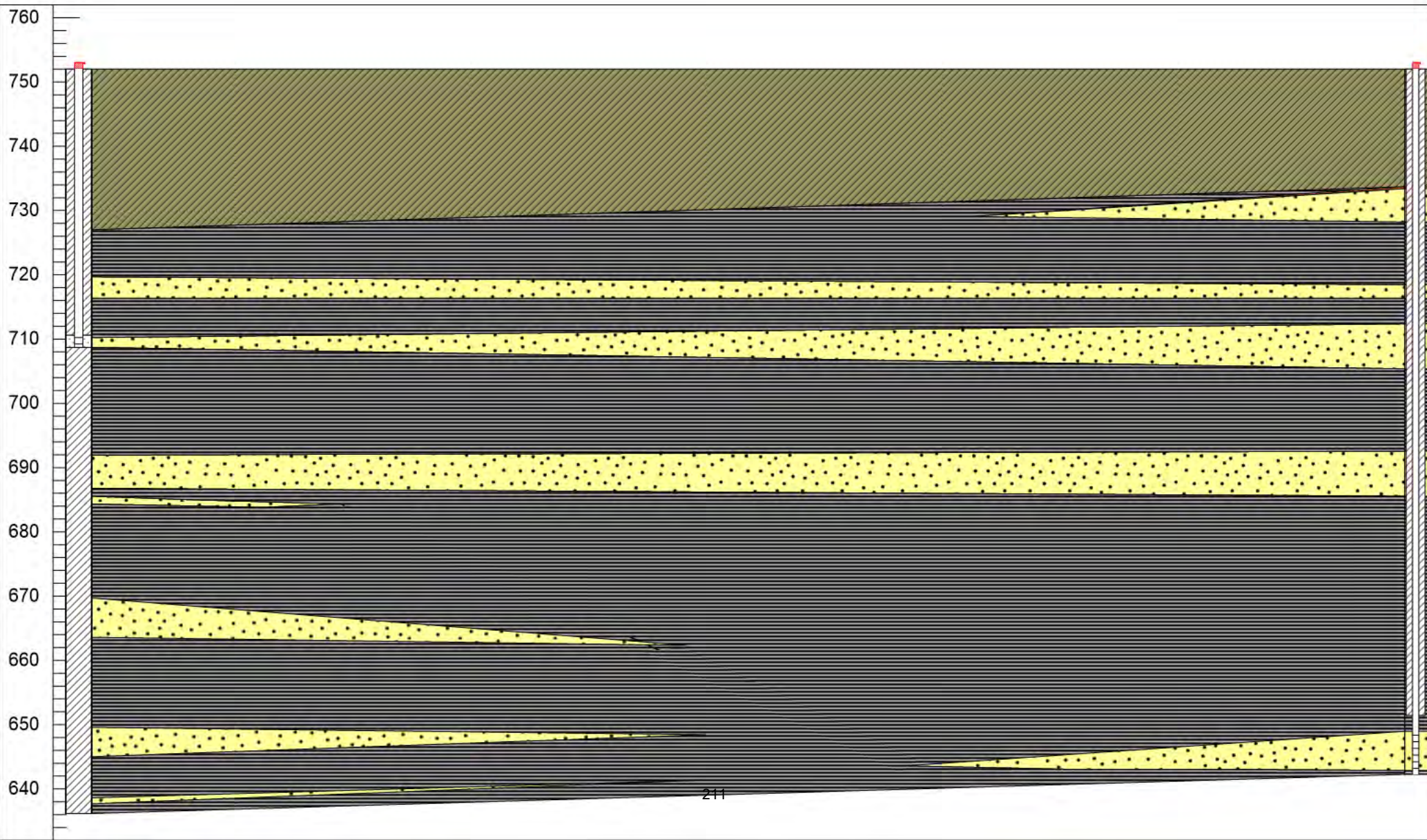
Hydrogeological Investigation

Legend

- Gravel
- Sandstone
- Shale
- Silty Clay

Well #2

GIC Well ID 9486216





REQUEST FOR DECISION

SUBJECT:	Bill C-21	REVIEWED AND APPROVED FOR SUBMISSION	
SUBMISSION TO:	REGULAR COUNCIL MEETING	CAO: SW	MANAGER:
MEETING DATE:	February 14, 2023	DIR: EGK	PRESENTER: SS
DEPARTMENT:	CORPORATE SERVICES	LEG: SS	
STRATEGIC PLAN:	Governance		

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Council accept the report on measures to oppose the federal Bill C-21 for information, as presented.

BACKGROUND/PROPOSAL:

Council adopted a motion to direct Administration to investigate ways for Council to oppose Bill C-21.

December 13, 2022 "MOTION: 22.12.772 Moved by: COUNCILLOR DAVE BERRY

That Council direct administration to investigate and provide a report on ways that this Council can show opposition to the federal Bill C-21 gun ban."

CARRIED

As local government, the avenues to oppose a federal bill are similar to those of a private citizen. Council may contact Government of Alberta and Government of Canada representatives and make their view known, broadcast online, or create/sign petitions on the matter. Council does benefit from having more notoriety and access to media in order to apply pressure than private citizens do.

Option 1: Write to Alberta's Chief Firearms Officer, Teri Bryant, expressing Council's displeasure with Bill C-21 and offer Greenview's support in ensuring Albertan firearm independence.

Option 2: Sign and promote House of Commons petition e-4221. This petition has been initiated by Robert Dowdell from Barrie, Ontario. It calls upon the Government of Canada to: "Stop targeting law abiding hunters, sports shooters and farmers with gun legislation; and immediately withdraw the amendments tabled on November 22, 2022, at the Standing Committee of Public Safety and National Security". This petition will remain open until February 19, 2023.

Option 3: Write to the three Members of Parliament that represent portions of Greenview, Gerald Soroka, Arnold Viersen and Chris Warkentin and express Council's opposition to Bill C-21.

Option 4: Release a statement of opposition on Greenview media/website denouncing the Bill.

Option 5: Contact a news outlet to release a statement of opposition from Greenview on the Bill.

Option 6: Hold a public engagement for the residents of Greenview to have their opinion on the matter heard and include that data in correspondence to Ministers denouncing the Bill.

Option 7: Utilize Alberta Counsel to lobby against the Bill to the Province of Alberta.

On February 3rd the Members of Parliament on the Standing Committee on Public Safety and National Security withdrew their amendments to the original Bill C-21. Amendments G4 and G46 which sought to ban hundreds of shotguns and rifles commonly associated with hunting and sport shooting. The original bill, banning handguns and amending the Criminal Code of Canada remains and requires third reading from the House of Commons and three reading from the Senate before it can be enacted into law.

The options identified in this report may be utilized in any instance which Council desires opposing a federal bill. It is not limited to Bill C-21.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the recommended motion is Council will be aware of their options when it comes to opposing federal bills.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to direct Administration to complete one or more of the options outlined in the background of the Request for Decision.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

If Council chooses to move forward with one or more of the options, Administration will aid in facilitating the completion of the motion(s).

ATTACHMENT(S):

- N/A



REQUEST FOR DECISION

SUBJECT: Alberta Roadbuilders and Heavy Construction Association Fuel Surcharge & Tonne/Km Rates Review

SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER: JF
DEPARTMENT:	OPERATIONS	DIR: RA	PRESENTER: JF
STRATEGIC PLAN:	Governance	LEG: SS	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – Policy 4004 – Equipment Contractors Registry.

RECOMMENDED ACTION:

MOTION: That Council review the implementation of the 2022 Alberta Roadbuilders and Heavy Construction Association's (ARHCA) Rental Rate Guide as it pertains to Greenview's Expression of Interest Program.

MOTION: That Council direct Administration to continue to pay 60% of the cost recovery fuel surcharge in The Alberta Roadbuilders and Heavy Construction Association's June 14, 2022 addendum to the 2022 Rental Rate Guide to be reviewed at the first Council meeting in November, 2023.

MOTION: That Council direct Administration to maintain tonne/km rates at \$0.20 per tonne/km with a \$1.00 basic loading factor in all areas except for \$0.22 per tonne/km with a \$1.00 basic loading factor on the Forestry Trunk Road to be reviewed at the first Council meeting in November, 2023.

BACKGROUND/PROPOSAL:

At the October 11, 2022 Regular Council Meeting, Council reviewed and subsequently directed Administration to continue to follow the Alberta Roadbuilders and Heavy Construction Association's (ARHCA) addendum to the 2022 rental guide at 60% as per Council's previous motion to this effect on July 12, 2022.

MOTION: 22.10.573 Moved by: DEPUTY REEVE BILL SMITH

That Council direct Administration to continue to follow the Alberta Roadbuilders and Heavy Construction Association's addendum to the 2022 rental guide fuel prices in construction at 60% of and enforce a price increase of 3 cents per tonne/km haul with a review date at the first council meeting in February 2023.

MOTION: 22.07.422 Moved by: COUNCILLOR JENNIFER SCOTT

That Council adjust Greenview's Expression of Interest to follow 60% of the ARCHA addendum to 2022 rental guide fuel prices in construction and enforce price increase of 3 cents per tonne/km with a review date at the first council meeting in October 2022, effective as of July 13, 2022.

ARHCA has indicated that the 2023 rates will factor in the 2022 fuel surcharge rates. However, ARHCA doesn't make its current books available until April. Greenview's EOI Program and Contractors Registry Policy indicates that the upcoming year's rates will be taken from the previous year's (2022's) ARHCA book. Continuing to implement the cost recovery fuel surcharge through the 2023 construction season would be a consistent application of the surcharge.

Administration has implemented the fuel cost adjustment as per Council's motion.

- When applied to gravel trucks, the average increase is 14%.
- When applied to heavy equipment, the average increase is 5%.
- Gravel trucks are hired twice as often as heavy equipment resulting in a combined average increase of 11%

EOIP costs incurred between July 13, 2022 and December 31, 2022:

- Construction & Engineering paid EOI contractors \$655,806.37
- Operations paid EOI contractors \$3,233,596.73
- These totals combined are \$3,889,403.10
- Applying the 11% average increase, the adjusted rate is estimated to have cost a total of \$427,834.34 in additional expenditures up to December 31, 2022

As of January 23, 2023, diesel prices have dropped an average of 6% since the motion was passed on July 13, 2022.

- For July 13, 2022, cardlock unmarked diesel rates were posted by UFA as follows:
 - \$1.6269/l for Grande Cache
 - \$1.5799/l for Grande Prairie
 - \$1.5669/l for Valleyview
- For August 31, 2022, cardlock unmarked diesel rates were posted by UFA as follows:
 - \$1.6939/l for Grande Cache
 - \$1.6479/l for Grande Prairie
 - \$1.6349/l for Valleyview
- For September 28, 2022, cardlock unmarked diesel rates were posted by UFA as follows:
 - \$1.4049/l for Grande Cache
 - \$1.3589/l for Grande Prairie
 - \$1.3459/l for Valleyview
- For October 29, 2022, cardlock unmarked diesel rates were posted by UFA as follows:
 - \$1.7019/l for Grande Cache
 - \$1.6559/l for Grande Prairie
 - \$1.6429/l for Valleyview
- For November 26, 2022, cardlock unmarked diesel rates were posted by UFA as follows:
 - \$1.8659/l for Grande Cache

- \$1.8199/l for Grande Prairie
 - \$1.8069/l for Valleyview
- For December 31, 2022, cardlock unmarked diesel rates were posted by UFA as follows:
 - \$1.6469/l for Grande Cache
 - \$1.6009/l for Grande Prairie
 - \$1.5879/l for Valleyview
- For January 21, 2023, cardlock unmarked diesel rates were posted by UFA as follows:
 - \$ 1.5309/l for Grande Cache
 - \$ 1.4849/l for Grande Prairie
 - \$ 1.4719/l for Valleyview

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the recommended motion is there will be consistent rates going through the 2023 construction season. As fuel rates are presently lower than when the first motion was passed to implement the adjustment, it seems reasonable to Administration to continue to apply the surcharge at 60% with Council's direction.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. The disadvantage of the recommended motion is from ARHCA's website: "ARHCA serves mainly as a lobby organization for its membership..." and "ARHCA advocates on behalf of contractors, suppliers, consulting engineers, and other professionals who work with them."

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to adjust the Alberta Roadbuilders and Heavy Construction Association's (ARHCA) Addendum to the 2022 Rental Rate Guide – Fuel Prices in Construction.

Alternative #2: Council has the alternative to pass an additional motion to remove the implementation of the addendum and return to EOI rates which were in effect prior to July 13, 2022.

FINANCIAL IMPLICATION:

Direct Costs: As of December 31, 2022, direct additional costs associated with the fuel surcharge applied by motion 22.07.422 are an estimated \$427,834.34

Ongoing / Future Costs: The ARHCA fuel surcharge is estimated to cost \$800,000.00 in 2023 at current rates.

STAFFING IMPLICATION:

The staffing implications are minimal but estimated at an additional 3 hours of administrative time per week to verify fuel surcharge submitted.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Should Council choose to pass motions regarding ARHCA fuel cost adjustment and tonne/km rates, Administration will send an emailed letter to EOI Contractors to inform of Council's decision.

ATTACHMENT(S):

- 2022 ARHCA & Contractor Rate Motions
- ARHCA 2022 Notice of Addendum



MUNICIPAL DISTRICT OF GREENVIEW

2022 Motions re: ARHCA, Fuel Cost Adjustments, and Stockpiling Rates

June 14, 2022: MOTION: 22.06.304 Moved by: COUNCILLOR WINSTON DELORME

That Council direct Administration when hiring gravel hauling contractors through the Equipment Contractors Registry, stockpiling projects with haul distances of 60.0 Km or less be calculated at an hourly rate, while stockpiling projects with haul distances of greater than 60 Km be calculated at a tonne/km rate.

For: Reeve Olsen, Deputy Reeve Bill Smith, Councillor Dale Smith, Councillor Delorme, Councillor Ratzlaff, Councillor Rosson, Councillor Berry, Councillor Burton, Councillor Scott, Councillor Schlieff, Councillor Didow

CARRIED

July 12, 2022: MOTION: 22.07.422 Moved by: COUNCILLOR JENNIFER SCOTT

That Council adjust Greenview's Expression of Interest to follow 60% of the ARHCA addendum to 2022 rental guide fuel prices in construction and enforce price increase of 3 cents per tonne/km with a review date at the first council meeting in October 2022, effective as of July 13, 2022.

For: Reeve Olsen, Deputy Reeve Bill Smith, Councillor Delorme, Councillor Ratzlaff, Councillor Rosson, Councillor Berry, Councillor Dale Smith, Councillor Scott, Councillor Schlieff, Councillor Didow

Against: Councillor Burton

CARRIED

October 11, 2022: MOTION: 22.10.572 Moved by: COUNCILLOR WINSTON DELORME

That Council review the implementation of the 2022 Alberta Roadbuilders and Heavy Construction Association's (ARHCA) Rental Rate Guide as it pertains to Greenview's Expression of Interest Program.

For: Reeve Olsen, Deputy Reeve Bill Smith, Councillor Delorme, Councillor Ratzlaff, Councillor Rosson, Councillor Berry, Councillor Dale Smith, Councillor Burton, Councillor Scott, Councillor Schlieff, Councillor Didow

CARRIED

October 11, 2022: MOTION: 22.10.573 Moved by: DEPUTY REEVE BILL SMITH

That Council direct Administration to continue to follow the Alberta Roadbuilders and Heavy Construction Association's addendum to the 2022 rental guide fuel prices in construction at 60% of and enforce a price increase of 3 cents per tonne/km haul with a review date at the first council meeting in February 2023.

For: Reeve Olsen, Deputy Reeve Bill Smith, Councillor Delorme, Councillor Ratzlaff, Councillor Rosson, Councillor Berry, Councillor Burton, Councillor Scott, Councillor Schlieff, Councillor Didow

Against: Councillor Dale Smith

CARRIED



Alberta Roadbuilders &
Heavy Construction Association

NOTICE OF ADDENDUM

Date: June 14, 2022

To: Municipal Road Infrastructure Owners
Private Sector Infrastructure Owners
Public and Private Agencies Referencing the ARHCA Equipment Rate Guide

From: Ron Glen, CEO, Alberta Roadbuilders and Heavy Construction Association (ARHCA)

Re: **Fuel Cost Recovery surcharge addendum to 2022 Rate Guide**

The volatility in global oil markets have caused fuel prices to exceed contractors' abilities to absorb costs. The ARHCA Rental Rate Guide published each year provides owners and contractors with a reasonable per hour base price (inclusive of a contractor's cost of ownership and operating costs) for more than 1000 different models and makes of heavy equipment used in road construction, maintenance and in other industries such as forestry. Equipment financing, labour, material and in particular fuel prices have escalated dramatically in-year since our book was published in February.

The benchmark price for diesel consisting of the posted rack rate plus applicable taxes, less the off-road rebate used in the 2022 Rate Guide was \$1.35/litre. Oil prices have since spiked due to international events and political responses to isolate Russian aggression in Europe. The impact on local fuel prices is a risk beyond the capacity of contractors to manage and without risk sharing amongst construction partners, contractors will incur substantial losses.

For this reason, in response to this unforeseen change in international oil markets, the ARHCA is issuing an addendum to the 2022 Rate Guide to include a Fuel Cost Recovery Surcharge. ARHCA has developed an approach that balances reasonable application with simplicity of administration. The surcharge rates are based on a fuel cost as at June 2 of \$1.96/litre and consumption measured by net horsepower averaged across 13 major types of heavy equipment. As seen in the attached table, for equipment with engines of less than 150 net horsepower the surcharge is \$9.25 per hour. The surcharge rate increases in step changes of approximately 150 hp up to the largest machines which have over 1100 hp. Equipment engine power is easily confirmed by manufacturer and third-party sources found on-line. The category surcharge is then added to the specific equipment rental rate for the specific manufacturer and model listed in the Rate Guide.

Page 1 of 2



Alberta Roadbuilders &
Heavy Construction Association

The ARHCA will continue to monitor the situation and, if necessary, provide further guidance in case prices drop or rise significantly during the construction season. **Please note:** this surcharge is inclusive of applicable taxes, but does not cover inflationary pressures for other materials, labour, or services that contractors and subcontractors are currently absorbing.

While we anticipate that by next year, the situation will most likely have stabilized, the current surcharge is outlined in the table attached, and on the ARHCA website.

Contractors recognize that all organizations are facing cost pressures. While the industry has survived through two years of pandemic related challenges, the cooperation of all partners in construction is needed now more than ever to deliver projects as best we can.

Thank you,

Ron Glen, CEO, ARHCA

Attachment: Fuel Cost Recovery Surcharge Table

CC: ARHCA Board of Directors

Page 2 of 2



ADDENDUM TO 2022 RENTAL RATE GUIDE

Cost-Recovery Fuel Surcharge 2022

ARHCA is issuing this addendum to the 2022 Rental Rate Guide for a fuel surcharge to be added to the hourly rates as per the table below. To establish a new rate for a piece of equipment, please use the existing rental rate as published in the 2022 Rental Rate Guide and **add** the surcharge based upon the NET horsepower of the equipment being used. The net horsepower is available on the sites below using the manufacturer and the model number of the unit:

[Constructionequipmentguide.com](https://www.constructionequipmentguide.com)

[Ritchiespecs.com](https://www.ritchiespecs.com)

[Lectura-specs.com](https://www.lectura-specs.com)

COST RECOVERY FUEL SURCHARGE FOR 2022 - as of June 14, 2022 *Includes applicable taxes

Net Horsepower Rating

0-150 HP	\$9.25
151-300 HP	\$20.75
301-450 HP	\$30.25
451-600 HP	\$38.00
601-750 HP	\$48.50
751-900 HP	\$68.00
901-1050 HP	\$79.50
1051-1200 HP	\$106.00

****This surcharge is in effect as of June 14, 2022 and may be revised should fuel markets vary significantly during the 2022 construction season.*



REQUEST FOR DECISION

SUBJECT:	Tendering of Forestry Trunk Road and Operations South Roadside Ditch Mowing		
SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER: JF
DEPARTMENT:	OPERATIONS	DIR: RA	PRESENTER: JF
STRATEGIC PLAN:	Economy	LEG:	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Council accept the report regarding the summer roadside ditch mowing program, for information, as presented.

