## MACKENZIE COUNTY

# REGULAR COUNCIL MEETING NOVEMBER 10, 2020 10:00 AM 

FORT VERMILION COUNCIL CHAMBERS


Mackenzie County

# MACKENZIE COUNTY REGULAR COUNCIL MEETING 

Tuesday, November 10, 2020
10:00 a.m.
Fort Vermilion Council Chambers
Fort Vermilion, Alberta
AGENDA

## CALL TO ORDER: <br> AGENDA: <br> ADOPTION OF PREVIOUS MINUTES:

4. 
5. a) Call to Order
6. a) Adoption of Agenda
7. a) Minutes of the October 28, 2020 Regular
b) Business Arising out of the Minutes

## DELEGATIONS:

a) Paradox Access Solutions (10:30 a.m.)
b) Leif Olsen, O2 Planning - Item \#13. c) La Crete Industrial Growth Strategy (1:00 p.m.)
c) Recreation Societies - 2021 Operating and 33 Capital Budget Requests (La Crete - 2:00 pm, Fort Vermilion, 2:15 pm, Zama - TBD)

TENDERS: Tender openings are scheduled for 11:00 a.m.
5. a) Caretaking - Blumenort Waste Transfer Station 35
b) Caretaking - Rocky Lane Waste Transfer Station 37

PUBLIC HEARINGS: Public hearings are scheduled for 1:00 p.m.
6. a) None

GENERAL
REPORTS:
7. a) CAO and Director Reports for October 2020
b) Disaster Recovery Update 53
c)

AGRICULTURE
8. a)

## SERVICES:

## COMMUNITY SERVICES:

9
9. a) Campground Caretaker Contract
b) Waste Transfer Station Service Agreement 69 Extension Request
c) Hutch Lake 10 Year Management Plan73
d)
e)
10. a) Bistcho Lake Cabin Tax Assessments107
b) Family and Community Support Services (FCSS) 109 COVID-19 Funding Grants
c) La Crete Recreation Board Project - Rebuild One 111 Compressor
d) Cheque Registers - October 26 - November 6, 2020
e)
f)
b)

OPERATIONS:

UTILITIES:

PLANNING \& DEVELOPMENT:

FINANCE:
11. a)
b)
12. a)
b)
13.
a) Bylaw 1203-20 Land Use Bylaw Amendment to ..... 115 Create a Zoning Overlay to Change the Minimum Setback Along 100 Street in the Hamlet of La Crete
b) La Crete Transportation Network Analysis ..... 121
c) La Crete Industrial Growth Strategy ..... 195
d) 5G Telecommunication Network ..... 261
e)
f)

ADMINISTRATION: 14. a) Caribou Update (standing item)
b)
c)

## COUNCIL <br> COMMITTEE <br> REPORTS:

INFORMATION I
CORRESPONDENCE:
CLOSED MEETING: Freedom of Information and Protection of Privacy Act Division 2, Part 1 Exceptions to Disclosure
17. a) Legal Matters (s. 17)
b)
c)

NOTICE OF MOTION: 18. a)
NEXT MEETING
DATES:

ADJOURNMENT: 20. a) Adjournment

## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Carol Gabriel, Deputy Chief Administrative Officer <br> (Legislative \& Support Services) |
| Title: | Minutes of the October 28, 2020 Regular Council Meeting |

## BACKGROUND / PROPOSAL:

Minutes of the October 28, 2020, Regular Council Meeting are attached.

OPTIONS \& BENEFITS:

COSTS \& SOURCE OF FUNDING:

## SUSTAINABILITY PLAN:

COMMUNICATION / PUBLIC PARTICIPATION:
Approved Council Meeting minutes are posted on the County website.

POLICY REFERENCES:

CAO: $\qquad$

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That the minutes of the October 28, 2020 Regular Council Meeting be adopted as presented.

## MACKENZIE COUNTY REGULAR COUNCIL MEETING

Wednesday, October 28, 2020 10:00 a.m.

Fort Vermilion Council Chambers
Fort Vermilion, AB

| PRESENT: | Josh Knelsen | Reeve |
| :--- | :--- | :--- |
| Walter Sarapuk | Deputy Reeve |  |
|  | Jacquie Bateman | Councillor |
| Peter F. Braun | Councillor |  |
|  | Cameron Cardinal | Councillor |
| David Driedger | Councillor |  |
|  | Eric Jorgensen | Councillor (arrived at 10:34 a.m. and left the |
|  | meeting at 2:41 p.m.) |  |
|  | Anthony Peters | Councillor |
|  | Ernest Peters | Councillor |

## REGRETS:

ADMINISTRATION: Len Racher
Carol Gabriel
Fred Wiebe
Don Roberts
Byron Peters
Caitlin Smith

Chief Administrative Officer
Deputy Chief Administrative Officer/
Recording Secretary
Director of Utilities
Director of Community Services
Director of Planning and Development
Manager of Planning and Development

## ALSO PRESENT:

Cpl. Mike Brown, Fort Vermilion RCMP
Cst. Steven Freamo, Fort Vermilion RCMP
Members of the public
Minutes of the Regular Council meeting for Mackenzie County held on October 28, 2020 in the Council Chambers at the Fort Vermilion County Office.

## CALL TO ORDER: 1. a) Call to Order

Reeve Knelsen called the meeting to order at 10:00 a.m.

## AGENDA:

MOTION 20-10-687 MOVED by Councillor Driedger

That the agenda be approved as presented.

## CARRIED

ADOPTION OF
PREVIOUS MINUTES:
MOTION 20-10-688

ADOPTION OF PREVIOUS MINUTES:

MOTION 20-10-689

ADOPTION OF PREVIOUS MINUTES:

## 3. c) Business Arising out of the Minutes

None
7. a) Disaster Recovery Update

GENERAL
REPORTS:

## 3. a) Minutes of the October 13, 2020 Regular Council Meeting

MOVED by Councillor Wardley
That the minutes of the October 13, 2020 Regular Council Meeting be adopted as presented.

## CARRIED

3. b) Minutes of the October 27, 2020 Organizational Council Meeting

MOVED by Councillor Cardinal
That the minutes of the October 27, 2020 Organizational Council Meeting be adopted as presented.

## CARRIED

Councillor Jorgensen arrived at 10:34 a.m.
MOVED by Councillor Cardinal
That flood mitigation options be brought back to the next Council meeting.

## CARRIED

Reeve Knelsen recessed the meeting at 10:55 a.m. and reconvened the meeting at 11:07 a.m.

TENDERS:

## 5. a) Caretaking - Fort Vermilion Waste Transfer Station

MOTION 20-10-691

MOTION 20-10-692

MOTION 20-10-693

## GENERAL

REPORTS:
MOTION 20-10-694
Requires 2/3

MOVED by Councillor Driedger
That the Caretaking - Fort Vermilion Waste Transfer Station Tenders - Envelope 1 be opened.

## CARRIED

## Tenders Received

$$
\text { John J. Russell } \$ 1,500.00
$$

## MOVED by Councillor Wardley

That the Caretaking - Fort Vermilion Waste Transfer Station contract be awarded to the lowest qualified bidder, while staying within budget.

## CARRIED

MOVED by Councillor Bateman
That administration investigate the insurance requirement for Waste Transfer Station Caretakers and bring it back to the next meeting.

## CARRIED

7. b) Disaster Recovery - Relocation of Mobile Homes

MOVED by Councillor Driedger
That the budget be amended to include $\$ 30,000.000$ for the relocation of the five mobile homes owned by Mackenzie County from Zama to Fort Vermilion, onto County owned property, with funding coming from the General Operating Reserve.

Councillor Driedger requested a recorded vote.

In Favor
Councillor E. Peters
Councillor Driedger
Reeve Knelsen
Councillor Braun
Councillor A. Peters

Opposed
Councillor Wardley
Councillor Bateman
Councillor Jorgensen
Councillor Cardinal
Deputy Reeve Sarapuk

AGRICULTURE SERVICES:

COMMUNITY SERVICES:

MOTION 20-10-695

DELEGATIONS:
MOTION 20-10-696

FINANCE:
MOTION 20-10-697

MOTION 20-10-698

## DEFEATED

8. a) None

## 9. a) 2020 Campground Caretakers Bonus

MOVED by Councillor Braun
That the 2020 Campground Caretaker bonuses be approved as follows:

- Hutch Lake - \$7,225
- Machesis Lake - \$1,517
- Wadlin Lake - \$8,000


## CARRIED

4. a) Fort Vermilion RCMP - Crime Statistics

MOVED by Councillor E. Peters
That the RCMP crime statistics reports be received for information.

## CARRIED

Reeve Knelsen recessed the meeting at 12:08 p.m. and reconvened the meeting at 12:54 p.m.

## 10.a) Expense Claims - Councillors

MOVED by Councillor Cardinal
That Councillor Jorgensen's expense claim for August 2020 be received for information.

## CARRIED

MOVED by Councillor Braun
That the Councillor expense claims for September 2020 be received for information.

CARRIED

## FINANCE:

MOTION 20-10-699

## FINANCE:

MOTION 20-10-700

PUBLIC HEARINGS:

## 10. b) Expense Claims - Members at Large

MOVED by Councillor A. Peters
That the Member at Large Expense Claims for September 2020 be received for information.

## CARRIED

## 10. c) Cheque Registers - October 8 - October 23, 2020

## MOVED by Councillor Cardinal

That the cheque registers from October 8 - October 23, 2020 be received for information.

## CARRIED

## 6. a) Bylaw 1198-20 Land Use Bylaw Amendment to Add Definition of Pluvial Flooding to Section 2.3, Amend Flood Plain Requirements in Section 5, and Add Restrictions to Sections 8 \& 9

Reeve Knelsen called the public hearing for Bylaw 1198-20 to order at 1:14 p.m.

Reeve Knelsen asked if the public hearing for proposed Bylaw 1198-20 was properly advertised. Caitlin Smith, Manager of Planning \& Development, answered that the bylaw was advertised in accordance with the Municipal Government Act.

Reeve Knelsen asked the Development Authority to outline the proposed Land Use Bylaw Amendment. Caitlin Smith, Manager of Planning \& Development, presented the following:

Pluvial Flooding is when ponding occurs in low lying areas during times of extreme rainfall or by seasonal runoff. There are several areas within Mackenzie County that experience the effects of seasonal runoff such as flooding or ponding in their yard sites and homes despite municipal recommendation against development in certain locations.

The County can be held liable if a developer proceeds with development in a known low lying area even if we recommend against development but grant/issue approval.

MOTION 20-10-701 MOVED by Councillor Braun
That second reading be given to Bylaw 1198-20 being a Land Use Bylaw Amendment to Add Definition of Pluvial Flooding to Section 2.3, Amend Flood Plain Requirements in Section 5, and Add Restrictions to Sections 8 \& 9 .

## CARRIED

MOTION 20-10-702
MOVED by Councillor Jorgensen
That third and final reading be given to Bylaw 1198-20 being a Land Use Bylaw Amendment to Add Definition of Pluvial Flooding to Section 2.3, Amend Flood Plain Requirements in Section 5, and Add Restrictions to Sections 8 \& 9.

## CARRIED

## PUBLIC HEARINGS:

## 6. b) Bylaw 1199-20 Partial Plan Cancellation and Consolidation of Plan 052 4423, Block 25, Lots 34 \& 35

Reeve Knelsen called the public hearing for Bylaw 1199-20 to order at 1:17 p.m.

Reeve Knelsen asked if the public hearing for proposed Bylaw 1199-20 was properly advertised. Caitlin Smith, Manager of Planning \& Development, answered that the bylaw was advertised in accordance with the Municipal Government Act.

Reeve Knelsen asked the Development Authority to outline the proposed Plan Cancellation \& Consolidation. Caitlin Smith, Manager of Planning \& Development, presented the following:

Mackenzie County received a request to consolidate Plan 052 4423, Block 25, Lots 34 \& 35 in the Hamlet of La Crete, to accommodate a larger commercial building.

The lots are currently zoned La Crete Highway Commercial "LC-HC" which is appropriate for the proposed use. However, the applicant would like to construct an addition to their existing building which would cross the current property line. The applicant already owns both lots and has used them for his business for some time.

Reeve Knelsen asked if Council has any questions of the proposed Plan Cancellation \& Consolidation. There were no questions.

Reeve Knelsen asked if any submissions were received in regards to proposed Bylaw 1199-20. There were no submissions.

Reeve Knelsen asked if there was anyone present who would like to speak in regards to the proposed Bylaw 1199-20. There was no one present to speak to the proposed bylaw.

Reeve Knelsen closed the public hearing for Bylaw 1199-20 at 1:18 p.m.

MOTION 20-10-703 MOVED by Councillor Braun
That second reading be given to Bylaw 1199-20 being a Partial Plan Cancellation and Consolidation Bylaw for Plan 052 4423, Block 25, Lots 34 \& 35.

## CARRIED

MOTION 20-10-704
MOVED by Councillor Bateman
That third and final reading be given to Bylaw 1199-20 being a

Partial Plan Cancellation and Consolidation Bylaw for Plan 052 4423, Block 25, Lots 34 \& 35.

## CARRIED

## PUBLIC HEARINGS:

## 6. c) Bylaw 1200-20 Partial Plan Cancellation and Consolidation of Plan 2938RS, Block 3, Lots 12 \& 13

Reeve Knelsen called the public hearing for Bylaw 1200-20 to order at 1:18 p.m.

Reeve Knelsen asked if the public hearing for proposed Bylaw 1200-20 was properly advertised. Caitlin Smith, Manager of Planning \& Development, answered that the bylaw was advertised in accordance with the Municipal Government Act.

Reeve Knelsen asked the Development Authority to outline the proposed Plan Cancellation \& Consolidation. Caitlin Smith, Manager of Planning \& Development, presented the following:

Mackenzie County received a request to consolidate Plan 2938RS, Block 3, Lots 12 \& 13 in the hamlet of Fort Vermilion, to accommodate a new retail store (Hardware).

The lots are currently zoned Fort Vermilion Commercial Centre "FV-CC" which is appropriate for the proposed use. However, the applicant would like to build a larger store than could be accommodated on only one of the lots.

Reeve Knelsen asked if Council has any questions of the proposed Plan Cancellation \& Consolidation. The following questions or comments were made:

- Is this area far enough back to be out of the flood zone? Yes, the water did not cross that roadway.

Reeve Knelsen asked if any submissions were received in regards to proposed Bylaw 1200-20. There were no submissions.

Reeve Knelsen asked if there was anyone present who would like to speak in regards to the proposed Bylaw 1200-20. There was no one present to speak to the proposed bylaw.

Reeve Knelsen closed the public hearing for Bylaw 1200-20 at 1:19 p.m.

That second reading be given to Bylaw 1200-20 being a Partial Plan Cancellation and Consolidation Bylaw for Plan 2938RS, Block 3, Lots 12 \& 13.

## CARRIED

## MOTION 20-10-706

## PUBLIC HEARINGS:

MOVED by Councillor Braun
That third and final reading be given to Bylaw 1200-20 being a Partial Plan Cancellation and Consolidation Bylaw for Plan 2938RS, Block 3, Lots 12 \& 13.

## CARRIED

## 6. d) Bylaw 1201-20 Plan Cancellation of Plan 0826817

Reeve Knelsen called the public hearing for Bylaw 1198-20 to order at 1:19 p.m.

Reeve Knelsen asked if the public hearing for proposed Bylaw 1201-20 was properly advertised. Caitlin Smith, Manager of Planning \& Development, answered that the bylaw was advertised in accordance with the Municipal Government Act.

Reeve Knelsen asked the Development Authority to outline the proposed Plan Cancellation. Caitlin Smith, Manager of Planning \& Development, presented the following:

Mackenzie County received a request to cancel Plan 082 6817. The plan is a registered, rural, multi-lot subdivision, located along Highway 697 in Blumenort, which was never fully constructed.

In 2008, the ten (10) lot subdivision was registered due to a clerical error despite the internal road only being partially built by the developer. In 2013, all of the lots, including the remainder of the quarter section, were sold to an adjacent landowner. The current landowner has no intention of completing the subdivision road or selling the individual lots.

The land is currently being used as farmland but is being taxed as residential lots. Because of the actual use, the landowner would like to consolidate all of the lots and rezone the properties. The lots are currently zoned Rural

MOTION 20-10-707

MOTION 20-10-708

OPERATIONS:

## UTILITIES:

FINANCE:

MOTION 20-10-709

Country Residential 1 "RCR1" which cannot be changed until they are all consolidated with the remainder of the quarter section.

Reeve Knelsen asked if Council has any questions of the proposed Plan Cancellation. There were no questions.

Reeve Knelsen asked if any submissions were received in regards to proposed Bylaw 1201-20. There were no submissions.

Reeve Knelsen asked if there was anyone present who would like to speak in regards to the proposed Bylaw 1201-20. There was no one present to speak to the proposed bylaw.

Reeve Knelsen closed the public hearing for Bylaw 1201-20 at 1:21 p.m.

MOVED by Councillor Braun
That second reading be given to Bylaw 1201-20 being a Plan Cancellation Bylaw for Plan 0826817.

## CARRIED

MOVED by Deputy Reeve Sarapuk
That third and final reading be given to Bylaw 1201-20 being a Plan Cancellation Bylaw for Plan 0826817.

## CARRIED

11. a) None

12. a) None

10. d) Financial Reports - January 1, 2020 to September 30, 2020

MOVED by Councillor Bateman
That the financial reports for January to September 2020 be received for information.

## CARRIED

Reeve Knelsen recessed the meeting at 1:51 p.m. and

## PLANNING AND DEVELOPMENT:

PLANNING AND DEVELOPMENT:

PLANNING AND
DEVELOPMENT:
MOTION 20-10-712

## ADMINISTRATION:

MOTION 20-10-713

COUNCIL
COMMITTEE REPORTS:
reconvened the meeting at 2:05 p.m.

## 13. a) Policy DEV006 Antenna System Siting Protocol

MOVED by Councillor Braun
That Policy DEV006 Antenna System Siting Protocol be TABLED for more information.

## CARRIED

13. b) Residential Tax Sub-Class - Undevelopable Lots

MOVED by Councillor Bateman
That the Residential Tax Sub-Class - Undevelopable Lots report be received for information.

## CARRIED

13. c) Development Statistics Report - January to September 2020

MOVED by Deputy Reeve Sarapuk
That the development statistics report for January to September 2020 be received for information.

CARRIED
14. a) Caribou Update

MOVED by Councillor Jorgensen
That the caribou update be received for information.

## CARRIED

15. a) Council Committee Reports (verbal)

Councillor Jorgensen left the meeting at 2:41 p.m.

## MOTION 20-10-714 MOVED by Deputy Reeve Sarapuk

That the Council Committee reports be received for information.

## CARRIED

## COUNCIL COMMITTEE REPORTS:

MOTION 20-10-715 MOVED by Councillor Braun
That the unapproved minutes of the Community Services Committee Meeting of October 14, 2020 be received for information.

## CARRIED

## INFORMATION I CORRESPONDENCE:

MOTION 20-10-716 MOVED by Deputy Reeve Sarapuk
That the information/correspondence items be accepted for information purposes.

## CARRIED

## CLOSED MEETING:

## 17. Closed Meeting

MOTION 20-10-717 MOVED by Councillor Bateman
That Council move into a closed meeting at 3:26 p.m. to discuss the following:
17. a) Disaster Recovery - Land Purchase (FOIP, Div. 2, Part 1, s. 23, 24, 25)

## CARRIED

The following individuals were present during the closed meeting discussion. (MGA Section 602.08(1)(6))

- All Councillors Present
- Len Racher, Chief Administrative Officer
- Carol Gabriel, Deputy Chief Administrative Officer
- Fred Wiebe, Director of Utilities

MOTION 20-10-718 MOVED by Councillor Bateman
That Council move out of a closed meeting at 4:06 p.m.

## CARRIED

## CLOSED MEETING: 17. a) Disaster Recovery - Land Purchase <br> MOTION 20-10-719 MOVED by Councillor Cardinal

That the County suspend all land purchase until the provincial funding is received and the mitigation plan is supported.

## CARRIED

## NOTICE OF MOTION: 18. a) None

NEXT MEETING
19. a) Next Meeting Dates

## DATE:

Regular Council Meeting
November 10, 2020
10:00 a.m.
Fort Vermilion Council Chambers
MOTION 20-10-720 MOVED by Councillor Braun
That the November 10, 2020 Budget Council Meeting be cancelled.

CARRIED
ADJOURNMENT:

MOTION 20-10-721
20. a) Adjournment

MOVED by Councillor Cardinal
That the Council meeting be adjourned at 4:10 p.m.

## CARRIED

These minutes will be presented to Council for approval on November 10, 2020.

Joshua Knelsen<br>Reeve

Lenard Racher<br>Chief Administrative Officer



## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Len Racher, Chief Administrative Officer <br> Title: |
|  | DELEGATION <br> Paradox Access Solutions |

## BACKGROUND / PROPOSAL:

A representative from Paradox Access Solutions will provide an introduction and presentation of their company.

See attached company brochure for additional information.

OPTIONS \& BENEFITS:

COSTS \& SOURCE OF FUNDING:

SUSTAINABILITY PLAN:

## COMMUNICATION / PUBLIC PARTICIPATION:

## POLICY REFERENCES:

$\qquad$ CAO: $\qquad$

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That the presentation from Paradox Access Solutions be received for information.
$\qquad$

PARADOX
ACCESS SOLUTIONS

AN INTRODUCTIONTO
PARADOX ACCESS SOLUTIONS

## PARADOX

## 26550 Acheson Rd．

 Acheson，Alberta T7X 6B2Phone： 5874611500
Toll－free： 1877 MUD UGLY
．paradoxaccess．com info＠paradoxaccess．com

Alberta｜British Columbia｜Saskatchewan

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## ABOUT.

Paradox Access Solutions is an industry leader in innovative access solutions.

Since 2004, Paradox Access Solutions has been providing industrial access mats, swamp mats rig mats and ground reinforcement for the pipeline, utility, municipal, general construction, and oil and gas industries in western Canada. With over 50 years of management experience in these industries, we have the know-how to handle your project, while helping you mitigate environmental impact.

Our work is always guided by:

Outstanding customer service

- Superior knowledge and innovative products and engineering
- Our responsibility for safety and the environment

In keeping with our commitment to customer service, Paradox Access Solutions is a member of these industry associations:

- Better Business Bureau

Construction Owners Association of Alberta

- Alberta Road Builders \& Heavy Construction Association


## SAFETY

Paradox Access Solutions leads the industry with its commitment to health and safety. The company is proud to be a qualified member of the following organisations:

- COR
- ISN
- CQN
- ACSA
- Aveta

We promote and support safety by:

- Maintaining a fleet of modern equipment according to a schedule that meets or exceeds manufacturers' recommendations
- Providing the best personal protection equipment to site workers
- Continuously acting to enhance safety policies and procedures
- Engaging in ongoing assessments to seek out potential improvements
- Empowering all employees to enforce best workplace practices
- Employing a department of health \& safety professionals who monitor performance, update programs, mentor and train employees, and reward positive performance

At Paradox Access Solutions, we believe that safety is not an option, it's an imperative. We go beyond the norm to encourage and compel the safest work environment for everyone.


## MATS

Paradox Access Solutions offers a variety of the most durable mats, including:

- 3-ply Access mats rated to $2,800 \mathrm{lbs}(1,270 \mathrm{~kg})$ loads
- Hybrid mats
- Crane mats of various dimensions
- Steel rig mats rated to $4,500 \mathrm{lbs}(2,040 \mathrm{~kg})$ or 9,000 lbs (4,080 kg)
- Mats and sidewalks manufactured from recycled tires


Our extensive experience in matting comes from many different industries:

- Oil and gas
- Construction
- Mining
- Pipelines
- Manufacturing
- Forestry
- Alternative energy
- Power transmission and distribution
- Heavy haul
- Aviation
- Environmental remediation
- Trenching and shoring
- Emergency access and disaster relief
- Public works
- Special events

Our innovative business management practices make it possible for us to provide streamlined services and non-traditional pricing packages. From consultation and transportation, to installation and removal, Paradox Access Solutions can provide you with the best matting solution for your unique needs, quickly and costeffectively.

Tough Cell is a breakthrough in the field of geosynthetics. Thanks to its cellular confinement technology, Tough Cell is able to support large vehicular loading while using cost-effective local infill material which means better performance with less cost for the transportation of infill. Tough Cell reduces the amount of required aggregate, structural pavement, and asphalt layer thickness.

Tough Cell uses patented Neoloy®, a polymeric nano-composite alloy based on polymer nano-fibers in a polyolefin matrix. Neoloy is vastly superior to traditional geocell materials because of its stability over a wide range of temperatures, and its high lesistance to creep and UV radiation.


## TOUGH CELL.

Tough Cell cellular confinement is our access solution superstar Developed from a military concept, Tough Cell is a high quality, durable reinforcement solution that meets the diverse needs of the geotechnical, civil engineering, and construction communities. This product uses a patented novel polymer alloy that is superior to all other geocell products, prolonging the life of your road surface over extended periods.

Tough Cell's honeycomb structure creates a composite material when filled with aggregate, making it perfect for providing a stable load-bearing surface over unstable ground. Tough Cell is ideal for:

- Paved or unpaved roads
- Railways
- Remote access roads
- Worksite pads
- Flood protection
- Slope and channel erosion protection
- Earth stabilization and retention
- Landfills
- Reservoirs

Our partners, Stratum Logics are recognized worldwide for their knowledge and skills in geocell road engineering. Paradox Access Solutions relies on the expertise of Stratum Logics for its engineercertified designs to ensure the optimal application of Tough Cell.

The benefits of Tough Cell are:

- It is the best performing geosynthetic available on the market
- Saves time \& money by reducing aggregate quantities by $50 \%$
- Maintains performance between $-50^{\circ} \mathrm{C}$ and $+50^{\circ} \mathrm{C}$
- Uses locally available marginal infill materials
- Fast and easy installation
- Lower maintenance costs
- Longer lifespan thanks to the strength and design of Tough Cell



## EARTHWORKS

Paradox Access Solutions is experienced and qualified to prepare your site for a variety of projects. Our earthworks services can be applied independently or integrated with other project solutions, such as surveying and geomatics services offered by our engineering partners, Stratum Logics.