MOTION: That Council direct Administration to tender roadside ditch mowing of the Forestry Trunk Road, Grande Cache Airport Road, & Victor Lake Road for the 2023 season.

BACKGROUND/PROPOSAL:

Administration is striving to be financially responsible by following Council's 2022-2025 Strategic Plan (*Governance; Provide quality municipal services, Economy; Maintain fiscal responsibility*) by providing operational alternatives. As part of budget discussions in 2022, Administration committed to bringing further information regarding costs associated with levels of service as well as alternatives for Council's consideration.

Roadside ditch mowing is completed every year by 6 seasonal staff who are hired for 5 or 6 month terms. Depending upon weather, equipment breakdowns, and other factors, the entire program is typically completed over the course of 5 months with approximately 4800 Km of linear ditches mowed as well as other facilities and areas such as transfer stations, gravel pits, stockpile sites, airports, lagoons, and drainage ditches. In 2022, crews worked effectively and completed a 2nd cut on 20% of Greenview roads, refocusing at the end of the season on high traffic roads and areas of concern for drainage. Mowing crews also assist with various tasks such as clearing deadfall trees from ditches, assisting with road repairs from overland flooding if needed, as well as perform maintenance on the tractors and mowers including changing gearboxes, blades, PTO shafts, oil changes, hydraulic hose repairs, etc. There are records of Greenview awarding a mowing contract in 2004 for the Grovedale area. However, Administration doesn't have records of the results other than what is in the attached Council minutes from September 8, 2004 (see attached).

Greenview keeps a fleet of 8 tractors and mowers, 6 of which actively work on ditch mowing through the summer months. The tractors serve a dual purpose as they are also outfitted with a plow blade in winter for

snowplowing parking lots, driveways, transfer stations, community halls, water points, and other sites as needed.

While the reporting on the attached spreadsheet is particular to the Forestry Trunk Road for 2022, Administration requests that if Council chooses to tender the mowing of the Forestry Trunk Road that they include the Grande Cache Airport Road (2.6 Km) and airport property (approximately 70 acres) and the Victor Lake Road (3 Km). Greenview crews mowed these sites in 2022 once the mowing operation had reached the south end of the Forestry Trunk Road.

Administration's background shows the costs to mow the FTR takes 6 tractors, 6 employees, 2 service trucks and hotel and subsistence. The mowing crew works 10 hours/day for a total of 22 days. Administration has also compared our current process if using the 2022 Alberta Roadbuilders and Heavy Construction Association (ARHCA) rates.

Administration anticipates that tendering the FTR roadside mowing will show a financial saving for Greenview. The tractors, mowers, and truck life span will be extended which will also assist in a financial long-term savings.

Administration is willing to proceed in any direction chosen by Council but does recommend this undertaking for a better understanding of the financial impacts to the current level of service.

BENEFITS OF THE RECOMMENDED ACTION:

1. A benefit of the recommended action is that Council will have additional information going forward regarding various aspects and expenses pertaining to Greenview's roadside ditch mowing program.
2. A benefit of the recommended action is that an accurate cost comparison can be made with an option to proceed or not to proceed with an awarded contract brought back for Council's decision.
3. As time goes on, some seasonal staff may choose not to return. Tendering a portion of the summer roadside ditch mowing program may be beneficial in balancing work between contract and in-house and operating with a smaller mowing crew.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. A perceived disadvantage to the recommended motion is that qualified seasonal staff who are competent and willing to do the work required can be difficult to find. After years of operating the mowing program, having a crew with multiple long-term returning staff is a benefit on multiple fronts.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to not direct Administration to tender roadside ditch mowing of the Forestry Trunk Road, Grande Cache Airport Road, and Victor Lake Road for the 2023 season. However, Administration does not recommend this action as it is following Council's strategic plan to "maintain fiscal responsibility."

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

The staffing implication is approximately 2 full days of 1 employee's time which includes preparation of Tender, Tender opening, Tender evaluation and Request For Decision for Council.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Should Council follow the recommended motion, Administration will prepare a FTR roadside mowing tender.

ATTACHMENT(S):

- 2022 FTR Mowing Cost Breakdown & EOI/ARHCA Comparison
- 2004 Council Minutes – Mowing Contract

2022 Mowing-Forestry Trunk Road Cost Breakdown & Comparison	
INTERNAL - GREENVIEW	TOTALS
STAFFING COST (6 Operators)	
Purchase Price of New 2019 Tractor \$194,000 ÷ 7500 Serviceable Hrs (Greenview Policy 4006) = \$25.87 x 1320 Hrs	\$ 34,148.40
Please note the purchase price for a new tractor has increased 40% since 2019	
Consumables (Oil, oil filters, repairs, windshield, etc...)	\$ 5,000.00
Hours Worked (6 Operators @ 10 Hrs/Day for 22 Days = 1320 Hrs) + legislated vacation pay & administrative time for hiring, payroll, etc...	\$ 50,000.00
Hotels & Subsistence	\$ 5,600.00
2 x Pick-up Trucks @ \$170/Day each for 22 Days	\$ 7,480.00
Blades (20 used @ \$61.31 each)	\$ 1,226.20
Fuel 110L/Day per Tractor (6 Tractors Used @ \$1.485/L for 22 Days)	\$ 21,562.20
Grand Total (If Greenview Equipment used for 2022 Mowing)	\$ 125,016.80
Cost Per Km at 171 Km	701.85/Km
EXTERNAL - EOI/ARHCA	TOTALS
Tractor Farm/Industrial-Wheel (Group 4-HP 121-165 including 60% fuel cost recovery surcharge)	\$ 115.45
Add 5% for Dual Tires	\$ 5.77
Attachments-Rotary Mowers 13' & Up	\$ 17.00
Total Cost/Hour	\$ 138.22
Subtotal (If ARHCA used for 2022 Mowing using 6 tractors) 1320 Hrs x \$138.22	\$ 182,450.40
2 Service Trucks at \$170/day x 22 Days	\$ 7,480.00
Grand Total	\$ 189,930.40
Cost per Km at 171 Km	\$1,110.70/Km
*Cost breakdown and comparison to ARHCA rates indicate that Greenview's mowing program operates at 66% of the expense that the same work would cost if equipment were hired at ARHCA rates through the EOI.	

Ops - 2 Hrs Travel/8 hrs mowing

Total Days Mowing	22	4 John Deere & 2 Kubota
Mowing Tractors	6	\$1,226
Blades Used	20 @ \$61.31 ea	
Hotel	\$2,976	
Subs	\$2,640	

Fuel-Tractors use Approx. 110L of fuel per day		September Fuel Prices
T24	3572.32	160.7
T25	1832.2	
T26	3650.18	
T27	broke down?	
T32	5652.73	
T75	4746.37	
T76	2159.25	

ARHCA Info	HP 125-150	Attachments	
Tractors Farm/Ind.-Wheel	Group 4	Dual Tires Add 5%	Flailing & Rotary Mowers-13'-Up
	\$103	\$5.15	\$17.00
			Total / HR
			\$125.15

Average Fuel Cost Sept

1.473
1.473
1.446
1.317
1.175
1.238
1.358
1.437
1.675
1.675
1.675
1.584
1.624
1.565
1.565
1.565
1.546
1.546
1.419
1.419
1.419
31.194
1.485429
Avg'd \$

[illegible]



REQUEST FOR DECISION

SUBJECT: Connector Request Application to connect Range Road 13 from Township Road 734 and Township Road 741

SUBMISSION TO: REGULAR COUNCIL MEETING **REVIEWED AND APPROVED FOR SUBMISSION**

MEETING DATE: February 14, 2023 **CAO:** SW **MANAGER:** LT

DEPARTMENT: CONSTRUCTION & ENGINEERING **DIR:** RA **PRESENTER:** LT

STRATEGIC PLAN: Economy **LEG:** SS

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – Policy 4002 Road Access, Bylaw 22-930 Schedule of Fees, Bylaw 21-876 Procedural Bylaw

RECOMMENDED ACTION:

MOTION: That Council deny the request for a connector road to link Township Road 734 to Township Road 741 by way of Range Road 13.

BACKGROUND/PROPOSAL:

At the June 28, 2022, Regular Council meeting, Council made the following motion,
That Council deny the road access request submitted to access SE 33-73-1 W6 from Range Road 13.

Administration advised the applicant that the application was denied and that an application fee for an access road requests, as per Bylaw 22-930 Schedule of Fees, would be required should the applicant wish to reapply in 6 months as per the Procedural Bylaw. Administration has recently received a second request from the applicant.

With following Council's Strategic Plan: *Economy; Prioritize infrastructure investments to align with operational capacity and; Policy 4002 Road Access: "No access roads will be constructed where there is currently adequate access to the parcel whether through an existing roadway, a developed/underdeveloped road allowance, or through the applicant's immediately adjacent parcel"*), Administration is recommending to deny the applicant request for a connector road.

The Applicant is requesting approximately 2.25km of connector road to be built from the north side of Township Road 734 to join Township Road 741 (W1/2 34-73-1 W6M) on a 20.12m undeveloped road allowance. The applicant currently accesses the land by adjoining quarters that are owned by the applicant as per Policy 4002 states.

The applicant has brought forward concerns regarding safety when mobilizing farm equipment or hauling grain/bales etc. The distance around is a 10kms round trip of travel, using Secondary Highway 736 North to

Township Road 741 from Township Road 734. However, the applicant can access his lands, with the benefit of culverts previously installed and provided by Greenview.

Although most landowners in the area agree that Range Road 13 would be beneficial, the lay of the land and the quality of the land is not suitable for road construction and would have an extreme financial implication to Greenview.

Currently, in the undeveloped road right of way there is a ditch that would be required to be realigned (see photos attached).

Administration provided a high-level estimate of \$1,400,000.00 when the last application was submitted which would include the requirement of land (if available), borrow for material, culverts and or bridge files, gravel, water act government applications with wetland payments, water assessment, construction, supervision, engineering, and surveying.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the recommended motion is that Administration is adhering to Council policies.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to direct Administration to proceed with the construction of Range Road 14 Connector Road, however this action is not recommended as it does not meet Council's Policy or Council's Strategic Plan.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform – To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform – We will keep you informed.

FOLLOW UP ACTIONS:

Administration will inform the applicant of Council's decision.

ATTACHMENT(S):

- Application
- Map(s)
- PowerPoint



MUNICIPAL DISTRICT OF GREENVIEW

ROAD CONSTRUCTION REQUEST

Any personal information that the Municipal District of Greenview may collect on this form is in compliance with Section 33 (c) of the Freedom of Information and Protection of Privacy Act. The information collected is required for the purpose of carrying out an operating program or activity of the Municipality, in particular for the purpose of our Public Works and Transportation Program. If you have any questions about the collection, please contact the Freedom of Information and Protection of Privacy Coordinator at 780-524-7600.

All requests submitted on this application will be investigated and submitted for consideration and/or priority rating. In order for your request to be properly investigated and considered, the following details and location sketch, on the reverse side, **must be completed**.

Name: Chris Hinks Telephone No. 0034 64 690-3369
Address: 73502 RR13, Debolt T0H 1B0

Location of Work to be Done
Legal: W 1/2 ^{1/4} Sec 34 Twp 73 Rge 1 W of 6 th M
Lot _____ Block _____ Plan No. _____ Ward _____

Please answer the following

Road required for: Access Road ☒ Residential Purposes ☐ Or Both ☐
If for residential purposes; do you live on the land? Yes ☐ No ☐
If no, where do you presently live? _____
When will you reside on the land? _____
Have you applied for power? Gas? ☐ Phone? ☐ Development Application? ☐
Would the proposed road be on a school bus route? Yes ☐ No ☒
How have you been getting to this land? RR13 ends at SW corner of W1/2 34 73 1W6, but unable to get to NW 1/4
What is the condition of the present access? Good ☐ Fair ☐ Poor ☐ None ☒
Date land acquired? This has been in our family farm since 1962, still no road, more than 10 road applications submitted

For Residential Access requests:

Are you willing to provide a Security deposit as per policy "Security For Access Construction To Proposed Residential Development" Yes ☐ No ☐

For Access Road requests:

How many acres are in crop? 150 Cleared? 280 Hay? 0

ROAD RECONSTRUCTION

Location: _____
Deficiencies Observed: _____

PAVING REQUEST

Location: _____
Reason: _____

COMMENTS/ ADDITIONAL INFORMATION:

This should be called a connector road to benefit other farmers/landowners besides myself.

We cleared the NW 1/4 a number of years ago but have difficulty to reach this quarter.

Note: The location sketch below must be completed for all request types. Please indicate details such as low areas, muskegs, drainage ditches, bridges, culverts, pipelines, power lines, existing or proposed buildings, and current access.

RANGE 1 W. OF 6 MERIDIAN



TOWNSHIP

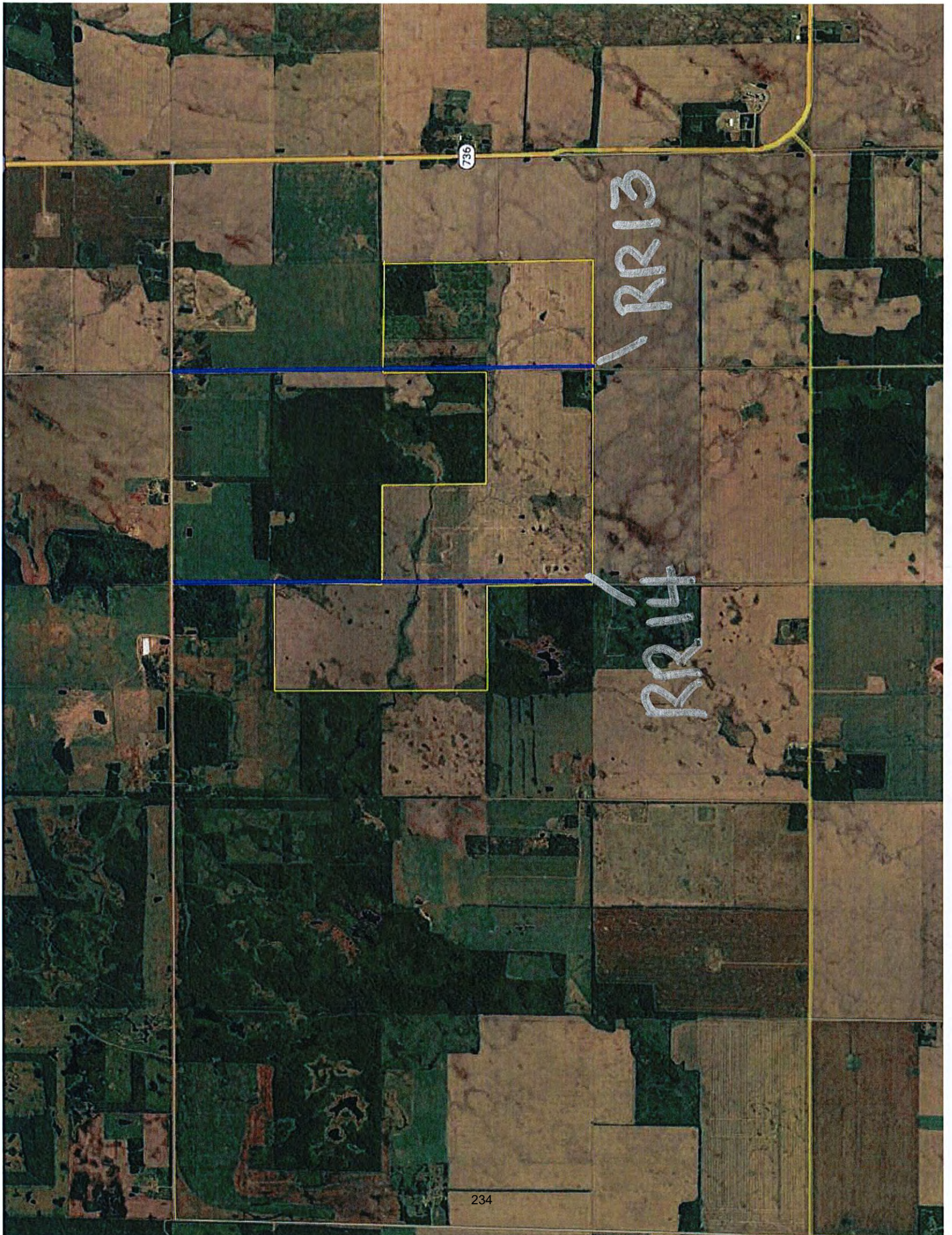
Sec 34 of 73

October 2, 2022

Date

Chris Hinks

Signature of Applicant



736

RR13

RR14



Proposed Road Project 2023 Range Road 13

Legend

2023 Proposed Connector Road

Cadastre

Crown Land

Hydro Area

Hydro Line

Roads-Jurisdiction

Municipal

Private

Gravel Highways

Paved Highways

0 500 1,000 m

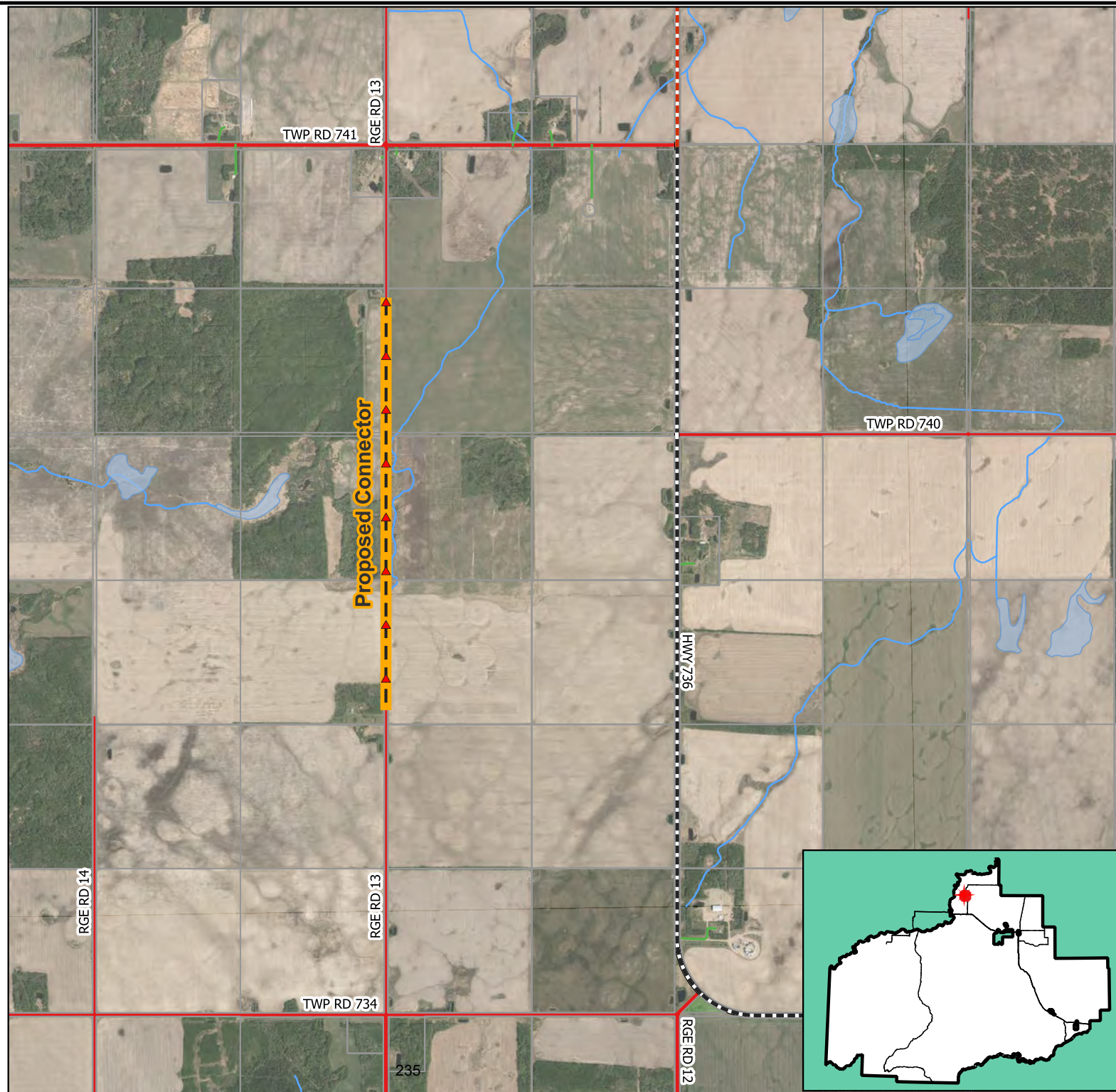
Produced: January 24, 2023 Projection UTM 11N NAD83

The MD of Greenview makes no representations or warranties regarding the information contained in this document, including, without limitation, whether said information is accurate or complete. Persons using this document do so solely at their own risk, and the MD of Greenview shall have no liability to such persons for any loss or damage whatsoever.