We have the knowledge and skills to perform:

- Site and lease maintenance and development
- Demolition
- Tank farm construction and berms
- Excavating
- Full project management
- Road construction
- Snow removal
- Tree removal, brushing, mulching, and grubbing

Paradox Access Solutions maintains a fleet of modern heavy equipment so it can provide a complete range of services. And we are always adding more and newer equipment. Our list of assets include:

- Skid steer (tracked)
- Range of dozers
- Mini excavators up to 850s (with mat grapples, thumbs, ho-pacs, twist bucket, breakers)
- Articulated rock trucks (25 to 40 tons)
- Graders
- Service trucks
- Water trucks
- Gravel trucks
- Low boys
- Winch tractors



## ENGINEERING

Paradox Access Solutions has partnered with the global experts in the application of Tough Cell, Stratum Logics, for all its engineering needs. Stratum Logics was incorporated in 2012 as a civil and geotechnical engineering consulting firm primarily focused on the design of alternative access solutions to areas where access would otherwise be impossible.
t is Stratum Logics' focus to provide unique and alternative products and services to the oil \& gas, mining, energy, pipeline, and construction industries Their objective is to provide a more environmentally friendly alternative, while still delivering economic value to clients

Additionally, Stratum Logics provides surveying and geotechnical testing services to complement its civil designs. The home office in Acheson is equipped with a geotechnical laboratory for analyzing samples from potential job sites.

Stratum Logics' service offerings include:

- Geometric design of paved and unpaved roads
- Structural design of pavement structures, including roads, yards, and pads
- Stamped engineered design drawings
- Geotechnical feasibility studies
- Quality assurance during construction of engineered projects
- Site surveying and survey data computation

Geotechnical testing of soils

Guided by Dr. Sanat Pokharel (Ph.D.), the global leader in his field, the Stratum Logics team brings internationally diverse knowledge and experience to solve problematic soil conditions with environmentally friendly and economical solutions.

## REQUEST FOR DECISION

Mackenzie County

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Jennifer Batt, Director of Finance <br> Title:DELEGATIONS <br> Recreation Societies - 2021 Operating and Capital Budget <br> Requests |

## BACKGROUND / PROPOSAL:

As part of the 2021 Budget discussion, Council requested to have the Recreation Societies present their 2021 Operating and Capital Budget requests.

Administration has scheduled delegation times during this Council meeting for each of the three Recreation boards:

La Crete-2:00 p.m.
Fort Vermilion 2:15 p.m.
Zama - TBD teleconfrence

## OPTIONS \& BENEFITS:

N/A

## COSTS \& SOURCE OF FUNDING:

2021 Operating \& Capital Budgets

## SUSTAINABILITY PLAN:

N/A
$\qquad$ CAO: $\qquad$

## COMMUNICATION / PUBLIC PARTICIPATION:

N/A

## POLICY REFERENCES:

N/A

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That the presentations by the Recreation Societies regarding their 2021 Operating and Capital Budget requests be received for information.
$\qquad$ CAO: $\qquad$

## REQUEST FOR DECISION

Mackenzie County

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Don Roberts, Director of Community Services |
| Title: | TENDERS <br> Caretaking - Blumenort Waste Transfer Station |

## BACKGROUND / PROPOSAL:

The Caretaking - Blumenort Waste Transfer Station has been advertised and tender submissions were due at Fort Vermilion County office, November 9, 2020 at 4:30 p.m.

## OPTIONS \& BENEFITS:

Proposals will be evaluated on the following criteria:

| Evaluation Criteria | Weight | Score |
| :--- | :---: | :---: |
| Experience | $30 \%$ |  |
| Proposal Cost | $70 \%$ |  |
| Total | $100 \%$ |  |

## COSTS \& SOURCE OF FUNDING:

Operational Budget

## SUSTAINABILITY PLAN:

$\qquad$ CAO: $\qquad$

## COMMUNICATION/PUBLIC PARTICIPATION:

Successful bidder will be notified.

## POLICY REFERENCES:

Policy FIN025 Purchasing Authority Directive and Tendering Process

## RECOMMENDED ACTION:

Motion 1:
$\square$ Simple Majority $\square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That the Caretaking - Blumenort Waste Transfer Station Tenders - Envelope 1 be opened.

Motion 2 (if required):
$\square$ Simple Majority $\quad \square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That the unqualified Caretaking - Blumenort Waste Transfer Station Tenders be returned to the senders without opening Envelope 2.

## Motion 3:

$\checkmark$ Simple Majority $\square$ Requires 2/3 $\square \square$ Requires Unanimous
That the Caretaking - Blumenort Waste Transfer Station Tenders - Envelope 2 be opened for qualified bidders.

Motion 4:
$\square$ Simple Majority $\square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That administration review the Caretaking - Blumenort Waste Transfer Station Tenders and bring back to Council later in the meeting for awarding.

Motion 5:
$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That the Caretaking - Blumenort Waste Transfer Station contract be awarded to the lowest qualified bidder, while staying within budget.

Author: $\qquad$ Reviewed by: $\qquad$ CAO: $\qquad$

## REQUEST FOR DECISION

Mackenzie County

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Don Roberts, Director of Community Services |
| Title: | TENDERS <br> Caretaking - Rocky Lane Waste Transfer Station |

## BACKGROUND / PROPOSAL:

The Caretaking - Rocky Lane Waste Transfer Station has been advertised and tender submissions were due at Fort Vermilion County office, November 9, 2020 at 4:30 p.m.

## OPTIONS \& BENEFITS:

Proposals will be evaluated on the following criteria:

| Evaluation Criteria | Weight | Score |
| :--- | :---: | :---: |
| Experience | $30 \%$ |  |
| Proposal Cost | $70 \%$ |  |
| Total | $100 \%$ |  |

## COSTS \& SOURCE OF FUNDING:

Operational Budget

## SUSTAINABILITY PLAN:

$\qquad$ CAO: $\qquad$

## COMMUNICATION/PUBLIC PARTICIPATION:

Successful bidder will be notified.

## POLICY REFERENCES:

Policy FIN025 Purchasing Authority Directive and Tendering Process

## RECOMMENDED ACTION:

Motion 1:
$\nabla$ Simple Majority $\square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That the Caretaking - Rocky Lane Waste Transfer Station Tenders - Envelope 1 be opened.

Motion 2 (if required):
$\square$ Simple Majority $\quad \square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That the unqualified Caretaking - Rocky Lane Waste Transfer Station Tenders be returned to the senders without opening Envelope 2.

## Motion 3:

$\checkmark$ Simple Majority $\square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That the Caretaking - Rocky Lane Waste Transfer Station Tenders - Envelope 2 be opened for qualified bidders.

Motion 4:
$\square$ Simple Majority $\square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That administration review the Caretaking - Rocky Lane Waste Transfer Station Tenders and bring back to Council later in the meeting for awarding.

Motion 5:
$\nabla$ Simple Majority $\quad \square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That the Caretaking - Rocky Lane Waste Transfer Station contract be awarded to the lowest qualified bidder, while staying within budget.

Author: $\qquad$ Reviewed by: $\qquad$ CAO: $\qquad$


## REQUEST FOR DECISION

Mackenzie County

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Len Racher, Chief Administrative Officer |
| Title: | CAO \& Director Reports for October 2020 |

## BACKGROUND / PROPOSAL:

The CAO and Director reports for October 2020 are attached for information.

OPTIONS \& BENEFITS:
N/A

COSTS \& SOURCE OF FUNDING:
N/A

## SUSTAINABILITY PLAN:

N/A

## COMMUNICATION / PUBLIC PARTICIPATION:

N/A

## POLICY REFERENCES:

N/A
$\qquad$ Reviewed by: CG CAO: $\qquad$

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square \square$ Requires Unanimous
That the CAO \& Director reports for October 2020 be received for information.
$\qquad$

# MONTHLY REPORT OF THE CHIEF ADMINISTRATIVE OFFICER Len Racher, CAO 

## Daily Activities Log for

| Date | Comments |
| :--- | :--- |
| Oct.01/20 | Discussion HLRS |
| Oct.06/20 | Disaster Recovery meeting. Managers meeting |
| Oct.7/20 | Meet with Director's |
| Oct.8/20 | Meet with Director's |
| Oct.9/20 | Meet with Director's |
| Oct.13/20 | Council Meeting |
| Oct.14/20 | Meeting in La Crete. Managers Meeting |
| Oct.15/20 | Org. chart discussions with Director's |
| Oct.19/20 | Committee of the Whole |
| Oct.20/20 | Budget work shop |
| Oct.21/20 | Meeting with Ratepayer. Budget work shop |
| Oct.23/20 | Site Safety Meeting. Meet with all staff in La Crete and Fort Vermilion |
| Oct.26/20 | Teleconference Minister Nixon |
| Oct.27/20 | Organizational Council Meeting |
| Oct.28/20 | Council Meeting |
| Oct.29/20 | Teleconference engineering firm |
| Respectfully, |  |
| Len Racher |  |
| Chief Administrative Officer |  |

## REPORT TO THE CAO

For the Month of October, 2020

From: Carol Gabriel, Deputy Chief Administrative Officer (Legislative \& Support Services)

## Meetings Attended

- 2020-10-06 Disaster Recovery Team meeting and Managers Meeting
- 2020-10-08 Virtual Session - Local Authorities Election Act Bill 29
- 2020-10-13 Council Meeting
- 2020-10-14 Meeting with Len and Glowing Embers Consulting regarding fire investigation services.
- 2020-10-14 Managers Meeting
- 2020-10-20 Budget Workshop with Council and Management Team
- 2020-10-21 Budget Workshop with Council and Management Team
- 2020-10-27 Organizational Meeting
- 2020-10-28 Council Meeting
- 2020-10-29 Attended the Alberta Municipal Clerks Association Annual General Meeting
- 2020-10-30 Attended virtual election training for the 2021 municipal elections.
- Meetings with Department heads regarding organizational requirements.
- Various other individual or departmental meetings.


## Council

- Preparing for various meetings of Council, correspondence, etc.
- Research and responding to inquiries.
- Preparing for the organizational meeting on October 27, 2020.
- Preparations for pre-budget workshop.
- Council self-evaluation is scheduled to be discussed at the next Committee of the Whole meeting. Evaluation survey will be forwarded to Council in advance of the meeting.


## Appeal Boards

- No active appeals.
- Subdivision and Development Appeal Board training for members and clerks is now being offered through video conference sessions provided by the Municipal Government Board. Information will be provided to members currently without the required training.


## Bylaws/Policies/Reports/Publications:

- Preparing a fee schedule bylaw amendment following the discussions at the budget workshop.


## Enhanced Policing

- Regular updates to Council are scheduled for the second council meeting of each month.
- RCMP services are available at the La Crete office on Wednesdays.


## Emergency Management

- Updating the Emergency Directory and Agency contacts as well as other components of the emergency plan has been put on hold due to the COVID-19 pandemic and the 2020 flood event.
- Next meeting of the Northwest Alberta Regional Emergency Advisory Committee will be held once Tri-Council meetings resume.
- Continue to act as the Communications Coordinator for the Disaster Recovery Team 2020 flood event.
- Coordinating meetings with the Minister of Municipal Affairs for disaster recovery discussions and follow-up.


## Communications:

- Prepare and submit weekly advertisements to the newspaper.
- Design and post updates to the County's Social Media including the website, Facebook, Twitter, and Instagram.
- Website content needs updating and will be completed as time permits.


## Human Resources:

- Dealing with several HR matters.
- Employee screening for return to work from sick leave as required.


## Municipal Elections:

- Attended the Local Authorities Election Act Bill 29 virtual information session on October 8, 2020.
- Attended the virtual election training on October 30, 2020 through the Alberta Municipal Clerks Association in conjunction with Alberta Municipal Affairs.
- Updates to the website will be happening soon providing information to potential candidates.


## Events/Community Engagement:

- No events or community engagements were held in September.


## Other:

- Assisting legislative and support services department staff (ie. Human Resources, Records Management, Information Technology, etc.)
- Ongoing form review and updating.
- Preparing for various meetings.
- Meeting coordination.
- Assisting other departments as required.


## Monthly Report to the CAO

For the Month of October 2020
From: Fred Wiebe
Director of Utilities

## Annual Operating Programs, Projects and Activities

| Program/Activity/Project | Timeline | Comments |
| :--- | :--- | :--- |
| Water Distribution and <br> Wastewater Collection <br> Maintenance | Oct/20 | This year will include a comprehensive <br> condition assessment of valves in FV. |

## Capital Projects

| Projects | Timeline | Comments |
| :--- | :--- | :--- |
| FV-Frozen Water Service <br> Repairs | Nov/20 | Unfortunately we did not get opportunity to <br> repair these remaining services this year and <br> plan to complete in 2021. |
| Potable Water Supply <br> North of the Peace River <br> information Administration recently requested a briefing note to the DM. I <br> included information as per our study in 2018 <br> and included both this waterline as well as <br> Bluehills. |  |  |
| Waterline Blue Hills | Oct/20 |  |
| Provincial Administration recently requested |  |  |
| information for a briefing note to the DM. I |  |  |
| included information as per our study in 2018 |  |  |
| and included both waterline projects. |  |  |$|$| Oct/20 | I received a call from Minister Nixon's office <br> regarding this last week so it sounds like <br> there is follow up happening. |
| :--- | :--- | :--- |
| Working on RFP scope details. |  |
| Supply Concept |  |$\quad$| Derer |
| :--- |


| ZA - Sewage Forcemain | Oct/20 | Approved for funding under AMWWP but <br> requesting to move funds to urgent needs in <br> Fort Vermilion as per council motion. |
| :--- | :--- | :--- |
| ZA- Distribution Pump <br> House Upgrades | Dec/20 | Working on change of project scope to get <br> project closer to budgeted estimate. |
| ZA- Lift Station Upgrades | Dec/20 | Will apply for grant funding in a future year as <br> per council motion. |
| LC/FV - Hill Crest School <br> Waterline Extension | Oct 31/20 | Bacteriological tests to be completed and a <br> few final deficiencies to be corrected but <br> waterline installation is complete and almost <br> ready for account activation for the school. |

## Personnel Update:

## Other Comments:

$\square$
Respectfully submitted,

Fred Wiebe
Director of Utilities
Mackenzie County

## Report to CAO

October, 2020
From: Grant Smith, Agricultural Fieldman

## Annual Operating Programs, Projects and Activities

| Program/Activity/Project | Timeline | Comments |
| :---: | :---: | :---: |
| Roadside Spraying | 2020 | Roadside spraying will commence on June $10^{\text {th }}$. Completion is July $10^{\text {th }}$. Area sprayed in 2020 is from the Peace River, south to TWP Rd 106-0 (Airport Rd). The ASB is continuing the "Do Not Spray Program". |
| Weed Inspection | 2020 | Weed assessments are being reviewed and the Assistant Fieldman will be interviewing landowners with noxious weed problems to plan control strategies in 2020. A contract Weed Inspector has been hired. There is a significant increase in Noxious weed infestations in organic fields. This is likely due to an over abundance of moisture as fields looked good in June. |
| Buffalo Head Truck Fill Hay Lease | 2020 | Bids were opened at the November 27 ${ }^{\text {th }}$ council meeting. A total of six bids were received on 6.5 acres of brome/alfalfa hay ground. The highest bid was $\$ 375$ for a three year term. |
| Emergency Livestock Response Plan | $\begin{aligned} & \text { December } \\ & 2020 \end{aligned}$ | The Draft has been completed, meetings are scheduled with local Ag Society's to discuss MOU's to use their facilities as Livestock Relocation Centers during a livestock evacuation.. The ELRP was presented to the ASB on March $20^{\text {th }}$. |
| Fusarium Head Blight Survey | 2020 | Samples from five fields were collected for Ab Ag. |
| Shelterbelt Program | $\begin{aligned} & \text { Spring } \\ & 2021 \end{aligned}$ | Trees were picked up in Fairview on June $10^{\text {th }}$. A total of 9940 seedlings were received. The only species not received was Golden Willow. Species received: White Spruce, Blue Spruce, Lilac, Siberian Larch, Green Ash \& Lodgepole Pine. Order deadline is Dec. $31^{\text {st }}$. |


| VSI Program | 2020 | Mackenzie County is still participating in the <br> program. The annual AGM is scheduled for <br> November 13 |
| :--- | :--- | :--- |
| Water in Pumping Program | November River. <br> Nor |  |
| Roadside Mowing | 2020 | The water pumping program will continue <br> until October 31st, the rental rates will double <br> in November. There has been six rentals this <br> year. |
| Commencement date was July 11 <br> completion date is August 15th. This year <br> there is appears to be a lot of culvert <br> damage. Contractors have been notified. <br> There is a standard 10\% holdback on all <br> contracts to cover damages to county <br> infrastructure, etc. |  |  |
| Crop Pests | 2020 | Clubroot of Canola testing has begun. <br> Around 75-100 fields will be tested. <br> Suspicious samples were sent to a lab in <br> Sherwood Park, the results were negative. |

## Capital Projects

| Projects | Timeline | Comments |
| :--- | :--- | :--- |
| Blue Hills erosion repair |  | Requests for proposals were opened in <br> Council on July 15 th. Two proposals were <br> Twp Rd 103-2 |
| received. Northern Road Builders: $\$ 282,600$. |  |  |
| Outback Ventures: $\$ 273,600$. |  |  |
| was awarded to Outback Ventures. contract |  |  |
| Completion date is August 31st. Budgeted |  |  |
| amount is $\$ 275,000$. This project has been |  |  |
| completed with satisfactory results. |  |  |

## Personnel Update:

## Other Comments:

## Monthly Report to the CAO

For the Month of October, 2020

From: Don Roberts<br>Director of Community Services

## Meetings Attended in October 2020

Council
Community Services
Joint Health \& Safety
Site safety meetings,
Managers
Alberta Agriculture and Forestry
First Nation Consultation
Disaster Recovery
Organizational Meeting
Budget Workshop
Fire Department Budget
AEMA
Campground Caretakers
WTS Caretakers

## Fort Vermilion, La Crete and Zama Fire Departments

Activity Summary Report for A 2020
03- Alarms
10 - Fire
12 - Medical Co-response
05 - Motor Vehicle Incident
00 - Hazzmat/Hazard
Fire departments will be required to provide administration with a full inventory list of their fire halls. This list is required to assist in budget season.

## Health and Safety

COR audit will be completed and submitted for review by mid-November. All indications show a positive result.

Winter - Snow season has been a factor in a few incidents. Employees have been briefed on winter operations, seasonal hazards and how to mitigate them.
Administration has reviewed previous winter incidents with employees and discussed different control measures to be put in place to avoid similar occurrences. Each
department will be required to have trained supervisors in order to conduct their own accident investigations.

## FRIAA Funding

FRIAA grant application that was submitted on Sept 14, 2020. has been denied funding. Administration has been made aware of another FRIAA funding opportunity. Administration is working with Forestry and AEP for recommendation and support.

## Parks and Recreation

The Vanguard Park in La Crete will be $90 \%$ completed. The Park consists of a fence, six seat swing, a slide and sandbox. All equipment has been installed with $1 / 3$ of the amount of sand in place. Remaining sand may have to wait until spring.

## Canada Post - Zama

The Post office in Zama is now fully operational. There was a delay due to the procedure of handling sales but it has been rectified. Patrons no longer need to go to High Level for a cash transaction.

## Transfer Stations.

There has been some questioning on the services provided in some areas/transfer stations/landfill and not in others. Administration will compile all information and present council with a full presentation during COW meeting of November 24.

## Monthly Report to the CAO

For the month of October, 2020
From: Byron Peters,
Acting Director of Operations
Director of Planning \& Development

## Strategic Priorities for Planning \& Development

| Program/Activity/Project | Timeline | Comments |
| :--- | :--- | :--- |
| Land Use Framework | TBA | Province has formally started pre- <br> planning for the LPRP. Caribou task <br> force is creating a sub-regional plan for <br> Bistcho. Regional Access Management <br> Plan (RAMP) for Bistcho is in the early <br> stages. |
| Community Infrastructure <br> Master Plans | Q4 2020 | Engineer is completing a final review of <br> the documents. Offsite levy bylaw will <br> be presented to council this fall, <br> seeking direction on the appropriate <br> level of costs to be passed along to <br> developers. |
| Industrial Growth Strategy <br> - La Crete | Q4 2020 | Final draft received and reviewed, <br> being presented at this council <br> meeting. If approved, will be <br> incorporated into MDP and other <br> planning policies. |
| Municipal Development <br> Plan | Started Q3 <br> Sorin's report for |  |

## Annual Operating Programs, Projects and Activities

| Program/Activity/Project | Timeline | Comments |
| :--- | :--- | :--- |
| Economic Development | Ongoing | CARES grant project is well underway. <br> Strategy |
| Keith \& Associates completing most |  |  |
| work on our behalf. A\&W Consulting to |  |  |
| complete the rest of the project by end |  |  |
| 2020. |  |  |
| Developing strategy to complete the |  |  |
| next steps of the ec. dev strategy. |  |  |\(\left|\begin{array}{lll}Have not had any meetings regarding <br>

2020 priorities. Informal conversations <br>
with some business owners to gauge <br>

some ideas.\end{array}\right|\)| Streetscape | Ongoing |
| :--- | :--- |
| fore engaged Associated Engineering |  |
| projections and traffic patterns for the |  |, | La Crete Area |
| :--- |
| Transportation Network |
| Analysis |


|  | community and develop a plan for <br> adequate access to the provincial <br> network. Draft report being presented <br> at this meeting. |
| :--- | :--- | :--- |

## Personnel Update:

In my last report I outlined a few shifts of duties within the planning department, but no one anticipated the additional changes that would occur within the last month.

I have not currently had the time to place more of a focus on economic development and some of the other initiatives, but I am doing my best to fill in as the Acting Director of Operations. I am familiar with the staff, roles, and responsibilities, but there are many details for me to learn. The entire operations department has been good to work with and we're trying to support each other through the transition.

## Other Comments:

The 16 lot subdivision in Fort Vermilion is in a mostly useable state. About half the lots can accommodate mobile homes being moved on this winter. There will be final grading, drainage and road work to be completed in spring.

## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Fred Wiebe, Director of Utilities/Director of Emergency <br> Management |
| Title: | Disaster Recovery Update |

## BACKGROUND / PROPOSAL:

Mackenzie County administration continues to work towards a flood recovery plan that is supported by residents, Council, and multiple Government Agencies.

In April 2020 Administration received an advance of $\$ 5,000,000$ to offset some of the anticipated costs from the Disaster Recovery Program (DRP). This funding is intended to cover the overland flood response, including evacuation, hotel \& lodging, and recovery costs to municipal infrastructure, and post event assistance that was provided to the residents. The amount allocated to the County does not include any mitigation or non-mandatory enhancements to municipal infrastructure.

Invoices to date (November 4, 2020) total \$4,708,745 including any deductible that was paid for the non-profits, and an estimated $\$ 232,009$ in expenses that will be invoiced to insurance for payment.

Administration along with AEMA continue to investigate and review possible grants both provincially and federally that may be available for which the County can make application. As identified projects under the Disaster Recovery Program are finalized, administration will submit costs for review and approval to offset the advance received.

Case managers from DRP continue to assist with residents on their individual claim, including DRP funding to assist with repairs. Samaritan's Purse case managers remain in the area to assist residents with their cases. Administration is working with Red Cross to provide longer term Psycho Social assistance to residents. Currently we have set up for 2 days of courses with November $16^{\text {th }}$ being an invitational for community leaders and November $17^{\text {th }}$ will be set up for community members.
$\qquad$

## Interim Housing site

As supported and funded by the Alberta Emergency Management Agency (AEMA), under Municipal Affairs, construction has been completed at the Interim housing site. 17 sites were developed, where 15 Mobile Homes were placed on location. Funded by AEMA under Alberta Seniors and Housing structure, and managed by the Boreal Housing Foundation, evacuees identified by administration completed applications and began moving into these units and out of temporary housing, campers, or friends and family homes they were residing in. Currently AEMA is trying to coordinate to get the 1 empty trailer occupied.

Two additional sites were developed and have been identified for housing options to landlords, as there is a current lack of rental properties in Fort Vermilion. Administration is currently discussing with GOA regarding the use of the two sites if required.

## Mackenzie County Phase 1 Housing site development

Phase 1 development west of the St. Theresa Hospital has been progressing well. There are areas that have not been graded to final design as we are awaiting the existing shallow utilities to be moved. The water and sewer utilities installation is complete and services have been installed onto 10 of the 15 sites so that they are ready for a mobile home. Administration is currently coordinating the installation of the shallow utilities including power and natural gas. This site is being developed to assist any residents that have been identified as rebuilds, or have chosen to rebuild to a safe location over the winter. A final location will be identified once the funding and mitigation has been approved by the Province.

## Temporary Housing

Currently there are only 2 wellsite trailers at the running track location, one of which will be moved off this week and the last trailer to be moved off the following week. Most of these residents have been identified as returning to repaired rental housing.

As of November 2, there are 23 residents identified as not being returned home, and either residing in temporary housing, or staying with friends and families.

## OPTIONS \& BENEFITS:

## N/A

## COSTS \& SOURCE OF FUNDING:

Capital Budget \$1,400,000
Disaster Recovery Program Funding - \$9,935,650

## SUSTAINABILITY PLAN:

N/A

## COMMUNICATION / PUBLIC PARTICIPATION:

N/A

## POLICY REFERENCES:

N/A

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square \quad$ Requires Unanimous
That the disaster recovery update be received for information.
$\qquad$

REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Don Roberts, Director of Community Services |
| Title: | Campground Caretaker Contract |

## BACKGROUND / PROPOSAL:

As per the discussion at the October 14, 2020 Community Services Meeting, and the Council Budget Workshop on October 20, 2020 administration was asked to explore options for the Campground Caretakers contract to include more services that could be offered to the patrons of the campgrounds.

According to COM001 Parks Caretaker Bonus Policy, at the end of each camping season the caretakers are eligible for a bonus worth up to $25 \%$ of the revenue brought in from the campground with a maximum of $\$ 8,000$. This bonus was developed with the premise that caretakers would show self-initiative to provide a higher level of service and to ensure the return of users to the campground. To make sure campers enjoy there camping experience and would return and possibly relay their experience in a positive way. Returning users would generate more revenue and hence a higher bonus for the caretakers at the end of the year.

There were also discussions of eliminating the bonus and encouraging the caretakers to offer more services to the patrons and therefore generating more revenue for themselves instead of the bonus.

For example, the canteen/store at each campground could be operated with increased hours and offer more items to generate revenue for the caretakers.
*Note: the operation of any canteen/store is not currently a County requirement in the contract and in the "scope of work" for Campground Caretakers but is part of the tendering process as "Additional Services Offered to the Public".

Caretakers could offer different services such as splitting wood for campers. Not the selling of the wood just the task of splitting. Boat rental, food services, outfitting were other initiatives discussed.

Author: $\qquad$ Reviewed by: $\qquad$ CAO: $\qquad$

The current campground attendants' contracts have expired and it is the Community Services recommendation to tender the contracts out with possible additional services to be added and bonuses to be restricted or abolished to reflect these initiatives.

All three contracts commenced in 2018 with the following definition of completion date;
(d) "Completion Date" means the 31st day of August (or Sept), 2018, or such later date as may be agreed upon in writing by the parties; and again commencing on May 15th, 2019
(i) "Term" means the period of time commencing on the Commencement Date and ending on the Completion Date.

Each Campground Caretaker contract was given a 1-year extension letter, at the same rate and services of the original contract, for the 2020 Season.

## OPTIONS \& BENEFITS:

## Option 1

To change the existing tender and scope of work/services and re-tender the Campground Caretaker contract and abolish the bonus clause.

This may increase the price of the contract and would require budget amendments next spring but would ensure extra services are provided to users of the campgrounds. Abolishing the bonus would save on bonus expenses and provide caretakers a means to make extra income in different areas.

## Option 2

To offer extension letters to all three contractors at the same rate and service level for a one, two, or three-year period. This would ensure the budgeted expense would remain constant.

## Option 3

To offer extension letters to all three contractors at the same rate and service level for a one-year period and develop a Request for Proposal (RFP) that has additional services included.

This 2022 RFP would be advertised in the spring of 2021. Administration could then examine the proposals and expenses and bring these forward to Council for 2022 budget deliberation. Mackenzie County holds the right to refuse any and all offers.
$\qquad$ D. Roberts Reviewed by: $\qquad$ CAO: $\qquad$

## COSTS \& SOURCE OF FUNDING:

Option 1
Unknown
Budget - 2022 Operations
Option 2
\$18,000 plus - Current caretakers Contract (Bonus unknown)
Budget - 2021, 2022, 2023 Operations
Option 3
\$18,000 plus - Current caretakers Contract (Bonus unknown)
Budget - 2021 Operations with possible future increases in 2022

## SUSTAINABILITY PLAN:

## COMMUNICATION / PUBLIC PARTICIPATION:

Letters to current contractors
Advertisement for tenders

## POLICY REFERENCES:

COM001 Parks Caretaker Bonus Policy

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That all Campground Caretaker Contracts be extended for the 2021 season, at the same rate and service level, and that administration issue a Request for Proposals in the spring of 2021 based on the revised Contract starting with the 2022 season.
$\qquad$ CAO: $\qquad$

## Schedule "A"

## CARETAKING OF CAMPGROUND

PROJECT OVERVIEW
\& DESCRIPTION OF WORK

Schedule "A"

## Hutch Lake \& Machesis Lake Campground Caretaker

## 1. Overview

Mackenzie County has leases with Alberta Agriculture and Forestry, and Alberta Parks respectively for the operations of the Hutch Lake \& Machesis Lake campgrounds.

Hutch Lake campgrounds located at NE $1 / 429-112-20-\mathrm{W} 5$ has approximately 20 overnight camping stalls, along with an overflow area, day use area, and boat docks. The caretaker is responsible for the maintenance and overseeing of the campground for the "Season" being from mid May 2018 through September $30^{\text {th }}, 2018$ and mid May 2019 through September $30^{\text {th }}, 2019$.

Machesis Lake campground located at NE 27-107-16-W5 has approximately 19 overnight camping stalls, day use area, swimming docks, with a new addition of 8 stalls at the equine camping area. The caretaker is responsible for the maintenance and overseeing of the campground for the "Season" being from mid May 2018 through August 31 ${ }^{\text {st }}, 2018$ and mid May 2019 through August 31 ${ }^{\text {st }}, 2019$.

## 2. Purpose of the Campground Caretaker

Mackenzie County is requesting proposals for the contract position of a campground caretaker to maintain, provide security and oversee the campgrounds during the season as per the description of work.

## 3. Description of Work

a) Provide personal contact with campers to promote responsible camping. This may include providing directions and brochures to campers and answering any questions they may have pertaining to the area.
b) Ensure all campers are registered, and fees collected while keeping all records of park activities (including day use).
c) Submit all revenues and attendance records biweekly to the Mackenzie County office in either High Level or Fort Vermilion.
d) Check washrooms daily, and ensure washrooms are stocked with an adequate supply of toilet tissue, hand sanitizer, etc. at all times. All janitorial cleaning supplies, paper towel and garbage bags are to be provided by the Contractor. Mackenzie County to provide toilet paper, and hand sanitizer.
e) Check sanitary effluent levels in toilet reservoirs and contact Mackenzie County to advise when sewage removal is required. Sewage removal costs will be borne by Mackenzie County.
f) Ensure open accessibility to the sanitary dumping station for RV's. Check efficient levels, and contact Mackenzie County to advice when sewage removal is required.
g) On a daily basis, pick up all litter within campground area, empty garbage receptacles and place in 6yd bin located on site. Mackenzie County will supply, and empty a 6 yd bin at the County's' cost.
h) Ensure grass is mowed and trimmed regularly, at campsites, roads, day areas and all open green spaces including entrance access.
i) Inspect campsites, and docks on a daily basis, and repair minor deficiencies. Report all other deficiencies to Mackenzie County.
j) Maintain and paint picnic tables when required. Mackenzie County to supply paint and supplies.
k) Clean fish cleaning stations daily.
I) Clean signage and information booth as necessary.
$m)$ Clean firewood storage area.
n) Clean shelter on a daily basis.
o) Clean up drift wood along the dock and boat launch.
p) Remove all deadfall in campsites, and along access road.
q) Maintain the volleyball court (if provided). Daily checks, rake sand, clean up debris.
r) Maintain playground area. Daily checks, rake sand, clean up debris.
s) Maintain campsites, clean debris, emptying the fire pits and rake site if required.
t) Ensure the campground/park is kept in a clean, well groomed, organized and in an esthetically pleasing state.
u) Ensure the well pumps kept clean, and non-potable water sign is attached and visible. Report any repairs required to Mackenzie County.
v) On a daily basis, check to ensure an adequate supply of firewood is available for the campers. Advise Mackenzie County when firewood is needed. The firewood will be supplied by Mackenzie County.
w) Report all potential hazards to Mackenzie County.
x) Enforce rules at the campground to ensure campers and recreation users are advised to follow the current Mackenzie County Parks and Campground bylaws. Those that do not adhere to the bylaw should be requested to provide their name, phone number, and license plate number (when possible). This information is to be provided to the Mackenzie County Bylaw Officer or Peace Officer for enforcement. If there are any safety concerns at the park i.e. violence, threats, or personal safety concerns, you are to report them immediately to the RCMP or Peace Officer.
y) Supply and maintain own vehicle and Equipment to perform the works prescribed in this Agreement.
z) Supply own living accommodations, including water. The County will designate a caretaker site and provide sewage tank and removal services for caretaker site.
aa)Upon a successful yearend evaluation by the Director of Community Services and Operations, and a positive recommendation by the Community Services Committee, a $25 \%$ bonus of the total revenue will be paid to the Contractor (Bonus maximum $\$ 8,000$ ). A successful yearend will be determined on the basis of customer and County satisfaction as well as meeting and/or exceeding the terms of this contract. (Refer to Mackenzie Country Policy COM001).
bb)Provide monthly reports to Director of Community Services as required. These shall include monthly statistics of campers, revenue, day uses, repairs, issues \& other info as requested by the Director of Community Services.

## 4. MACKENZIE COUNTY SHALL:

1. Install well pumps at beginning of season and remove such at end of season (if provided).
2. Remove sewage from the toilet reservoirs, sanitary dump station and fish cleaning stations; when deemed necessary by the Contractor.
3. Supply and place firewood in designated firewood storage area.
4. Remove garbage from 6yd bins only; when deemed necessary by the Contractor.

Request for Proposals - Mackenzie County - Caretaking of Mackenzie County Campground
5. Provide toilet paper, and hand sanitizer solution for washroom facilities.
6. Pay to the Contractor the fee as agreed upon over the contract period in proportionate payments on a monthly basis.

16
Schedule "B"

## Plan to meet Caretakers' Duties

Plan:
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Description of Living Accommodations (including make/model/year):
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## List of Maintenance Equipment:

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## Proponents Experience:

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## Proposed Subcontractors and /or Employees:

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Experience of Proposed Subcontractors and /or Employees:
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## ADDITIONAL SERVICES

## Services:

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W.C.B. account \# (attach copy of clearance letter)

If you do not currently have W.C.B. do you plan to obtain one? $\qquad$

COR/SECOR \# (attach copy)

Or statement if you plan to obtain one: $\qquad$

## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Don Roberts, Director of Community Services |
| Title: | Waste Transfer Station Service Agreement Extension Request |

## BACKGROUND / PROPOSAL:

The Waste Transfer Station Service Agreement was awarded to L \& P Disposals Inc. in December 2017 for a two year term ending December 31, 2019. A one year extension was granted by council expiring on December 31, 2020. The contract for this service includes a clause as follows:

Clause 8.16...
Mackenzie County may, prior to the expiry of the contract time, extend the contract time, twice only, for a further 1 year period subject to the same terms, covenants and conditions as contained within this Contract.

Attached is a letter from L \& P Disposals Inc. requesting that Mackenzie County extend the contract for one year. The terms of the contract would remain the same, however they do request if the landfill tipping fees increase during this year that the price be raised to reflect the increase for the 6 and 7 yard bins.

## OPTIONS \& BENEFITS:

1. Direct administration to extend the Waste Transfer Station Service Agreement with L \& P Disposals Inc. for a one year term ending on December 31, 2021, subject to an increase to cover the cost of landfill tipping fee increases.
2. Direct administration to put the Waste Transfer Station Service Agreement out for tender.
$\qquad$ D. Roberts Reviewed by: $\qquad$ CAO: $\qquad$

## COSTS \& SOURCE OF FUNDING:

2021 Operating Budget.

## SUSTAINABILITY PLAN:

N/A

## COMMUNICATION / PUBLIC PARTICIPATION:

## POLICY REFERENCES:

Policy FIN025 - Purchase Authority Directive and Tendering Process

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That the Waste Transfer Station Service Agreement with L \& P Disposals Inc. be extended for a one year term ending December 31, 2021.
$\qquad$
$\qquad$ CAO: $\qquad$

In regards to our current contract for the hauling of the Mackenzie County Transfer Station waste, we of L\&P Disposals Inc. are requesting a one year contract extension per our current contract general conditions.

We request this 1 year extension from January 1, 2021 to December 31, 2021 of the same terms, covenants and conditions as contained in the current contract. However we do request IF the landfill tipping fees increase during this year that the price be raised to reflect the increase for the 6 and 7 yard bins.

Thank you for your time and consideration of this matter.

## Pat Bateman



## REQUEST FOR DECISION

Mackenzie County

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Don Roberts, Director of Community Services |
| Title: | Hutch Lake 10 Year Management Plan |

## BACKGROUND / PROPOSAL:

Administration, together with the guidance of the Community Services Committee has been working on developing multi-year plans for various campgrounds.

The plan was presented to the Community Services Committee for final review on October 14, 2020. The following motion was made.

MOTION CS-20-068 MOVED BY Councillor Braun
That the Community Services approved the Hutch Lake 10 Year Plan in principal, and recommend to Council to approve as presented.

## CARRIED

OPTIONS \& BENEFITS:

COSTS \& SOURCE OF FUNDING:

## SUSTAINABILITY PLAN:

Author: $\qquad$ D. Roberts Reviewed by: $\qquad$ CAO: $\qquad$

## COMMUNICATION / PUBLIC PARTICIPATION:

## POLICY REFERENCES:

## RECOMMENDED ACTION:

$\square$ Simple Majority $\quad \square$ Requires 2/3 $\square$ Requires Unanimous
That the Hutch Lake 10 Year Management Plan be approved as presented and be submitted to Alberta Environment and Parks.
$\qquad$ CAO: $\qquad$

# 10 YEAR MANAGEMENT PLAN 

## 2021-2031



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## Introduction

Management plans are an essential aspect to effectively protect and enhance habitat identified as critically important to wildlife and fish or having high recreational value to stakeholders. Management plans define the features, goals, and vision of the site and identify the responsibilities of the project partners. This plan describes Hutch Lake's history and physical characteristics, and outlines the long-term management objectives and planned activities (see Section 2.0) over the next ten years in conjunction with the Alberta Environment \& Parks (AEP) Management Objectives. AEP may conduct inspections of Hutch Lake as required.

This plan is to be a working document between Mackenzie County and Alberta Environment \& Parks and may require future amendments. Changes in management objectives or direction at Hutch Lake will require amendments to this plan. Aside from any necessary amendments, the management plan will also be reviewed after ten years as per AEP'S regular renewal schedule. Any changes to provincial policy may impact this plan which would require additional amendments. This will be a discussion between AEP and Mackenzie County staff and/or management personnel as required.

The application process to lease and potentially acquire the land will follow the rules and guidelines as per Electronic Disposition Services, and other necessary direction from AEP. This includes public and Indigenous consultation.

## Referrals and Inquiries

For all referrals and inquiries, regional Approvals and Resource Management staff and managers will jointly function as Land Manager, and Mackenzie County as Lease Manager. Land Authority on all Crown lands will remain with the Crown. Mackenzie County will perform management duties as per this management plan, as well as maintenance and enhancement (e.g., fence construction, riparian and upland habitat enhancements, sign installation, etc.). Any additional activities proposed which contradicts those identified in this management plan will require discussion with AEP and Mackenzie County.

## Mackenzie County

Box 640
4511-46 Avenue
Fort Vermilion, $A B$
TOH 1N0

## Acknowledgements

Mackenzie County would like to thank Alberta Environment and Parks (AEP) for their support in achieving the vision of making Hutch Lake a site that provides yearly outdoor recreation and enjoyment for local citizens and tourists to the region.

### 1.0 Site Description

### 1.1 Background

Hutch Lake was created by damming the upper reach of Meander River, a tributary of Hay River. Hutch Lake was initially a provincial park; however, it was deregulated around 2007-08. Its legal location is NW 29, E $1 / 230$ \& SW 31-112-20-W5M. Originally, the recreational area was two different dispositions that were consolidated creating Hutch Lake Recreational area REC090007. Mackenzie County has a lease agreement over the land to maintain the viability of the campground and day use area. This lease expires January 9, 2038.

The Hutch Lake Campground provides yearly recreation for residents and visitors near and far. A day use area is in the northern region of Hutch Lake, complete with parking stalls, picnic tables, fire pits, playgrounds, outhouse facilities, day use shelter, beach with volleyball net, caretaker's site, boat launch, dock, firewood bin, and a small overnight camping area. More southerly is the overnight campground equipped with 13 stalls, each with their own picnic tables and fire pits. The overnight area also includes outhouse facilities, garbage facilities, firewood stations, and an RV dump station. There are managed ATV/skidoo trails which lead to up Watt Mountain and back to the Town of High Level which are operated by the Watt Mountain Wanders - Snowmobile Club.

Between mid-May and the end of September of 2019, Hutch Lake had over 5009 recreational users, of which 3526 were registered day users. During off-season months, the area is regularly utilized for winter activities including snowmobiling and ice fishing.

### 1.2 Site Location \& Surrounding Land Use

Hutch Lake is located in the boreal forest natural sub region approximately 30km northwest of High Level, Alberta and 100km south of the North West Territories Border. Its waterbody ID number is 4886 . Hutch Lake is located in a forested area that has experienced logging activity and seismic research. It is nearby oil and gas services and a fire watchtower station. The land surrounding Hutch Lake has a long-standing trapping lease. There is a man made dam on the northern side of Hutch Lake, which is how the lake was created.

Hutch Lake is long and narrow, approximately 11.5 kilometres long and 500 metres wide with a surface area of 610 ha and a maximum depth of 8 meters (Schroeder, 2003). The lake shoreline is largely undeveloped, which is where campground users may utilize the lake for recreation. There is a small rural subdivision to the north of the lake primarily for summer cabins/cottages.

Additional land use activities include ATV riding, hunting, and fishing. As the thousands of acres surrounding Hutch Lake remain primarily undisturbed, Mackenzie County is committed to working with Alberta Environment and Parks to sustain the ecosystem within the leased area while providing recreational areas for residents.

Figure 1


### 1.3 Legal Description

Current Details of Notations and Dispositions:
Table 1. Legal description of the Hutch Lake Site

| Legal Land Description | Ownership | Area |  | Other Relevant <br> Information |
| :--- | :--- | :---: | :---: | :---: |
|  | Crown Land | 251.6 | 101.8 | North of Hutch <br> Lake |
| Plan 082 9050, Block 1, Lot 1 | Crown Land | 38.8 | 15.7 | North of Hutch <br> Lake |
| Total Land |  | 290.40 | 117.50 |  |

### 1.4 Site Features

### 1.4.1 Infrastructure

## Existing Infrastructure

Hutch Lake Campground lies on the northwest side of the Hutch Lake shoreline. A 2-kilometre gravel road loops around the site. The entrance and day use area are between the ridge and shore in a flat area. The day use area is equipped with parking stalls, picnic tables, fire pits, a firewood bin, a playground, outhouse facilities, a day use shelter, a beach with volleyball net, a caretaker's site, a boat launch and dock, and eight small overnight sites. As you travel south along the lake, the land inclines where the overnight campground is situated. On top of this ridge, the trees are a mature stand of poplar and spruce. The soils are mostly clay with a steep slope along the shorelines. Signage will be strategically placed throughout the site to ensure user awareness of safety and approved site usage.

## Future Planned Infrastructure

Mackenzie County continues to work with Alberta Environment and Parks throughout the development process of Hutch Lake. This will ensure that developments will have as little of an impact on tributary and ephemeral waterways.

Each development phase will include the addition of a minimum of 1-2 bear-proof waste bins and safety signage regarding wildlife awareness and educations. Hutch Lake currently has two (2) bear-proof waste bins. After the first development phase, this new infrastructure will be monitored and reviewed to evaluate whether additional bins and/or signage is needed.
Consultation with AEP will then be initiated.
Each phase of the plan will be subjected to the availability of funds or budget restraints and should not be held to exact timelines

Hutch Lake's development phases are as follows and are shown on the attached map.

| Phase 1 | To begin in 2020 and completed in 2022 |
| :---: | :---: |
| 1. Caretaker's Office <br> 2. Planting tree clusters within day use area <br> 3. New campground area Tenting Area <br> 4. Clearing of both Phase $1 \& 2$, develop Phase 1 only | Phase 1 would include a caretaker's office, the planting of tree clusters within the day use area and a new overnight campground area. The tree clusters would consist of strategically placed groups of native trees and shrubs which will enhance the beauty of Hutch Lake, as well as provide wind and erosion protection. <br> Construction of the new overnight campground will be located 150 meters southwest of the boat launch/dock on the south side of the access road. This location places campers within an easy walking distance to the main campground facilities, eliminating the long trek from the current overnight sites Phase one would consist of around 23 sites pull through sites, and 16 back-in sites. In addition, 5 small glamping sites constructed on the north side of the access road. There would also be approximately 30 tenting sites south of the day use area. An outhouse, garbage bins, and signage would all be included in the new site. |
| Phase 2 | To begin in 2022 and be completed in 2024 |
| 1. Large pull through RV sites <br> 2. Glamping Sites <br> 3. Group Camping Sites <br> 4. Trails <br> 5. Day-use expansion | Phase 2 would be the second half of the overnight campground capacity with an additional 24 large pull though RV sites, 4 group camping sites and 9 glamping sites (on the north side of access road). The number of sites will depend on the terrain in each of Phases. This new area will include outhouse facilities, firewood bins, a playground, water station, an RV dumping station, required signage, and bear-proof waste containers. Trail development will also be included in this phase. AEP will review the construction of each phase, ensuring placement of this infrastructure is agreeable. |
| Phase 3 | To begin in 2024 and be completed in 2026 |
| 1. Trails <br> 2. Group camping sites <br> 3. Pull through sites <br> 4. Boat Dock <br> 5. Parking expansion | Phase 3 will consist of 7 group sites, 23 pull through sites, and a boat dock with walk up and ATV access only will be complete in this phase. A continuation of trail development and group site development |
| Phase 4 | To begin in 2026 and be completed in 2028 |
| 1. New campground area expansion 14 sites remain half of $R V$ sites <br> 2. Cabins <br> 3. Trail system expansion <br> 4. Shower House <br> 5. Boat Dock | Phase 4 will have additional 24 pull through overnight stalls and 5 larger group camping sites along with overnight cabins in the lower end by the boat launch and dock. A shower house would also be constructed by the boat launch. |


|  | A boat dock would be placed on the lake with walk up <br> and ATV access. The trails would continue throughout <br> the phases to connect each phase of the development. |
| :--- | :--- |
| Phase 5 | To begin in 2028 and be completed in 2030 |
| 1. Boat Dock | Phase 5 will include new 39 back in sites adjacent to the <br> existing back in sites. An additional boat dock with walk <br> 2. Back in sites <br> up and ATV access would also be installed. By the end <br> of this phase, the entire campground will be connected <br> and accessible via the development of a walking trail <br> system. This system will only allow foot and ATV traffic <br> to minimize disturbance to the habitat and trees/shrubs. <br> The trail would consist of natural foliage and perhaps <br> mulching material. This will be determined alongside |
| AEP's consultation. |  |

Mackenzie County recognizes that some additional educational signage will be required at the boat launch and fish cleaning station. This will make campers aware of fishing regulations, water conditions, fire safety, wildlife etc. Pamphlets will also be available at the caretaker's office

### 1.4.2 Fish, Wildlife and Habitat Values

Using a Fish and Wildlife Internet Management Tool (FWMIT) search, the following species were identified in the Hutch Lake area:

| Fish species | Walleye, northern pike, stickleback trout, pearl dace, white suckers |
| :--- | :--- |
| Wildlife species | Bald eagle, black tern, common nighthawk, rusty blackbird, white- <br> winged scooter, black bear, moose (and other ungulates), fur- <br> bearers, pileated woodpecker |
| Habitat values | Forest, riparian, water body |

Other relevant legislation and regulations related to fisheries, wildlife and habitat values include the Fisheries Act, Water Act, Code of Practice for Water Course Crossings, Forests Act, Environmental Protection and Enhancement Act, Public Lands Act, Public Lands Administration Regulation, Forest and Prairie Protection Act, Soils Conservation Act, and the Wildlife Act.

Mackenzie County understands that this development plan will increase user activity at Hutch Lake, which could impact wildlife and fish populations, ultimately impacting fishing and hunting regulations in this region.

### 1.4.2 First Nations

### 2.0 Site Management

Table 2. - Long Term Objectives

| Habitat Enhancement and Maintenance |  |  |
| :---: | :---: | :---: |
| Specific Objectives | Activities | Timelines |
| 1. Manage Vegetation | 1.1 Hazard tree removal to ensure safety of recreational users and FireSmart the recreational area. <br> 1.2 Ongoing monitoring to identify and eliminate noxious weeds on site. <br> 1.3 Remove deadwood to prevent injury to users. | On site caretaker MaySeptember will do daily inspections of campground. <br> Mackenzie County staff complete monthly site inspections to identify such hazards. |
| 2. Manage recreational use to reduce wildlife disturbances | 2.1 Tree retention to minimize negative impacts to wildlife and provide an aesthetically pleasing camping experience. <br> 2.2 Trail development will ensure trees/shrub retention. <br> 2.3 Trail development will follow waterbody setbacks, watercourse code of practice, and use materials appropriate for site. | Signage will be installed and reviewed for clarity informing users of trail systems, and habitat retention. |
| 3. Restoration of land with recreational and habitat improvement goals | 3.1 Restoration of identified areas as required (e.g mulching, seeding, etc.). | Be reviewed during site inspections. |
| Recreation Infrastructure |  |  |
| Specific Objectives | Activities | Timelines |
| 4. Campsites and cookhouse | 4.1 Tree/brush clearing to prep campsites <br> 4.2 Dock <br> 4.3 Graded and gravelled sites (size x size) for \# trailers (size $x$ size max) and \# tents. <br> 4.4 Fire pits at each campsite and throughout day use area. | Regularly as required. |


|  | 4.5 Picnic tables at each campsite and throughout day use area. |  |
| :---: | :---: | :---: |
| 5. Waste Management | 5.1 Bear-proof garbage receptacles provided onsite at numerous locations, to be collected weekly. <br> 5.2 Fish Cleaning Station to be constructed and emptied biweekly. | The remainder of the lease. |
| Public Education and Outreach |  |  |
| Specific Objectives | Activities | Timelines |
| 6. Signage to educate public. | 6.1 Bear Smart signs on garbage management and staying safe in bear country. <br> 6.2 Fire Smart signage <br> 6.3 Fisheries regulations information <br> 6.4 Watchable Wildlife in Alberta including American White Pelican | Signage will be installed and reviewed for clarity informing users of trail systems, and habitat retention. <br> Within the disposition, users will follow Municipal Parks Bylaw of Mackenzie County. <br> Signage will be posted for Alberta Environment \& Parks, and Alberta Resource Management Environmental Hotline and Report a Poacher line for concerns on all off site Recreational users. |

### 3.0 References

Regional Forest Landscape Assessment: Lower Peace Region http://www1.agric.gov.ab.ca/\$department/deptdocs.nsf/ba3468a2a8681f69872569d60073fde1/0 9392952f443274287257f6500001bea/\$FILE/RegForLandAssess-LowerPeace-Jun12-2013.pdf

Fish and Wildlife Management Information System (FWMIS)
https://maps.alberta.ca/FWIMT Pub/Viewer/?TermsOfUseRequired=true\&Viewer=FWIMT Pub
2016 Forest Management Plan Terms of Reference
http://www.highlevelwoodlands.com/pdf/THL 2016 DFMP ToR 15Nov13.pdf
Mackenzie County Municipal Parks Bylaw
https://docs.mackenziecounty.com/docushare/dsweb/Get/Document-19641/Bylaw\ 103716\ Municipal\ Parks\ Bylaw.pdf

Mackenzie County Recreational Area Policy https://docs.mackenziecounty.com/docushare/dsweb/Get/Document-225/ADM040\ Recreational\ Area\ Policy\ 08-Dec-09.pdf

2011 Hutch Lake Fall walleye index netting survey https://open.alberta.ca/publications/hutch-lake-fall-walleye-index-netting-2011

### 4.0 Agreement Term and Management Partners

Mackenzie County will endeavor to seek partnership opportunities with First Nations, Industry, Provincial Agency's, Local Societies/Clubs and other Organizations that may have interests in the improvement of regional recreation and the Hutch Lake Campground.

Mackenzie County and AEP agree to review and update the management plan as required, as per application amendment procedures. Upon renewal of the [relevant disposition described in this management plan] we will review the plan to ensure the vision, objectives and specific activities stated within are being met.