This document shall not be copied or distributed to any person without the express written consent of the MD of Greenview.

© MD of Greenview. All Rights Reserved.


NOT RESPONSIBLE FOR ERRORS OR OMISSIONS





Proposed Road Project 2023 Range Road 13


Legend

 2023 Proposed Connector Road

 Cadastre

 Crown Land


 Hydro Area

 Hydro Line

Roads-Jurisdiction

 Municipal

 Private

 Gravel Highways

 Paved Highways

0 500 1,000 m

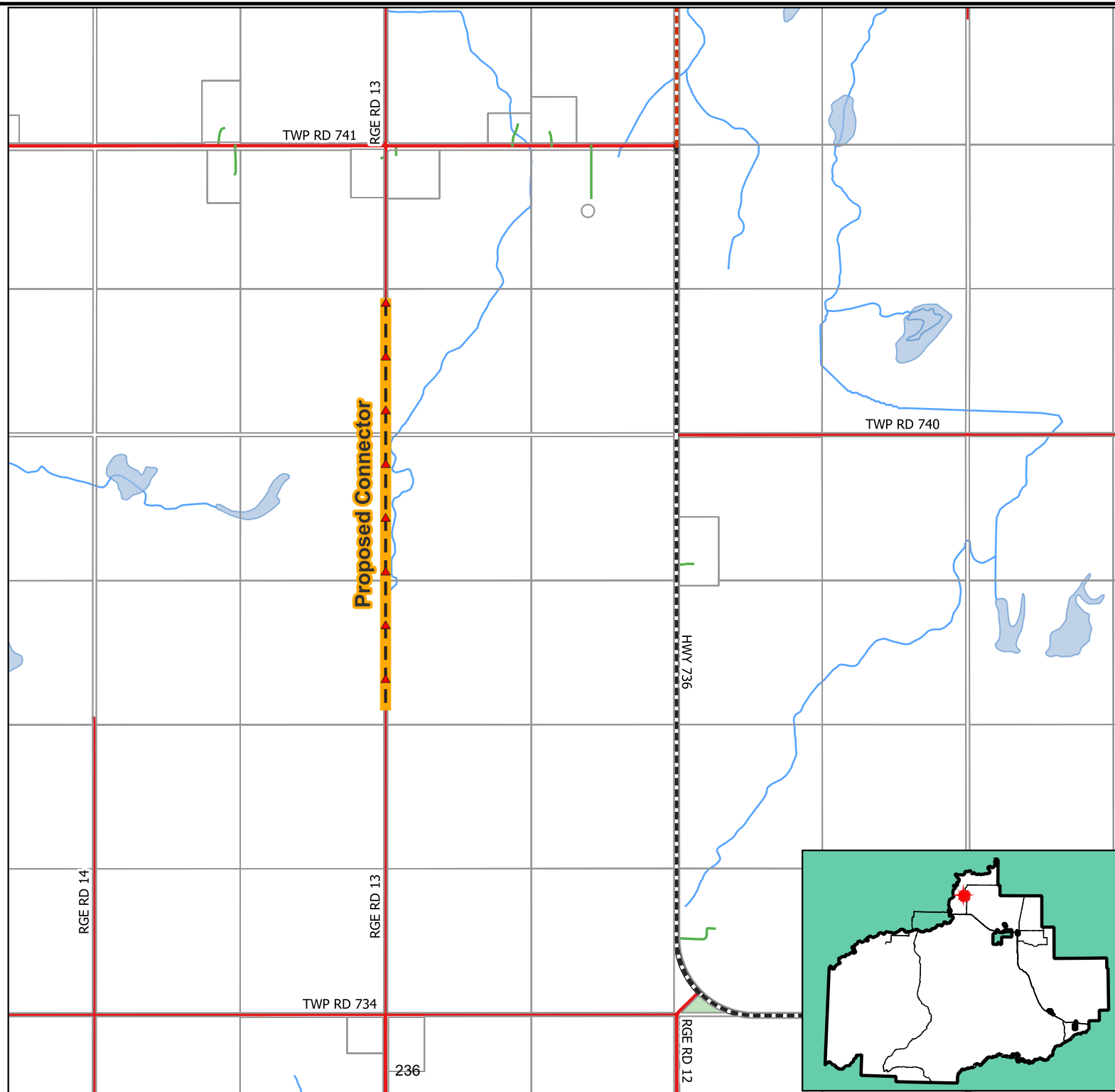
Produced: January 24, 2023 Projection UTM 11N NAD83

The MD of Greenview makes no representations or warranties regarding the information contained in this document, including, without limitation, whether said information is accurate or complete. Persons using this document do so solely at their own risk, and the MD of Greenview shall have no liability to such persons for any loss or damage whatsoever.

This document shall not be copied or distributed to any person without the express written consent of the MD of Greenview.

© MD of Greenview. All Rights Reserved.

NOT RESPONSIBLE FOR ERRORS OR OMISSIONS



Hinks

Range Road 13 Connector Request

Facing south at end of RR 13



Facing north east of RR 13 NW 34-73-1 W6



Facing north showing man made ditch in road allowance



Facing north on partial undeveloped road allowance
currently travelling to access



Facing north showing
man made ditch in road allowance



Facing north further north



Facing south at end of RR 13



Facing north at dead-end of RR 13 south of Twp. 741



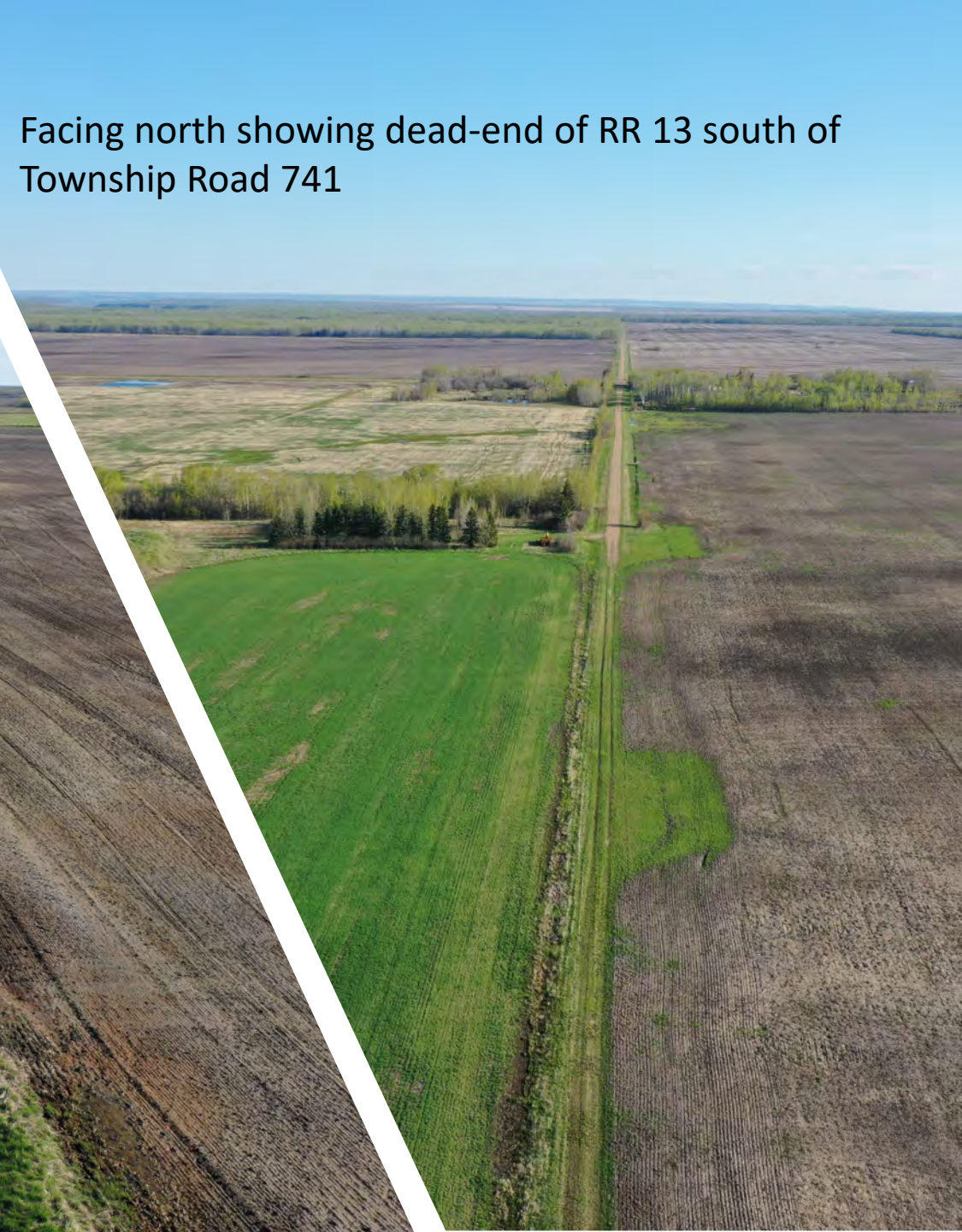
Facing south middle of undeveloped road allowance showing man made ditching to wetland



Facing north on RR 13



Facing north showing dead-end of RR 13 south of Township Road 741



Facing east off of undeveloped road allowance RR 13





REQUEST FOR DECISION

SUBJECT: Connector Request Application to connect Range Road 14 from Township Road 734 and Township Road 741

SUBMISSION TO:	REGULAR COUNCIL MEETING	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	February 14, 2023	CAO: SW	MANAGER: LT
DEPARTMENT:	CONSTRUCTION & ENGINEERING	DIR: RA	PRESENTER: LT
STRATEGIC PLAN:	Economy	LEG: SS	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – Policy 4002 Road Access, Bylaw 22-930 Schedule of Fees, Bylaw 21-876 Procedural Bylaw

RECOMMENDED ACTION:

MOTION: That Council deny the request for a connector road to link Township Road 734 and Township Road 741 by way of Range Road 14.

BACKGROUND/PROPOSAL:

At the June 28, 2022 Regular Council Meeting, Council defeated the following motion;

That Council approve the access road application submitted to access SE 5-74-1 W6M from the south of Township Road 741, with funds to come from the 2023 roads block funding budget.

Administration advised the applicant that the application was denied and that an application fee for an access road requests, as per Bylaw 22-930 Schedule of Fees, would be required should the applicant wish to reapply in 6 months as per the Procedural Bylaw. Administration has recently received another request from the applicant.

With following Council's Strategic Plan: *Economy; Prioritize infrastructure investments to align with operational capacity and; Policy 4002 Road Access: "No access roads will be constructed where there is currently adequate access to the parcel whether through an existing roadway, a developed/underdeveloped road allowance, or through the applicant's immediately adjacent parcel"*), Administration is recommending to deny the applicant request for a connector road.

The applicant is requesting approx. 3.5km of connector road to be built from the north side of Township Road 734 to join Township Road 741 on a 20.12m undeveloped road allowance. The applicant currently accesses the land by adjoining quarters that are owned by the applicant therefore doesn't meet policy.

There have been 4 previous applications over the last 26 years, and all have been denied due to the type of land and water sheds in the area. Accessing the road allowance is only attainable on years with low precipitation.

A high-level estimate is \$1,400,000.00 which would include the requirement of land (if available), borrow for material, culverts and or bridge file, gravel, water act government applications with wetland payments, water assessment, construction, supervision, engineering, and surveying. This would have an extreme financial implication to Greenview.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the recommended motion is that Administration is adhering to Council policies.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to direct Administration to proceed with the construction of Range Road 13 Connector Road, however this action is not recommended as it does not meet Council's Policy or Council's Strategic Plan.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will inform the applicant of Council's decision.

ATTACHMENT(S):

- Application
- Map(s)
- PowerPoint



MUNICIPAL DISTRICT OF GREENVIEW

ROAD CONSTRUCTION REQUEST

Any personal information that the Municipal District of Greenview may collect on this form is in compliance with Section 33 (c) of the Freedom of Information and Protection of Privacy Act. The information collected is required for the purpose of carrying out an operating program or activity of the Municipality, in particular for the purpose of our Public Works and Transportation Program. If you have any questions about the collection, please contact the Freedom of Information and Protection of Privacy Coordinator at 780-524-7600.

All requests submitted on this application will be investigated and submitted for consideration and/or priority rating. In order for your request to be properly investigated and considered, the following details and location sketch, on the reverse side, **must be completed**.

Name: Chris Hinks

Telephone No. 0034 64 690-3369

Address: 73502 RR 13 Debolt T0H 1B0

Location of Work to be Done

Legal: W1/2 ^{1/4} Sec 33 Twp 73 Rge 1 W of 6th M

Lot _____ Block _____ Plan No. _____ Ward _____

Please answer the following

Road required for: Access Road ☒ Residential Purposes ☐ Or Both ☐

If for residential purposes; do you live on the land? Yes ☐ No ☐

If no, where do you presently live? _____

When will you reside on the land? _____

Have you applied for power? Gas? ☐ Phone? ☐ Development Application? ☐

Would the proposed road be on a school bus route? Yes ☐ No ☒

How have you been getting to this land? by road allowance

What is the condition of the present access? Good ☐ Fair ☐ Poor ☐ None ☒

Date land acquired? 1962, yes 1962

For Residential Access requests:

Are you willing to provide a Security deposit as per policy "Security For Access Construction To Proposed Residential Development" Yes ☐ No ☐

For Access Road requests:

How many acres are in crop? 310 Cleared? 320 Hay? 0

ROAD RECONSTRUCTION

Location: _____

Deficiencies Observed: _____

PAVING REQUEST

Location: _____

Reason: _____

COMMENTS/ ADDITIONAL INFORMATION:

There is no road on the W1/2 33 73 1W6, this should be a connector road to be used
by neighboring farmers and landowners not just myself

Note: The location sketch below must be completed for all request types. Please indicate details such as low areas, muskegs, drainage ditches, bridges, culverts, pipelines, power lines, existing or proposed buildings, and current access .

RANGE 1 W. OF 6 MERIDIAN



TOWNSHIP
Sec 33 or 73

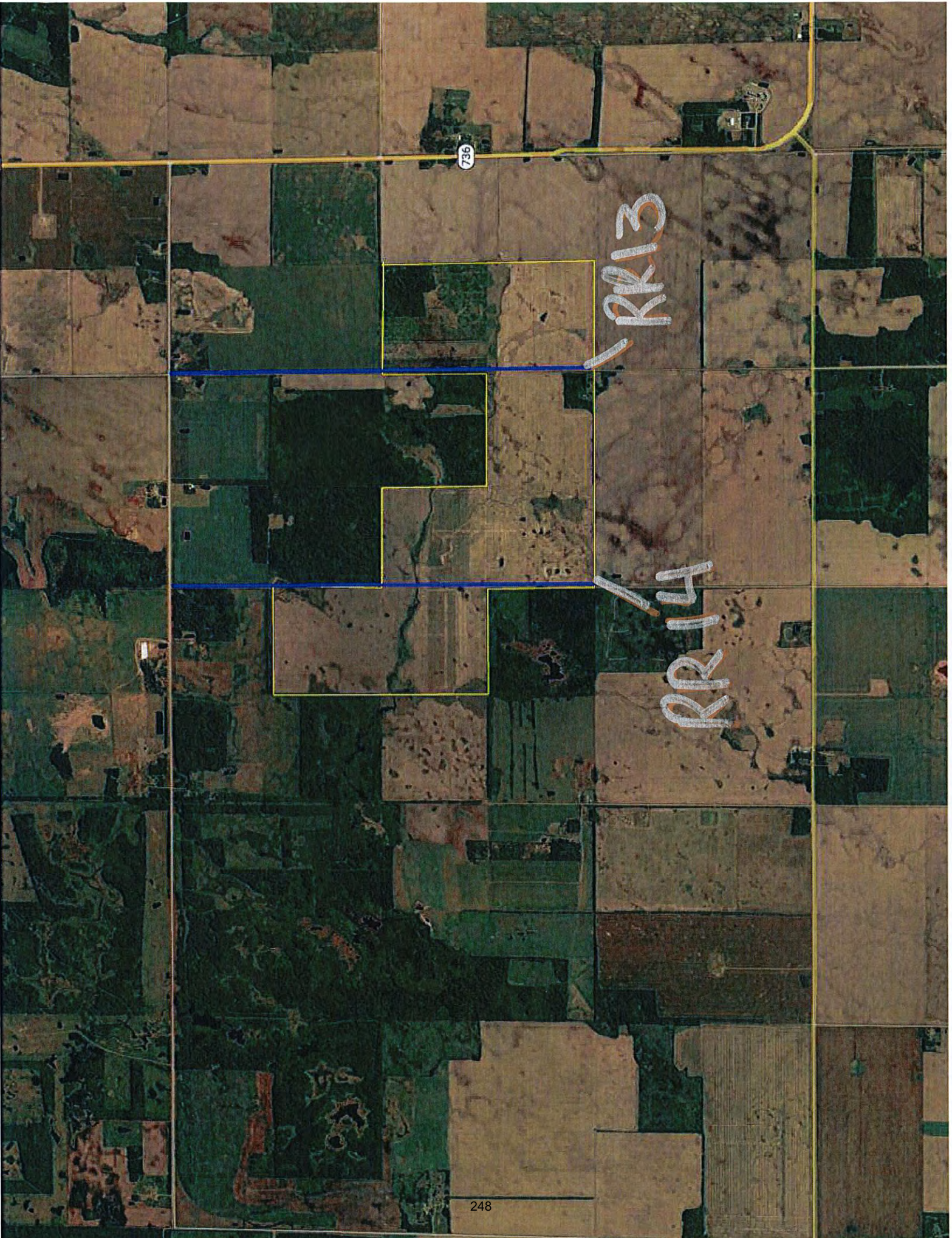


October 2, 2022

Date

Chris Hinks

Signature of Applicant





Proposed Road Project 2023 Range Road 14

Legend

- 2023 Proposed Connector Road
- Cadastre
- Crown Land
- Hydro Area
- Hydro Line

Roads-Jurisdiction

- Municipal
- Private
- Gravel Highways
- Paved Highways

0 500 1,000 m

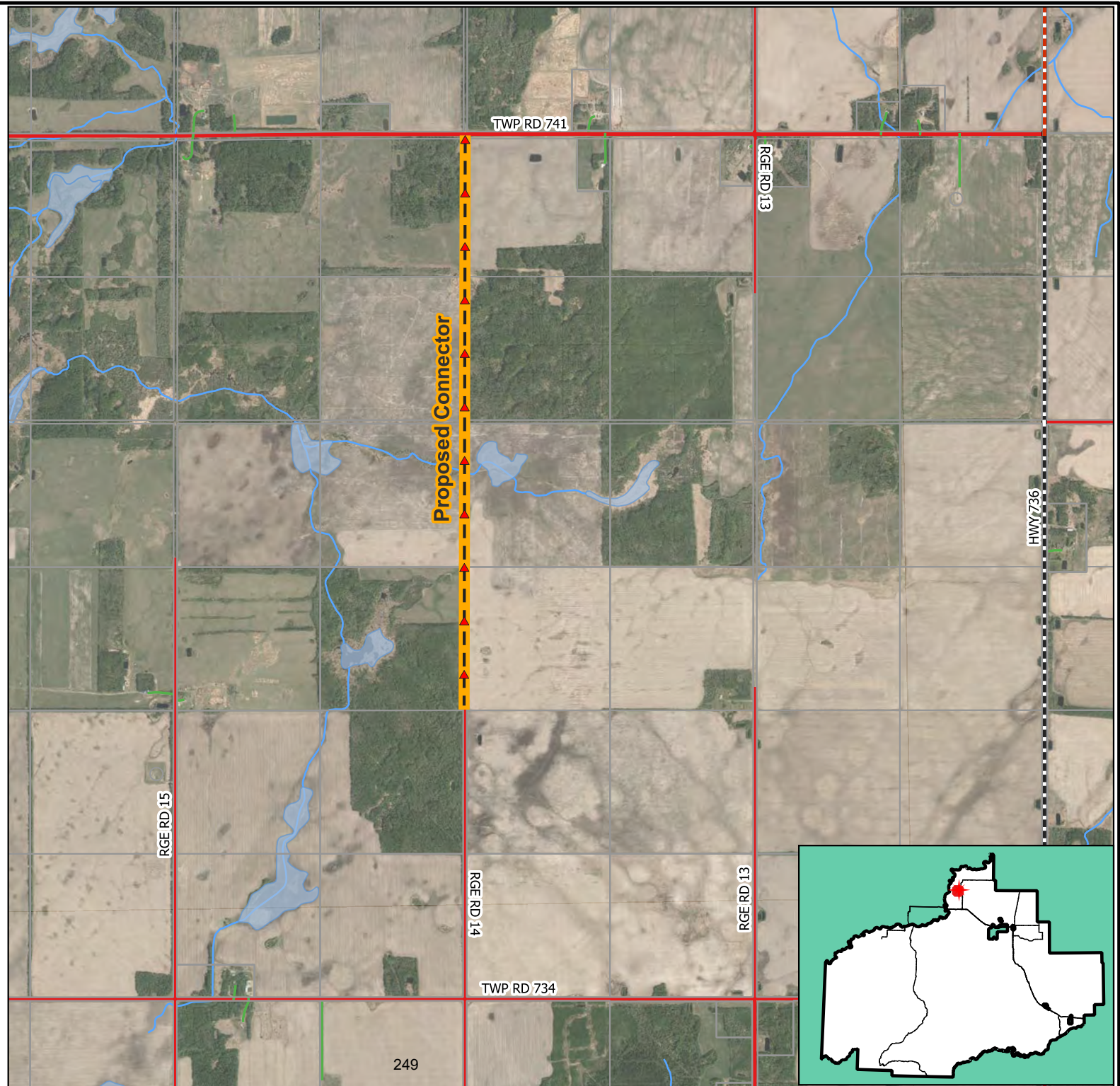
Produced: January 24, 2023 Projection UTM 11N NAD83

The MD of Greenview makes no representations or warranties regarding the information contained in this document, including, without limitation, whether said information is accurate or complete. Persons using this document do so solely at their own risk, and the MD of Greenview shall have no liability to such persons for any loss or damage whatsoever.