## Mackenzie County

Signature: $\qquad$ Date: $\qquad$
Representative: $\qquad$

Signature: $\qquad$ Date: $\qquad$
Representative: $\qquad$

Alberta Environment and Parks (AEP) - Operations, Resource Management
Signature: $\qquad$ Date: $\qquad$
Representative:


Alberta Environment and Parks (AEP) - Operations, Approvals
Signature: $\qquad$ Date: $\qquad$
Representative: $\qquad$

### 5.0 Amendments

| Amendment <br> $\#$ | Amendment Description | Section or <br> Detail Map | Phase | Date <br> Submitted |
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## Appendix A

1. Map - Development Phase Plan Aerial
2. Map - Development Phase Map without Aerial
3. Map - Day Use Area
4. Map - Campsite Development
5. Legal Survey (required under Surveys Act)
6. Schedule A: Caretaker's Contract \& Responsibilities
7. Schedule B: Mackenzie County Recreational Area Policy ADM040








## Schedule A

Hutch Lake Campground Caretaker

## Hutch Lake Campground Caretaker

## 1. Overview

Mackenzie County has leases with Alberta Agriculture and Forestry and Alberta Environment and Parks for the Hutch Lake Campground. The campground is located at NE $1 / 4$ 29-112-20W5 and has approximately 20 overnight camping stalls, along with an overflow area, day use area, and boat docks. The caretaker is responsible for the maintenance, security and oversight of the campground for the camping season between mid-May and mid-September.

## 2. Description of Work

- Meet with campers and assist them with any questions or concerns. Provide directions, brochures, etc.
- Ensure campers are registered and collect fees. Record park attendance (including day users).
- Submit all revenues and attendance records biweekly to the Mackenzie County office in either High Level or Fort Vermilion.
- Check outhouse daily, ensure they are stocked with an adequate supply of toilet tissue and hand sanitizer at all times. All janitorial cleaning supplies, (paper towel and garbage bags) will be provided by the Caretaker.
- Mackenzie County will provide toilet paper and hand sanitizer.
- Check sanitary effluent levels of toilets and RV dumping stations. Contact the County when sewage removal is required.
- Pick up any litter within campground daily. Empty garbage bins and place in the 6yd bin located on site.
- Mow and trim grass regularly at campsites, roads, day area, and all open green spaces (including entrance access).
- Inspect campsites, fire pits, and dock on a daily basis, ensuring they are clear of any debris (deadfall, driftwood, etc). Repair any minor deficiencies. Report all other deficiencies to the County.
- Maintain and paint picnic tables when required. Mackenzie County will supply paint and supplies.
- Clean fish cleaning stations daily.
- Clean signage and information booth as necessary.
- Clean firewood bins and shelters as necessary.
- Inspect the beach daily, rake and clean the beach if necessary. Maintain the volleyball court if provided.
- Inspect playground area daily and clean up any debris or litter.
- Ensure well pumps are clean and non-potable water sign is attached and visible. Report any repairs required to Mackenzie County.
- Ensure firewood supply is adequate on a daily basis. Advise Mackenzie County when firewood is needed.
- Report all potential hazards to Mackenzie County.
- Enforce campground rules to ensure campers and recreation users are safe and
compliant. Record the names, phone numbers, and license plate numbers of those that do not adhere to the bylaw (if possible). Report this information to the county Bylaw Officer or Peace Officer. Report any major safety concerns (i.e., violence, threats, personal safety concerns) immediately to the RCMP or Peace Officer.
- Supply and maintain own vehicle and equipment to perform the work prescribed in this Agreement.
- Supply own living accommodations, including water. The County will designate a caretaker's site and provide a sewage tank and removal service.
- Provide monthly reports to Director of Community Services as required. These shall include monthly statistics of campers, revenue, day users, repairs, issues, and other information as requested by the Director of Community Services.
- Upon a successful yearend evaluation by the Director of Community Services and Operations, and a positive recommendation by the Community Services Committee, a $25 \%$ bonus of the total revenue will be paid to the Caretaker (bonus maximum $\$ 8,000)$. A successful yearend will be determined on the basis of customer and County satisfaction as well as meeting or exceeding the terms of this contract. (Refer to Mackenzie Country Policy COM001)


## 3. MACKENZIE COUNTY SHALL:

1. Install well pumps at beginning of season and remove at the end of the season (if provided);
2. Remove sewage from the toilet reservoirs, RV dumping station, and fish cleaning stations (when deemed necessary by the Caretaker);
3. Supply and place firewood in designated firewood storage area;
4. Remove garbage from large 6 yard bin (when deemed necessary by the Caretaker);
5. Provide toilet paper and hand sanitizer solution for outhouse facilities;
6. Pay the wage as agreed upon over the Caretaker's contract period on a monthly basis;
7. Allow the Caretaker to operate a concession and any other applicable campground revenue generating activities for his/her own profit pending the County's approval prior to the start of each season. The Caretaker must receive approval from the Health Inspector prior to commencing operation of a concession.

## Schedule B

## Mackenzie County Recreational Area Policy

## Mackenzie County

| Title: | Mackenzie County <br> Recreational Area Policy | Policy No: | ADM040 |
| :--- | :--- | :--- | :--- |

## Purpose:

To identify County Recreational Areas. To properly classify all County and/or Partnership Recreational Areas, based on area usage, community need, natural features present and currently maintained areas.

## Policy Statement

Mackenzie County strives to offer Recreational Areas for our citizens and visitors to the County. Mackenzie County strives to engage our citizens and visitors of all ages in recreational opportunities. Recreational Areas are characterized into different Classifications in order to provide the best possible opportunities for all. Classifications for playgrounds and campgrounds may be combined when available or applicable combined efforts in regards to Park Spaces will be recognized. Examples or such partnerships may be School Division, Provincial Government agencies, local Community Groups.

## 1. Classifications of Campgrounds and Playgrounds

a. Green Space
b. Playground
c. Urban Park
d. Regional Park
e. Lease Holder

Council has identified and classified the following as County Recreational Areas:

| Recreational Area | Location | Classification | Operational Authority / <br> Partnership |
| :--- | :--- | :--- | :--- |
| Mackenzie Housing Park | Fort Vermilion Hamlet | Urban Park | County/Fort Vermilion <br> Recreational Society |
| Fort Vermilion Pioneer Park | Fort Vermilion Hamlet | Playground | County |
| Fort Vermilion Arena Park | Fort Vermilion Hamlet | Urban Park | County / Fort Vermilion <br> Recreational Society |
| D.A. Thomas Park | Fort Vermilion Hamlet | Urban Park | County |
| Fort Vermilion Walking Trails | Fort Vermilion Hamlet | Green Space | County/Fort Vermilion <br> Walking Trail Committee |
| Bridge Campsite | Fort Vermilion Rural | Regional Park | County/ASRD |


| Recreational Area | Location | Classification | Operational Authority / <br> Partnership |
| :--- | :--- | :--- | :--- |
| La Crete Hill Park | La Crete Hamlet | Urban Park | County |
| Reinland Park | La Crete Hamlet | Urban Park | County |
| 108 St Park | La Crete Hamlet | Playground | County |
| La Crete Walking Trails | La Crete Hamlet | Green Space | County / La Crete <br> Walking Trail Committee <br> / ASRD |
| La Crete Arena Park | La Crete Hamlet | Urban Park | County / La Crete <br> Recreational Society |
| Tourangeau Lake | La Crete Rural | Green Space | County |
| Atlas Landing | Zama Hamlet | Regional Park | County / Zama <br> Recreational Society |
| Zama Community Park | Buffalo Head Rural | Regional Park | County/Zama <br> Recreational Society |
| Zama Community Hall | High Level Rural | Regional Park | County / Town of High <br> Level / Provincial Parks |
| Buffalo Head Tower | Rocky Lane Rural | Regional Park | County / Provincial <br> Parks |
| Hutch Lake Campground | Fort Vermilion Rural | Regional Park | County / ASRD |
| Machesis Lake | Fort Vermilion Rural | Lease Holder | County/Fort Vermilion <br> Recreational Society |
| Wadlin Lake | Tompkins Landing | Lease Holder | County/La Crete Ferry <br> Campground Society / <br> ASRD |
| Fort Vermilion Rodeo Grounds |  |  |  |
| La Crete Ferry Campground |  |  |  |

## 2. Recreational Area Classification Definitions

Recreational Areas are classified taking into account, current features, natural features, usage and grant and partnership opportunities. Parks will be upgraded and maintained to provide the best possible uses and may or may not include all amenities that are listed under their classification. All Park areas amenities inclusions will be under the jurisdiction of the County Parks \& Recreation Committee in conjunction of the County's Park \& Recreation Master Plan (when implemented).
a. Green Space

## Must Include:

- Good repair and maintenance of property
- Passive features like picnic tables, benches
- Garbage receptacles \& collection


## May Include:

- Walking Trails (either soft or hard surface)
- Dock or boat launch where applicable
- Parking Area
- Green spaces \& natural landscaping items such as flowers \& trees
b. Playground


## Must Include:

- Good repair and maintenance of property
- Basic equipment is supplied and installed (ex. swings, sandbox, slides etc.)
- Garbage receptacles \& collection


## May Include:

- Passive features like picnic tables, benches
- Playground structure
- Green spaces \& landscaping items such as flowers \& trees
c. Urban Park


## Must Include:

- Good repair and maintenance of property
- Garbage receptacles \& collection
- Green spaces \& landscaping items such as flowers \& trees
- Passive features like benches, picnic tables


## May Include:

- Picnic area(s)
- Toilets
- Shelters
- Playground structure
- Fencing
- More intensive recreation areas: such as ball diamonds, sports fields and/or courts, spray pools, recreation centres, outdoor rinks.


## d. Regional Park

## Must Include:

- Good repair and maintenance of property
- Picnic areas
- Fire pits and firewood
- Toilet facilities
- Parking area
- Garbage receptacle \& collection
- Green spaces \& natural landscaping items such as flowers \& trees
- Passive features like benches


## May Include:

- Playground structure
- Dock and/or boat launch
- Shelters
- Non-potable water facilities
- Individual and/or group camping sites
e. Lease Holder


## Must Include:

- Obtain and maintain current lease agreement.
- Operating authority.


## 3. Signage

- All County Parks will have appropriate signage that clearly shows Ownership and/or Operational parties; Classification.
- Other signage including emergency contacts, rules, regulations and special issues will be reviewed as a yearly sign upgrade package.
- All signage will be in good repair and clearly visible.


## 4. Inspections

- All playground equipment shall be inspected pursuant to the Playground Inspection Policy ADM020.
- All County park facilities shall be inspected regularly by departmental staff to ensure a safe and friendly environment for all users.


## 5. Operating Authority

- Recreational areas may be placed under the control of a Partnership Group (such as a Local Recreational Society, School, Provincial Agency or other registered Non-Profit group when it is mutually agreed upon by both parties.
- Operating authorities are responsible for maintenance and inspections of facilities pursuant to this and other applicable county policies. A detailed Operating Agreement must be agreed upon by all Partnered bodies to ensure the safe and proper operation of County Recreational Areas.


## 6. Partnerships

- Partnerships for recreational areas will be explored and combined in all instances where circumstances warrant


## 7. Promotion of Recreational Areas

- The County will strive to provide adequate promotional materials and venues for all County Recreational Areas.

|  | Date | Resolution Number |
| :--- | :---: | :---: |
| Approved | 07-Jan-03 | $03-947$ |
| Amended | 30-Sep-03 | $03-538$ |
| Amended | 24-Feb-04 | $04-101$ |
| Amended | 25-Jun-07 | $07-06-588$ |
| Amended | 08-Dec-09 | $09-12-1109$ |

## REQUEST FOR DECISION

Mackenzie County

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Jennifer Batt, Director of Finance |
| Title: | Bistcho Lake Cabin Tax Assessments |

## BACKGROUND / PROPOSAL:

During the October 13, 2020 Council meeting, the following motion was passed:

MOTION 20-10-607
Requires Unanimous

MOVED by Councillor Bateman
That administration bring back options for Bistcho Lake cabins tax assessments to the next meeting.

## CARRIED

Administration reviewed the tax notices for the Bitcho Lake cabin tax rolls, and confirmed that as the leases were cancelled for the cabin leases, land assessment was removed, and not assessed, only the cabin remained on the properties.

Administration reviewed the assessments with the County's assessor and confirmed that as the cabins remain on location, the assessor must assess a value to the cabin, and the residential mill rate is calculated.

## OPTIONS \& BENEFITS:

Option

1) Remove the cabins from location closing the tax roll;

## Option

2) Every year, prior to the due date, the ratepayer may request that the taxes be waived by way of Council Motion.

Author: $\qquad$ J.Batt Reviewed by: $\qquad$ CAO: $\qquad$

Operating Budgets

## SUSTAINABILITY PLAN:

N/A

## COMMUNICATION / PUBLIC PARTICIPATION:

N/A

## POLICY REFERENCES:

Tax Rate Bylaw

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous

That the Bistcho Lake Cabin Tax Assessment report be received for information.
$\qquad$ CAO: $\qquad$

## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Jennifer Batt, Director of Finance <br> Title: |
| Family and Community Support Services (FCSS) COVID-19 <br> Funding Grants |  |

## BACKGROUND / PROPOSAL:

COVID-19 funding was made available by the Provincial Government to all Family and Community Support Services (FCSS) in Alberta. Each FCSS could make application and if approved receive funding to assist with the COVID 19 assistance. The grants purpose is to provide social supports for vulnerable Albertans directly and indirectly affected by the COVID-19 pandemic. The amounts received by each organization varied depending on the organizations applications. All three FCSS branches made application and were approved for funding under Mackenzie County.

Funding approved is as follows:
La Crete FCSS - \$6,150
Fort Vermilion FCSS - \$21,500
Zama FCSS - \$14,400.
Additionally, the La Crete Support Services Society was recently notified that they have been approved to receive the Emergency Community Support Fund Grant in the amount of $\$ 20,000$. The grants purpose is to provide immediate financial support to qualified groups whose programs are serving vulnerable populations impacted by COVID-19.

In order to receive these funds, both organizations were required to deposit the funds with Mackenzie County due to the FCSS organizations being under Mackenzie County and not their own organization. Reporting and follow-up will be completed by each FCSS organization.

All funds received were forwarded directly to each FCSS organization as approved.
$\qquad$ J. Veenstra Reviewed by: $\qquad$ CAO: $\qquad$

## OPTIONS \& BENEFITS:

The Family and Community Support Services Association of Alberta grant and the Emergency Community Support Fund Grant was made available to charities and nonprofit organizations to support vulnerable populations as they manage the impacts of COVID-19.

## COSTS \& SOURCE OF FUNDING:

Family and Community Support Services Association of Alberta Grant in the amount of \$42,050

Emergency Community Support Fund Grant in the amount of $\$ 20,000$

## SUSTAINABILITY PLAN:

N/A

## COMMUNICATION / PUBLIC PARTICIPATION:

## N/A

## POLICY REFERENCES:

## N/A

## RECOMMENDED ACTION:

$\square \quad$ Simple Majority
$\checkmark$ Requires 2/3
$\square \quad$ Requires Unanimous
That the 2020 operating budget be amended to include $\$ 62,050$ for local Family and Community Support Services (FCSS) COVID-19 funding support, with funding coming from the Family and Community Support Services of Alberta COVID 19 Grant in the amount of \$42,050 and the Emergency Community Foundations of Alberta Grant in the amount of \$20,000.
$\qquad$ Reviewed by: J.Batt CAO: $\qquad$

## REQUEST FOR DECISION

Mackenzie County

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Jennifer Batt, Director of Finance |
| Title: | La Crete Recreation Board Project - Rebuild One Compressor |

## BACKGROUND / PROPOSAL:

Administration received an invoice from the La Crete Recreation Board, which resulted in a review of their 2019 project - Rebuild One Compressor. Upon review, administration determined that the amount on the invoice received was not paid prior to the project being closed by the previous Director of Community Services during the 2020 budget deliberation.

As this project was closed, there is no funding in the 2020 budget leaving an amount outstanding of $\$ 2,169.16$.

| 2019 Budget | $\$ 22,000$ |
| :--- | :--- |
| 2019 Expenses | $\$ 17,330$ |
| Budget Remaining | $\$ 4,670$ |
| 2020 Expense | $\$ 2,169$ |

By approving this additional cost, the project would remain under the original budget allocated. As this project was closed in 2019, a 2020 budget amendment is required by Council motion.

## OPTIONS \& BENEFITS:

N/A

## COSTS \& SOURCE OF FUNDING:

2020 Capital Budget

Author: $\qquad$ Reviewed by: $\qquad$ J. Batt CAO: $\qquad$

## SUSTAINABILITY PLAN:

N/A

## COMMUNICATION / PUBLIC PARTICIPATION:

N/A

## POLICY REFERENCES:

N/A

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires $2 / 3 \quad \square \quad$ Requires Unanimous

That the 2020 budget be amended in the amount of $\$ 2,169$ for the 2019 La Crete Recreation Board Project - Rebuild One Compressor, with funding coming from the Recreation Board Reserve.
$\qquad$

## REQUEST FOR DECISION

Mackenzie County

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Jennifer Batt, Director of Finance |
| Title: | Cheque Registers - October 26 - November 6, 2020 |

## BACKGROUND / PROPOSAL:

At the request of Council cheque registers are to be viewed by Council during Council meetings.

All invoices are authorized by Managers, Directors, and or the CAO in accordance with the Purchasing Policy. Cheques are released on a weekly basis unless otherwise required for operational needs. Copies of the October 26 - November 6, 2020 cheque registers will be available on meeting day.

## OPTIONS \& BENEFITS:

Administration will continue to present all new cheque registers at each Council meeting.

COSTS \& SOURCE OF FUNDING:
2020 Budget.

## SUSTAINABILITY PLAN:

N/A
$\qquad$ CAO: $\qquad$

## COMMUNICATION / PUBLIC PARTICIPATION:

N/A

## POLICY REFERENCES:

Policy FIN025 Purchasing Authority Directive and Tendering Process

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square \square$ Requires Unanimous
That the cheque registers from October 26 - November 6, 2020 be received for information.
$\qquad$ CAO: $\qquad$

## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Caitlin Smith, Manager of Planning and Development <br> Bylaw 1203-20 Land Use Bylaw Amendment to Create a <br> Zoning Overlay to Change the Minimum Setback Along 100 <br> Street in the Hamlet of La Crete |

## BACKGROUND / PROPOSAL:

100A Street is located parallel to 100 Street otherwise known as Main Street (arterial road) in the hamlet of La Crete. 100A is a registered service road and separate from the 100 Street Right of Way.

This item was previously taken to Council to determine the future width of the 100 Street corridor, where Council determined that 40 meters would be sufficient.

On April 8, 2019 the following motion was made:
MOTION 19-04-247 MOVED by Councillor Braun
That the County secure a 40 meter right of way on 100th Street in La Crete for future main street widening and that administration move forward to close 100A Street.

## CARRIED

Currently, Mackenzie County has title of the closed road. In order to obtain a 40 meter corridor on 100 Street ( 30 m is existing) 10 meters of 100A Street must be added to the corridor. The County will have to buy 10 m from some properties and offer to sell 10 m to other properties where the 100A street exists.

The 100 Street Zoning Overlay Bylaw 12xx-20 has been drafted as a means to prevent new developments from being too close to the future 100 street corridor. The Bylaw proposes a 10 meter setback from the future 100 street corridor or 20 meters from the existing 100 street road right-of-way. This will ensure alignment of all future buildings along the corridor.

Author: $\qquad$ Reviewed by: $\qquad$ CAO: $\qquad$

The current minimum setback from the front property line for La Crete Main Street "LCMS" is 3.0 meters ( 9.8 feet) while the maximum is 5.0 meters ( 16.4 feet).

There are currently no buildings that encroach the proposed 100 street corridor, however some properties will not meet the new setback requirements and will be grandfathered.

Once setbacks are secured, negotiations with landowners will begin.

## OPTIONS \& BENEFITS:

Mackenzie County will be prepared for future road widening prior to it being needed and landowners can develop their lots without additional consultation from the County.

## COSTS \& SOURCE OF FUNDING:

Costs will consist of advertising the Public Hearing, which will be borne by the Planning and Development Operating Budget.

## SUSTAINABILITY PLAN:

Goal E26 That Mackenzie County is prepared with infrastructure and services for a continually growing population.

Strategy E26.1 Infrastructure is adequate and there are plans in place to manage additional growth.

Strategy E26.3 Take proactive measures to anticipate growth by preparing evidencebased plans for it.

Strategy E28.1 When making County growth projections for planning major capital expenditures, continue to use "average 20-year growth rates" rather than using "current growth rates" that may not represent enduring growth patterns.

Goal C1 The capacity of infrastructure in County hamlets and rural communities keeps pace with their growth and is planned in a way that ensures their sustainability.

## COMMUNICATION / PUBLIC PARTICIPATION:

Not applicable at this time.
$\qquad$ N Friesen Reviewed by: $\qquad$ C Smith CAO: $\qquad$

## POLICY REFERENCES:

## Mackenzie County Economic Development Strategy and Streetscape Design

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That first reading be given to Bylaw 1203-20 being a Land Use Bylaw Amendment to Create a Zoning Overlay to Change the Minimum Setback Along 100 Street in the Hamlet of La Crete, subject to public hearing input.
$\qquad$

BYLAW NO. 1203-20

## BEING A BYLAW OF MACKENZIE COUNTY <br> IN THE PROVINCE OF ALBERTA

TO AMEND THE
MACKENZIE COUNTY LAND USE BYLAW
TO ADD A ZONING OVERLAY TO CHANGE THE MINIMUM SETBACKS ALONG 100 STREET IN THE HAMLET OF LA CRETE

WHEREAS, Mackenzie County has a Municipal Development Plan adopted in 2009, and
WHEREAS, Mackenzie County has adopted the Mackenzie County Land Use Bylaw in 2017, and

WHEREAS, the Council of Mackenzie County, in the Province of Alberta, has deemed it desirable to amend the Mackenzie County Land Use Bylaw to change the setbacks along 100 Street in the Hamlet of La Crete.

NOW THEREFORE, THE COUNCIL OF MACKENZIE COUNTY, IN THE PROVINCE OF ALBERTA, DULY ASSEMBLED, HEREBY ENACTS AS FOLLOWS:

1. That Mackenzie County Land Use Bylaw Section 8 General Regulations be amended with the following addition:
8.69 Zoning Overlay for 100A Street in the Hamlet of La Crete.
8.69.1 This Overlay applies to those commercial and industrial zoned lands that are adjacent or abutting the east side of 100 Street, from the north side of 94 Avenue to the south side of Township Road 1062/La Crete North Access. This Overlay is intended to ensure Setbacks within each of the applicable Land Use Districts are standardized and in alignment along adjacent sites on this corridor to ensure consistency of development along this corridor. This Overlay provides for a consistent setback line in order to allow for the recommended future widening of 100 Street in accordance with Policy DEV001 Urban Development Standards, which includes the closure of surplus right-of-way from 100A Street that is to be included within the 100 Street right-of-way.
8.69.2 Notwithstanding the regulations of the La Crete Main Street (LC-MS) district Section 9.30 and La Crete Heavy Industrial (LC-HI) district Section 9.32, the required minimum setbacks in respect of the frontage along 100 Street or 100A Street shall be measured from a conceptual line representing the future ultimate eastern edge of the 100 Street right-of
way as illustrated in Figure 27.
a. For simplification, the minimum required setback for DEVELOPMENT along the east side of 100 Street is 20 meters ( 65 feet) from the existing 100 Street road right-of-way boundary.
2. That Mackenzie County Land Use Bylaw Section 9.30 La Crete Main Street (LCMS) Additional Regulations be amended with the following addition:
9.30.17 Any DEVELOPMENT east of 100 Street shall have a minimum setback of 20 meters ( 65 feet) from the 100 Street road right-of-way.


Figure 27. Main Street in the Hamlet of La Crete

READ a first time this $\qquad$ day of $\qquad$ , 2020.

Public Hearing held this $\qquad$ day of $\qquad$ 2020.

READ a second time this $\qquad$ day of $\qquad$ , 2020.

READ a third time and finally passed this $\qquad$ day of $\qquad$ 2020.

Joshua Knelsen
Reeve
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## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Byron Peters, Director of Planning and Development |
| Title: | La Crete Transportation Network Analysis |

## BACKGROUND / PROPOSAL:

The La Crete Transportation Network Analysis project was initiated in mid 2020 in response to challenges faced by developers and some of the initial feedback that we received at the open houses for the Industrial Growth Strategy.

Legislative changes that occurred within the last few years require every development within 1 mile (1600m) of a provincial highway to be referred to Alberta Transportation. The previous proximity requirement was a half mile ( 800 m ). This change, along with a growing desire locally for development in high visibility areas, prompted the County to initiate a review of our transportation network around La Crete and Highway 697.

A primary goal of this project is to understand the traffic volume growth projections over the next 20 to 30 years, and understand when intersection upgrades may be required, and what sort of upgrades we can anticipate.

The report being presented to Council is the first draft, so this is an opportunity to provide feedback to be included in the final analysis. Administration has identified a few items that need to be clarified in the final report; these items will be discussed during the presentation.

## OPTIONS \& BENEFITS:

This information will help the County with budgeting, and assist developers with understanding the impacts that their development is likely to have on traffic volumes. This allows a plan to be developed to upgrade key roads and intersections at the appropriate times, and provides projections to Alberta Transportation so that there is a less onerous Traffic Impact Assessment requirement on developers.
$\qquad$
$\qquad$

## COSTS \& SOURCE OF FUNDING:

Adoption of the La Crete Transportation Network Analysis does not include any direct costs. The County will incur a variety of costs as the region grows, but adequate preplanning should reduce both costs and risk for the county and developers.

One option for funding future intersection improvements is provincial Strategic Transportation Infrastructure Program (STIP) funding. This program provides up to 50\% matching funding for eligible projects up to \$6M (\$3M provincial contribution).

The STIP application for a 2021 project must be submitted by November 30, 2020. In order to apply, a commitment is required from Council. A 2021 project may see some savings/efficiencies if the work can be coordinated with the grade widening for Highway 697.

## SUSTAINABILITY PLAN:

Goal E1 That the Region's transportation system:

- Reduces travel time and increases safe, comfortable, and efficient travel between its communities and between the County and major destinations beyond its borders.
- Provides an economically efficient access to business and industrial markets outside of County boundaries.

Goal E26 That Mackenzie County is prepared with infrastructure and services for a continually growing population.

Strategy E26.3 Take proactive measures to anticipate growth by preparing evidencebased plans for it.

## COMMUNICATION / PUBLIC PARTICIPATION:

None required.

## POLICY REFERENCES:

N/A

Author: $\qquad$ Reviewed by: $\qquad$ CAO: $\qquad$

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That the Draft La Crete Transportation Network Analysis report and presentation be received for information.
$\qquad$

## Mackenzie County

## Transportation Network Analysis

 Hamlet of La Crete

NOVEMBER 2020

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Closure

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## 1 INTRODUCTION

The hamlet of La Crête is located in northwest Alberta and is the largest of the three hamlets within Mackenzie County accounting for about $22 \%$ of the County's total population (2006 data). In 2011, La Crête had a total population of 2400 residents and its main economy is agriculture and forestry with industrial growth on the rise. A significant amount of planning work, including transportation planning, has already been completed to chart the hamlet's forward progress. The County retained Associated Engineering (AE) to review the policies and plans completed to date to recommend a long-term transportation network for La Crête that leverages existing infrastructure and supports anticipated future growth. Included in this transportation study is an analysis of the four highway intersections accessing the hamlet, with a traffic impact assessment component at one intersection where imminent development is expected.

## 2 BACKGROUND INFORMATION REVIEW

### 2.1 County Policy Documents

The County provided various background documents that were reviewed in the preparation of this study. The documents included:

- Municipal Development Plan
- $\quad$ Area Structure Plan Bylaw No. 895-13 (2013)
- Urban Development Standards
- Sustainability Plan
- Industrial Growth Strategy
- Transportation Master Plan (Draft)

Relevant findings are summarized in the sections below and have been incorporated into aspects of this study wherever possible. When developing a recommendation for the long-term transportation network, the goals and mandates described below were taken into consideration.

### 2.1.1 Municipal Development Plan (MDP)

The MDP, prepared in 2009 and most recently amended in 2013, guides growth and development of the County until 2031. A major theme identified in the MDP is to ensure that the County is a desirable place to live and raise a family. Various goals from the MDP which are relevant to this theme, including development, the transportation system, and the environment are summarized in Table 2-1 below.

Table 2-1
MDP Goals for Development and Transportation

| Goal / Vision | Topic | Relevant Action in Study |
| :--- | :--- | :--- |
| Development and growth shall be directed to specific <br> locations | Development | Information noted |
| Development in hamlets shall be orderly, efficient and <br> contiguous | Development | Road network to follow same <br> characteristics |
| Transportation system shall be safe and convenient | Transportation | Road network should also be safe and <br> convenient |
| Integrity of natural areas shall be protected | Environment | Avoid proposing road networks <br> through natural areas |
| Future subdivisions next to a highway shall protect the <br> integrity of the highway and may require a service road, <br> subject to Alberta Transportation (AT) requirements | Development, <br> Transportation | Consult AT on development adjacent <br> to highway |
| Each hamlet will grow within or contiguous to their <br> boundaries to accommodate long-term growth | Development | Plan network for long-term growth |
| Optimize the use of existing services and infrastructure <br> and strengthen the long-term viability of all hamlets | Development, <br> Transportation | Leverage existing road infrastructure <br> during network development |
| Plan for a positive growth rate in all hamlets | Development | Plan network with positive growth |


| Goal / Vision | Topic | Relevant Action in Study |
| :--- | :--- | :--- |
| Plan for future subdivision and development of <br> residential areas | Development | Plan network for future subdivision <br> and residential development |
| Develop the hamlet in accordance with the Hamlet of La <br> Crête Area Structure Plan (ASP) Bylaw 895-13 | Development | Plan network to accommodate the La <br> Crête ASP |
| Commercial uses shall be limited to existing commercial <br> areas, the locations shown in the area structure plans <br> for La Crête or, in the commercial policy areas shown | Development | Identifies planned commercial nodes <br> within/near the hamlet |
| Mackenzie County shall promote the development of <br> one compact, viable central business district | Development | Information noted |
| Industrial parks or industrial uses shall have simple and <br> direct access to truck routes, highways or rail networks | Transportation | Ensure access to industrial uses is as <br> direct and simple as possible |
| Provide an efficient and effective transportation <br> network for the movement of people and goods | Transportation | Recommend a network that is <br> efficient and effective |
| Guarantee sufficient right-of-way provision for roads in <br> order to allow their expansion in the future, if necessary | Transportation | Recommend a network with sufficient <br> road right of ways for the long-term |
| Mackenzie County shall protect transportation corridors <br> required to implement the Transportation Master Plan | Transportation | Align network to Transportation <br> Master Plan where possible, keeping <br> in mind that it is not approved by <br> Council |
| All roads shall be developed in accordance with the <br> specifications of Mackenzie County's Minimum Design <br> Standards for Local Improvements | Transportation | Plan network in accordance with <br> County design standards |
| Mackenzie County shall encourage the incorporation of <br> pedestrian and bicycle paths designed as integral parts <br> of municipal parks and neighbourhoods | Development | Transportation | | Plan network to incorporate |
| :--- |
| pedestrian and cyclist accommodation |

According to the MDP, La Crête has a residential land supply consisting of approximately 683 ha for residential development and approximately 150 ha for future country residential development within its current boundaries. Based on typical hamlet and country residential densities, La Crête could accommodate a population of around 19,300 people. This is about eight times the current population. It is evident that there is enough land within the hamlet to accommodate a sizeable increase in population growth for decades to come and that La Crête can continue development as population and demands grow without worrying about expanding hamlet boundaries. However, when planning for future development, it is important to also simultaneously plan for an appropriate road network that is logical and safe and allows for adequate road right of ways.

### 2.1.2 Area Structure Plan Bylaw No. 895-13 (2013)

La Crête's Area Structure Plan (ASP) was signed into a bylaw in 2013. Its policy for residential areas is to encourage connectivity between neighbourhoods through the provision of streets that are designed to support safe pedestrian, cycle and vehicle movements. This underscores the need to plan for a road cross-section that also incorporates cycling and pedestrian accommodation in addition to regular vehicle traffic. The bylaw includes two cross-sections, shown in Figure 2-1 and Figure 2-2 and described below:

- Green Link roads are intended to be developed with shared paths down one side of the street. These links are intended to provide connections for active modes to major parks, schools and the town centre.
- Town Centre roads are intended to improve the walking environment through the town centre to support a pedestrian friendly environment. This includes wider sidewalks, trees, and pedestrian scale street lights.


Figure 2-1
Green Link Cross-Section


Figure 2-2 Town Centre Street Cross-Section

As per the ASP, these road profiles should be used as the road standards for the areas of the transportation network identified in the Roads and Access Map of the ASP. The Roads and Access Map identifies key trails to maintain and to be created during new development and redevelopment. The ASP mandates that trail rights of way within a Municipal Reserve should be a minimum of 4 m wide, with the trail surface a minimum of 2 m wide. The ASP notes that all roadways, intersections and accesses should be developed to Mackenzie County standards. Also, the local road system should allow for several vehicular and pedestrian route alternatives linking community destinations. Along with these considerations, the ASP Roads and Access Map has been used as a starting point to develop the proposed long-term transportation network map.

### 2.1.3 Urban Development Standards

The Urban Development Standards (UDS), approved in June 2002 and last amended in February 2017, were developed to ensure consistent development is maintained within the hamlets of Mackenzie County. Items in the standards relevant to the transportation system include:

## Roadway Spacing:

- $\quad$ Arterial roads to be placed a minimum of 800 m apart.
- $\quad$ Collector roads to be spaced 300-400 m apart.
- $\quad$ Arterials to be intersected every $300-400 \mathrm{~m}$ by collector roads.


## Intersections:

- Anticipated that traffic signals will be required where arterial roads intersect, and potentially where collector roads intersect with arterials.
- Roundabouts are encouraged at intersections that are anticipated to see high volumes but where signalization is not warranted.


## Pedestrian Accommodation:

- $\quad$ Sidewalks shall be located in all areas where even moderate levels of pedestrian traffic are anticipated.
- $\quad$ Sidewalks shall be located along both sides of arterial roads, both sides of collector roads where high traffic volumes are anticipated, and on one side along low volume collectors and local roads.
- Greenlink corridors shall have a sidewalk and an asphalt path, on opposite sides of the road. This same standard shall apply to arterial and high-volume collector roads.
- Where sidewalks are required along roads constructed to Rural Standard*, the sidewalk shall be either 1.5 m wide concrete or 2.4 m wide asphalt.
*The UDS defines Rural Standard as "built up asphalt surfaced roads with swales/ditches, power, and St lighting. Urban Standard is defined as "curb and gutter, sidewalk, underground power, metal light standards with underground servicing, asphalt surfacing and storm sewer".

The UDS contains the table shown in Figure 2-3 that identifies which standard applies depending on zoning and road classification.

| Road Classification | Zoning |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residential |  | Commercial |  | Industrial |  |
|  | HR, MHC, MHS | HCR | HCC1, HC2, TC1 | HC1, GC1 | HI1, LG1 | HI2 |
| Arterial Hamlet 40 m min ROW width | urban or rural standard* sidewalk u/g power | urban or rural standard* sidewalk u/g power | urban or rural standard* sidewalk u/g power | urban or rural standard* sidewalk u/g power | urban or rural standard* sidewalk u/g power | urban or rural standard* sidewalk u/g power |
| Collector Hamlet 26 m min ROW width | urban standard | rural standard sidewalk u/g power | urban standard | urban or rural standard* sidewalk u/g power | rural standard sidewalk o/h power | rural standard o/h power |
| Local Hamlet 20 m min ROW width | urban standard | rural standard u/g power | urban standard | urban or rural standard* sidewalk u/g power | rural standard o/h power | rural standard o/h power |
| Core Hamlet 22 m min ROW width | urban standard | N/A | urban standard | N/A | N/A | N/A |

[^0]Figure 2-3
Roadway Standards Based on Zoning

### 2.1.4 Sustainability Plan

The Mackenzie County Sustainability Plan was approved in January 2016. Its purpose is to project a picture of what a community expects to look like in the future and a plan on how to achieve that vision. According to the Sustainability Plan, the greatest challenges facing the County and its residents are the distance to market and deficient transportation infrastructure. Therefore, the Plan has identified two economic goals to address these hurdles:

- Economic Goal 1: The Region's transportation system reduces travel time and increases safe, comfortable and efficient travel between its communities and between the County and major destinations beyond its borders.
- Economic Goal 2: The Region's transportation system provides an economically efficient access to business and industrial markets outside of County boundaries.

A strategy to achieve these goals involves maintaining a strong and consistent approach with Provincial and Federal governments and other parties (i.e. NADC, NTAC) to request the completion and upgrade of northern transportation corridors. This will:

- Facilitate the safe and efficient movement of goods to, from and within the County
- Strengthen economically, socially and environmentally sustainable opportunities for the movement of people, as well as agricultural and resource sector goods.


### 2.1.5 Industrial Growth Strategy

An Industrial Growth Strategy is under development for La Crête and exists in draft form dated October 2020. It is a response to the economic growth pressure that the hamlet is facing and the associated servicing constraints. The Strategy provides a vision for future industrial development in the La Crête area for the next 20 years. There is a desire to minimize industrial traffic through the hamlet and to provide safer access to the community from Highway 697. Current policies enable this Strategy to promote a transition in downtown La Crête away from active industrial uses in the hamlet core. The MPD designates over 1,600 ha for existing and future industrial development. The Strategy's development suitability model shows the following three nodes of highest suitability for industrial development:

- The largest suitable area is in and around the existing La Crête Sawmills along Highway 697, south of La Crête. This area has been identified due to the existing highway infrastructure improvements, servicing infrastructure connectivity, and an ample supply of larger parcels for future development.
- The second-largest area of suitability is north of the hamlet, in the area previously identified by the industrial lands review as a priority area for future development (along 100 St ).
- The other area of highest development suitability is directly east of La Crête along Highway 697. This area benefits from direct highway access, servicing infrastructure, and an overall lack of limiting factors.

The Growth Strategy recommends developing two service roads running parallel to Highway 697 to accommodate additional development. The first service road is proposed one quarter section west of Highway 697 from Twp Rd 1060 to 109 Ave for 3.2 km and should be prioritized starting with the northern half. The second service road is proposed for 1.6 kilometres one quarter section east of Highway 697 from Twp Rd 1060 south to the existing truck turning improvements on Twp Rd 1055. Both service roads should be designed to accommodate transport trucks.

To accommodate the proposed industrial growth areas, the Strategy recommends improvement of 100 St north of 109 Ave to Twp Rd 1064, and Twp Rd 1064 east of 100 St to Highway 697. Similarly, the following intersections have
been identified for improvement over the life of the Strategy: the new intersection of Twp Rd 1064 with Highway 697, 109 Ave and Highway 697, 94 Ave and Highway 697, and 109 Ave and 100 St.

### 2.1.6 Transportation Master Plan

A draft version of the Transportation Master Plan for La Crête was completed in October 2014, and the final version was completed in July 2015. It is understood that the TMP has not been adopted by Council. However, AE has reviewed both the draft and final TMP in preparation of this study and has used it to gain an understanding of the transportation history and vision for the future. The four primary goals of the TMP are to:

1. Provide an effective transportation network to allow the efficient movement of people and goods between all residential, business and industrial sections of the community.
2. Provide residents, employees and customers a wide range of mobility choices such as driving, walking and cycling.
3. Place a high priority on the safety and security of people, equipment, goods and property in the design and operation of the transportation system.
4. Educate the public on healthy transportation choices and minimize the environmental impacts of the transportation system.

A hierarchy of road classifications was recommended to meet the transportation needs of the County, including arterials, commercial arterials, primary collectors, neighbourhood collectors, industrial streets, core area roads and local streets. The functions of each road type are summarized in Table 2-2 and are intended to align with Transportation Association of Canada (TAC) and City of Edmonton practices.

Table 2-2
Roadway Classification Function and Access

| Roadway Class | Function | Access |
| :--- | :--- | :--- |
| Arterials | Support larger volumes of traffic accessing or <br> egressing La Crête, providing a means for traffic <br> to flow from collector and local roads | Limited; concentrated on fixed <br> locations with accesses shared <br> between properties |
| Commercial <br> Arterials | Support larger volumes of traffic within the <br> commercial area (mainly 100 St) that are <br> generated within the area itself | Provide access for commercial vehicles |
| Primary Collectors | Carry moderate volumes between local road <br> and arterial road systems | Access to adjacent land use is <br> important |
| Neighbourhood | Carry low volumes between local roads and <br> arterial roads | Access to adjacent residential uses is <br> essential |
| Core Area Roads | Carry relatively high volume of traffic at low <br> speeds | Access to commercial and business <br> establishments in the core |
| Local Roads | Carry low volumes that originate in or are <br> destined to adjacent uses | Main intention is to provide access |
| Industrial Roads | Support a moderate volume of traffic consisting <br> of commercial vehicles and other business <br> traffic | Some restrictions may apply |

According to the TMP, the existing right-of-ways within the Hamlet of La Crête are 20 m wide, except for arterial roads which are 30 m wide. These widths conform to City of Edmonton standards for local roadways, which require a 16-17 m ROW for residential local roads and a 20 m ROW for industrial local roads. Some of the City of Edmonton minor collector cross-sections are 20 m or less, but other collector types and arterials require more width than 20 m . As previously mentioned, there are two recommended cross-sections for roads within the hamlet: Green Link and Town Centre Corridors.

It should be noted that some Green Link corridors as identified in the ASP are not wide enough to accommodate the recommended cross-section (100 Ave, $104 \mathrm{St}, 98 \mathrm{Ave}$ ). If those corridors are to be upgraded with the recommended cross-section, purchase of right-of-way will be required. Alternate routes may be pursued, however the existing road right-of ways (mainly 20 m wide) fall short of being able to accommodate the desired cross-section.

The TMP identifies the following noteworthy items specific to upgrading the La Crête road network:

- The County has identified 94 Ave, 99 Ave, and 105 St as priority areas requiring repair over the next 15 years.
- The County has identified an east-west collector road along the south boundary of the hamlet as a critical investment to divert through traffic around 94 Ave.
- 100 Ave and 108 St will play major roles in connecting future residential development to the hamlet's core.
- The County has identified plans to upgrade the existing rural roadways bordering La Crête to meet arterial standards, allowing improved access for industrial and heavy agricultural traffic through La Crête.
- 94 Ave between 100 St and 113 St is currently identified as a Hamlet Arterial Roadway. However, County staff have indicated that this road does not currently allow heavy vehicle traffic due to the presence of multiple schools. The TMP recommends to reclassify this portion of road to a Hamlet Collector Road, and that heavy truck and industrial traffic be rerouted north on 113 St to 109 Ave. Depending on future growth, this route may be eventually expanded into a full bypass.
- The TMP recommends that Warrant Studies for the intersections adjacent to schools on 94 Ave be conducted to determine if signalization is required to ensure the safety of pedestrians trying to cross 100 St .
- Mackenzie County standards indicate that an urban road with an 11.5 m top is sufficient for a $60 \mathrm{~km} / \mathrm{h}$ speed limit within a 30 m right-of-way. The TMP suggests a possibility of installing a 2 -lane arterial roadway to account for planned growth. It is noted that the standards do not include a detail for 2-lane arterial roads.
- Mackenzie County design standards indicate that roads with an AADT value of less than 200 should typically be designed to have a gravel surface finish.
- The TMP recommends that the hamlet's pedestrian network should provide an effective means for pedestrians to access the various parks planned to be developed in the future.


### 2.1.7 Summary of Reviewed Documents

The County has identified two typical cross-sections that are desired for roadways within La Crête, as well as design standards for different road types. The ASP and Industrial Growth Strategy identify areas where future development is anticipated. The TMP and Industrial Growth Strategy have identified areas of the road network which are recommended to be prioritized for upgrading. The ASP and TMP have proposed a long-term hierarchical road network that will be used as a starting point to develop the recommendations in this study. This study will mainly focus on creating a sustainable long-term network of arterial and collector roadways, as local roads may be highly influenced by development type. To support the goals identified in several of the documents, this study will provide a recommended
long-term transportation network that ensures safe and efficient travel within La Crête while providing the means to support traffic associated with future development and growth.

### 2.2 Population

Mackenzie County's Municipal Development Plan estimates three different scenarios for projecting population growth in La Crête: a conservative growth rate of 10.0\% / 5 years, the anticipated growth rate of 20.0\% / 5 years, and optimistic growth rate of $35.0 \% / 5$ years. Starting from the historically recorded population in 2006 by Statistics Canada, the MDP used a linear method to complete population forecasts. The MDP's projections for La Crête in 2026, 2031, and AE's subsequent projection for 2041 (20-year horizon) using the same method, are shown for each scenario in Table 2-3.

Table 2-3
Population Projections Based on MDP

| Year | Conservative Growth <br> $10 \% / 5$ years | Anticipated Growth <br> $20.0 \% / 5$ years | Optimistic Growth <br> $35.0 \% / 5$ years |
| :---: | :---: | :---: | :---: |
| 2006 | 2,166 | 2,166 | 2,166 |
| 2026 | 3,171 | 4,491 | 7,194 |
| 2031 | 3,488 | 5,390 | 9,712 |
| 2041 | 4,221 | 7,761 | 17,701 |

### 2.3 Traffic Volume Data

Alberta Transportation has available historical traffic volumes on Highway 697 along the intersections accessing La Crête. Recent counts along Highway 697 at Twp Rd 1062 (North Access) are showing a high growth in recent years, likely associated with the recent growth of La Crête, but are expected to stabilize over time and become more similar to the growth rates at Twp Rd 1060 (South Access). AE reviewed the available history going back to 2002 to determine a more accurate historical growth rate and determined that the high recent growth rate was indeed preceded by a period of low or non-existent growth. The historical growth rate was calculated using the data available from 2005-2019 with the method shown in Section A.4.3 of the Alberta Transportation Highway Geometric Design Guide. The volumes and growth rates are shown in Table 2-4 and Figure 2-4. The cells which do not contain a volume did not have data available for that year in that location. To determine the overall growth rate in the area, the average of all six locations was taken.

Turning movement counts for Average Annual Daily Traffic (AADT) and both peak hours were obtained from the Alberta Transportation Traffic Mapping website. Information was available at Twp Rd 1062 (North Access), Twp Rd 1060 (South Access), and Twp Rd 1055 (Sawmill Access). The 2019 data was used to perform the analyses of the Highway 697 intersections and is included in Appendix A.

Table 2-4
Historical Traffic Volumes on Highway 697 near La Crête

| Location on Hwy 697 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2005-2019 <br> Growth Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E of Twp Rd 1062 ( N Access) | - | - | - | 1760 | 1760 | 1760 | - | 1720 | 1740 | 1910 | 1910 | 1910 | 2060 | 2100 | 2400 | 2400 | 2400 | 2870 | 2.76\% |
| S of Twp Rd 1062 ( N Access) | - | - | - | 440 | 440 | 440 | - | 440 | 480 | 560 | 560 | 560 | 600 | 640 | 800 | 800 | 800 | 1050 | 4.15\% |
| N of Twp Rd 1060 (S Access) | 290 | 290 | - | 460 | 460 | 460 | 460 | 460 | 500 | 940 | 940 | 940 | 940 | 1000 | 1200 | 1200 | 1200 | 1240 | 4.49\% |
| S of Twp Rd 1060 (S Access) | 1250 | 1250 | - | 1360 | 1360 | 1360 | 1360 | 1360 | 1460 | 1520 | 1520 | 1520 | 1520 | 1700 | 1700 | 1700 | 1700 | 1740 | 1.56\% |
| N of Twp Rd 1055 (Sawmill Access) | 1250 | 1250 | 1390 | 1390 | 1390 | 1390 | 1390 | 1390 | 1490 | 1520 | 1520 | 1520 | 1520 | 1700 | 1700 | 1700 | 1700 | 1740 | 1.44\% |
| S of Twp Rd 1055 (Sawmill Access) | 1060 | 1060 | 1290 | 1290 | 1290 | 1290 | 1290 | 1290 | 1420 | 1440 | 1440 | 1440 | 1440 | 1600 | 1600 | 1600 | 1600 | 1640 | 1.52\% |
| Average Growth Rate of Highway 697 near La Crête: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2.65\% |



Figure 2-4
Historical Traffic Volumes on Highway 697 near La Crête

There were no turning movements available for the intersections within La Crête, however the County provided information on traffic volumes counted at selective road links in 2013 on a weekday. To apply growth factors, AE used the population forecasts as detailed in the MDP and calculated in Table 2-3. The growth factors were applied to the 2013 counts and projected to the 2021 and 2041 horizons, as shown in Figure 2-5 and Figure 2-6.


Figure 2-5
2013 Daily Traffic Counts Projected to 2021 for Three Growth Scenarios


Figure 2-6
2013 Daily Traffic Counts Projected to 2041 for Three Growth Scenarios

### 2.4 Collision Data

The latest provincial collision data from Alberta Transportation's Collision Information Application is from 2012-2016. La Crête is accessed via Highway 697, control section 4, identified as 697:04 by AT. The collision rates for provincial highways similar in nature to Highway 697:04 were averaged and compared to the collision rates for Highway 697:04. The comparison is shown in Table 2-5. Rates are shown per 100 million vehicle kilometres (100 MVKM).

Table 2-5
Collision Rates for Hwy 697:04 versus Provincial Total from 2012-2016

| Location | AADT in <br> 2012-2016 | Animal Collision <br> Rate / 100 MVKM | Non-Animal Collision <br> Rate / 100 MVKM | Total Collision Rate <br> / 100 MVKM |
| :--- | :---: | :---: | :---: | :---: |
| Hwy 697:04 | $1170-1370$ | 52.57 | 46.84 | 99.41 |
| All Three Digit Highways | $700-2000$ | 71.53 | 42.78 | 114.3 |
| All Undivided Highways <br> with AADT closest to Hwy <br> 697:04 | $1100-1400$ | 73.64 | 38.80 | 112.4 |
| All Provincial Undivided <br> Highways | $700-2000$ | 69.96 | 38.42 | 108.4 |

This indicates that historically Highway 697:04 has not seen a total collision rate higher than the provincial average for all undivided highways with AADT between 700-2000. Its total collision rate is also lower than the total rates of highways with traffic volumes most similar to Highway 697:04 and all three-digit highways with AADT between 700 2000. However, the non-animal collision rates for Highway 697:04 have been higher than the provincial average and other highways similar in nature.

Detailed collision data on Highway 697 along the La Crête accesses was also reviewed to understand the type of collisions that have occurred along that stretch of highway, and to discern any patterns. The latest data available from Alberta Transportation was from the years 2008-2017. The results are summarized below:

At the Twp Rd 1062 (North Access) intersection:

- 6 collisions occurred, 4 of which were after sunset
- Most occurred around the PM peak hour, between 4:45 and 6:30 PM
- $4 / 6$ collisions resulted in property damage only, and 2 resulted in minor injuries
- $3 / 6$ collisions resulted in a vehicle going into the right ditch, 1 was due to a vehicle going into the left ditch, 1 was a head on collision and 1 was a right-angle collision


## Between the Twp Rd 1062 (North Access) and Twp Rd 1061 (94 Ave) intersections:

- 16 collisions occurred, 10 of which were after sunset or before sunrise
- 14/16 collisions resulted in property damage only, 1 resulted in minor injuries and 1 resulted in major injuries
- 11/16 collisions occurred due to a vehicle striking an animal
- $2 / 16$ collisions resulted in a vehicle going into the right ditch, 1 was due to a vehicle crossing the centre line, 1 was due to striking a non-fixed object on the roadway, and 1 was due to passing a left-turning vehicle


## At the Twp Rd 1061 (94 Ave) intersection:

- 2 collisions occurred, both of which were after sunset
- 1 collision resulted in property damage only and the other resulted in major injuries
- 1 collision occurred when a vehicle hit a fixed object in the right ditch, and the other was a right-angle collision


## Between the Twp Rd 1061 (94 Ave) and Twp Rd 1061 (Airport Access) intersections:

- 4 collisions occurred, 2 of which were before sunrise
- All the collisions resulted in property damage only
- 3 collisions occurred when a vehicle struck an animal, and 1 collision occurred when a vehicle struck an object in the right ditch

At the Twp Rd 1061 (Airport Access) intersection:

- 2 collisions occurred, 1 of which was after sunset
- Both collisions resulted in minor injuries
- 1 collision resulted when a vehicle turned left across the path of an oncoming vehicle, and the other was a rear end collision


## At the Twp Rd 1060 (South Access) intersection:

- No collisions recorded

Between the Twp Rd 1060 (South Access) and Twp Rd 1055 (Sawmill Access) intersections:

- 7 collisions occurred, all of which were after sunset or before sunrise
- 6/7 collisions resulted in property damage only, while 1 resulted in major injuries
- 6/7 collisions occurred due to a vehicle striking an animal, and 1 occurred when a vehicle overturned in the left ditch


## At the Twp Rd 1055 / Sawmill Access intersection:

- 3 collisions occurred, all of which were after sunset or before sunrise
- $2 / 3$ collisions resulted in minor injuries, and 1 resulted in property damage only
- 1 collision occurred due to a vehicle striking an animal, 1 occurred when a vehicle ran off the road to the left, and the other occurred when a vehicle sideswiped a parked vehicle

Collision data described above is presented in detail in Appendix B. From reviewing the data, the highway along La Crête does not present a major concern in terms of collision patterns. Upgrades to the intersection configurations are likely to alleviate some concerns, as would the installation of lights. As many of the collisions occurred during the dark, completing illumination warrants at the intersections would indicate whether there is a need for lighting.