This document shall not be copied or distributed to any person without the express written consent of the MD of Greenview.

© MD of Greenview. All Rights Reserved.

NOT RESPONSIBLE FOR ERRORS OR OMISSIONS





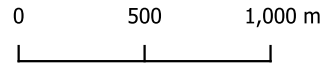
**Proposed Road Project
2023
Range Road 14**

Legend

- 2023 Proposed Connector Road
- Cadastre
- Crown Land
- Hydro Area
- Hydro Line

Roads-Jurisdiction

- Municipal
- Private
- Gravel Highways
- Paved Highways

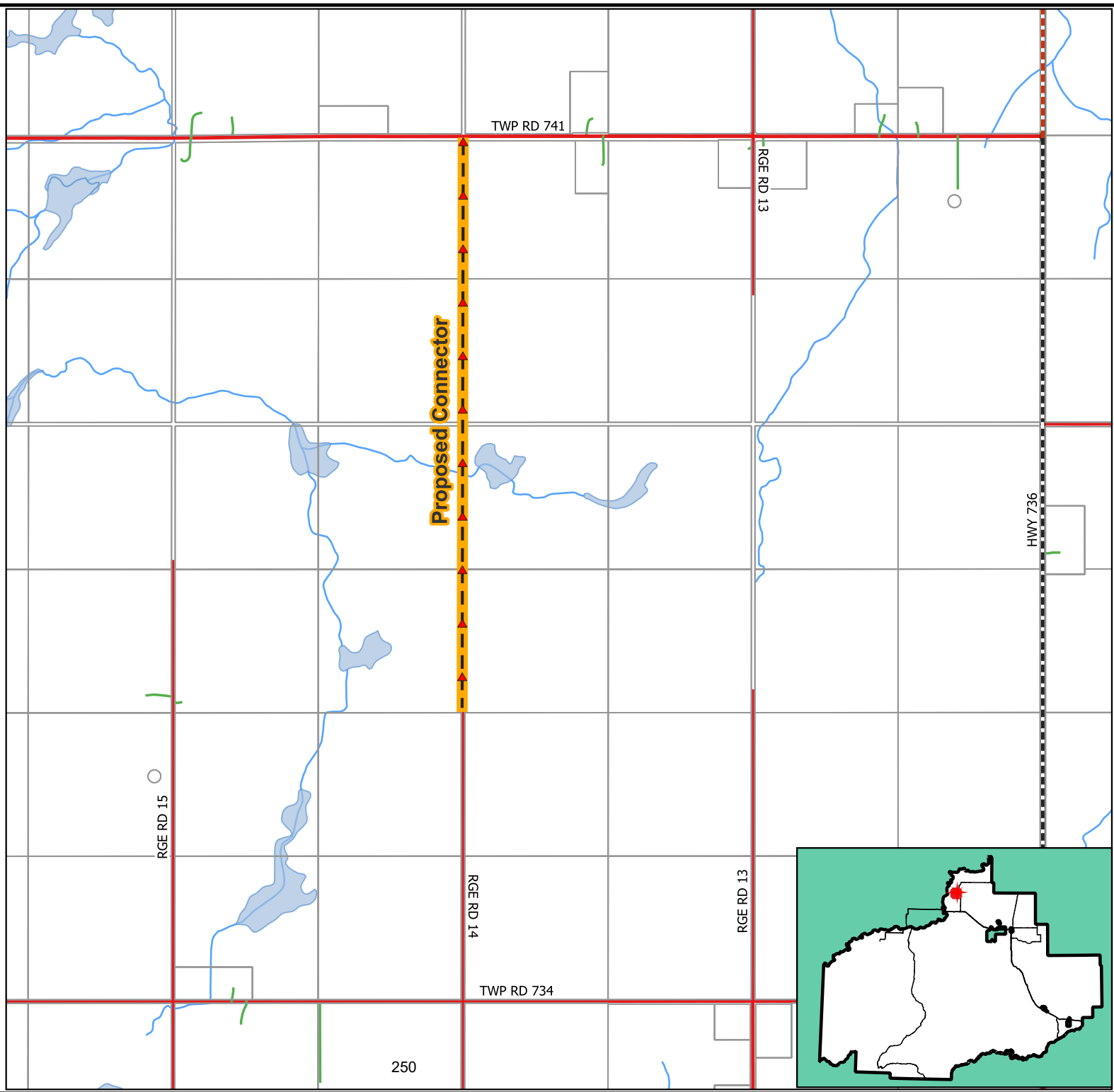


Produced: January 24, 2023 Projection UTM 11N NAD83

The MD of Greenview makes no representations or warranties regarding the information contained in this document, including, without limitation, whether said information is accurate or complete. Persons using this document do so solely at their own risk, and the MD of Greenview shall have no liability to such persons for any loss or damage whatsoever.

This document shall not be copied or distributed to any person without the express written consent of the MD of Greenview.
© MD of Greenview. All Rights Reserved.

NOT RESPONSIBLE FOR ERRORS OR OMISSIONS



Hinks

Range Road 14 Connector Request

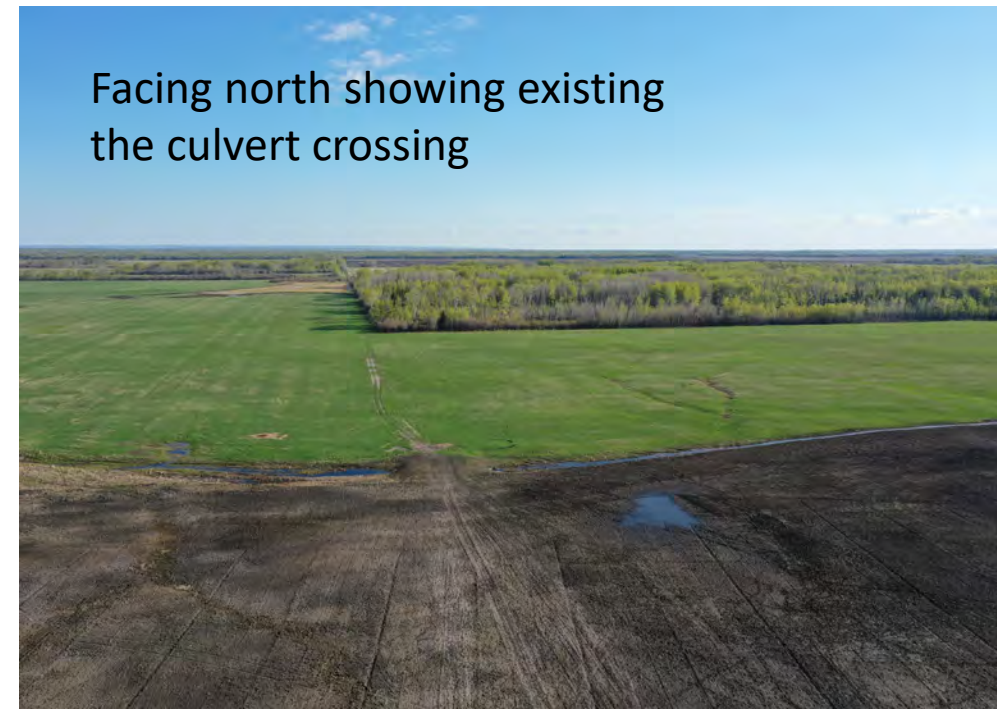
Facing North on SE 5-74-1 W6



Facing north from end of RR 14



Facing north showing existing the culvert crossing



Facing East on RR 14 existing culvert crossing showing farm crossing



Facing north at wetland from SE 5



Facing north RR 14



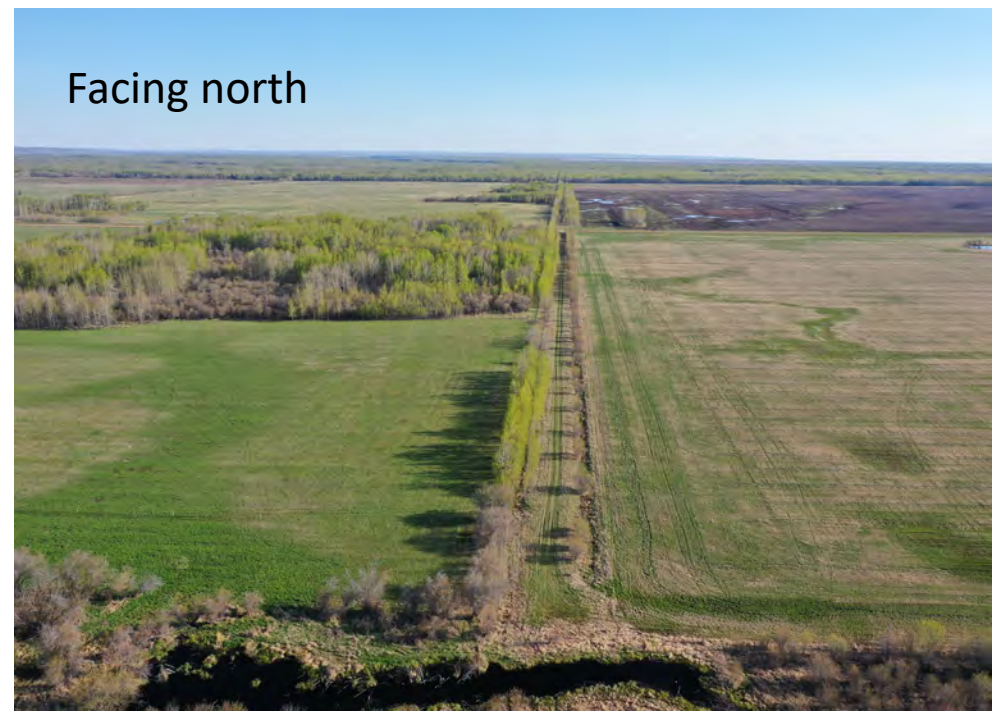
Facing west off RR 14 showing culvert crossing and wetland



Facing north existing deadend from RR 14



Facing north



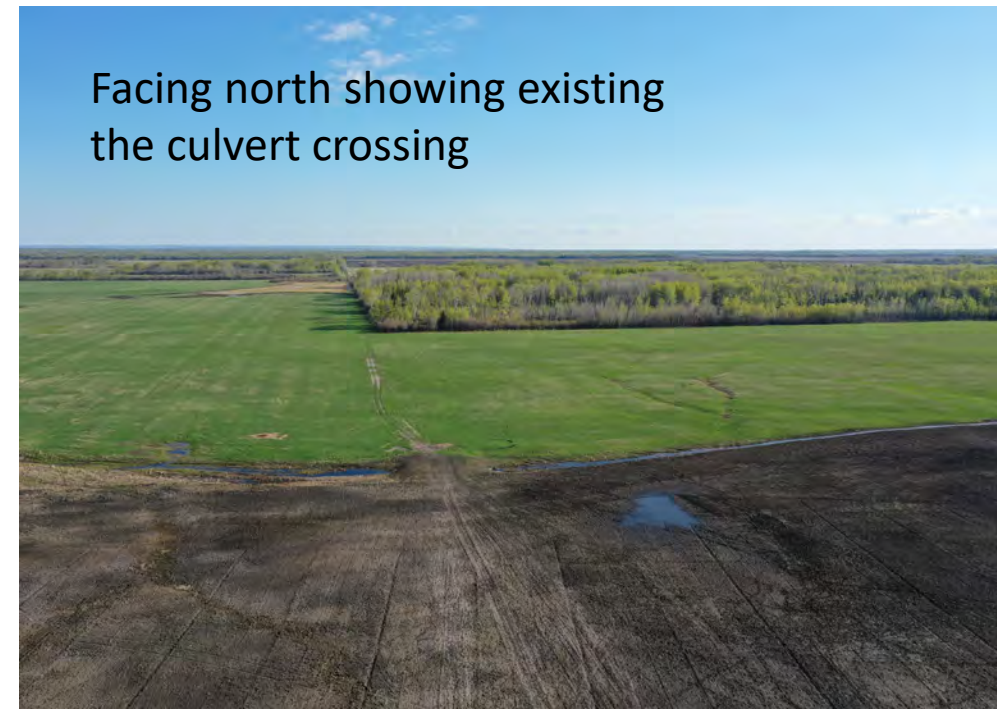
Facing North on SE 5-74-1 W6



Facing north from end of RR 14



Facing north showing existing the culvert crossing



Facing north end of RR 14



Facing south





MUNICIPAL DISTRICT OF GREENVIEW

Manager's Report

Department: CAO Services

Submitted by: Stacey Wabick, CAO

Date: 1/31/2023

Chief Administration Officer, Stacey Wabick

January was month of variety for CAO Services. It started with coordinating upcoming tasks and meetings such as professional development for Senior Leadership, minister meetings during the Rural Municipalities of Alberta Conference, the CAO becoming a registered member of the Local Government Administration Association of Alberta and how to better succession plan for the organization.

Formal meetings that took place include Alberta Counsel grant writing division, a GIG meeting to specifically discuss carbon hub status and preferred direction, and meeting with East Smoky Gas Coop regarding their potential interest in servicing future GIG needs, Alberta Municipalities and the RCMP District Advisory NCO.

Various administrative tasks were completed such as formalizing the agreement with the West Yellowhead Regional Waste Management Authority as per a Council motion, a ministerial briefing for the 747 bridge, a review of the tax break on drilling, strategic plan data collection for an upcoming report, Community Development Initiative reviews, a potential partnership with Big Lakes County and the MD of Smoky River for a grant, a review of a matt washing facility, addressing various inquiries and concerns around snow removal in different areas of Greenview and upcoming vehicle purchases.

The month ended with a tour to visit staff in DeBolt, Grovedale and Grande Cache. Communication was the focus point for these meetings where the Senior Leadership Team discussed various ongoing projects and welcomed any questions staff may have on any subject area.



MUNICIPAL DISTRICT OF GREENVIEW No. 16

Manager's Report

Department: Community Services

Submitted by: Michelle Honeyman, Director Community Services

Date: February 14, 2023

Director Community Services, Michelle Honeyman

In Community Services in January there was more background work on the development of the Grant application software and logistics to determine the various grant and funding streams and how to make the system assist the community when applying for grants to Greenview.

There were several meetings and collaborations with the community group and as a result the Grande Cache Medical Clinic Corporation business plan was reviewed, and the agreement was finalized to provide the start up funding for the community ran medical clinic that is a model for the future of municipal involvement in the development of sustainable clinics in small communities.

The Director also attended a meeting of the Peace Health authority Advisory Committee and learned about recruitment efforts and resources in our region. It is interesting to note that the model that is being implemented in Grande Cache is unique and goes beyond the typical municipal response and this will be highlighted moving forward.

The 2023 approved grants have been processed, except for one (Bear Creek Folk Festival) that is awaiting an address confirmation. The Valleyview Health Centre Foundation has confirmed that AHS provides funding to the Valleyview Health Centre for necessary equipment and were seeking additional funding from Greenview for equipment.

In alignment with the Strategic Plan:

[Governance – Goal 2 - Provide quality municipal services.](#)

The CAO has approved the following sponsorships and donations to date in 2023:

Organization Name	Event	Approved Donation
Valleyview Minor Hockey Association	Hockey Day in Valleyview- January 21, 2023	Gift in-kind valued up to \$100.00
Grovedale Minor Hockey Association	Hockey Tournament- January 21, 2023	Gift in-kind valued up to \$100.00
Valleyview Rural Crime Watch	AGM March 24-25 in Peace River	Gift in-kind valued up to \$200.00

Ridgevalley School	Transportation cost of bussing the Grade 6 class to Valleyview to participate in a Council meeting in March 2023	Sponsorship of \$180.00
Swan City Snowmobile Club	Poker Rally- February 11, 2023	Gift in-kind valued up to \$100.00
Valleyview Cup Hockey Tournament	Valleyview Cup Hockey Tournament- March 3-5, 2023	Gift in-kind valued up to \$300.00

The Greenview Sponsorships and Donations Policy states the “CAO, or designate, has the delegated authority to approve a sponsorship or donation for a single event up to a maximum of \$1,000.00” and it also states, “Administration will provide an update to Council regarding sponsorships and donations approved by the CAO in the monthly manager’s report”.

Agricultural Services Manager, Sheila Kaus

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects worked on by Agricultural Services this month are:

Governance Goal#3- Improve intermunicipal government relations:

The Peace Region Association of Alberta Agricultural Fieldman offers administration a regular opportunity to coordinate with other Agricultural Services departments throughout the region, leading to improved intermunicipal cooperation and advocacy efforts. From January 17-19th the Peace Region Association of Alberta Agricultural Fieldman completed delivery of the 2023 Provincial Agricultural Service Board Conference in Grande Prairie. The conference was well received with significant resolutions being approved by the provincial body. Administration will keep the Board apprised of the progress of the Provincial Committee regarding the resolutions as 2023 moves forward. To ensure that resolutions are well written and informed, Greenview ASB’s resolution priorities and considerations would be best submitted to Administration prior to April. This early submission allows for the time required to ensure high quality and considers the control seasons frantic pace.