### 2.5 Site Visit

Based on discussions with the County and Alberta Transportation, six intersections were examined in detail during the site visit; four on Highway 697 and two within the hamlet. The findings are described below. Site photos are included in Appendix C.

### 2.5.1 Highway 697 and Twp Rd 1062 (North Access)

This intersection is referred to as the north access into La Crête. Highway 697 forms the east and south legs, whereas Twp Rd 1062 forms the west leg. The north leg is a gravel road, Rge Rd 151, that serves a residential subdivision and then terminates. There are residential farming properties in the northeast and southeast quadrants, and a farm field in the southwest corner. The northwest corner is primarily forested. The intersection is not illuminated. The intersection configuration as seen during the site visit is described in Table 2-6. All measurements shown are approximate and rounded to the nearest multiple of five.

Table 2-6
Configuration of Highway 697 and Twp Rd 1062 Intersection

| Leg | Road Name | Control Type | Lane Configuration | Other Items |
| :---: | :---: | :---: | :---: | :---: |
| North | Rge Rd 151 | Stopcontrolled | - Single lane in each direction. <br> - No tapers. | - Posted speed is $60 \mathrm{~km} / \mathrm{h}$. <br> - "No Exit" sign is present. |
| East | Hwy 697 | Free-flow | - Shared through/left turn lane. <br> - 3.5 m right turn deceleration lane with 75 m parallel lane and 200 m taper. <br> - Eastbound acceleration lane with 90 m taper. | - Posted speed is $100 \mathrm{~km} / \mathrm{h}$. <br> - There is an advance warning sign about logging trucks. |

- There appears to be a southbound acceleration lane, but the paint lines are mostly gone except a few faded dashed lines at the end of the 100 m taper.
- The pavement is wider for approximately 115 m south of the intersection as though to accommodate a right turn lane, but the markings were not visible.
- Shared 3.7 m through/left lane.
- Right turn deceleration lane with a 75 m parallel lane, 90 m taper, 3 m wide lane, and 0.7 m shoulder.
- Westbound acceleration lane with 50 m parallel lane and 180 m taper.
- Posted speed is $100 \mathrm{~km} / \mathrm{h}$.
- The "STOP" pavement marking is faded.
- Overhead power lines parallel Highway 697 along the east side.
- Rumble strips are present in advance of the stop condition.
- Posted speed is $100 \mathrm{~km} / \mathrm{h}$.
- A quad trail is present on the north side of Highway 697.
- Overhead power lines parallel Highway 697 on its north side.

Based on the configuration and approximate measurements, this intersection appears to have been constructed as a Type IIIc intersection.

Prior to the site visit, AE was made aware that the highway has very narrow shoulders and is planned for a gradewidening east of Twp Rd 1062. Therefore, AE took some approximate measurements to confirm. East of the intersection, the westbound through lane was 3.9 m , the eastbound through lane was 3.7 m , and the shoulders were 0.5 m on either side, for a total width of 8.6 m . South of the intersection past the tapers, the highway cross section was measured to have a 1 m shoulder on the west side, a 3.6 m southbound lane, a 3.8 m northbound lane, and a 0.7 $m$ shoulder on the east side, for a total width of 9.1 m. The 2019 AADT on Highway 697 was 2870. According to the Alberta Transportation Functional Classification Map, Highway 697 is classified as Rural Arterial Undivided (RAU). Figure G-1.1 in the AT Highway Geometric Design Guide shows that a RAU with an AADT of 2870 should be 10 m wide, meaning that the existing highway does not meet these standards.

It was also noted during the site visit that water was ponding in the northwest corner, and cattails and ponding water were observed around the culvert at the southeast corner. Sideslope measurements were taken in the intersection corners and found to be:

- Northeast corner ranged from 15-35\%, and there is also a steep drop-off on the edge of pavement.
- $\quad$ Southeast corner ranged from 19-28\%.
- $\quad$ Southwest corner ranged from 17-30\%.
- Northwest corner ranged from 28-36\%.

Some of these sideslopes are steeper than minimum requirements. Section G.6.3 of the Highway Geometric Design Guide states that on any roadway where the 85 th percentile running speed exceeds $100 \mathrm{~km} / \mathrm{h}$, any existing sideslopes of 3:1 or steeper should be identified as candidate locations for improvement. If improvements are being made to this intersection and the 85th percentile running speed exceeds $100 \mathrm{~km} / \mathrm{h}$, it is recommended that any sideslopes $3: 1$ or steeper should be improved as recommended in Table G.6.3a. This table shows that for an AADT range between 1500 and 4000 , sideslopes should be improved to $5: 1$ if possible, and at a minimum to $4: 1$.

### 2.5.2 Highway 697 and Twp Rd 1061 (94 Ave)

Twp Rd 1061 (94 Ave) provides access into La Crête from Highway 697 halfway between the north and south accesses. The intersection of Highway 697 and Twp Rd 1061 (94 Ave) is a three-legged intersection, with agricultural use surrounding it. There are residences in the northeast and southwest quadrants. There were no turning arrows visible during the site visit. The intersection is not illuminated. The intersection configuration as seen during the site visit is described in Table 2-7. All measurements shown are approximate and rounded to the nearest multiple of five.

Table 2-7
Configuration of Highway 697 and Twp Rd 1061 Intersection

| Leg | Road Name | Control Type | Lane Configuration | Other Items |
| :---: | :---: | :---: | :---: | :---: |
| North | Hwy 697 | Free-flow | - 3.7 m through lane <br> - 3.7 m right turn deceleration lane with a 90 m taper and 1.0 m shoulder. | - Posted speed is $100 \mathrm{~km} / \mathrm{h}$. <br> - There is a field access by the end of the northbound bypass taper. <br> - Overhead power lines parallel the highway on the east side. |
| South | Hwy 697 | Free-flow | - 3.7 m shared through/left-turn lane. <br> - 3.5 m northbound bypass lane with 70 m north taper, 50 m of full lane, 80 m south taper, and 1.0 m shoulder. <br> - Southbound acceleration lane consisting of 85 m taper. | - Posted speed is $100 \mathrm{~km} / \mathrm{h}$. <br> - Overhead power lines parallel the highway on the east side. |
| West | Twp Rd 1061 | Stopcontrolled | - Shared left/right turn lane. <br> - No tapers. | - Posted speed is $80 \mathrm{~km} / \mathrm{h}$. <br> - Advance "Stop Ahead" sign. <br> - No rumble strips to indicate of an upcoming stop condition; may be due to proximity of residences. <br> - A $20 \mathrm{~km} / \mathrm{h}$ quad trail sign is present in the northwest corner. |

Based on the configuration and approximate measurements, it is determined that this intersection was constructed with an Alberta Transportation Type Ila configuration.

Delineators are present around the intersection. Drainage appears to be functioning moderately well, with a potential low spot on the southeast corner at the culvert where cattails were observed. Sideslope measurements were taken at random intervals in the intersection corners and found to be:

- East side ranged from 23-24\%.
- Southwest corner ranged from $29 \%-35 \%$, with the high end of the range around the stop sign.
- Northwest corner ranged from 17\%-23\%.

The sideslopes on the east side and in the northwest corner are shallower than 4:1. However there is a steep area in the southwest corner. If improvements are being made to this intersection and the 85th percentile running speed exceeds $100 \mathrm{~km} / \mathrm{h}$, it is recommended that any sideslopes 3:1 or steeper should be improved as recommended in Table G.6.3a of the Highway Geometric Design Guide.

### 2.5.3 Highway 697 and Twp Rd 1060 (South Access)

Twp Rd 1060 is commonly referred to as the South Access into La Crête from Highway 697. The intersection of Highway 697 and Twp Rd 1060 (South Access) is a four-legged intersection. Surrounding land uses include a combination of industrial and agricultural on the northwest quadrant, residential in the northeast quadrant, and agricultural use in the southeast and southwest quadrants. Pavement markings / arrows were visible during the site visit. The intersection is not illuminated. The intersection configuration as seen during the site visit is described in Table 2-8. All measurements shown are approximate and rounded to the nearest multiple of five.

Table 2-8
Configuration of Highway 697 and Twp Rd 1060 Intersection

| Leg | Road <br> Name | Control Type | Lane Configuration | Other Items |
| :---: | :---: | :---: | :---: | :---: |
| North | Hwy $697$ | Free-flow | - 3.7 m shared through/left lane. <br> - Right turn deceleration lane with 100 m taper, 85 m parallel lane, and 1.0 m shoulder. <br> - 3.3 m northbound acceleration lane with 60 m parallel lane, 120 m taper, and 0.9 m shoulder. | - Posted speed is $100 \mathrm{~km} / \mathrm{h}$. <br> - A field access is located within the northbound acceleration lane, approximately 55 m north of the intersection. <br> - Overhead powerlines parallel highway along the east side. |
| East | Twp Rd 1060 | Stopcontrolled | - Shared through/left/right turn lane. | - Twp Rd 1060 is gravel going east. |
| South | Hwy <br> 697 | Free-flow | - 3.8 m shared through/left lane. <br> - 2.9 m right turn deceleration lane with 32 m parallel lane, 215 m taper, and 0.9 m shoulder <br> - Southbound acceleration lane with 80 m taper. | - Posted speed is $100 \mathrm{~km} / \mathrm{h}$. <br> - Overhead powerlines parallel the highway along the east side. |
| West | $\begin{aligned} & \text { Twp } \\ & \text { Rd } \\ & 1060 \end{aligned}$ | Stopcontrolled | - Shared through/left lane. <br> - Channelized eastbound to southbound right turn, yieldcontrolled and separated by a large depressed grassed island. | - Twp Rd 1060 is paved. <br> - No rumble strips to indicate of an upcoming stop condition; may be due to proximity of residences. |

Based on the above rough measurements, it is determined that this intersection mostly closely resembles an Alberta Transportation Type IVb configuration, modified to include a channelized right turn.

An anecdotal observation made during the site visit was that many more northbound cars appeared to be turning left rather than right, yet there is a dedicated right turn lane and a shared through/left. Looking at the 2019 AADT turning movement counts, 330 vehicles turned left, 490 vehicles went straight, and 60 turned right at this intersection. This intersection configuration was re-examined during this analysis to determine suitability of lane assignments.

Some water was noticed to be pooling in the depressed pork chop island. Sideslope measurements were taken at random intervals in the intersection corners and found to be:

- Northeast corner ranged from $23-45 \%$, with the steepest part at the turning radius.
- Southeast corner ranged from 26\%-36\%
- $\quad$ Southwest corner ranged from $24-32 \%$
- The steeper sideslopes on the southwest side of the southbound right turn lane averaged from 37-43\%, and from $39-40 \%$ on the north side. The pavement sideslope of the southbound right turn lane was observed to be steep and the pavement was cracking off in the shoulder.
- $\quad$ Sideslopes in northwest corner averaged at 27-30\%.

Some of these sideslopes are steeper than minimum requirements. If improvements are being made to this intersection and the 85th percentile running speed exceeds $100 \mathrm{~km} / \mathrm{h}$, it is recommended that any sideslopes $3: 1$ or steeper should be improved as recommended in Table G.6.3a of the Highway Geometric Design Guide.

### 2.5.4 Highway 697 and Twp Rd 1055 (Sawmill Access)

Twp Rd 1055 provides the main access to the La Crête Sawmill, which is located just west of Highway 697 and south of Twp Rd 1055. The east leg does not provide through traffic, ending at a residential property about 250 m from the highway. There is an agricultural field in the intersection's northwest quadrant, residential use in the northeast, and a combination of residential/agricultural uses in the southeast corner. The intersection is a unique design because it has a channelized northbound turn ramp which is on the east side of the highway. It was constructed to replace a standard northbound left turn for the long logging trucks; instead, they take the exit to the right to Twp Rd 1055, where they turn left (after stopping) and go straight west through the intersection (after stopping) to reach the Sawmill. The intersection configuration as seen during the site visit is described in Table 2-9. All measurements shown are approximate and rounded to the nearest multiple of five.

Table 2-9
Configuration of Highway 697 and Twp Rd 1055 Intersection

| Leg | Road Name | Control Type | Lane Configuration | Other Items |
| :---: | :---: | :---: | :---: | :---: |
| North | Hwy 697 | Free-flow | - Shared left/through lane. <br> - 200 m channelized right turn lane with yield control. <br> - Northbound acceleration lane with 100 m taper. | - Posted speed is $100 \mathrm{~km} / \mathrm{h}$. <br> - Residential access just north of the taper. <br> - Overhead powerlines parallel the highway along the east side. <br> - There is a section of graveled road along the radius of the right turn, followed by asphalt. |
| East | Twp Rd 1055 | Stopcontrolled | - Shared left/through/right lane. | - East leg is gravel-surfaced. |
| South | Hwy 697 | Free-flow | - Shared left/through lane. | - Posted speed is $100 \mathrm{~km} / \mathrm{h}$. <br> - Overhead powerlines parallel the highway along the east side. |


| Leg | Road Name | Control Type | Lane Configuration | Other Items |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | - Channelized turn lane that allows logging trucks to complete left turn. <br> - Southbound acceleration lane with a 90 m taper. |  |
| West | Twp Rd 1055 | Stopcontrolled | - Shared left/through/right lane. | - Overhead powerlines parallel Twp Rd 1055 on its south side. |

Based on the above rough measurements, it is determined that this intersection mostly closely resembles an Alberta Transportation Type llb intersection, modified to include the separated northbound left turn and southbound right turn for logging trucks.

AE also measured the highway south of the intersection to identify whether the narrow shoulders are also a concern in this area. The cross-section was found to be: 1.0 m west shoulder, 3.9 m southbound lane, 3.5 m northbound lane, and 1.2 m east shoulder. As previously mentioned, the recommended width for this highway classification in Chapter G of the Highway Geometric Design Guide is 10 m . This section of highway is slightly short of this but is wider than the section of Highway 697 east of Twp Rd 1062 (North Access).

In the northeast corner of the intersection, some water was ponding during the site visit, and the culvert end was noticed to be smashed. Cattails and reeds were observed in the ditch south of the channelized northbound right turn ramp, meaning drainage could be an issue. Sideslope measurements were taken at random intervals in the intersection corners and found to be:

- Northeast corner ranged from 23-26\%.
- Southeast corner averaged around $23 \%$.
- $\quad$ Southwest corner ranged from 29-30\%.
- Northwest corner averaged around $22 \%$ near the yield sign within the island. On the outside of the turning lane, the slope is very flat which could lead to ponding in the spring.

The sideslopes at this intersection are all shallower than $3: 1$, which is the minimum requirement on highways where the 85 th percentile running speed exceeds $100 \mathrm{~km} / \mathrm{h}$.

### 2.5.5 100 St and 101 Ave

The intersection of 100 St and 101 Ave provides the main access from the north into La Crête. The northeast corner is primarily agricultural use, and the northwest and southeast quadrants are commercial/industrial use. The southwest corner contains an empty field. All four legs of the intersection are paved, though during the inspection the painted lines appeared faded. Illumination is provided along the south side of the east leg and along the west side of the south leg. The intersection configuration as seen during the site visit is described in Table 2-10.

Table 2-10
Configuration of 100 St and 101 Ave Intersection

| Leg | Road <br> Name | Control Type | Lane Configuration | Other Items |
| :---: | :---: | :---: | :---: | :---: |
| North | $\begin{aligned} & 100 \\ & \text { Street } \end{aligned}$ | Free-flow | - Shared left/through/right lane. | - Posted speed $50 \mathrm{~km} / \mathrm{h}$. <br> - No curb and gutter. <br> - Crosswalk across north leg. <br> - Overhead powerlines on east side. <br> - Truck ban sign for northbound traffic. |
| East | 101 <br> Avenue | Stopcontrolled | - Shared left/through/right lane. | - Posted speed 70 km/h. <br> - Flashing lights at stop control. <br> - No curb and gutter. <br> - Separated paved trail along north side. <br> - Overhead powerlines on north side. <br> - No rumble strips in advance of stop, which could be a safety concern. |
| South | $\begin{aligned} & 100 \\ & \text { Street } \end{aligned}$ | Free-flow | - Shared left/through lane. <br> - Unmarked right turn lane. | - Posted speed $50 \mathrm{~km} / \mathrm{h}$. <br> - Curb and gutter starts approximately 50 metres south of the intersection. <br> - $20 \mathrm{~km} / \mathrm{h}$ quad trail sign in southeast corner. |
| West | 101 <br> Avenue | Stopcontrolled | - Shared left/through/right lane. | - Posted speed $70 \mathrm{~km} / \mathrm{h}$. <br> - Flashing lights at stop control. <br> - No curb and gutter. <br> - Crosswalk across the west leg. <br> - Overhead power lines on north side. |

The ditch drainage appears to be working properly. A catchbasin manhole is present in the southeast corner. There are culverts under 100 St on the north approach, and a culvert under the asphalt trail in the northeast corner. Sideslope measurements were taken in the intersection corners and found to be:

- Northeast corner ranged from 29-30\%.
- Southeast corner averaged around 9\%.
- Southwest corner has no sideslope as the sidewalk is raised above the road.
- Northwest corner has steep sideslopes, ranging from 30-38\% at their steepest.

Since the westbound traffic is travelling at highway speed and is required to come to a complete stop at this intersection, the County may wish to consider installing advance rumble strips to provide warning to motorists. Another recommendation to improve safety at this location is to complete an updated turning movement count and complete a signal warrant analysis to identify when signals would be required at this intersection.

### 2.5.6 100 St and 94 Ave

As Twp Rd 1061 (94 Ave) provides access into La Crête from Highway 697, it intersects with 100 St, the main northsouth arterial through the hamlet. At this intersection, there are commercial properties in all quadrants, except for the southeast quadrant which contains an empty field. The posted speed is $50 \mathrm{~km} / \mathrm{h}$ at all legs. During the inspection it was noted that there are no turn arrows to indicate intended lane movements, and the lane lines are faded. Illumination is present along the west side of 100 St. The intersection configuration as seen during the site visit is described in Table 2-11.

Table 2-11
Configuration of 100 St and 94 Avenue Intersection

| Leg | Road Name | Control Type | Lane Configuration | Other Items |
| :---: | :---: | :---: | :---: | :---: |
| North | $100$ <br> Street | Free-flow | - Shared through/left lane. <br> - Shared through/right lane. <br> - 4-lane urban cross-section with curb and gutter. | - Separated sidewalk along west side. <br> - Crosswalk across the approach with button-activated lights on both sides but no signage. <br> - Overhead powerlines along east side. |
| East | 94 <br> Avenue | Stopcontrolled | - Shared through/left lane. <br> - Right turn lane. | - No curb ramp or sidewalk to receive pedestrians from west. <br> - Overhead powerlines along north side. |
| South | $100$ <br> Street | Free-flow | - Shared through/left lane. <br> - Shared through/right lane. <br> - 4-lane urban cross-section with curb and gutter. | - Separated sidewalk along west side. <br> - Overhead powerlines along east side. |
| West | 94 <br> Avenue | Stopcontrolled | - Shared left/through lane that widens to include a short right-turn lane. <br> - Rural cross-section with no shoulder and no curb and gutter. | - Right turn lane is missing a turn arrow. <br> - Crosswalk across the west leg with 2 painted lines to delineate the width. <br> - Sidewalk along north side, separated by a ditch. <br> - Manhole in northwest ditch. <br> - Overhead powerlines along north side. |

As this is a main entrance into La Crête, the County may wish to review the collision history at this intersection and perform a signalization warrant analysis with updated turning movement counts. It is also recommended to install new pavement markings to indicate lane assignments.

## 3 DEVELOPMENT

The residential population resides generally on the west side of La Crête, while the town centre and industrial areas are generally situated within the middle and east side. It is anticipated that La Crête will continue to grow for many years, and there are several areas within the hamlet suitable for future development. Mackenzie County has provided information on two currently proposed subdivision applications within/near La Crête; the John Driedger Subdivision and the John Buller Subdivision, both of which are described in the subsequent sections. The ASP and Industrial Growth Strategy also provide information on where the future development is anticipated in and around La Crête.

### 3.1 Jon Driedger Subdivision

The Jon Driedger Subdivision is proposed within NE-11-106-15-W5M, on land that is currently being used for agricultural purposes. It is located immediately southwest of the intersection of Highway 697 and Twp Rd 1062 (North Access). It is planned to be completed in four phases, with the last phase anticipated to begin construction in 2030. This means that within the 20 -year horizon, the entire subdivision would be completed. Three of the four phases are planned as rural (industrial) uses, while one phase is planned as highway commercial. Alberta Transportation has indicated they would not permit a new access to be constructed into the subdivision from Highway 697. Therefore, all the development traffic would be accessing the development off Twp Rd 1062 (North Access), or by a future east-west road in the south half of the development. The layout of the proposed subdivision is included in Appendix D.

### 3.2 John Buller Subdivision

The John Buller Subdivision is proposed to be in NW-10-106-15-W5M, south of Twp Rd 1062 (North Access) and east of 99 St . The land is currently being used as a hayfield and is proposed to be subdivided into 16 residential lots with a north-south road on the east side. One of the accesses would be via 99 St and 105 Ave, where 105 Ave would be connected to the new road. The new road would also be connected to 101 Ave at the south end of the subdivision. The total area of this proposed development is 16.81 acres. This development does not directly affect the geometric assessments of the highway intersections in this study but has been taken into consideration in the development of the overall transportation network. The layout of the proposed subdivision is included in Appendix D.

### 3.3 Future Development Based on County Documents

To gain an idea of the County's future development plans for La Crête, the ASP and the Industrial Growth Strategy show a good picture of where the anticipated residential, commercial, and industrial growth will occur. Though a Traffic Impact Assessment (TIA) will be required for each development that goes in, knowing about these nodes of future development assists with determining whether the road classification on the adjacent road network will continue to be suitable as development progresses.

### 3.3.1 Area Structure Plan

The Area Structure Plan shows a development staging plan for residential and commercial land uses within La Crête. This plan is shown in Figure 3-1.


Figure 3-1
Development Staging Map of La Crete

This plan indicates that residential development will continue to spread alongside existing residential development, mainly within the west and south sides of the hamlet with some to the east as well. Commercial development will be focussed around Twp Rd 1062 (North Access) and 100 St, as well as pockets alongside existing commercial uses throughout the hamlet.

### 3.3.2 Industrial Growth Strategy

The Industrial Growth Strategy used a development suitability model to show areas with the highest suitability for industrial development, as shown in Figure 3-2.


Figure 3-2
Suitable Areas for Industrial Growth

The Strategy specifically identified the three most suitable areas for industrial growth as:

1. Within and around the existing La Crête Sawmills along Highway 697
2. North of the hamlet along 100 Street
3. Directly east of La Crête along Highway 697

As desired in County documents, this supports a shift away from industrial uses within the hamlet's core. These areas should be serviced by roads that are able to handle heavy truck traffic. The development of the proposed transportation network allows for this.

## 4 PROPOSED TRANSPORTATION NETWORK

### 4.1 Road Classifications

La Crête's Transportation Master Plan describes the desire to have a road hierarchy and identifies the function of each road classification. The Transportation Association of Canada recommendations for traffic volumes on various road types from the Guidelines for Canadian Roads is shown in Table 4-1. The recommended volumes are compared to the estimated traffic volumes that were projected from available 2013 counts on selected roads in La Crête, using the anticipated growth rate of $20 \%$ every five years.

Table 4-1
Traffic Volumes Based on Road Classification

| Road Classification | TAC Guidelines for Recommended Volumes | Example Road in La Crête | Volume of Road in 2021 (Anticipated Growth Rate) | Volume of Road in 2041 (Anticipated Growth Rate) |
| :---: | :---: | :---: | :---: | :---: |
| Major Arterial | 10,000-30,000 | 100 St between <br> Twp Rd 1062 \& Twp Rd 1061 | 9,625 | 19,960 |
| Minor Arterial | 5,000-20,000 | Twp Rd 1062 | 4,365 | 9,045 |
| Residential Collector | <8,000 | 109 St | 2,120 | 4,400 |
|  |  | Twp Rd 1061 | 1,480-1,880 | 3,070-3,895 |
| Industrial/Commercial Collector | 1,000-12,000 | 100 St north of Twp Rd 1062 | 2,395 | 4,965 |
|  |  | 100 St south of Twp Rd 1061 | 2,395 | 4,965 |

The road classifications proposed for the long-term transportation network and shown on Figure 4-1 include:

- Major arterial (based on Town Centre cross-section)
- Minor Arterial (based on Green Link cross-section)
- Collector (based on modified version of Green Link cross-section depending on County budget and priorities)

During future development, allowance should be made to accommodate the width of the desired road cross-sections, regardless of when the road will actually be constructed.

### 4.2 Proposed Maps

AE used a combination of the development staging map and the roads and access map in the ASP, the road classification map from the TMP, the map from the Industrial Growth Strategy, and information on future development to develop a proposed long-term transportation network for La Crête. The proposed road network is shown in Figure 4-1. Once a draft of the road network was developed, the roads and access map was also used to inform the creation of a proposed trails network for La Crête, which is shown in Figure 4-2. Green Link corridors, existing trails, and future land use were all considered. A truck route map was also developed to show where roads should be constructed to allow for truck traffic and is shown in Figure 4-3.



AF
FIGURE 4-2
Proposed Trails Network
for La Crête
Backeround imge adapoted tron
Lacrete Ace sturuture Plan
${ }_{2013}{ }^{2013}$


## 5 TRAFFIC IMPACT ASSESSMENT - JON DRIEDGER SUBDIVISION

The Jon Driedger Subdivision is a proposed development in the southwest quadrant of the intersection of Highway 697 and Twp Rd 1062 (North Access). This subdivision would have a significant impact on volumes at that intersection. Therefore, as confirmed with Alberta Transportation, the analysis for this intersection included a review of the intersection configuration with the anticipated development traffic to fulfill the requirements of a Traffic Impact Assessment (TIA).

The County also shared a TIA that was completed in January 2006 for the development in SW 13-106-15-W5M (the northeast quadrant of the intersection), which determined that the intersection of Highway 697 and Twp Rd 1062 (North Access) would require upgrading to a Type Illd intersection following full size development (using a design horizon of 2025). This development has now been constructed but the intersection has not been upgraded. As determined during the site visit, this intersection's current configuration is a modified Type IIIc treatment.

### 5.1 Traffic Volumes

The Jon Driedger subdivision is proposed to be constructed in four phases, with construction of the last phase beginning in 2030. Therefore, background traffic volumes were projected to 2021 (assumed to be opening day of Phase 1), 2025 (Phases 1 and 2 completed), 2026 (Phases 1-3 completed), 2031 (assumed to be opening day of Phase 4 with all other phases completed), and 2051 (20-year horizon from opening day of the last phase).