Economy Goal#2- Create a diverse economy:

Problem Wildlife programming supports agricultural diversity and protects viable and sustainable agricultural practices as without predator control supports, livestock productions economic sustainability is negatively impacted. Problem wildlife has been busy consulting with ratepayers that have been experiencing predation, setting and checking baits, snares, and traps, performing reconnaissance along Priority Area 1 south of Valleyview and around Grovedale and reaching out to those who had been in touch with the department through 2022 to see if assistance is required. These efforts have resulted in the harvest of twenty-five coyotes, one wolf, and one fox. Nine of the harvests have been sold to a fur handler license holder based in Peace River resulting in \$70 returning to Greenview. Seven harvested coyotes were unsalvageable due to mite infestation.

The team has experienced some difficulty in accessing locations. Use of the side-by-side has met with limited success. The unit has limitations in reversing and has gotten stuck each time a team member has used it. Unless locations have already been cleared, the team intends on working together to share the skidoo. Administration has made note of this limitation, along with the travel back and forth to facilitate sharing of the skidoo to assess the need for a second skidoo in 2024.

Problem Wildlife Work Orders

File Status	Beaver- MD	Beaver- Ratepayer	Customer Service	Predation	Totals
In Queue	-	-	-	-	
Open	-	-	-	12	12
Closed	-	-	2	-	2
TOTALS	0	0	2	12	14

Governance #2- Provide quality municipal services by providing consistent levels of service:

Recruitment contributes to providing consistent levels of service as the department would not be capable of delivering seasonal control programs without the seasonal staff brought into the department annually to facilitate the work. Administration has begun preliminary work on recruitment of seasonal staff and the Supervisors are collaborating with the Safety department for training requirements in 2023.

Economy Goal#2- Create a diverse economy: Veterinary Services Incorporated (VSI) encourages livestock producers to access veterinary care and maintain herd health, protecting the economic viability of their livestock operation.

VSI Quarterly Reports and Service Breakdown – 2022

Fourth quarter VSI totals have been received. For 2022, there was a 4.2% decrease in claims. This decrease is suspected to be related to increased difficulty of livestock producers accessing veterinary services coupled with policy changes implementing in 2021 requiring participants to be a resident of Greenview.

	# Services	2022	2021	2020	+/- (%)
Total 1 st Quarter	70	\$17,268.52	\$19,269.77	\$21,172.35	-8.99%
Total 2 nd Quarter	175	\$33,563.50	\$33,953.33	\$36,569.40	-1.15%
Total 3 rd Quarter	41	\$6,361.23	\$ 8,382.80	\$ 8,342.09	-24.1%
Total 4 th Quarter	116	\$41,106.15	\$40,995.55	\$34,228.60	0.3%
2022 Claims	402	\$98,299.40	\$102,601.45	\$100,312.44	-4.2%

Preg Checks: 13,765
Semen Testing: 689
C-Sections: 20
Exams: 53
Herd Health: 9

Economy Goal #2- Create a diverse economy:

The Agricultural Equipment Rental Program contributes to the economic viability of agricultural producers by providing equipment for rent that is cost prohibitive to purchased, when measured against frequency of use. Rental Equipment stands at 5 rental days up to January 23, 2023.

Protective Services Manager, Wayne Brown

Greenview Fire-Rescue Services continues to provide consistent levels of service throughout the Municipal District of Greenview No. 16 in alignment with the 2022-2025 Strategic Plan:

Culture, Social & Emergency Services

Administration:

On January 9 the Regional Fire Chief met with Community Peace Officer (CPO) and Deputy Fire Chief (DFC) in Grande Cache to discuss the Main Street Lofts site. The apartment is consistently illegally entered and there are signs of fires being set for warmth by the illegal occupants. Regional Fire Chief is currently acquiring quotes to secure and board the property from illegal occupation ensuring safety is priority.

An Emergency Advisory Committee was held on January 16 to update the committee, topics included the natural gas issue in Grande Cache and dangerous goods traffic through the Grovedale area. A wildfire simulation is planned for the Grande Cache area in April and a dangerous goods incident simulation for Grovedale and area in the fall.

Owner of the property in Grovedale that was a concern has complied with the issued Safety Codes Order by discontinuing the use of the industrial type building for living/sleeping, the order has therefore been withdrawn.

Regional Fire Chief attended a Forest Resource Improvement Association of Alberta (FRIAA) Fire Smart conference call for information, it is expected that Greenview will be applying for grant funding potentially in partnership with Fox Creek.

Fire Stations update:

The Fire Cadet Program plan is on track and will be launched at STN 31-DEBOLT on Feb. 6, 2023. Five students are enrolled; it will also launch Feb 7, 2023, at STN 33-GRANDE CACHE, four students are tentatively enrolled.

Station 33 – Grande Cache been working with Royal Canadian Mounted Police (RCMP), Emergency Medical Services (EMS), Grande Cache Community High school, Greenview Enforcement Services and Grande Cache Victim Services to provide a program to high school students about the dangers of drinking and driving, distracted driving, All Terrain Vehicle (ATV) safety and consequences to dangerous behaviour. This program will be delivered to students closer to the end of the school year.

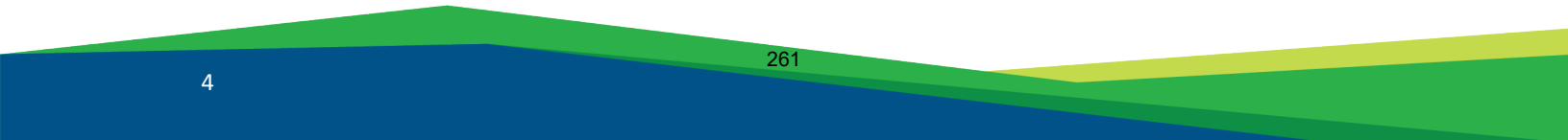
Incidents:

	STN 31	STN 32	STN 32	FCFD	VVFD
Emergency Response	12	8	3	8	8
Medical Co-Response	5	11	9	0	0

Of the total 39 emergency responses 30 (Coded 77 – Motor Vehicle Collisions (MVC)) were to roadway incidents. Included in this coding were: 9 single vehicle roll overs, 6 semi truck roll overs, 6 collisions, 4 animal-vehicle collisions, 1 vehicle fire, and fire crews were stood down 4 times.

Large Incidents:

On January 18 a rupture of a Pembina pipeline (propane type product) occurred at 6:20 PM, the resulting plume migrated into the Sweat House area. The pipeline was isolated remotely, the release was from a pipe 12 inches in diameter and 59 KM in length. Regional Fire Chief was notified at 9:30 PM, he attended the Pembina Emergency Operations Centre at 10:30 PM. Pembina was using air monitoring equipment to track the plume, had placed roadblocks and immediately began notifying the residents in the affected area. 12 residents were re-located to a hotel in Valleyview. Pembina is continuing with their pipeline repair work and is now providing daily activities of work in Greenview.



Governance

On January 25 the new Holmatro extrication tool was deployed at Station 33-Grande Cache, this is a “state of the art” e-tool that will save precious seconds when someone is trapped or pinned in a vehicle.



On January 24, the Regional Fire Chief met with representative Mark Cardwell of the AB Safety Codes Council to complete an audit of Greenview’s Safety Codes fire inspections and fire investigations programs. Mr. Cardwell will be preparing and sending a report outlining recommendations and suggestions for Greenview.

Environment

The new Tri-partnership Training Center located in Grande Prairie County is making good progress, estimated opening is March 2023. This will be a “game-changer” allowing for safer and accelerated live fire training for our firefighters.

Enforcement Services - George Ferraby (Eva King – Acting)

The department continues to provide consistent levels of service throughout the Municipal District of Greenview No. 16 in alignment with the 2022-2025 Strategic Plan:

Administration:

Enforcement Services is excited to have our new recruited officer start in Grovedale on February 13, 2023.

Multiple Joint Task Force initiatives took place throughout the Municipal District of Greenview No. 16 during the month of January. This included Commercial Vehicle Check Stops on the Forestry Trunk Road (FTR) and Commercial Vehicle Inspection stops near the Little Smoky Area. We have removed multiple Commercial Vehicles from Greenview roadways for major safety defects and large over weights.

Enforcement Services Peace Officer located in Grande Cache is now certified as a Commercial Vehicle Safety Alliance (CVSA) Inspector and can perform level one inspections on Commercial Vehicles.

Enforcement Services partnered with Infrastructure & Planning department throughout the month of January. Enforcement Services conducted inspections on Municipal District of Greenview No.16 commercial vehicles to ensure full compliance.

[Governance](#)

Enforcement Services has fielded 128 calls for service, 56 violation tickets, and 48 warning tickets.

[Culture, Social & Emergency Services](#)

Enforcement Services assisted Fox Creek Royal Canadian Mounted Police (RCMP) with their Impaired Driving initiated check stop.

Enforcement Services is working in partnership with Grande Cache Fire and Emergency Services in creating a Community Service program to be delivered to students at the High School in Grande Cache.

Stats:

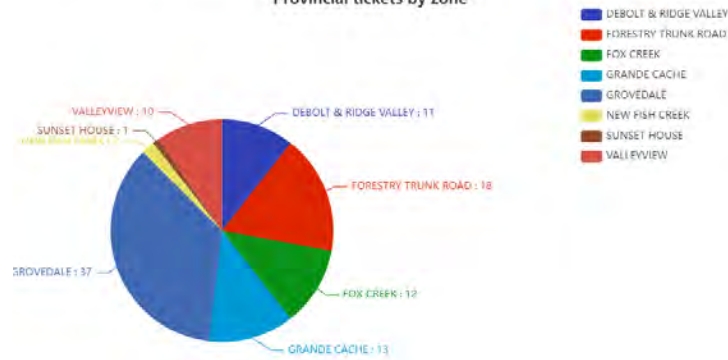
Ticket Create Date: 2022-12-21 ~ 2023-02-01

Provincial tickets by type

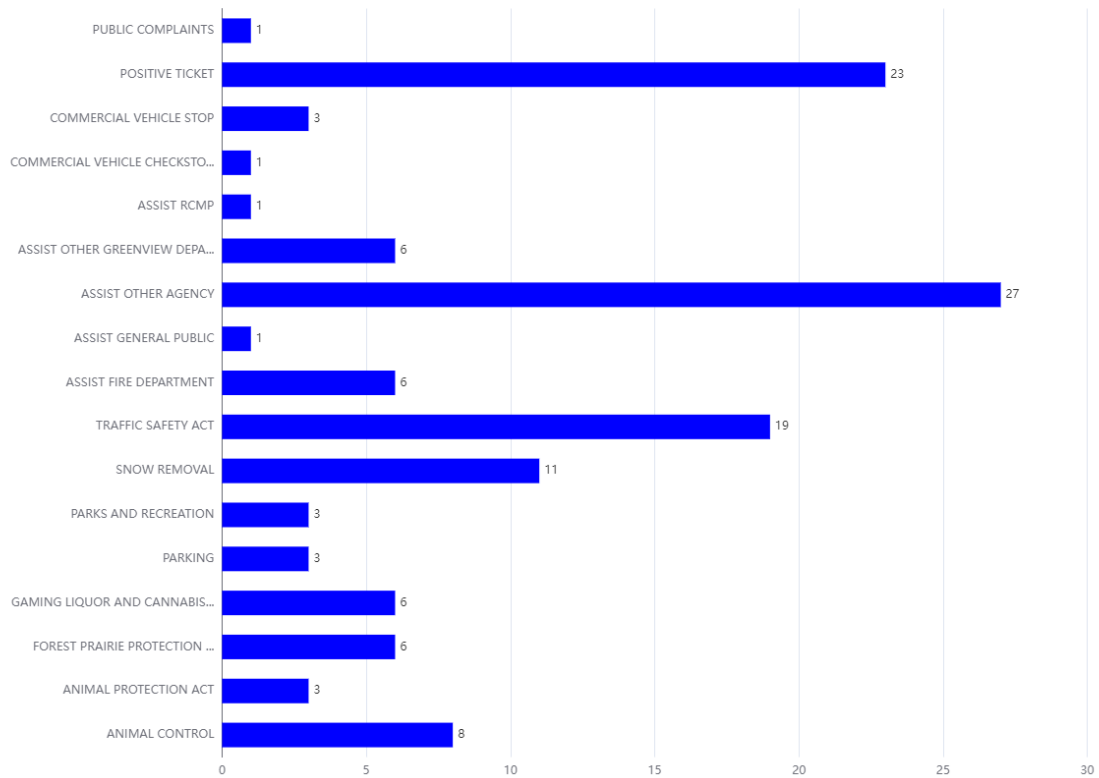


Ticket Create Date: 2022-12-21 - 2023-02-01

Provincial tickets by zone



OCCURRENCE REPORT Count of Incident Types Total:128 | 100.0%



Grande Cache Pound Report:

Dec 21, 2022 - Jan 20, 2023

Animals Impounded:	
Dogs	6
Cats	0

Total Animals Impounded	6
Complaints:	
Responded to	7
Referred to CPO	2
Animals brought in	4

Green View Family and Community Support Services (FCSS) Manager, Lisa Hannaford

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects worked on by FCSS this month are:

Governance Goal#2 - Provide Quality Municipal Services:

Administration has compiled the statistics and outcomes for all 2022 programming. There were 12,115 individuals serviced in 2022, compared to 9820 in 2021. The increase in numbers was mainly due to individuals accessing Home Support, the Community Volunteer Income Tax Program and Information and Referral Services. Of the total number receiving services, 3822 live in the Town of Valleyview, 5916 were Greenview residents, and 2378 from Sturgeon Lake.

During the month of December alone, the Community Resource Center Coordinators from the two offices assisted 478 inquires either in person or by telephone. The top three reasons people called or came in were for technical assistance, seniors related visits and employment.

Green View FCSS was successful in the proposal submitted to the Province to operate the career and employment storefront services. As the department has been offering these services for over 15 years, staff is well-versed in the day to day operations of assisting residents to search for and secure employment.

On Monday January 9, the province of Alberta announced information on the New Alberta Affordability Payment Program. This program will provide \$600.00 to those who are eligible. This will mainly affect seniors, AISH (Assisted Income for the Severely Handicapped) recipients, and children of families whose combined income is under \$180,000.00. While some payments will be automatic, others may have to be applied for through the My Alberta Digital Identification program. Our offices will be able to assist people to navigate the application process, and the applications process opened on January 18th.

The Government of Alberta is helping local food banks and organizations put nutritious meals on more tables by providing \$20 million in funding over 2 years: details on who can apply can be found in the following link: <https://www.alberta.ca/affordability-action-plan.aspx>. The Valleyview and Grande Cache Food Bank as well as the Valleyview and DeBolt library were sent a direct link to this information through the Green View FCSS office. At the regular Green View FCSS meeting held on January 18, a discussion on Food security in Valleyview and area took place. Representatives from the Valleyview Food Bank, the

Valleyview Library (dry pantry), and the Lutheran Church, who supplies coffee and sandwiches to those requiring it were present. The discussion resulted in increased collaboration between groups.

The Town of Fox Creek has terminated their agreement for the Family Resource Network-Home Visitation and Caregiver Support spoke contract. The position has been vacant for months, and there have been very few people coming into the FCSS office requesting home visitation or caregiver supports in both Grande Cache and Valleyview. In the interim, the Green View FCSS office has been compiling a variety of resources and referrals on topics including parenting courses that families can access both online and in person.

Governance- Goal #1 – Increase staff success:

Many of the FCSS staff compliment will engage in various components of Emergency Social Services (ESS) training in January and February. This free training is conducted by the Alberta Emergency Management Association of Alberta, and courses include ESS Basics, Facility management, Registration and Reception Center Program/My Alberta Emergency Registration System, ESS Coordinator, and Donations Management. The team will be engaging in a mock ESS tabletop on February 27 allowing an opportunity to practice skills. On January 27, administration will attend a Northwest ESS meeting where regional supports and resources will be discussed.

Culture, Social and Emergency Services-Goal#3 – Improve public perception of Greenview

On January 17 Green View FCSS hosted a Finding Balance presentation at the Seniors Drop-in Center in Valleyview. This 1.5 hour workshop provided participants with practical information on how to prevent falls in the home. There were 26 people in attendance who all reported that they came away with valuable fall prevention strategies.

Youth programming currently running includes Boys Groups at Ridgevalley school in grades 3, 4, and 5. This program focuses on effective and respectful communication and healthy relationships.

The Empathy program, which enhances empathetic development in children aged 3-5. This program is run in partnership with the Greenview Regional Multiplex in Valleyview in addition to Susa Creek School. The I Can Handle Anger Program is also being delivered at Susa Creek school to preschool aged children.

The WiseGuyz program, running in Grande Cache for grade 9 males, wrapped up its first module on healthy relationships. This program will continue to run for the rest of the school year.

Administration is currently planning a Kids Conference in Grande Cache March 28, 29 and 30th. The Kids Conference allows children aged 5-12 freedom of choice in their experiences during the 2 1/2 days. There are 3 streams of learning including physical literacy, creativity, and life skills.

Recreation Services Manager, Kevin Gramm

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects worked on by Recreation this month are:

Governance – GOAL 1: Increase staff success.

Recreation Services team leads recently gathered for the 1st quarter Programming and Customer Service training and development meeting hosted this quarter by the Greenview Regional Multiplex. Recreation

team members from Grande Cache and Outdoor Recreation met to discuss plans and objectives for successful programming development, budget reviews and direction setting. After some intense planning sessions team leads broke into various streams to further refine and plan opportunities and ideas. Some collaborative ideas such as “what is the GRM’s signature event” were discussed and the upcoming 5-year anniversary of the Multiplex.

The groups then broke off into activity sessions to further build the networking and participated in light sporting activities to finish the day’s activities and educational opportunities. The previous session was hosted by Outdoor Recreation at Shuttler Flats to bring some exposure to our recreation gems. The first session was held in Grande Cache at the Recreation Centre and included some Mountain View sight seeing and hiking opportunities. The 2nd quarter of 2023 will be in Grande Cache again!

- **Governance – GOAL 2: Provide quality municipal services.**

Recreation Services Administration is focused on promotions, collaboration, and continued quality programming. Monthly meetings with community groups such as Walking with Families, W.O.W. Valleyview, and Interagency have proven to foster relationships and opportunities. W.O.W. Valleyview is a scheduled delegation for the March GRM Advisory Board meeting. Collaboration focused on increasing facility usage with the youth in our community is the topic of discussion.

Increasing the usage of our Super Senior patrons is an additional goal of administration. The Super Senior Club was launched January 1st. This program will provide recognition to our active Super Seniors much in the same way as our Member of the Month program. Included in the Super Senior Club is a monthly updated facility schedule, along with a healthy recipe to try and wellness information. Our Super Seniors that visit us frequently will qualify to have their name and/or picture placed on our Super Senior Wall of Fame.

Fieldhouse rentals in December included Freson Bros Christmas Party, Pembina Kids Christmas Party, and Western Cree Tribal Council hosted a 400-person event on the 14th, celebrating their elder at Christmas time. The event included a band and comedian. Stage, Dance Floor and Commercial Kitchen all were utilized for the event. The GRM Team received many thanks for a great event.

GRM Programs Attendance Stats – December 2022

***Minimum Required Attendance: 6 participants**

Program	Participant Registration
Christmas Craft	12
Pancakes & PJ Night	16
Christmas Baking	12
Baking 4 Santa	12
Noon Years Eve Event	82 children/60 adults

GRM Fitness Attendance Stats – December 2022

***Minimum Required Attendance: 6 participants**

Program	Participant Registration
Zumba (Group A)	9
Zumba (Group B)	8
Gentle Yoga	6

- ❖ Facilitators have enjoyed an eventful December. Drop-in Tot Time continued throughout December, Childmind Care was offered Monday-Thursday, 9:00am-11:00am and 5:00pm-8:00pm.
- ❖ Christmas Craft creating was enjoyed on December 7th, Christmas Baking (8-12yrs) on the 12th, Baking for Santa (4-7yrs) on the 14th, and Pancakes and Pajamas (3-10yrs) was a well attended event on Friday, the 9th from 5:30-8:30pm.

- ❖ Noon Years Eve event hosted December 30th, proved to be a huge success. Activity stations were set up throughout the fieldhouse, balloon drop took place at noon.
- ❖ Effective January 1st, all youth members utilizing the Fitness Centre are now required to have a Fitness Centre Orientation certification in their member file. The Fitness Programmer has been busy completing orientations with our youth. This will assist us in ensuring the youth are utilizing the equipment in a safe, effective manner and are adhering to Fitness Centre guidelines.
- ❖ Youth and adult snowshoeing have been facilitated at Johnson Park in conjunction with Outdoor Recreation.
- ❖ Senior Fitness Centre orientations has been offered to the seniors in our community throughout the month of January. 4 sessions well attended. This is being facilitated in conjunction with the Town of Valleyview Recreation Department.
- ❖ 12-week Waist Away Challenge commenced January 1st, a Fitness Centre promotion to engage our members and assist with maintaining motivation into the New Year.
- ❖ Registration is open for the Greenview Indoor Triathlon that will be hosted on February 25th.
- ❖ Wibit Weekends continue to be received well and will be offered every 3rd weekend of the month moving forward.
- ❖ Water Works commenced once again on January 3rd. Offered twice weekly with 13 people registered.
- ❖ Upcoming Aquatic Programs include Ridge Valley School Swim Lessons, Sweetheart Sport & Swim event, Senior Aquatic Walk & Stretch, and Private Swimming Lessons.

GCRC Programs Attendance Stats – December 2022

***Minimum Required Attendance: 6 participants**

Program	Participant Attendance
Lighting of Rocky Event	300
Christmas Tree Hunt	70
Dear Santa,	7
Christmas Cookie Decorating	12
Let it Snow	4
MD Kids Christmas Party	24
DIY Christmas Wreath	11
DIY Tree Ornaments	9
Sock Snowman	7
DIY Gnome Ornaments	7
Gingerbread House DIY	11
Christmas Movie	7
House Decorating Contest	19 Homes Registered

GCRC Fitness Attendance Stats – December 2022

***Minimum Required Attendance: 6 participants**

Program	Participant Registration
Tails & Trails	2
Adult Barre	27 (3 classes)
Vinyasa Yoga	6
Morning Zumba	2
Restorative Yoga	6
Ballet a la Seconde (6–9-year-olds)	30
Night Zumba	6
Night Hikers	47 (2 sessions)
Aqua Fit	17 (2 sessions)
Aqua Fit-no instructor	63 (13 sess)
Lunch Swim	2

The Grande Cache Recreation Centre was the place to be during the Holiday Break. Sponsored swims were very well attended with several of the weekends with back-to-back Hockey Tournaments reaching maximum capacity in our Aquatics facility. Reportedly families travelled from Hinton and Grande Prairie to attend even outside families travelling for sporting activities. Several Curling Bonspiels also recently took place in the Recreation Centre.

Lifesaving Swim Lessons – 16 hours of pool time	28 – Under 3 and 128 – 3 – 12-year-olds
Junior Lifeguard Club – 2 hours of pool time	18 youth participated in several sessions
Otters Swim Club	36.25 hours of aquatics usage
Public, Lane and Family Swims	213 hours of operation open
Public swim parties	2 facility bookings
4 hours of sponsored swim by local organizations	5 hours of private rental bookings

- **Governance – GOAL 3: Improve intermunicipal government relations.**

Recreation Services Administration participated in a joint collaborative effort for the Wapiti Recreation and Trail Master Plan. Working with the province, industry partners and collaborative municipalities Greenview representatives continue to meet regarding future planning and trail identification in the Wapiti area. Recently Administration and Greenview Council met with members of the Alberta Province to discuss some of the future opportunities and focus areas.

Administration also continues to partner and be a collaborative team member with the City and County of Grande Prairie as well as smaller municipal partners on the Grande Prairie Regional Recreation Committee. Greenview is a 2 % contributing partner with this committee and works to support ideas and initiatives to promote and enhance further recreation opportunities in the Region.

- **Economy -: GOAL 1: Maintain fiscal responsibility.**

Recreation Services Administration within the Greenview Regional Multiplex and the Grande Cache Recreation Centre strives to encourage facility usage, driving opportunity within our recreation buildings and ensure we keep fiscal focus on our attendance.

Represented below is 2 different formats for reporting facility statistics. The Greenview Regional Multiplex is a new reporting format that Administration began mid December. This is the format we will be presenting in the upcoming Manager's reports for ease of input and understanding. The Grande Cache Recreation Centre is the original format we had been putting in the reports previous to changes made in December.

In the February report, Administration will present full January statistics in the new format for the time period January 1st to the 31st 2023.

Recreation Services Administration does not have the GCRC / GRM historical data to track specific facility usage like we have presented below for the Greenview Regional Multiplex. This is due to the way data is entered into the booking software currently in use at our facilities.

Greenview Regional Multiplex: December 13th – December 31st– 2022

Total Facility Usage

Age	Aquatic Centre	Fitness Centre	Fieldhouse	Walking Track	Indoor Play Centre	Total
Under 3	65	0	3	0	11	79
Child	232	0	51	2	26	311
Youth	57	35	103	4	0	199
Adult	357	551	126	35	10	1079
Senior	69	25	11	27	0	132
Super Senior	27	14	1	37	2	81
Total	807	625	295	105	49	1881

Facility Rentals

Aquatic Centre	Party Room	Fieldhouse	Boardroom	Indoor Play Centre	Total
66	136	516	0	0	718

Average Daily Usage

Age	Aquatic Centre	Fitness Centre	Fieldhouse	Walking Track	Indoor Play Centre	Total
Under 3	4	0	0	0	1	5
Child	13	0	3	0	1	17
Youth	3	2	6	0	0	11
Adult	20	31	7	2	1	61
Senior	4	1	1	2	0	8
Super Senior	2	1	0	2	0	5
Total	45	35	16	6	3	107

***Average based on 18 days** (Excluding December 22nd, closure due to HVAC and December 25th for Christmas)

Grande Cache Recreation Centre: December 1st - 31st 2022.

Memberships Purchased Per Month

Facility Usage Per Month

Category	Total Memberships Purchased - 2021	Total Memberships Purchased - 2022	Total Day Passes Purchased - 2021	Total Day Passes Purchased - 2022	Members - 2021	Day Passes - 2021	Average Daily Usage - 2021	Members - 2022	Day Passes - 2022	Average Daily Usage - 2022
Family	5	3	83	89	160	83	8	241	89	11
Senior	5	5	10	21	95	10	3	87	21	3
Super Senior	0	2	N/A	2	75	N/A	2	102	2	3
Adult	58	70	244	305	741	244	32	851	305	37
Youth	10	40	208	173	164	208	12	71	173	8
Child (FREE)	N/A	N/A	N/A	22	N/A	N/A	N/A	N/A	22	1
TOTAL	78	120	545	612	1235	545	57	1352	612	63

- **Culture, Social & Emergency Services – GOAL 3: Improve public perception of Greenview.**

The following points are a summary of positive feedback received on registration cards at outdoor recreation sites during the 2022 camping season.

Moody's Crossing:

- "Nice place!"
- "We really appreciate. Thank you"
- "Very nice and clean place"
- "Thank You! Awesome Place"
- "Wonderful camping place"
- "Nice spot to camp"
- "Thanks"
- "A beautiful campground, thank you."
- "Very nice and well-kept campground, Thank you."
- "Thank you, Kendra. It was a pleasure meeting you. See you next year."
- "Happy Thanksgiving"

Swan Lake:

- "Beautiful campsite as always"
- "Thank you for such a great place to come fishing & camping. Love that you have a couple of longer sites for RV's."
- "Thank you for maintaining such a lovely campground."
- "We are happy to be at our second home".
- "Glad to be here!"
- "Great place to camp"
- "Looking forward to our next visit."
- "Very nice upgrades & well kept."
- "Great camping and fishing"
- "Gorgeous campsite (8) view of the lake & upon arrival we watched someone catch & release 2-3 lb rainbow! Just what we've needed since the beginning of COVID-19- 1st road trip from Vancouver Island."
- "Great holiday!"
- "Glad to be back."
- "Having a good time."
- "Thanks for the great stay"

Johnson Park:

- "Cleanest washrooms ever"
- "Beautiful campground. Will definitely be coming back."
- "Thanks for split wood"
- "Thank you for building such a nice park."
- "Very clean! Way better than Alberta Parks!"
- "Nice clean toilets. Thanks for the chopped wood"
- "Thank you"

- “Thank you for the beautiful place to camp. Our family has been enjoying this place for years.”
- “Thanks for the beautiful campground. Very peaceful & quiet”
- “Beautiful campground, very clean, well kept. Thank you all who make this happen.”
- “Thanks for your help”
- “Thanks for having a very nice campground.”
- “Very nice, thanks”

- **Culture, Social & Emergency Services – GOAL 4: Support and maintain recreational opportunities.**

Recreation Services Administration has a meeting with Alberta Forestry, Tourism and Parks scheduled on January 27th to discuss leases for Provincial Recreation Areas (PRAs). The primary focus will be renewals for Southview PRA and Kakwa River PRA, extensions to the existing Sheep Creek PRA and Smoky River South PRA leases, and the divestment of Shuttler Flats PRA.

A Request for Proposals for the Kakwa Trail Corridor Consulting Services was posted on January 13th, 2023, and is scheduled to close on February 7th, 2023. Council should expect to see a Request for Decision to award the relevant contract during the February 28th Regular Council Meeting. Administration is working closely with Alberta Forestry, Tourism and Parks to move this project forward.

Administration has signed a Consent to Withdrawal for a small portion (0.556 acres) of the Moody’s Crossing lease. This consent will allow the Province to remove a small, undeveloped portion of the parcel of land from Greenview’s lease in order to allocate it to Alberta Transportation for ditch repairs.

Administration has applied for the following leases to be transferred into Tourism and Commercial Recreation Leases:

- Swan Lake
- Moody’s Crossing
- Johnson Park
- Grovedale Fish Pond

This type of lease allows for longer terms and therefore a decreased impact on administrative time for renewals. These specific sites were brought forward by the Province, but additional sites may be looked into. A similar site to consider would be Smoky Sunset Landing. This process will be looked reviewed.



MUNICIPAL DISTRICT OF GREENVIEW No. 16

Manager's Report

Department: Corporate Services

Submitted by: Ed Kaemingh, Director Corporate Services

Date: 2/14/2023

Director Corporate Services – Ed Kaemingh

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects I have worked on this month are:

- **Governance** - *Incorporate staff succession planning:*

I held 9 one on one meetings with my direct reports, at these meetings we discuss any challenges they are facing with their areas, successes they have experienced, review and identify any adjustments they need to make with their business plans. For my one on one with the Information Services Manager I travelled to Grovedale, an initiative that I plan to continue to do over the next year to better connect with the staff at other office locations.

- **Culture, Social & Emergency Services** - *Work with partners to create opportunity to encourage development of elder, community and senior supportive housing and living facilities:*

I reviewed the various Financing options for Heart River Housing with our Finance team.

- **Economy** - *Monitor and maintain capital spending and operation fiscal responsibility:*

We held our first asset management committee meeting for 2023, this meeting focussed on developing and refining the terms of reference based on guidance from Senior Leadership Team and developing asset management frameworks for the departments.

I worked with our procurement officer to develop the RFP template for contract awards to Council, the awards will go in camera so that Council will have the opportunity to review the rankings and have a discussion prior to making the decision.

Our Auditor presented the audit plan to Senior Leadership Team along with Finance, they reviewed a few of the accounting changes, the most impactful will be the Asset Retirement Obligations (ARO). This section establishes

standards on how to account for and report legal obligations associated with the retirement of certain tangible capital assets and solid waste landfill sites.

Finance & Administration, Manager – Cara Garrett

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects I have worked on this month are:

- **Economy** - *Monitor and maintain capital spending and operation fiscal responsibility:*

Finance is currently doing work to complete 2022 while balancing that with 2023 work. This is a busy time of year and there is a lot of attention needed to make sure that entries are done to reflect the proper fiscal year.

The last payment run for 2022 was January 18, 2023, but accruals were accepted up to January 31, 2023. Anything received after that date will be evaluated for its materiality and impact to the Financial Statements.

Once Accounts Payable and Accounts Receivable are closed there are a number of other adjustments that will need to be done so that we can prepare files for the auditors.

Financial Reporting, Manager – Marley Hanrahan

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects I have worked on this month are:

- **Economy** - *Monitor and maintain capital spending and operational fiscal responsibility:*

The focus in January was on year end. We continued work on the 2022 changes to tangible capital assets which included setting up the fixed asset card information in Worktech in alignment with the new policy, gathering disposal information including bills of sale and insurance claims, and reviewing invoices coded to capital projects to ensure they meet policy guidelines. To date, we have created 117 new asset cards for 2022 with more to be done as we work through the capital project listing. We have also been doing a review of our GL accounts and creating adjusting journal entries as required. And we have started preparing and reviewing year end working papers in anticipation of the accrual process cut-off of January 31st so that we can make final updates as support of any year end adjustments in early February.

The preliminary Q4 financial reporting package was also prepared in accordance with the Financial Reporting Policy for the January 24th Council meeting. As we have not completed 2022, it was a preliminary, summarized look at where Greenview was at compared to the budget. A final unaudited report will be presented to Council at the March 28th Council meeting.

Asset Management Officer – Jamie Hallett

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects I have worked on this month are:

- **Environment** – *Align investment into infrastructure that best supports industry:*

The Asset Management Advisory Committee (AMAC) met on January 19th, the Terms of References (TOR) was reviewed with Senior Leadership Team (SLT) changes and additions. We have moved the committee to be majorly set on Greenview's Asset Maturity and the game plan to move maturity scale, up strategically. We are making efforts for work capacity and not to lose the momentum from the previous meetings. There will be a minimum of 6 meetings per year, to ensure effectiveness of the committee.

Registration for the last Heliport in Grovedale has been received and we're now moving on to the registration with Nav Canada and Industry Canada for the communication towers at each Public Service Buildings (DeBolt & Grovedale) and an additional radio tower down by the Simonette Road. It will take approximately one year to see the stations in the Nav Canada Published document.

Discussions have started on Asset Retirement Obligations (ARO) for the 2022 Audit. By completing the policy in early 2022, we can now start to address the concern around financial implications required. This year will be about how to get started and address the 2 assets we are dealing with by using the Accounting Standards and the ARO Policy. The additional assets list is being complied and will have the need for final forecasting as well. Advisement and overview will be in the 2022 audit evaluations.

- **Economy** – *Adopt an asset management plan:*

Working on the 2022-2024 Software Project for Greenview. Assets are coming together slowly, and we are trying to cover all department needs for this phase. We are working closely together to get the road segment data cleaned up and moved into the GIS side of the PSD-Citywide software. Then take that data and link it to create the single asset event for Greenviews inventories. We are also converting PDF data into CSV file to ease the data into PSD-Citywide.

Working on Phase 1 of the Software Project; workflow and Preventive Maintenance (PM). This will be discussed in detail at AMAC and likely SLT, as we are looking to record work being completed to assets on a regular interval or not. This will help budgeting operational costs.

Working on additional programs that need to be apart of the new Asset Management Program. The biggest of which will be the one-stop of data entry into PSD-Citywide, then it will output to programs like FileHold, eCompliance, TownSuite (new financial software) and other programs. This work will help the collective to be entering data just once.

Information Systems, Manager – Peter Stoodley

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects I have worked on this month are:

- **Culture, Social & Emergency Services** - *Identify & prioritize opportunities for broadband across Greenview:*

Hybrid Wireless service has been terminated as of Jan 31, 2023. All three sites Valleyview AG, Ops and FCSS are on 300 Mbps internet from Canadian Fiber. Administration in Valleyview upgrade to 2Gb is currently being re-scheduled by our Internet Service Provider (ISP).

- **Governance** – *Establish levels of service:*

Information Systems has been meeting with Cyber Security companies to identify Greenview's needs and is compiling information received on this. Cyber security is becoming more popular with insurance companies and Greenview needs to protect its data and employees.

The existing draft policy for BYOD (bring your own device) will be improved to meet today's needs and provide Greenview with better protection and reduce costs where it does not impact staff abilities to work.

Information Systems has compiled a report which provides stats on blocked email due to Greenview's cyber security measures to protect staff email accounts and the organization. These stats are from December 22, 2022 to January 21, 2023.

Quantity	Type
40	Malware Blocked
1147	Phishing Blocked
1762	Spam Blocked
70	Emails neutralized once in Greenview's environment

Legislative Services Officer – Sarah Sebo

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects I have worked on this month are:

- **Governance** - *Ensure our policies address changing and growing community needs:*

In January the following bylaws and policies were brought to Council for approval:

Bylaw 21-870 "Firearms Restriction in the Hamlet of Grande Cache" was given third reading as amended. The bylaw needs Ministerial approval before it can come into force.

Bylaw 22-929 "Records Retention and Disposition Bylaw" was given third reading as amended. The numbering within the bylaw was corrected.

Bylaw 22-930 "Schedule of Fees" was given third reading as amended. The phases for land acquisition for road widening were consolidated into one set of rates for all of Greenview. Removing the need for phases and variation.

Policy 6001 "Minor Area Structure Plan" was accepted as amended. Grammatical changes were made.

Policy 6002 “Development Enforcement” was accepted as presented.

Policy 6003 “Land Acquisition for Road Right-of-Way for Subdivisions” was accepted as amended. A directors title was fixed.

Policy 6004 “Certificate of Compliance” was accepted as presented.

Policy 6005 “Municipal Planning Committee Meeting Procedure” was repealed.

Policy 6006 “SDAB Meeting Procedures” was accepted as presented.

Policy 6007 “Subdivision Process” was accepted as amended. A cross reference to a bylaw was added.

Policy Review Committee was held January 11 where the following policies were reviewed by the committee. Policy 4004 “Equipment Contractor Registry” compiles a registry of interested equipment contractors, gravel haulers, operators and labourers (Equipment Contractors) available for casual work with Greenview at the rate and hiring process specified by Greenview.

Policy 4014 “Road Gravelling Program” ensures gravelling of local roads is carried out in a cost effective manner while considering both short and long term maintenance requirements.

Policy 7000 “Greenview Digital Signs” provides government and community information to residents, ratepayers, and visitors to Greenview by displaying events, functions, and messages that inform and enrich the community while establishing rules for information that is provided on outdoor municipal digital signs.

Policy 7002 “Advertising” The purpose of this policy is to ensure that all third-party advertising on Greenview property, facilities, and media is consistent with Greenview’s corporate values, image, and strategic goals.

Policy 7004 “Special Occasion Messages” The purpose of this policy is to give recognition to Greenview residents and businesses for their significant birthday or anniversary.

Policy 8001 “Community Facility Advertising Repeal” this policy is iterated in the advertising policy.

Policy 8008 “Post Secondary Scholarship” Greenview Council wishes to support applicants pursuing postsecondary education in trades and apprenticeship fields, college, and university. This policy seeks to provide financial assistance for individuals as they make meaningful contributions to their community.

Policy 8010 “Competition Sponsorship” To provide a guideline when awarding financial assistance to non-profit organizations, school participants or groups, or individuals not associated with a school or non-profit group in offsetting costs when participating in provincial, national, or international competition.

The next Policy Review Committee is scheduled for February 15, 2023.

The Subdivision and Development Appeal Hearing that was scheduled for January 13 was cancelled as the applicant withdrew their appeal.

Procurement Officer, Ashlee Holmes

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects I have worked on this month are:

- **Governance** – *Establish levels of service:*

January has been a very exciting month for Procurement. This month I have been busy helping support departments with some of their 2023 capital purchases/projects and beginning to look at some of the 2023 Operationally funded projects and work. As Procurement primarily focuses on establishing levels of services, the outcome of the services I provide is assisting other departments to reach their goals as identified in Greenview's Strategic Plan 2022-2025. In total, this month I supported and reviewed 17 tenders, contracts, and/or agreements for Planning and Development, Construction, Environment, Operations, Recreation, Facility Maintenance, and Fire Rescue Services. In addition to helping other teams, I have also developed four tenders, three of which have been launched this month. The other tender will be launched later in quarter 1.