### 5.1.1 Background Traffic Volumes

The highway traffic volumes at this intersection have been increasing over the last few years, but prior to that, the volumes were stable. As recommended by Alberta Transportation, the high growth rate recently seen at this intersection is expected to stabilize in the long term. Therefore, the average historical growth rate of $2.76 \%$ was applied to the background highway traffic and grown out to each design horizon. A $1 \%$ growth rate was applied to the traffic movements on the minor roads (Twp Rd 1062 and Rge Rd 151). The 20-year horizon from full build out is considered to be 2051, so background traffic was grown until then. Background traffic volumes for existing day (2019), opening day of Phase 1 (2021), opening day of full build out (2031), and the 20 -year design horizon (2051) are shown in Figure 5-1 to Figure 5-6 for AADT and both peak hours.


Figure 5-1
2019 Turning Movement Count for Hwy 697 and Twp Rd 1062 (North Access)


Figure 5-2
2021 Background Traffic Estimates for Hwy 697 and Twp Rd 1062 (North Access)


Figure 5-3
2025 Background Traffic Estimates for Hwy 697 and Twp Rd 1062 (North Access)


Figure 5-4
2026 Background Traffic Estimates for Hwy 697 and Twp Rd 1062 (North Access)


Figure 5-5
2031 Background Traffic Estimates for Hwy 697 and Twp Rd 1062 (North Access)


Figure 5-6
2051 Background Traffic Estimates for Hwy 697 and Twp Rd 1062 (North Access)

### 5.1.2 Development Traffic Volumes

The Jon Driedger subdivision consists of four phases, three of which are proposed to be classified as "rural industrial" while one phase is proposed to be "highway commercial". In the 2021 design horizon, only Phase 1 was assumed to be completed. By 2031, all four phases were assumed to be completed.

The total area of the development by phase is indicated below:

- Phase 1 (Rural Industrial, 2021): 8.015 ha, with 3.67 ha for new roadway and 0.386 ha for MUL (assumed to be municipal/public utility lot)
- $\quad$ Phase 2 (Rural Industrial, 2025): 14.827 ha, with 1.93 ha for new roadway and 0.323 ha for MUL
- Phase 3 (Highway Commercial, 2026): 8.254 ha, with 0.355 ha for MUL and main access by road already constructed as part of Phase 1
- $\quad$ Phase 4 (Rural Industrial, 2031): 12.196 ha, with 3.37 ha for new roadway and 0.323 ha for MUL

Development traffic volumes were estimated using information available from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10 ${ }^{\text {th }}$ Edition). The areas provided in the site plan are for the total land parcels used rather than the building floor area of the development, which is what the ITE Trip Generation Numbers are based on. At this time, the County does not know the exact land uses proposed for each parcel within the subdivision, and the total floor areas of the development are unknown. It should be noted that without knowing the exact land uses and areas, this analysis faces a higher degree of uncertainty than a typical TIA. However, it is understood that the County would like to proceed with intersection improvements in conjunction with Alberta Transportation's Highway 697 grade-widening project next summer and would like to apply for funding immediately to qualify for a government subsidy for work next year (summer 2021). Therefore, AE used their best judgement to estimate the most applicable land use as defined in the Trip Generation Manual to determine appropriate trip generation rates. AE recommends that a TIA supplement be completed once the land uses are identified, in advance of the intersection work if possible, to confirm that the estimates and assumptions made in this report are appropriate.

The definition of potential applicable land use codes and the selected land use are shown in Table 5-1.
Table 5-1
Potential Land Use Codes

## ITE Land Use

Code and Label

## Definition

## Selection

## For the Rural Industrial Phases:

110: General Light Industrial

130: Industrial Park

A light industrial facility is a free-standing facility devoted to a single use. The facility has an emphasis on activities other than manufacturing and typically has minimal office space. Typical light industrial activities include printing, material testing, and assembly of data processing equipment.

An industrial park contains a number of industrial or related facilities. It is characterized by a mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. Many industrial parks contain highly diversified facilities -

Not selected as the phases will be made up of a variety of industrial uses.

This land use code was selected. It was deemed more applicable than "Light Industrial" or "Manufacturing" due to

## ITE Land Use Code and Label

## For the Highway Commercial Phase:

A business park consists of a group of flex-type or incubator one or two-story buildings served by a common roadway system. The tenant space is flexible and lends itself to a variety of uses. Tenants may be start-up companies or small mature companies that require a variety of space. The average mix is $20-30 \%$ office/commercial and 70-80\% industrial/warehousing.

A shopping centre is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping centre's composition is related to its market area in terms of size, location, and type of store. A shopping centre also provides on-site parking facilities sufficient to serve its own parking demands. Many shopping centres, in addition to the integrated unit of shops in one building or enclosed around a mall, include outparcels. These buildings are typically drive-in banks, retail stores, restaurants or small offices.

A factory outlet centre is a shopping centre that primarily
823: Factory Outlet Centre houses factory outlet stores, attracting customers from a wide geographic area, very often from a larger area than a regional

770: Business
Park

820: Shopping Centre shopping centre.

## Definition <br> some with a large number of small businesses and others with one or two dominant industries.

## Selection

A manufacturing facility is an area where the primary activity is the conversion of raw materials or parts into finished products. Size and type of activity may vary substantially from one facility to another. In addition to the actual production of goods, manufacturing facilities generally also have office, warehouse, research, and associated functions.

150: A warehouse is primarily devoted to the storage of materials, Warehousing
but it may also include office and maintenance areas.
the potential in varied use throughout the area.

Not selected as the primary function of the industrial areas will not be manufacturing.

Not selected as the primary function of the industrial areas will not be dedicated to warehousing.

Not selected as the development will not be primarily buildings for industrial/warehousing use with tenant spaces.

This land use code was selected as it is most applicable to this development. It is based on surveyed data of shopping centers that include neighbourhood centers, community centers, regional centers, and super regional centers.

Not selected as the phase will not be primarily made up of factory outlet stores.

To determine an approximate gross floor area for the industrial phases, AE approximated the ratio of existing buildings off Google Earth to total parcel area within the industrial areas in La Crête. This process is shown in Table 5-2.

Table 5-2
Existing Industrial Parcels in La Crête with Parcel and Building Areas

| Parcel | Quarter Section | Current Use | Total Parcel Area | Approximate Building Area | Ratio of Building Area to Parcel Area |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Plan 0727718 <br> Block 2, Lot 1 | NE10-106-15-5 | True North Powersports - ATV Repair Shop | $\begin{gathered} 1.25 \mathrm{ha} \\ 12,500 \mathrm{~m}^{2} \end{gathered}$ | 1,830 m ${ }^{2}$ | 15\% |
| Plan 1321868 Block 2, Lot 1 | NE10-106-15-5 | Alberta Ltd. Kubota Farm and Rach | $\begin{gathered} 2.51 \mathrm{ha} \\ 25,100 \mathrm{~m}^{2} \end{gathered}$ | 1,280 m ${ }^{2}$ | 5\% |
| Plan 0727718 <br> Block 2, Lot 9 | NE10-106-15-5 | Built Rite Structures General Contractor | $\begin{gathered} 1.01 \mathrm{ha} \\ 10,100 \mathrm{~m}^{2} \end{gathered}$ | $800 \mathrm{~m}^{2}$ | 8\% |
| Plan 1521632 <br> Block 5, Lot 5 | NE10-106-15-5 | Forest Trotter LP Logging Contractor | $\begin{gathered} 2.14 \mathrm{ha} \\ 21,400 \mathrm{~m}^{2} \end{gathered}$ | 1,090 m² | 5\% |
| Plan 9621721 <br> Block 18, Lot 7 | SW10-106-15-5 | George's Roofing Rolled Metal Products Supplier | $\begin{aligned} & 0.653 \mathrm{ha} \\ & 6,530 \mathrm{~m}^{2} \end{aligned}$ | 1,030 m ${ }^{2}$ | 16\% |
| Plan 0227658 <br> Block 21, Lot 1 | SW10-106-15-5 | Screwy Louie's Locks \& Glass - Glass and Mirror Shop | $\begin{aligned} & 4,350 \mathrm{~m}^{2} \\ & \text { (approx.) } \end{aligned}$ | 390 m ${ }^{2}$ | 9\% |
| Plan 0424214 <br> Block 1, Lot 1 | SE16-106-15-5 | Integra Tire - Tire Shop | $\begin{gathered} 2.02 \mathrm{ha} \\ 20,200 \mathrm{~m}^{2} \end{gathered}$ | 1,815 m² | 9\% |
| Plan 0924475 <br> Block 2, Lot 2 | SE16-106-15-5 | Ok Tire - Auto Repair Shop | $\begin{gathered} 1.02 \mathrm{ha} \\ 10,200 \mathrm{~m}^{2} \end{gathered}$ | 1,530 m ${ }^{2}$ | 15\% |
| Plan 9823499 <br> Block 1, Lot 1 | SW2-106-15-5 | Northern Road Builders LP Construction Company | $\begin{gathered} 4.87 \mathrm{ha} \\ 48,700 \mathrm{~m}^{2} \end{gathered}$ | 1,990 m ${ }^{2}$ | 4\% |

As evidenced in Table 5-2, the ratio of industrial building area to total parcel area ranges from $4-16 \%$. Therefore, the worst-case scenario of $16 \%$ was applied to the total area of each industrial phase (excluding the road and MUL areas) to calculate trip generation.

To determine a gross floor area for the commercial phase, AE approximated the ratio of existing buildings off Google Earth to total parcel area within the existing commercial areas in La Crête. This process is shown in Table 5-3.

Table 5-3
Existing Commercial Parcels in La Crête with Parcel and Building Areas

| Parcel | Quarter Section | Use | Total Parcel Area | Approximate Building Area | Ratio of Building Area to Parcel Area |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Plan 0627695, Block 24, Lot 1 | NW10-106-15-5 | Super J Foods Supermarket | $\begin{gathered} 1.34 \mathrm{ha} \\ 13,400 \mathrm{~m}^{2} \end{gathered}$ | 2,350 m ${ }^{2}$ | 18\% |
| Plan 1160NY Block 4, Lot 1 | NE9-106-15-5 | Tuffline Power Sports | $\begin{aligned} & 0.372 \mathrm{ha} \\ & 3,720 \mathrm{~m}^{2} \end{aligned}$ | $705 \mathrm{~m}^{2}$ | 19\% |
| Plan 9820781 <br> Block 4, Lot 6 | NE9-106-15-5 | Country Grill Steak and Ribs | $\begin{gathered} 0.4 \text { ha } \\ 4,000 \mathrm{~m}^{2} \end{gathered}$ | $745 \mathrm{~m}^{2}$ | 19\% |
| Plan 1822539, Block 1, Lot L | NE4-106-15-5 | The Espresso House FitLife Burger Shack Agriculture Financial Services | $\begin{gathered} 1.339 \mathrm{ha} \\ 13,390 \mathrm{~m}^{2} \end{gathered}$ | 3,080 m² | 23\% |
| Plan 9020454, Block 5, Lot 18 | SW10-106-15-5 | UFA Farm \& Ranch Supply Store | $\begin{aligned} & 1.617 \mathrm{ha} \\ & 16,170 \mathrm{~m}^{2} \end{aligned}$ | 2,390 m ${ }^{2}$ | 15\% |

As evidenced in Table 5-2, the ratio of commercial building area to total parcel area ranges from $15-23 \%$. Therefore, the worst-case scenario of $23 \%$ was applied to the total area of the commercial phase (excluding the road and MUL areas) to calculate trip generation.

The adjusted areas for each phase based on the total estimated gross floor area per phase are:

- $\quad$ Phase 1 (Rural Industrial, 2021): 8.015 ha * $0.16=1.28$ ha
- $\quad$ Phase 2 (Rural Industrial, 2025): 14.827 ha * $0.16=2.37$ ha
- $\quad$ Phase 3 (Highway Commercial, 2026): 8.254 ha * 0.23 = 1.9 ha
- $\quad$ Phase 4 (Rural Industrial, 2031): 12.196 ha * $0.16=1.95$ ha

The trip generation in the AM and PM peaks for both land use codes was calculated based on the adjusted areas, using the setting of "general urban/suburban" during weekday peak hours of adjacent street traffic. As the subdivision will in a more rural setting, it is believed that the trip generation numbers will err on the side of caution and provide a conservative estimate of trips generated. A copy of the land use code figures can be found in Appendix E.

The number of trips generated by this development will consider pass-by trips for the commercial phase. These trips are not new traffic added to the road, but existing road users entering the development as a detour to their ultimate destination. The ITE Trip Generation Manual explains that pass-by trips typically occur where commercial retail units are situated adjacent to a busy street as the development attracts motorists already on a street system for a different purpose. The convenience of the development such as a gas station being "on the way" encourages detour, however it is not considered to be the primary trip destination. It has been assumed that the trips associated with the commercial development will consist both of pass-by trips which are already part of the network and have been diverted from Highway 697, and of new trips created because of the development. The land use code 130, Industrial Park, does not have pass-by data, likely because the nature of the development does not commonly create pass-by trips and is considered to be the intended destination of the road user. Based on ITE Trip Generation Handbook Appendix E, the
pass-by trip percentage for land use code 820 which will be factored into this assessment is $14 \%$ in the PM peak, meaning that $14 \%$ of all trips generated in the PM peak will be removed from the total new trips generated. No passby data was available for the AM peak.

It is understood that Alberta Transportation will not allow any additional accesses to be constructed along Highway 697 as there are already several existing accesses along the highway between the North and South Accesses into La Crête. Therefore, all development traffic will be entering/exiting through an access off Twp Rd 1062 on the north side of the development. The proposed development does have allowance for a future access to the south, but that is currently an undeveloped quarter section and the County has not indicated timelines for construction of this road connection. For purposes of this assessment, AE has assumed that in 2021 and 2031 the south road has not been constructed, but by the 2051 horizon ( 20 years from full build out) the southern road has been constructed.

Not all the traffic generated by the development will be coming from or going to the east, as some traffic will be coming from or going to La Crête. Typically when the split of traffic is unknown, a 50/50 split is assumed. However, to provide a more conservative estimate as requested by Alberta Transportation, AE has assumed that $1 / 3$ of the traffic will be coming from or going to the west, and the remaining $2 / 3$ to/from the east, resulting in a higher amount of traffic at the Twp Rd 1062 (North Access) and Hwy 697 intersection. Therefore, 2/3 of the total generated development traffic has been assigned to the intersection of Twp Rd 1062 (North Access) and Hwy 697. In 2051, it is assumed that a southern road connection has been constructed, reducing some of the movements at the intersection of Twp Rd 1062 (North Access) and Hwy 697; for the 2051 development traffic, AE has reduced the northbound left and the eastbound right movements by $1 / 3$ in both peak hours.

The estimated development traffic volumes are shown for the AM and PM peak in the 2021 (Phase 1 only), 2025 (Phases 1 and 2 completed), 2026 (Phases 1-3 completed), 2031 (full build out), and 2051 (20-year horizon of full build out with south road) design horizons in Figure 5-7 through 5-11.


Figure 5-7
2021 Estimated Development Turning Volumes - Phase 1 Complete


Figure 5-8
2025 Estimated Development Turning Volumes - Phases 1 and 2 Completed


Figure 5-9
2026 Estimated Development Turning Volumes - Phases 1-3 Completed


Figure 5-10
Estimated Development Turning Volumes - Full Build Out in 2031


Figure 5-11
Estimated Development Turning Volumes - Full Build Out in 2051 with South Road Constructed

### 5.1.3 Combined Traffic Volumes

To determine the combined traffic volumes, the development traffic was added to the background volumes for each development horizon (2021, 2031, and 2051). These traffic volumes form the basis of the analysis for this study and are presented in Figure 5-12 to Figure 5-16.


Figure 5-12
2021 Estimated Combined Turning Volumes - Phase 1 Completed


Figure 5-13
2025 Estimated Combined Turning Volumes - Phases 1 and 2 Completed


Figure 5-14
2026 Estimated Combined Turning Volumes - Phases 1-3 Completed


Figure 5-15
Estimated Combined Turning Volumes - Full Build Out in 2031


Figure 5-16
Estimated Combined Turning Volumes - Full Build Out in 2051 with Southern Road

### 5.2 Alberta Transportation Warrant Analysis

### 5.2.1 Left-Turn Warrant

According to Figure D-7.4 (included in Appendix F) of the Highway Geometric Design Guide, this intersection warrants a detailed analysis to determine the treatment using the 2019 volumes. Therefore, a detailed analysis was completed following the guidelines in Sections D.7.6 and D.7.7. Table 5-4 through Table 5-8 show the left turn warrants with combined traffic volumes (background and development) for 2021, 2025, 2026, 2031, and 2051. Table 5-9 shows the left turn warrants with background traffic only in 2051.

## Left Turn Warrant Analysis per Section D.7.6

- Design speed of $110 \mathrm{~km} / \mathrm{h}$

Table 5-4
2021 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1062

| Hwy 697 \& Twp Rd 1062 | 2021 AM - EB | 2021 PM - EB | 2021 AM - WB | 2021 PM - WB |
| :--- | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 5 | 24 | 21 | 24 |
| VA (Advancing Volume) | 129 | 220 | 190 | 131 |
| \% Left Turns | $4 \%$ | $11 \%$ | $11 \%$ | $18 \%$ |
| VO (Opposing Volume) | 190 | 131 | 129 | 220 |
| Treatment Warranted | Type II | Type III | Type III | Type III |

Table 5-5
2025 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1062

| Hwy 697 \& Twp Rd 1062 | 2025 AM - EB | 2025 PM - EB | 2025 AM - WB | 2025 PM - WB |
| :--- | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 5 | 31 | 23 | 27 |
| VA (Advancing Volume) | 146 | 282 | 250 | 157 |
| \% Left Turns | $3 \%$ | $11 \%$ | $9 \%$ | $17 \%$ |
| VO (Opposing Volume) | 250 | 157 | 146 | 282 |
| Treatment Warranted | Type II | Type IV | Type III | Type III |
| Storage Length (if any) | N/A | 0 m | N/A | N/A |

Table 5-6
2026 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1062

| Hwy 697 \& Twp Rd 1062 | 2026 AM - EB | 2026 PM - EB | 2026 AM - WB | 2026 PM - <br> WB |
| :--- | :---: | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 5 | 56 | 24 | 27 |
| VA (Advancing Volume) | 195 | 515 | 316 | 333 |
| \% Left Turns | $3 \%$ | $11 \%$ | $8 \%$ | $8 \%$ |
| VO (Opposing Volume) | 316 | 333 | 195 | 515 |
| Treatment Warranted | Type II | Type IV | Type IV | Type IV |
| Storage Length (if any) | N/A | 15 m | 0 m | 10 m |

Table 5-7
2031 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1062

| Hwy 697 \& Twp Rd 1062 | 2031 AM - EB | 2031 PM - EB | 2031 AM - WB | 2031 PM - <br> WB |
| :--- | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 9 | 62 | 26 | 30 |
| VA (Advancing Volume) | 215 | 569 | 372 | 359 |
| \% Left Turns | $4 \%$ | $11 \%$ | $7 \%$ | $8 \%$ |
| VO (Opposing Volume) | 372 | 359 | 215 | 569 |
| Treatment Warranted | Type III | Type IV | Type IV | Type IV |
| Storage Length (if any) | N/A | 25 m | 10 m | 10 m |

Table 5-8
2051 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1062

| Hwy 697 \& Twp Rd 1062 | 2051 AM - EB | 2051 PM - EB | 2051 AM - WB | 2051 PM - <br> WB |
| :--- | :---: | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 10 | 66 | 37 | 43 |
| VA (Advancing Volume) | 238 | 591 | 457 | 423 |
| \% Left Turns | $4 \%$ | $11 \%$ | $8 \%$ | $10 \%$ |
| VO (Opposing Volume) | 457 | 423 | 238 | 591 |
| Treatment Warranted | Type III | Type IV | Type IV | Type IV |
| Storage Length (if any) | N/A | 25 m | 10 m | 10 m |

Table 5-9
2051 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1062 - Background Traffic Only

| Hwy 697 \& Twp Rd 1062 | 2051 AM - EB | 2051 PM - EB | 2051 AM - WB | 2051 PM - <br> WB |
| :--- | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 7 | 26 | 37 | 43 |
| VA (Advancing Volume) | 159 | 245 | 294 | 220 |
| \% Left Turns | $4 \%$ | $11 \%$ | $13 \%$ | $20 \%$ |
| VO (Opposing Volume) | 294 | 220 | 159 | 245 |
| Treatment Warranted | Type II | Type IV | Type IV | Type III |
| Storage Length (if any) | N/A | 0 m | 0 m | N/A |

### 5.2.2 Right-Turn Warrant

The right-turn warrant analysis based on AT's Highway Geometric Design Guide requires an exclusive right-turn lane when all three of the following conditions are met:

1. Main (or through) road AADT $\geq 1,800$
2. Intersecting road AADT $\geq 900$
3. Right-turn daily traffic volume $\geq 360$ for the movement in question

If an exclusive right turn lane is warranted, the standard Alberta Transportation Type IVd layout should be used.

The AADT on Highway 697 east and on Twp Rd 1062 is greater than 1,800 using 2019 traffic counts. The AADT on Hwy 697 south is greater than 900 using 2019 traffic counts. In 2031 and 2051, the projected right turning combined volumes exceed 360 for the eastbound right, so an exclusive eastbound right turn is warranted.

### 5.2.3 Combined Warrant Analysis

As seen in the left and right turn warrant analyses, an Alberta Transportation Type IV treatment becomes warranted for the eastbound left turn in 2025, while the Type III suffices for the westbound left turn. By 2026, with Phases 1-3 complete, a Type IV treatment with extra storage length for the left turns is required in both directions ( 15 m for the eastbound left turn and 10 m for the westbound left turn). In 2031 at full build out, 25 m of additional storage length will be required for the eastbound left turn and 10 m of extra storage length for the westbound left turn. In 2051, assuming the south road is constructed, the required storage lengths stay the same as for 2031 full build out. The intersection treatment will require an exclusive right turn lane for the eastbound right.

As stated in Section D.7.8, a channelized intersection may be warranted at intersections with high through traffic volumes (above 4,000 AADT). It states that where both left and right turn lanes are required, this is usually a good candidate for channelization. The estimated traffic volumes will exceed 4,000 AADT in 2051 at this intersection growing the background traffic only, i.e. without the development. Comparing the warrant analyses between 2051 background traffic only versus 2051 combined traffic, the development results in the need for 10 m of storage length for the westbound left turn, and 25 m of storage for the eastbound left turn. The development also results in an exclusive right-turn lane for the eastbound right. Without the development, a Type IV treatment would still be required but without the additional storage length for the left turns and without an exclusive eastbound right-turn.

This intersection will require upgrading from its current Type IIIc configuration to meet the estimated background traffic volumes as well as the combined traffic volumes. As recommended in Section D.7.8, channelization for the eastbound right-turn should be considered in the design of this intersection upgrade to avoid the need for a six-lane flared intersection, which is very wide, and to avoid delay of vehicles on the intersecting road.

### 5.3 Capacity Analysis

The Synchro analysis program is based on the ITE Highway Capacity Manual (HCM) 2010 and was used to analyze the capacity of the study intersection and determine the need for additional intersection and capacity improvements. This program applies the methodology established by the HCM to output a level of service (LOS) for a study intersection, given the lane designations, vehicular volumes, signal timing and heavy vehicle percentages. Intersection operations are typically rated by two measures: LOS and volume-to-capacity ratios (v/c).

Level of service is based on the estimate average delay per vehicle for all traffic passing through an intersection. A high LOS is a result of a very low average delay; the highest LOS is identified as LOS A. A low LOS is identified as LOS F. The LOS categories vary depending on whether an intersection is signalized, stop, or yield-controlled. The HCM justifies this difference by noting that drivers stopped at a signal light will have more tolerance for delays because they will perceive that eventually they will get their turn. Table 5-10 identifies the LOS criteria for intersections.

Table 5-10
Level of Service for Intersections

| Level of Service | Average Stop Control Delay per Vehicle (s) |
| :---: | :---: |
| A | Less than 10 |
| B | $10-15$ |
| C | $15-25$ |
| D | $25-35$ |
| E | $35-50$ |
| F | greater than 50 |

The $\mathrm{v} / \mathrm{c}$ ratio of an intersection describes the extent to which the traffic volumes can be accommodated by the theoretical capacity of the intersection. A v/c ratio below 0.9 indicates that there is generally sufficient capacity to accommodate the traffic on the approach or at the intersection. A value between 0.9 and 1.0 suggests unstable operations and congestion may occur as volumes are nearing the theoretical capacity of the roadway. A calculated value over 1.0 indicates that volumes are theoretically exceeding capacity.

For this study, a minimum LOS D was required for the intersection and for each approach; individual movements were allowed to operate at LOS E.

In developing the Synchro model for this intersection, Associated Engineering used the following input parameters presented in Table 5-11. The results of the capacity analysis completed using these inputs have been summarized in the following sections. All results from the analysis can be found in Appendix G.

Table 5-11
Synchro Analysis Input Parameters

| Parameter | Value |
| :---: | :---: |
| Ideal Saturation Flow Rate | 1,900 vehicles per hour |
| Analysis Period | 15 minutes |
| Speed Limit - Highway 697 / Twp Rd 1062 | $100 \mathrm{~km} / \mathrm{h}$ |
| Speed Limit - Highway 697 - South Leg | $100 \mathrm{~km} / \mathrm{h}$ |
| Speed Limit - Rge Rd 151 - North leg | $60 \mathrm{~km} / \mathrm{h}$ |
| Turning Speed | Program Default |
| Lane Utilization | Program Default |
| Peak Hour Factor | 0.92 |
| Growth Factor | 1.0 |
| Heavy Vehicle Percentage | As shown in AT counts |

Based on the Alberta Transportation turning movement diagram for this intersection, the heavy vehicle percentage (single unit trucks and tractor trailer units) is estimated to be $11.5 \%$ on the east leg, $19.3 \%$ on the south leg, $8.2 \%$ on the west leg, and $3.4 \%$ on the north leg.

Table 5-12 shows the capacity analysis results in each horizon year for the existing intersection configuration, and Table 5-13 shows the results in each year using the upgraded intersection configuration.