As part of procurement and data analysis, I have been assisting Communications with an analysis of Greenview's promotional suppliers, the associated costs, and usage. More information regarding this project will come later in Quarter 1. I am also working with Amazon Business to launch the Greenview Amazon Business account. This month, I worked with all departments to identify potential Amazon Business users and will be finalizing this information with Greenview's Account Manager in February with an expected launch date of March 1, 2023. One of the benefits of Amazon Business is Greenview will be able to place orders for products that are difficult to purchase locally, and have those items shipped directly to each location, without having to pay additional shipping costs. In addition to procurement activities, Greenview received exciting news this month. We were named the successful proponent and awarded the Career and Employment Services Storefront Contract for the Valleyview area from the Alberta Government, Ministry of Community and Social Services. This was exciting news and a great outcome for a collaborative project between Procurement and FCSS.

As a member of the Psychological Health and Safety Committee, I was happy to help support the team in working with FCSS to get an employee resource document developed, identifying community and emergency resources and contact information for staff. I am excited about the first Greenview U of 2023, where the team, in collaboration with The Wellness Committee, will be hosting the first session.

Software Integration, Project Lead - Teresa Marin

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects I have worked on this month are:

- **Economy** – *Adopt an asset management plan:*

Project Management

Project Lead meets weekly with the PSD Citywide Inc. Project Manager to discuss the project progress and to address any delays or workflow requirements that may impact the project timelines.

Exploring opportunities for exporting and importing source file information to and from the existing software (i.e. FileHold and E-Compliance) and the new software programs, details such as the cost, benefits etc. will be gathered and presented when complete.

Chart of Accounts (CoA) Refresh

PSD Citywide Inc. has prepared a draft Chart of Accounts Project Strategy for the Finance Manager and the Manager of Financial Reporting to review. The project is on schedule with a projected completion date of March 2023.

Asset Management Software

The new software will ensure Greenview has accurate, up-to-date, detailed tracking, reporting, and monitoring of all assets, including detailed costs to maintain and/or replace the assets.

Conducting Phase I, this includes asset and maintenance scheduling for the following departments: Fleet, Facilities, Operations, and Construction and Engineering. All Fleet assets have been uploaded into the software site and progress continues with the other departments. Phase I is on schedule with a projected completion date of March 2023.



Manager's Report

Department: Planning & Economic Development

Submitted by: Martino Verhaeghe, Director Planning & Economic Development

Date: 2/14/2023

Director Planning & Economic Development – Martino Verhaeghe

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects the Economic Development and Tourism teams have worked on this month:

- **Economy – Create a diverse economy.** *Capitalize on infrastructure advantages that already exist in Greenview:*
 - Meetings on airport repurposing with Kyle Reiling and Economic Development
 - Registration of PSD helipads and progress towards Industry Canada approval of associated communication towers
- **Culture, Social & Emergency Services – Enhance communication to our public.** *Council and Administration engage the community through public engagement platforms:*
 - Compiled and reviewed results of the K-12 & GRM Public Engagement Survey
- **Governance – Improve intermunicipal government relations.** *Host regular meetings with neighbours, partners and indigenous communities:*
 - Met with Northland, Grande Yellowhead, Northern Gateway and Holy Family School Divisions on Joint Use Planning Agreements
 - General agreement on Joint Use and Planning Agreements obtained administratively to be brought forward in February/March to Council and Trustees.
 - Meetings with Mountain Metis Nation Association on moving the Grande Cache project forward
 - Meeting with Grande Cache Chamber of Commerce
 - CNRL GIG/water access meeting
 - Drop-in meeting with Grande Cache Tourism Interpretive Centre and West Yellowhead MLA, Martin Long

- Work with Procurement, Economic Development and Communications to develop a strategy providing opportunities for local businesses to be informed of the ability to bid on proposals and tenders

• **Governance - Increase staff success.** *Provide current staff growth opportunities when appropriate:*

- Review The Five Dysfunctions of a Team – Senior Management training preparation
- Presentation preparation for the date of the February 13, 2023, Greenview U – Wellness Day

Ongoing:

- Request For Proposal on Halmet of Debolt Area Structure Plan and Hamlet of Ridgevalley Area Structure Plan
- Continued work on the review of the Business License Bylaw and Hawkers, Peddlers and Mobile Vendors
- Review and acceptance of Municipal ortho GIS photos - 35% of MD
- Progress towards accepting payments at the FCSS building
- Continue progress on the acquisition of half section of land on HWY 40 & TWP 690
- Review of project list for potential grant funding
- Asset Management and GIS data coordination meeting
- Review of corporate-wide GIS needs assessment

Communications & Marketing, Manager – Stacey Sevilla

The communications department continues to produce regular external communications for ratepayers, stakeholders and the general public. The Comms department also works closely in collaboration with all other departments to create, launch and promote new services and programs etc.

Please note that the list below highlights Communications department activities but is not exhaustive.

Projects completed or underway:

Governance - Increase staff success. *Provide current staff growth opportunities when appropriate:*

- Assisted with Greenview University 2023 – Wellness Day logistics and prepared posters, email copy and registration
- Internal Communications: Wellness Committee posters designed and distributed

Economy – Create a diverse economy. *Increase tourism attractions:*

- Tourism Ad – Calgary Outdoor Adventure Show 2023

Culture, Social & Emergency Services – Enhance communication to our public. *Re-establish our quarterly newsletter for our public:*

- January 2023 Mountains to Meadows Newsletter printed and distributed to subscribers
- Glitz local Valleyview newspaper full-page advertisement scheduled for February 2023 distribution

Culture, Social & Emergency Services – Enhance communication to our public.

Continually improve our social media and digital platforms + Continue to use & expand the use of digital & non-digital bulletin boards:

- Updated new Rates & Fees on publications and website - GCRC Aquatics, Membership Rates, Community Bus brochure, and more

- Dust Control program traditional and digital advertising campaign
- EOI Information Sessions/Advertising
- Shelterbelt Tree advertising campaign

Culture, Social & Emergency Services – Improve public perception of Greenview. *Actively participate in community events:*

- In-kind donations: Valleyview Minor Hockey, Grovedale Minor Hockey, two last-minute gift baskets for Agricultural Services regional ASB conference
- In-kind donations ready for pick up Rural Crime Watch, Valleyview Cup Hockey Tournament
- In-kind donation delivery arranged: Swan City Snowmobile Club
- Internal program to streamline Communications requests rolled out

Culture, Social & Emergency Services – Support and maintain recreational opportunities. *Recognize opportunities to increase recreation development:*

- Recreation program marketing posters and digital advertising for Fitness, After School Programs, Lifeguard programs, Aquatic Centre hours, and more for both GCRC and GRM recreation teams

Projects Underway:

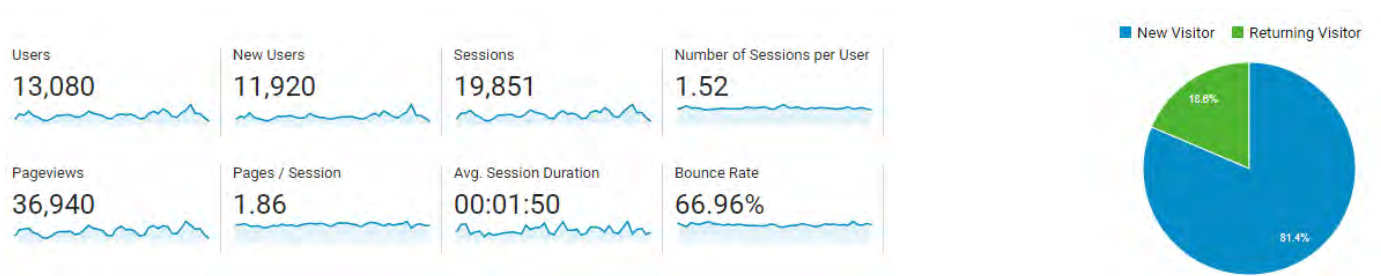
- Greenview Engagement Procedure Manual review/edits
- Tree Resources publication for Agricultural Services and brochures
- Greenview Values Word Art Wall Signage Quotes
- New Greenview Flag designs
- Proudly Supported by Banners for Sponsorships and Events
- Internal: Updating Product Catalog and updating Online Store
- Annual Website updates for departments and Bylaws/Policies
- Canvas distribution to 2023 photo contest winners
- Business cards created and ordered for staff
- Custom Greenview Plush Moose in production. Estimated delivery March 2023
- Promotional Inventory count completed for year-end
- Pembina Incident communications response
- Upcoming: Strategic Plan Progress Report document update, 2022 Annual Report, April Mountain To Meadows Newsletter – individual office mission vision pillars wall hangers

Digital presence statistics

Culture, Social & Emergency Services – Enhance communication to our public. *Continually improve our social media and digital platforms.*

Website (January 2023)

Greenview's website has seen **36,940** pageviews on the website through the month of January. The Greenview website has seen a slight increase in new users through January at **11,920**. Website access from mobile devices remains almost on par with the national average, with approximately 51% of website users from a desktop or laptop computer. ***NEW:** Visits to the Careers page of posted jobs totalled **2,106** at the time of this report, accounting for approximately **6%** percent of all website visits.



Facebook (January 2023)



Efforts to grow our Twitter and Instagram presence continue. Twitter followers as of January 29, 2023, = 1,848. Instagram followers as of January 29, 2023, = 602.

Greenview APP (January 2023)

The app was used approximately 312 times through the end of January, with users accessing the "Notifications" section the most often. We have had 18 new downloads over this period. Approx 1056 live app users to date, showing slow and steady growth.

Economic Development, Manager – Kevin Keller

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects the Economic Development and Tourism teams have worked on this month:

Economic Development:

- **Economy** - Seek opportunities for other funding sources:
- **Economy** – Create a diverse economy. Create opportunities to support and attract businesses in Greenview:

Administration has applied to the Northern and Regional Economic Development Program (NRED) grant program to match funding for the Greenview Beautification grant project. This grant will be open to businesses within Greenview to enhance, rejuvenate and renovate their Greenview Business in 2023. More information about this program and the application process will be shared with Greenview business in the first quarter.

- **Economy** – Create a diverse economy. Create opportunities to support and attract businesses in Greenview:
- **Culture, Social & Emergency Services** – Improve public perception of Greenview. Actively participate in community events:

Greenview Economic Development is assisting with planning the 2023 Growing the North Conference, to be held on February 22 and 23, 2023. With the addition of breakout sessions this year, we have been busy coming up with panellists for different sectors to showcase projects but, most importantly, educate the attendees with opportunities Greenview is currently leveraging for the growth of the regional economy. Greenview is supporting Growing the North in different ways this year. Instead of Gold or Platinum Sponsorship, Greenview will be showcased as a partner, supplying a networking prize.

- **Economy – Create a diverse economy. Create opportunities to support and attract businesses in Greenview:**

Administration has been working with Community Futures West Yellowhead on the Business Triage project through Deloitte, which will be presented at the February Committee of the Whole. Economic Development has started the kick-off of this project for the rest of Greenview. This opportunity will identify where Greenview businesses are facing the most challenges and where Greenview can focus its support and attention to assist them. This project will also provide compelling data regarding our Greenview business's growth, and the future will soon be at our fingertips.

- **Economy – Maintain fiscal responsibility. Seek funding opportunities for other funding resources:**

Administration has received an informative update regarding the E Ventures project. E Ventures has received a proposal from ChargerQuest that outlines their interest in the E Ventures project, as well as being a 50% funder of the E Ventures network and co-applicant on the upcoming Natural Resources Canada Zero Emission Vehicle Infrastructure Program Funding. Applications are expected to open in late January to early February. This type of proposal is precisely what E Ventures needs to start looking at the future of electric vehicle infrastructure within Greenview, the region and connecting to the Southern parts of Alberta.

Tourism

- **Economy – Create a diverse economy. Increase tourism attractions:**
- **Economy – Create a diverse economy. Capitalize on infrastructure advantages that already exist in Greenview:**
- **Governance – Improve inter-municipal government relations. Build relationships with industry-focused organizations:**

On January 18, 2023, Administration attended the Town Hall Grande Prairie Regional Tourism Event hosted in Hinton. The introduction of the Northern Rockies Tourism Development Zone was reviewed. The strengths, weaknesses, opportunities, and threats analysis are underway for the region from the feasibility study and are expected to be completed in April. Travel Alberta's mandate has been recently updated and is now focused on supporting tourism opportunities throughout ten distinct zones. Greenview is located in the newly designated Northern Rockies Tourism Development Zones, and Grande Cache is seen as the "low-hanging fruit" opportunity for development and promotion by Travel Alberta.

- **Economy - Seek opportunities for other funding sources:**
- **Culture, Social & Emergency Services – Improve public perception of Greenview. Actively participate in community events:**

Administration submitted a grant application for the Northern and Regional Economic Development Program (NRED) for the Uptown Pop-Up Plaza and Mural Infrastructure for the Grande Cache Tourism and Interpretive Centre Park.

- **Culture, Social & Emergency Services – Improve public perception of Greenview. Actively participate in community events:**
- **Economy – Create a diverse economy. Capitalize on natural areas that exist within Greenview:**

Administration held the Junior Adventurer's Youth Programs on January 3 through 5 and the Sprouts Youth Program for a total of 51 attendees. On January 21 -22, the Tourism Center hosted a successful adult's Beginner Acrylic Paint Class with full attendance.

The upcoming events for the remainder of January include the Sprouts Youth Program on January 26, the Nuggets of Nature Youth Program on January 28, and a photography workshop with Margaret Abraham on January 30th.

- **Economy – Create a diverse economy. Increase tourism attractions:**
- **Economy - Seek opportunities for other funding sources:**

On January 25th, the Tourism Department received verbal confirmation that Greenview has been approved for a \$55,000 Federal Government Tourism Relief Fund grant. These funds will be utilized to advance the dinosaur exhibit at the Tourism Centre in conjunction with the Philip J. Currie Museum.

- **Economy – Create a diverse economy. Increase tourism attractions:**

Administration has confirmed attendance for the Calgary Outdoor & Adventure Show held on March 18 and 19 at the BMO Centre, Stampede Park. Administration will utilize this opportunity to promote the tourism offerings in the Grande Cache region to a broader provincial audience.

Statistics

- Total Visitors Dec:712
- Total Dec Revenue: \$8434.34
- * Visitors Jan (1-22): 556
- * Revenue Jan (1-22): \$3760.19

	Total Visitors		Total Revenue
2019	19,168	2019	\$58,392.15
2020	9,025	2020	\$56,401.48
2021	15,825	2021	\$122,124.19
2022	19,039	2022	\$136,011.70

Planning and Development, Acting Manager – Nicole Friesen

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects the Planning & Development Team has worked on this month are:

- **Governance – Provide quality municipal services.** *Provide consistent levels of service:*

The department will be welcoming two (2) new staff members on January 30, 2023, filling positions which have been vacant for several months. Being fully staffed in advance of the development season will allow the department to provide a high level of service as staff can be trained during the slow period for the department.

Applications received this month include:

Type	Applications
Business Licenses:	0
Development Permits:	8
Land Use Amendments:	1
Subdivisions:	1
Approaches:	0

Aerial imagery captured in 2022 has been added to the mapping system for internal and external use. The new imagery represents approximately 1.18 million hectares or 11,800 km² within the southeast portion of Greenview.

- **Governance – Provide good governance.** *Ensure our policies address changing and growing community needs:*

Department policies reviewed were completed and approved by Council on January 10, 2023.

- **Environment – Implement policies that will support and enhance Greenview's diverse communities.** *Develop a plan that allows for growth opportunities and preserves agricultural land:*

GIS added the Agricultural Regions of Alberta Soil Inventory Database (AGRASID) and Land Suitability Rating System (LSRS) layer to Greenview's mapping system. The rating is now being used in Subdivision, and Land Use Bylaw Amendment (rezoning) reports to replace the rating provided by municipal tax assessors. The new rating aligns with the Agriculture department's practices and allows better coordination between departments.

- **Economy – Maintain fiscal responsibility.** *Adopt an asset management plan:*

GIS has been working with the Asset Management Team to capture and modify data as needed, such as splitting roads into one-mile sections.

- **Governance – Provide good governance.** *Regular communication between Council & Administration:*

Of the eight (8) Development Permit applications received this month, three (3) had estimated project costs exceeding \$500,000:

D23-002 / 1-7-68-8-W6 / i3 ENERGY CANADA LTD. / OIL & GAS FACILITY / \$2,800,000 / WARD 8

D23-005 / SE-33-63-3-W6 / RIGHT CHOICE CAMPS & CATERING LTD / WORK CAMP - 212 PERSONS / \$1,000,000 / WARD 8

D23-006 / 10-24-69-6-W6 / SECURE ENERGY SERVICES INC / LANDFILL, INDUSTRIAL - EXPANSION / \$3,300,000 / WARD 8



Manager's Report

Department: Infrastructure & Engineering

Submitted by: Roger Autio, Director Infrastructure & Engineering

Date: 2/14/2023

Director of Infrastructure & Engineering, Roger Autio

- **Economy**
 - Travelled to Edmonton on Jan 9th to start preparing for questioning on events, schedules, and costing relating to the Grande Cache Water Treatment Plant lawsuit from the builder (Chandos).
 - Dealing with Aquaterra on the operations of the Grande Cache water and wastewater collection and distribution. More information will be coming to Council by the end of February.
 - Finalizing the proposal for the Nose Creek Water Point, will be posted shortly.
 - Conversation with Alberta Transportation about Hwy 40 / Twp 700 construction. The roundabout design is finalized, and construction had started but little field work at this time.
 - Engaged M2 Engineering on more discussion on the Ridgevalley Lagoon in regards to the amount of land required. A closed session will be coming forward at the end of February for direction from Council

Manager, Construction & Engineering, Leah Thompson

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects that Construction and Engineering has worked on this month are:

- **Governance**
 - Preparing Request for Proposals to advertise engineering requirements for Township Road 704 Engineering and obtaining traffic counts from Hwy 49 to Range Road 230 throughout.
 - Preparing Request for Proposals to advertise engineering requirements for Crack Sealing, Line Painting and Spray Patch.

- RV Dumping Station to be posted on Alberta Purchasing Connection (APC) by the first week of February.
- FTR Phase 6 Construction has been posted on APC and will close February 17.
- Range Road 230 asphalt has been posted on APC and will close February 17.
- Township Road 722 had 29 properties to contact and purchase land if necessary. One landowner refused to sell, 10 properties had provided the land previously, and 18 landowners sold the 5m of right of way to Greenview.
- Township Road 720 had 28 properties to contact and purchase land if necessary. One landowner refused to sell, 8 properties provided the land previously, waiting on 3 landowners to provide paperwork back, and 14 landowners sold the 5m of right of way.
- Township Road 714 has 24 properties to contact and purchase land where necessary. 9 Nine landowners sold, 1 in an estate, 7 grazing and/or crown, and 7 agreements in progress for finalization.

Manager, Operation, Josh Friesen

- Operations invited Enforcement Services to complete vehicle inspections on plow trucks at Operations shops to promote safety, legislative compliance, as well as interdepartmental cooperation.
- Finalized and submitted year end audit documents and inventory reports.
- Preparing and submitting requests for quotes and tenders for 2023 projects.
- Consulted with multiple departments for a final version of EOI Package for 2023-2024 season.

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects that Operations has worked on this month are:

- **Governance**
 - Apprentice Mechanic from Grande Cache is presently taking 3rd year schooling.
 - Crews continue to provide levels of service in accordance with policies such as the snow removal policy.
 - Reviewed and brought policies to PRC and Council
- **Economy**
 - Provide year-end reports on inventories and revenue for annual financial audit reporting.
- **Environment**
 - Developing 2022 department work plans with a focus on drainage in rural areas and continuing maintaining and improving recreational access roads.
 - Multiple staff from Operations have enrolled in environmental training, regarding water legislation.

- **Culture, Social & Emergency Services**

- Worked with Communications for advertising Dust Control, Expression of Interest, Roadside Ditch Cleanup, and Rural Driveway Snowplowing programs.

Operations East

- 6 signs replaced – 1 faded left curve sign at TWP RD 712 west of RGE RD 233A in Valleyview North. 1 faded right curve sign replaced at RGE RD 200 north of TWP RD 694 in the Sweathouse Area. 1 no exit sign replaced at TWP RD 700/RGE RD 222 in Valleyview South. 1 broken stop sign replaced at TWP RD 673a/RGE RD 225 in Little Smoky Area. The advance sign for Clarkson Valley turnoff was repaired and the 80 km/hr sign replaced at TWP RD 712 east of RGE RD 262 in Sturgeon Heights/Clarkson Valley.
- Operations East focused on snowplowing, snow removal, and sanding.
- Tractors maintained Greenview parking lots, transfer stations, water points, community halls and plowed 72 rural driveways.
- Began gravel haul from Glacier Rock Gravel Pit south of Ridgevalley to the 8 Mile Stockpile in Sunset House and then to Hunke Stockpile in New Fish Creek.

Operations Central

- Operations Central focused on snowplowing, snow removal, and sanding.
- Cleaned numerous culverts and ditches in the Hamlet of DeBolt and Creeks Crossing Area in preparation for spring thaw.
- Repaired 1 frequency sign at KM 6 and 1 left curve sign at KM 76.5 on the Forestry Trunk Road.

Operations West

- Mulching on Big Mountain Creek Road has been completed except for some minor cleanup after spring thaw.
- 4 days of snowplowing performed on HWY 666 as requested by Ledcor.
- Operations West focused on snowplowing, snow removal, and sanding.

Operations South

- Snowplowing, snow removal and sanding ongoing in the Hamlet of Grande Cache and from KM 161-171 on the Forestry Trunk Road.
- Contract dozer cleared snowdrifts between KM 155-157 on the Forestry Trunk Road.
- 2 separate ice flows cleared off the road and ditch on Wanyandie East Road in Operations South.
- Assisted Environmental Services with 1 curb stop valve repair, 1 waterline break dig and 1 day cleaning and exercising valves with the hydrovac in the Hamlet of Grande Cache.

Fleet Services

- A temporary Mechanic started in Operations East on January 30th.
- Delivery of the Grande Cache Street Sweeper was attempted but unit arrived not meeting specifications in sales agreement. We are currently discussing options with the vendor and with RMA.

Road Requests Received - 43	Operations East	Operations West	Operations Central	Operations South
Community Halls, Cemeteries, Arenas, etc.	1		1	
Driveway Snowplowing	9		3	1
Dust Control		1		
Flooding	1			
Road Conditions	8		1	2
Safety Concerns	4		1	1
Signage	1		1	
Snow & Ice		4	1	3
TOTAL	23	5	8	7

Fleet & Shop Work Order Requests for Current Reporting Period	
Grande Cache Shop	43
Grovedale Shop	31
Valleyview Shop	171
TOTAL	245

RoaData-Municipal Approval Requests	Service Rigs	Heavy Hauls	Drilling Rigs	Well Services
TOTALS	25	333	15	0
RoaData-Municipal Loads		Single Trip Loads	Multiple Legal Trip Loads	
TOTALS		389	0	
Grand Total-Approval Requests/Municipal Loads		762		

Road Use Agreements	
New Road Use Agreements	5
Total Road Use Agreements	907

Log Haul Route Requests		
Received	Approved with Conditions	Rejected
0	0	0

Manager, Facility Maintenance, Wayne Perry

Task List Completed	101	Task List New Additions	87
---------------------	-----	-------------------------	----

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects that Facilities Maintenance has worked on this month are:

- **Governance**
 - DeBolt PSB expansion is now complete, the building is now ready for operations except for a few electrical and carpentry deficiencies which will be repaired in the spring. We are holding back \$24,000 to cover the cost of these repairs. With this expansion it provides improve levels of service in DeBolt and surrounding area as operations will have a place to store their equipment.
 - Transfer Switch Controller at the Administration Building has failed, in late December it was determine that the replacement transfer switch controller would not work, and a new transfer switch would be needed. We are currently working on quotes to get it replaced. With the generator as is, if we have a power outage the generator would have to be switched over manually, and once the power restored it would need to be manually switched back.
 - A water leak has been discovered on a check valve in a manhole at the Medical Clinic, currently we have been assisting Environmental Services, Town of Valleyview, and the Valleyview Hospital, a new check valve has been purchased and installed.
 - CO/NO2 sensors have been added to the building that currently didn't have any, and the ones inside the PSB's have been upgraded.
 - In the middle of January, it was brought to our attention that OH&S had changed the requirements for first aid kits in Alberta, we have until March 31st to add the supplies to our first aid kits. We currently have over 300 first kits in our building and fleet vehicles that need to go through, and items added as required.
 - Grovedale Maintenance Building furnace controller board and pressure switch failed, the pressure switch had been changed out earlier, so it was determined not to buy the parts for this furnace and to buy a new furnace as this one was scheduled to be replaced this year. The new furnace has been installed and operating.
- **Culture, Social & Emergency Services**
 - On January 27th Valleyview Fire Department lost radio communication, it was determined after a site visit to snuff mountain that a cable on the communication tower had been severed, Vector Communications was called, and a technician was sent out on January 30th to repair the line.

Manager, Environmental Services, Doug Brown

In alignment with the 2022-2025 Strategic Plan, some of the key activities and projects that Environmental Services has worked on this month are:

- **Governance**

- Preparing RFP to advertise on APC for Grovedale lagoon leak repairs, Engineering Services.
- Tender posted for new Grande Cache Wastewater Treatment Plant, closes mid-February.
- Mandatory site visit was held in Grande Cache for pre-qualified contractors of the New Wastewater Treatment Plant.
- Geotech drillers in Grande Cache for memorial drive water and sewer extension preliminary work.
- Inter department cooperation with Operations Team conducted a water valve repair in Grande Cache.
- Inter department cooperation with Facilities, ordering parts and organizing plumber coordinating with Town of Valleyview (water shut down) for failed check valve at Valleyview Medical Center.
- Flushed the Valleyview Rural Water Line
- Repaired a hydrant in Grande Cache
- Ridgevalley Sewage Lift Station pump seal was repaired and placed back in service.
- Replaced soft start pump control at Ridgevalley lift station.
- Reviewing and updating policies for PRC.

- **Economy**

- E-waste (Electronic Waste) bins have all been collected. Bins will be weighed, and Greenview will be compensated through the Alberta Recycling Management Authority.

CAPITAL BUDGET -- DEPARTMENT UPDATE								
CAPITAL APPROVED PROJECTS	COUNCIL APPROVED(2023 Total) BUDGET AMOUNT	COST SPENT TO DATE	STRATEGIC PLAN	CONTRACTOR	STATUS	PERCENTAGE COMPLETE	QUARTERLY REPORT	NOTES
ROADS								
RD22001 FTR Phase 6	\$ 7,540,000.00							
RD22006 RV Dumping Access	\$ 300,000.00							
RD23002 Block Funding Roads	\$ 1,000,000.00							
RD23003 FTR Improvements	\$ 500,000.00							
RD23004 FTR Canfor South	\$ 783,900.00							
RD20008 Twp 692 - GD Industrial Rd - West of Hwy 666	\$ 1,189,729.00							
PAVING								
PV22003 RR 230	\$ 3,891,453.00							
PV 22002 Twp 701A Overlay	\$ 3,200,000.00							
PV 220004 GC Phase 6 Sidewalk / Driveways	\$ 845,000.00							
PV 22001 Rge Rd 251 South	\$ 1,000,000.00							
PV24001 RR 73 to H666	\$ 60,000.00							
PV24003 Twp Rd704 Overlay	\$ 60,000.00							
BF/DRAINAGE								
BF77159 Asplund Creek	\$ 35,000.00							
BF78503 RR 225	\$ 45,000.00							
BF79118 Tributary to Sturgeon Creek	\$ 50,000.00							
BF 77244 Tributary to Sweathouse	\$ 590,000.00							
BF 76902 Tributary to Clouston Creek	\$ 516,000.00							
ENVIRONMENTAL SERVICES								
ES23001 1/2 Ton Replacement A161	\$ 60,000.00							
ES23002 1/2 Ton Replacement A197	\$ 60,000.00							
ES23003 1/2 Ton Replacement A108	\$ 60,000.00							
SOLID WASTE								
SW22003 WYRMA	\$ 270,000.00							
SW 20001 GC Transfer Station Development	\$ 100,000.00							
SW 22004 GC Landfill Groundwater Well Monitoring	\$ 134,000.00							
SW19004 GC Landfill & Recycling Land Purchase	\$ 30,000.00							
SW23001 Hook Bin Truck Replacement A201	\$ 300,000.00							
WATER DISTRIBUTION/TREATMENT PLANTS								
WD15002 GD Water Treatment Plant Upgrade	\$ 900,000.00							
WD16004 Landry Heights Water Distribution System	\$ 17,250.00							
WD17002 SCADA Upgrades	\$ 161,054.00							
WD19004 GC Distribution Pumphouse Upgrades	\$ 10,000.00							
WD 21001 Sunset House Water	\$ 150,000.00							
WD22002 SCADA Upgrades	\$ 172,700.00							
WD 22004 GC Master Plan	\$ 260,310.00							
WD 23006 Nose Creek Water Point	\$ 240,000.00							
WD22005 Water & Sewer Extension - Memorial Drive	\$ 100,000.00							
WASTEWATER SYSTEMS								
WW17002 GD Evaporative Lagoon Decommissioning	\$ 2,250,000.00							

WW 17001 GD Collection System	\$	25,000.00						
WW19001 GD Floating Liner	\$	11,600,000.00						
WW19002 GC Sewage Treatment Plant	\$	35,590,000.00						
WW20005 DB Lift station Forcemain Upgrades	\$	10,000.00						
WW21001 RV Lagoon Expansion	\$	2,732,000.00						
OPERATIONS EQUIPMENT								
OP23001 Tractor 6140R Replacment T27	\$	300,000.00						
OP23003 Grader Replacement G35 VV	\$	775,000.00						
OP 22001 GC Street Sweeper	\$	365,000.00						
OP23004 1/2 Ton Truck Purchase - Replacment of A127 (3/4 ton)	\$	60,000.00						
OP23005 2 ton, Extended Cab Pick Up Truck Replacement of A145 & F22	\$	100,000.00						
FACILITIES MAINTENANCE								
FM21008 Security Improvement 4 yr plan	\$	242,200.00						
FM 20013 DeBolt PSB Expansion	\$	953,200.00						
FM 22001 Skid Steer Broom Replacement	\$	12,000.00						
FM 22006 Fire Pump Upgrades	\$	20,000.00						
FM 22003 CO & N2O Monitoring Equipment	\$	60,000.00						
FM22007 Renovations to FM/Enviro Building	\$	50,000.00						
FM22008 GC Operations Sand/Salt Building	\$	1,000,000.00						
FM22009 GRM Emergency Generator (350kW)	\$	425,000.00						
FM23005 Replacement of BR1 with new Broom	\$	6,000.00						
RM23007 Replacement Furnaces from DB and GD Facility Maintenance Building								
FM23008 Replace Unit Heaters pre 2000	\$	12,000.00						
FM23009 Purchase a Wide Area Mower	\$	95,000.00						



Municipal District of Greenview No. 16

NAME: Winston Delorme

Employee # : _____

ADDRESS : _____

Department: Council

DATE	DEPART TIME	ARRIVE TIME	MEETING CODE	DESCRIPTION	KM	MEALS				LODGING EXPENSES	PER DIEM
						B	L	D	AMOUNT		
Jan. 17			C	ASB Conference							459.00
Jan. 18			C	ASB Conference							459.00
Jan. 20			C	ASB Conference							459.00
Jan. 23	15:00	18:00	M	Travel To GP	200						269.00
Jan. 24	7:00	18:00	M	Council Meeting	300	1			20.00		459.00
Jan. 25	7:00	17:00	M	GIG Meeting / Travel to GC	500	1			20.00		459.00
Jan. 26				ASCHA Executive Meeting							
NOTES:				KILOMETER CLAIM			TOTAL		40.00		2564.00
Meeting Code : M for Meetings C for Conferences				RATE	KM's	TOTAL	LESS GST				
				\$0.68 per km	1000	680.00	NET CLAIM		40.00		2564.00
				\$0.17 per km	1000	170.00					
				SUBTOTAL		850.00	TOTAL CLAIM				3454.00
				LESS G.S.T.			LESS ADVANCES				
				TOTAL		850	AMOUNT DUE (OWING)				\$3,454.00



Municipal District of Greenview No. 16

NAME: Ryan Ratzlaff

Employee # : _____

ADDRESS : _____

Department: Council

DATE	DEPART TIME	ARRIVE TIME	MEETING CODE	DESCRIPTION	KM	MEALS				LODGING EXPENSES	PER DIEM
						B	L	D	AMOUNT		
17-Jan	7:30	15:00	M	COTW - Debolt	195						317.00
19-Jan				EPR Zoom meeting							
20-Jan				Little Smoky Community hall inspection discussion							
24-Jan	8:15	15:00	M	RCM	80						317.00
25-Jan	8:15	12:45	M	GIG	80						317.00
25-Jan	17:45	21:00	M	Fox Creek Culture & Rec board	120						269.00
NOTES:				KILOMETER CLAIM			TOTAL				1220.00
Meeting Code : M for Meetings C for Conferences				RATE	KM's	TOTAL	LESS GST				
				\$0.68 per km	475	323.00	NET CLAIM				1220.00
				\$0.17 per km	475	80.75					
				SUBTOTAL		403.75	TOTAL CLAIM				1623.75
				LESS G.S.T.			LESS ADVANCES				
				TOTAL		403.75	AMOUNT DUE (OWING)				\$1,623.75



Municipal District of Greenview No. 16

NAME: Sally Ann Rosson

Employee # : _____

ADDRESS : _____

Department: Council

DATE 2023	DEPART TIME	ARRIVE TIME	MEETING CODE	DESCRIPTION	KM		MEALS				LODGING EXPENSES	PER DIEM	
							B	L	D	AMOUNT			
16-Jan	13:30	16:15	M	EAC	16						269.00		
17-Jan	8:00	14:15	M	COTW	16						317.00		
18-Jan	9:00	13:20	M	FCSS	16						317.00		
19-Jan	13:30	15:20	M	AER - Webinar Recycling Regs							269.00		
24-Jan	8:30	14:30	M	Council	16						317.00		
24-Jan	18:00	20:00	M	Peace Health Advisory Council Zoom							207.00		
25-Jan	8:30	12:00	M	GIG & Invoicing	16						269.00		
26-Jan	12:45	3:30		Pioneer Centre Presentation							N/C		
NOTES:				KILOMETER CLAIM			TOTAL				1965.00		
Meeting Code : M for Meetings C for Conferences				RATE		KM's	TOTAL	LESS GST					
				\$0.68 per km		80	54.40	NET CLAIM				1965.00	
				\$0.17 per km		80	13.60						
				SUBTOTAL			68.00	TOTAL CLAIM					2033.00
				LESS G.S.T.				LESS ADVANCES					
				TOTAL			68	AMOUNT DUE (OWING)					\$2,033.00

Sally Ann Rosson
Claimant

January 30, 2023
Date

298

Approved

Date



Municipal District of Greenview No. 16

NAME: Jennifer Scott
 ADDRESS : _____

Employee # : _____
 Department: Council

DATE	DEPART TIME	ARRIVE TIME	MEETING CODE	DESCRIPTION	KM	MEALS				LODGING EXPENSES	PER DIEM
						B	L	D	AMOUNT		
17-Jan	8:00	16:00	M	COTW	52						317.00
18-Jan	9:30	12:30	M	Ridgevalley Home (not sure if this is billable)	30						269.00
24-Jan	8:00	17:30	M	RCM (7hrs) , PHAC (Zoom) (2.5hrs)	76						459.00
25-Jan	8:00	17:00	M	GIG (4.5hrs)	76						459.00
25-Jan	16:30	21:00		PACE (4.5hrs included above)	176						
NOTES:				KILOMETER CLAIM			TOTAL				1504.00
Meeting Code : M for Meetings C for Conferences				RATE	KM's	TOTAL	LESS GST				
				\$0.68 per km	410	278.80	NET CLAIM				1504.00
				\$0.17 per km	410	69.70					
				SUBTOTAL		348.50	TOTAL CLAIM				1852.50
				LESS G.S.T.			LESS ADVANCES				
				TOTAL		348.5	AMOUNT DUE (OWING)				\$1,852.50



Municipal District of Greenview No. 16

NAME: Christine Schlieff

Employee # : _____

ADDRESS : _____

Department: Council

DATE	DEPART TIME	ARRIVE TIME	MEETING CODE	DESCRIPTION	KM		MEALS				LODGING EXPENSES	PER DIEM
							B	L	D	AMOUNT		
17-Jan	6:45	15:00	M	COTW	186							459.00
18-Jan	7:30	15:00	M	FCSS	305							317.00
19-Jan	15:30	16:30	M	Wapiti Trails Zoom								269.00
24-Jan	6:45	19:00	M	Council and Nitawk committee	305							524.00
25-Jan	6:45	14:00	M	GIG	305							317.00
27-Jan	12:30	15:30	M	South Peace Regional Archives	64							269.00
NOTES:				KILOMETER CLAIM			TOTAL					2155.00
Meeting Code : M for Meetings C for Conferences				RATE	KM's	TOTAL	LESS GST					
				\$0.68 per km	1165	792.20	NET CLAIM					2155.00
				\$0.17 per km	1165	198.05						
				SUBTOTAL		990.25	TOTAL CLAIM					3145.25
				LESS G.S.T.			LESS ADVANCES					
				TOTAL		990.25	AMOUNT DUE (OWING)					\$3,145.25



Municipal District of Greenview No. 16

NAME: Duane Didow

Employee # : _____

ADDRESS : _____

Department: Council

DATE	DEPART TIME	ARRIVE TIME	MEETING CODE	DESCRIPTION	KM	MEALS				LODGING EXPENSES	PER DIEM
						B	L	D	AMOUNT		
16-Jan	17:00	20:00	M	Travel to VV	350			X	50.00		269.00
17-Jan	7:00	18:00	M	COTW	350	X		X	70.00	135.16	459.00
18-Jan	7:00	14:00	M	North Rockies Tourism TH in Hinton	300		X		20.00		317.00
19-Jan	6:30	15:00	M	CFWY reg board meeting	470						459.00
23-Jan	16:00	18:00	M	Travel to GP	250			X	50.00		269.00
24-Jan	7:00	16:00	M	Regular Council meeting	100	X			20.00		459.00
25-Jan	7:00	20:00	M	GIG mtg/GP Tourism Board mtg	350	X	X	X	90.00	299.95	524.00
NOTES:				KILOMETER CLAIM			TOTAL		300.00	435.11	2756.00
Meeting Code : M for Meetings C for Conferences				RATE	KM's	TOTAL	LESS GST				
				\$0.68 per km	2170	1475.60	NET CLAIM		300.00	435.11	2756.00
				\$0.17 per km	2170	368.90					
				SUBTOTAL		1844.50	TOTAL CLAIM			5335.61	
				LESS G.S.T.			LESS ADVANCES				
				TOTAL		1844.5	AMOUNT DUE (OWING)			\$5,335.61	

D. Didow
Claimant

Jan 30, 2023
Date

301

Approved

Date



Municipal District of Greenview No. 16

NAME: Tyler Olsen

Employee # : _____

ADDRESS : _____

Department: Council

DATE	DEPART TIME	ARRIVE TIME	MEETING CODE	DESCRIPTION	KM	MEALS				LODGING EXPENSES	PER DIEM
						B	L	D	AMOUNT		
16-Jan	10:00	17:00	m	Emergency advisory committee	420		1		20.00		317.00
17-Jan	7:30	17:00	m	COTW DeBolt return to GC	400						459.00
18-Jan	6:00	16:00	m	Tourism townhall Hinton, CFWY Queens	250						459.00
19-Jan	8:00	19:00	m	CFWY board meeting RDDDMS board m	250						459.00
NOTES:				KILOMETER CLAIM			TOTAL		20.00		1694.00
Meeting Code : M for Meetings C for Conferences				RATE	KM's	TOTAL	LESS GST				
				\$0.68 per km	1320	897.60	NET CLAIM		20.00		1694.00
				\$0.17 per km	1320	224.40					
				SUBTOTAL		1122.00	TOTAL CLAIM				2836.00
				LESS G.S.T.			LESS ADVANCES				
				TOTAL		1122	AMOUNT DUE (OWING)				\$2,836.00