Table 5-12
Capacity Analysis Summary for Existing Intersection Configuration

| Analysis Period | Peak Hour | Highest Approach Delay (s) | Lowest <br> Approach LOS | Max V/C Ratio | Intersection Delay (s) | Intersection LOS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background 2021 | AM | 11.0 | B | 0.07 | 2.6 | A |
|  | PM | 10.4 | B | 0.04 | 2.9 | A |
| Background 2051 | AM | 13.5 | B | 0.17 | 3.3 | A |
|  | PM | 11.7 | B | 0.09 | 3.5 | A |
| Combined Traffic 2021 (Phase 1 Only) | AM | 11.4 | B | 0.08 | 2.6 | A |
|  | PM | 10.7 | B | 0.05 | 2.8 | A |
| Combined Traffic 2031 (Full Build Out) | AM | 17.9 | C | 0.26 | 3.5 | A |
|  | PM | 21.8 | C | 0.24 | 3.5 | A |
| Combined Traffic 2051 | AM | 22.5 | C | 0.37 | 4.2 | A |
|  | PM | 25.1 | D | 0.32 | 4.3 | A |

Table 5-13
Capacity Analysis Summary for Improved Intersection (Type IV)

| Analysis Period | Peak <br> Hour | Highest Approach Delay (s) | Lowest <br> Approach LOS | Max V/C Ratio | Intersection Delay (s) | Intersection LOS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background 2021 | AM | 11.0 | B | 0.09 | 2.5 | A |
|  | PM | 10.4 | B | 0.09 | 2.8 | A |
| Background 2051 | AM | 13.5 | B | 0.17 | 3.2 | A |
|  | PM | 11.7 | B | 0.12 | 3.3 | A |
| Combined Traffic 2021 (Phase 1 Only) | AM | 11.4 | B | 0.11 | 2.6 | A |
|  | PM | 10.7 | B | 0.11 | 2.7 | A |
| Combined Traffic 2031 (Full Build Out) | AM | 17.9 | C | 0.26 | 3.3 | A |
|  | PM | 21.7 | C | 0.28 | 3.1 | A |
| Combined Traffic 2051 | AM | 22.5 | C | 0.37 | 4.0 | A |
|  | PM | 25.0 | D | 0.32 | 3.8 | A |

The results show that the intersection operates well both with the current configuration and the upgraded configuration.

### 5.4 Signalization Warrant

A traffic signal warrant analysis was completed using the procedures outlined by the Transportation Association of Canada. In accordance with AT's policy, in an urban area, a warrant score exceeding 100 indicates that traffic signals are warranted, and in rural areas a score of 80 is typically used as a threshold for requiring signals.

A signalization warrant analysis was performed for the intersection of Highway 697 and Twp Rd 1062. Using 2019 traffic counts, the intersection resulted in a score of 7 , meaning that signals are not warranted. With the estimated combined 2051 traffic counts, the intersection resulted in a score of 46 . Signals are not warranted in the design horizon with the development traffic. The signal warrant sheets are included in Appendix H.

### 5.5 Illumination Warrant

An illumination warrant was completed for the intersection of Highway 697 and Twp Rd 1062 using the TAC Warrant for Intersection Lighting. Under existing conditions, the intersection received a score of 66, which is lower than the warranting condition of 120 . When the traffic volumes increase and development proceeds near the intersection, this will increase the warrant score, resulting in a higher need for illumination. Channelization of the intersection would also increase the warrant score. With the recommended improvements and increased traffic volumes in 2051 the intersection received a score of 141, exceeding the warranting conditions. It is recommended that lighting is installed in conjunction with any intersection improvements at this intersection to improve safety conditions and increase visibility of the main approach into La Crête. The lighting warrant sheets are included in Appendix H.

## 6 ASSESSMENT OF HIGHWAY INTERSECTIONS

The three other highway intersections providing access to La Crête were analyzed for current traffic volumes as well as future traffic volumes, projected to a 20 -year design horizon. Once the volumes anticipated in the 20 -year horizon were determined, a warrant analysis was performed to establish the type of intersection warranted by Alberta Transportation Standards.

## $6.1 \quad$ Highway 697 and Twp Rd 1061 (94 Ave)

### 6.1.1 Existing Traffic

No turning movement counts were available from Alberta Transportation for this intersection, so traffic volumes were estimated using proportions of the turning volumes counted at the adjacent intersections. The following assumptions were used:

- The average was taken between the northbound left-turning traffic at Twp Rd 1062 (North Access) and the northbound left-turning traffic Twp Rd 1060 (South Access). This average was applied to the northbound leftturning volume approaching Twp Rd 1061 (94 Avenue).
- A similar percentage of southbound right-turning traffic would be likely to occur at Twp Rd 1061 (94 Avenue) as at Twp Rd 1060 (South Access).

The estimated 2019 AADT and peak hour turning movement volumes for Highway 697 and Twp Rd 1061 (94 Avenue) are shown in Figure 6-1.


Figure 6-1
2019 Turning Movement Estimates for Hwy 697 and Twp Rd 1061 (94 Ave)

According to Figure D-7.4 (shown in Appendix F), this intersection warrants a Type II treatment using the estimated 2019 volumes.

### 6.1.2 Future Traffic

Traffic volumes at the intersection were projected to the current year of 2021 and the 20-year design horizon of 2041. Highway traffic was grown using the average growth rate of $2.65 \%$ growth rate until 2041. Traffic on the minor road was grown at a rate of 1.0\%. The estimated AADT and peak hour turning movement volumes for Highway 697 and Twp Rd 1061 (94 Avenue) in 2021 and 2041 are shown in Figure 6-2 and Figure 6-3.


Figure 6-2
2021 Turning Movement Estimates for Hwy 697 and Twp Rd 1061 (94 Ave)


Figure 6-3
2041 Turning Movement Estimates for Hwy 697 and Twp Rd 1061 (94 Ave)

### 6.1.3 Alberta Transportation Warrant Analysis

According to Figure D-7.4 (shown in Appendix F), this intersection warrants a Type II treatment using the estimated 2021 volumes and a detailed analysis to determine the treatment using the estimated 2041 volumes. The detailed analysis was completed following the guidelines in Sections D.7.6 and D.7.7 of the Highway Geometric Design Guide.

## Left Turn Warrant Analysis per Section D.7.6:

- Design speed of 110 km/h
- Detailed analysis was only required for 2041 volumes
- Only the northbound left turn was evaluated as there is no possibility for a southbound left turn
- Table 6-1 shows the left turn warrant analysis

Table 6-1
2041 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1061

| Hwy 697 \& Twp Rd 1061 | 2041 AM - NB | 2041 PM - NB |
| :--- | :---: | :---: |
| VL (Left-Turning Volume) | 59 | 19 |
| VA (Advancing Volume) | 113 | 81 |
| \% Left Turns | $52 \%$ | $23 \%$ |
| VO (Opposing Volume) | 45 | 82 |
| Figure Used | D-7.6-7d | D-7.6-7c |
| Treatment Warranted | Type II | Type II |

## Right Turn Warrant Analysis per Section D.7.7:

To warrant an exclusive right turn lane at a two-lane highway intersection, the following three conditions must be met:

- Main (or through) road AADT is greater than or equal to 1,800 - the 2041 north leg AADT is 1,613 and the south leg AADT is 1,911 , so this condition would be met.
- Intersecting road AADT is greater than or equal to 900 - the 2041 AADT on Twp Rd 1061 is 754, so this condition is not met.
- The right turn daily traffic volume is greater than or equal to 360 for the movement in question - the northbound traffic cannot turn right, and the daily southbound right turn volume is 67 , so this warrant is not met.


## Conclusion:

An Alberta Transportation Type Ila intersection treatment (for three-legged intersections) is warranted for the intersection of Highway 697 and Twp Rd 1061 based on the projected 2041 traffic. Since this is the current treatment, no upgrades are required based on highway traffic growth only. Should development proceed in the area, a TIA should be completed to confirm the appropriateness of the configuration with the additional traffic.

### 6.2 Highway 697 and Twp Rd 1060 (South Access)

### 6.2.1 Existing Traffic

2019 volumes from Alberta Transportation's counts are shown in Figure 6-4 for AADT and both peak hours for the intersection of Highway 697 and Twp Rd 1060 (South Access).


Figure 6-4
2019 Turning Movement Estimates for Hwy 697 and Twp Rd 1060 (South Access)

According to Figure D-7.4 (shown in Appendix F), this intersection warrants a Type II treatment using the 2019 volumes.

### 6.2.2 Future Traffic

Traffic volumes at the intersection were projected to the current year of 2021 and the 20-year design horizon of 2041. Highway traffic was grown using the average growth rate of $2.65 \%$. Traffic on the minor road was grown at a rate of $1.0 \%$. The estimated AADT and peak hour turning movement volumes for Highway 697 and Twp Rd 1060 (South Access) in 2021 and 2041 are shown in Figure 6-5 and Figure 6-6.


Figure 6-5
2041 Turning Movement Estimates for Hwy 697 and Twp Rd 1060 (South Access)


Figure 6-6
2041 Turning Movement Estimates for Hwy 697 and Twp Rd 1060 (South Access)

### 6.2.3 Alberta Transportation Warrant Analysis

According to Figure D-7.4 (included in Appendix F), this intersection warrants a detailed analysis to determine the intersection treatment type using the projected 2021 and 2041 volumes. The detailed analysis was completed following the guidelines in Sections D.7.6 and D.7.7 of the Highway Geometric Design Guide.

## Left Turn Warrant Analysis per Section D.7.6:

- Design speed of 110 km/h
- Table 6-2 and Table 6-3 show the left turn warrant analyses for 2021 and 2041, respectively

Table 6-2
2021 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1060

| Hwy 697 \& Twp Rd 1060 | 2021 AM - NB | 2021 PM - NB | 2021 AM - SB | 2021 PM - SB |
| :--- | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 59 | 24 | 5 | 13 |
| VA (Advancing Volume) | 124 | 72 | 44 | 79 |
| \% Left Turns | $48 \%$ | $33 \%$ | $11 \%$ | $16 \%$ |
| VO (Opposing Volume) | 44 | 79 | 124 | 72 |


| Figure Used | D-7.6-7d | D-7.6-7d | D-7.6-7b | D-7.6-7b |
| :--- | :---: | :---: | :---: | :---: |
| Treatment Warranted | Type II | Type II | Type II | Type II |

Table 6-3
2041 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1060

| Hwy 697 \& Twp Rd 1060 | 2041 AM - NB | 2041 PM - NB | 2041 AM - SB | 2041 PM - SB |
| :--- | :---: | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 89 | 36 | 8 | 19 |
| VA (Advancing Volume) | 187 | 108 | 67 | 119 |
| \% Left Turns | $48 \%$ | $33 \%$ | $12 \%$ | $16 \%$ |
| VO (Opposing Volume) | 67 | 119 | 187 | 108 |
| Figure Used | D-7.6-7d | D-7.6-7d | D-7.6-7b | D-7.6-7b |
| Treatment Warranted | Type IV | Type III | Type II | Type II |

## Right Turn Warrant Analysis per Section D.7.7:

To warrant an exclusive right turn lane at a two-lane highway intersection, the following three conditions must be met:

- Main (or through) road AADT is greater than or equal to 1,800 - the 2041 north leg AADT is 1,947 and the south leg AADT is 2,657 , so this condition would be met.
- Intersecting road AADT is greater than or equal to 900 - the 2041 AADT on Twp Rd 1060 is 1,432 on the west approach and 752 on the east approach, so this condition would be met on the west approach.
- The right turn daily traffic volume is greater than or equal to 360 for the movement in question - the daily northbound right-turning volume is 96 and the daily southbound right-turning volume is 81 , so this warrant is not met.


## Conclusion:

Assuming a steady highway traffic growth at $2.65 \%$, the estimated 2041 traffic will require an Alberta Transportation Type IV treatment. It will require a Type IVc treatment as the AADT on the minor road exceeds 200, but the right-turn warrant is not met. If traffic growth continues at the estimated pace, this intersection will require upgrading to a Type IVc by 2041. Should development proceed in the area, a TIA should be completed to determine the appropriate intersection configuration with the additional traffic.

### 6.3 Highway 697 and Twp Rd 1055 (Sawmill Access)

### 6.3.1 Existing Traffic

2019 volumes from Alberta Transportation's counts are shown in Figure 6-7 for AADT and both peak hours for the intersection of Highway 697 and Twp Rd 1055 (Sawmill Access).


Figure 6-7
2019 Turning Movement Counts for Hwy 697 and Twp Rd 1055 (Sawmill Access)

According to Figure D-7.4 (included in Appendix F), this intersection warrants a Type III treatment using the 2019 volumes.

### 6.3.2 Future Traffic

Traffic volumes at the intersection were projected to the current year of 2021 and the 20-year design horizon of 2041. Highway traffic was grown using the average growth rate of $2.65 \%$. Traffic on the minor road was grown at a rate of $1.0 \%$. The estimated AADT and peak hour turning movement volumes for Highway 697 and Twp Rd 1055 (Sawmill Access) in 2021 and 2041 are shown in Figure 6-8 and Figure 6-9.


Figure 6-8
2021 Turning Movement Counts for Hwy 697 and Twp Rd 1055 (Sawmill Access)


Figure 6-9
2041 Turning Movement Counts for Hwy 697 and Twp Rd 1055 (Sawmill Access)

### 6.3.3 Alberta Transportation Warrant Analysis

According to Figure D-7.4 (included in Appendix F), this intersection warrants a detailed analysis to determine the intersection treatment type using the projected 2021 and 2041 volumes. The detailed analysis was completed following the guidelines in Sections D.7.6 and D.7.7 of the Highway Geometric Design Guide.

## Left Turn Warrant Analysis per Section D.7.6:

- Design speed of 110 km/h
- Table 6-4 and Table 6-5 show the left turn warrant analyses for 2021 and 2041, respectively

Table 6-4
2021 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1055

| Hwy 697 \& Twp Rd 1055 | 2021 AM - NB | 2021 PM - NB | 2021 AM - SB | 2021 PM - SB |
| :--- | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 17 | 0 | 0 | 1 |
| VA (Advancing Volume) | 137 | 74 | 70 | 83 |
| \% Left Turns | $12 \%$ | $0 \%$ | $0 \%$ | $1 \%$ |
| VO (Opposing Volume) | 70 | 83 | 137 | 74 |
| Figure Used | D-7.6-7b | D-7.6-7a | D-7.6-7a | D-7.6-7a |
| Treatment Warranted | Type II | Type II | Type II | Type II |

Table 6-5
2041 Left Turn Warrant Analysis for Hwy 697 and Twp Rd 1055

| Hwy 697 \& Twp Rd 1055 | 2041 AM - NB | 2041 PM - NB | 2041 AM - SB | 2041 PM - SB |
| :--- | :---: | :---: | :---: | :---: |
| VL (Left-Turning Volume) | 25 | 0 | 0 | 2 |
| VA (Advancing Volume) | 206 | 111 | 104 | 125 |
| \% Left Turns | $12 \%$ | $0 \%$ | $0 \%$ | $2 \%$ |
| VO (Opposing Volume) | 104 | 125 | 206 | 111 |
| Figure Used | D-7.6-7b | D-7.6-7a | D-7.6-7a | D-7.6-7a |
| Treatment Warranted | Type III | Type II | Type II | Type II |

## Right Turn Warrant Analysis per Section D.7.7:

To warrant an exclusive right turn lane at a two-lane highway intersection, the following three conditions must be met:

- Main (or through) road AADT is greater than or equal to 1,800 - the 2041 north leg AADT is 2,768 and the south leg AADT is 2,627 , so this condition would be met.
- Intersecting road AADT is greater than or equal to 900 - the 2041 AADT on Twp Rd 1055 is 337 on the west approach and 82 on the east approach, so this condition would be not be met.
- The right turn daily traffic volume is greater than or equal to 360 for the movement in question - the daily northbound right-turning volume is 17 and the daily southbound right-turning volume is 129 , so this warrant is not met.


## Conclusion:

The warrant analyses show that an Alberta Transportation Type III intersection treatment is warranted for the northbound left in 2041. Since the AADT on the east leg is less than 200 and the left turn is warranted in one direction, a Type IIIb treatment is recommended. An exclusive right turn lane is not warranted. Currently, this intersection does not have a bypass lane to avoid northbound left-turning traffic, but has a channelized turn to the east which allows logging trucks to complete the left turn by using Township Road 1055. It is assumed that most of the northbound left-turning traffic at this intersection is made up of logging trucks due to the location of the Sawmill, and that any passenger vehicle traffic going to La Crête would use Twp Rd 1060 instead of turning here. Due to the allowance for left-turning logging trucks in place, no improvements are recommended based on growth of highway traffic without any upcoming development in the area. Should development proceed in the area as recommended in the Industrial Growth Strategy, a TIA should be completed to determine whether the intersection configuration will remain sufficient with the additional traffic.

## 7 SUMMARY

Two typical cross-sections were used within the plan as identified in County documents: the Green Link and Town Centre cross-sections. Using the information on traffic volumes, population and planned development within La Crête, AE developed a proposed road network, a proposed truck route map, and a proposed trail map. Traffic volumes on Highway 697 were reviewed and a growth rate of $2.65 \%$ was assigned as the most realistic projection of background traffic over the next few decades based on the historical growth average. This rate was used to complete intersection analyses for the four intersections accessing La Crête. Intersection-specific recommendations based on the results of the analyses are described below.

## Highway 697 and Twp Rd 1062 (North Access):

- Many assumptions were made to complete the TIA portion of the analysis for this intersection, because the land use and building sizes for each land parcel within the proposed subdivision are currently unknown. It is recommended that a TIA supplement be completed when this information is known to confirm the appropriateness of the assumptions made in this report, prior to the construction of any intersection improvements if possible.
- Background traffic volumes projected to 2051 (20 years from full build out of the development) result in the need to upgrade to a Type IV intersection, based on the Alberta Transportation warrants. The addition of the development traffic results in the requirement for longer storage lengths for left turns and an exclusive eastbound right turn. A Type IV configuration with 25 m of additional storage for the eastbound left turn and 10 m of additional storage for the westbound left turn is recommended. Also, channelization is recommended for the eastbound right turn.
- Results of the capacity analysis show that the intersection is expected to operate acceptably with the increased traffic volumes for all design horizons both with the existing configuration and the upgraded configuration.
- Illumination warrants show that lighting will be required in 2051 with the development, the increased traffic volumes, and the channelized right turn.
- Upgrading the intersection should address any faded or absent pavement markings, and should include regrading any deficient sideslopes to the correct ratio.

Highway 697 and Twp Rd 1061 (94 Ave):

- Based on growing highway traffic only, no intersection improvements are anticipated to be required in the 2041 horizon. Should development proceed in this area, a TIA should be completed to confirm the appropriateness of the configuration with the anticipated additional traffic.
- If any improvements are made to this intersection configuration, it is recommended that any steep sideslopes be regraded to the correct ratio.


## Highway 697 and Twp Rd 1060 (South Access):

- If traffic growth continues at the estimated pace, this intersection will require upgrading to a Type IVc by 2041. Should development proceed in the area, a TIA should be completed to determine the appropriate intersection configuration with the additional traffic.
- If any improvements are made to this intersection configuration, it is recommended that any steep sideslopes be flattened to the correct ratio. Steep pavement sideslopes should also be addressed.


## Highway 697 and Twp Rd 1055 (Sawmill Access):

- Based on growing highway traffic only, no intersection improvements are anticipated to be required in the 2041 horizon. However, should development proceed in the area as recommended in the Industrial Growth Strategy, a TIA should be completed to determine whether the intersection configuration will remain sufficient with the additional traffic.
- If any improvements are made to this intersection configuration, the areas with ponding water should be reviewed to determine whether drainage accommodation is sufficient in this area. The smashed culvert can be repaired in the near future by notifying Alberta Transportation.

100 St and 101 Ave:

- Consideration should be given to installing rumble strips on the east approach, since the traffic coming from the east has been traveling at highway speed for a long time and is required to come to a complete stop here.
- As this is a main entrance into La Crête, the County may wish to review the collision history at this intersection and perform a signalization warrant analysis with updated turning movement counts.


## 100 St and 94 Ave:

- As a low-cost safety improvement, the correct lane markings should be painted at this intersection to clearly indicate lane assignments.
- As this is a main entrance into La Crête, the County may wish to review the collision history at this intersection and perform a signalization warrant analysis with updated turning movement counts.


## CLOSURE

This report was prepared for the Mackenzie County to provide a recommendation for a long-term transportation network within La Crête, and to complete analyses of the highway intersections providing access to La Crête.

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.

Tamara Soltykevych, P.Eng.
Transportation Engineer

Kent Eklund, P.Eng., MBA
Vice President, Transportation

## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Byron Peters, Director of Planning and Development |
| Title: | La Crete Industrial Growth Strategy |

## BACKGROUND / PROPOSAL:

The La Crete Industrial Growth Strategy project was started in the fall of 2019 in order to comprehensively plan for the demand for industrial and highway commercial development in and around La Crete. An open house was held on November 5, 2019, with a second open house on February 3, 2020.

Originally slated for completion in May, the project was delayed in the spring of 2020 due to the Fort Vermilion Ice Jam Flood. Although delayed, this project is now effectively complete and is ready to be reviewed by Council.

When this project started, there were additional constraints effecting the ability for industrial growth in the Mackenzie County region. Over the last year, Northern Lights Gas Co-op has announced that a new natural gas supply line will be constructed, and ATCO has constructed a new 3-phase power line to La Crete, which increases the electrical capacity by about $35 \%$.

Leif Olsen, Planner with O2 Planning will provide an update on the La Crete Industrial Growth Strategy. A copy of their presentation is attached.

## OPTIONS \& BENEFITS:

The La Crete Industrial Growth Strategy provides guidance to ensure that the long term development of La Crete is completed in logical format. This strategy ignores the hamlet boundaries and provides a plan for the greater La Crete area. A preliminary assessment of utility servicing was also completed in order to provide a general idea of servicing requirements and costs.
$\qquad$
$\qquad$

Administration recommends that the concepts and guidance provided within the La Crete Industrial Growth Strategy be incorporated into County planning documents, such as the Municipal Development Plan, Area Structure Plan, and Land Use Bylaw. Additional policies may also require minor amendments.

## COSTS \& SOURCE OF FUNDING:

Adoption of the growth strategy does not include any direct costs. The County will incur a variety of costs as the region grows, but adequate pre-planning should reduce both costs and risk for the county and developers.

## SUSTAINABILITY PLAN:

Goal E26 That Mackenzie County is prepared with infrastructure and services for a continually growing population.

Strategy E26.2 Provide exceptional service that enhance the quality of life in County hamlets and existing rural areas as a means to dissuade residents and newcomers from moving to undeveloped areas to establish lots or acreages,

Strategy E26.3 Take proactive measures to anticipate growth by preparing evidencebased plans for it.

## COMMUNICATION / PUBLIC PARTICIPATION:

Two open houses were held earlier in the project in order to gauge the level of support and/or or resistance to the strategy. In addition to public advertising, all landowners within the concept area received a mailed invitation to the open houses.

The strategy is not a statutory document. Incorporating the land use recommendations and overall guidance into statutory documents will require additional public engagement. This public participation will be directed by the requirements for public participation for each of the statutory documents.

## POLICY REFERENCES:

Mackenzie County’s Municipal Development Plan

Author: $\qquad$ B Peters Reviewed by: $\qquad$ CAO: $\qquad$

## RECOMMENDED ACTION:

Motion 1:
$\checkmark$ Simple Majority $\quad \square$ Requires 2/3 $\square$ Requires Unanimous
That the La Crete Industrial Growth Strategy be adopted as presented.

Motion 2:
$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous

That the concepts and guidance provided within the La Crete Industrial Growth Strategy be incorporated into County planning documents.
$\qquad$ CAO: $\qquad$


## EXECUTIVE SUMMARY

1 INTRODUCTION
1.1 Growth Challenges + Opportunities
1.2 How The Strategy Works
1.3 Strategy Development

2 GROWTH STRATEGY
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PREFACE
02 Planning + Design was appointed by Mackenzie County to prepare an
Industrial Growth Strategy for the hamlet of La Crete in October 2019. The La
Crete Industrial Growth Strategy was prepared in three distinct phases,
incorporating technical research, public consultation, and expert stakeholder
review to ensure the Growth Strategy reflects the diverse interests and
expertise involved in La Crete's industrial development.

## EXECUTIVE SUMMARY

The La Crete Industrial Growth Strategy is a response to La Crete's current economic condition. As the fastest growing hamlet in Mackenzie County, La Crete is experiencing sustained economic growth pressure and the associated servicing constraints that come with rapid growth. Planning staff have recommended that future expansion occur outside the hamlet in order to facilitate larger-scale operations, and the County is targeting specific types of industrial development that are water and land intensive.

## Existing Challenges

Industrial growth in the La Crete area is constrained by several challenges, including servicing and transportation infrastructure limitations and a lack of clear direction for industrial development in municipal policy. Addressing these challenges and presenting solutions to them is a major focus of the Industrial Growth Strategy.

## Future Opportunities

Despite these challenges, many opportunities exist that position the La Crete area well for future industrial growth. County policy and community perception of industrial growth are very supportive, while La Crete is advantageously positioned with ample land suitable for industrial development. The Industrial Growth Strategy takes advantage of these opportunities, leveraging them into a growth-supportive framework that benefits La Crete.



The Strategy
Given the opportunities and constraints facing La Crete there are a range of areas that should be contemplated for future industrial growth. As a strategic planning document the Industrial Growth Strategy gives this guidance as well as providing:
) A Vision for how to accommodate industrial growth in and around La Crete;
, A Decision-Making Tool for Council, County Administration, and stakeholders;
, A Guide to help residents and landowners understand how lands around La Crete may be used; and
, Industrial growth that respects and meets the needs of the community.

The La Crete Industrial Growth Strategy proposes a master Land Use Concept (shown on the following page) and supporting Transportation, Servicing, and Public Realm Concepts that provide a clear vision for future industrial development in the La Crete area. These concepts will serve as the decision-making tool for all involved in the development process, and provides a framework for growth that balances sound planning practices and the desires of County residents.

Implementation
La Crete faces challenges to realizing its full development potential. The lack of servicing infrastructure capacity requires County action in order to create the requisite conditions for industrial growth. In doing so the County must also provide certainty and consistency for developers, utility providers, and the public as to how the County will address these constraints. Collectively the County can achieve these outcomes through strategic implementation of the Industrial Growth Strategy, accomplished by:
, Aligning Existing Policy with the Industrial Growth Strategy;
, Identifying Stakeholders for successful implementation;
, Growing Responsibly according to economic and infrastructure conditions; and
, Developing a Business Case for funding the infrastructure improvements required to reach La Crete's full potential.

Appropriately administered, the La Crete Industrial Growth Strategy is a guiding document that will inform investment in the La Crete area for the next 20 years, guiding future development in a way that will benefit all La Crete residents.


Implementation framework for the Industrial Growth Strategy.


The La Crete Industrial Growth Strategy's Land Use Concept.

## 1 INTRODUCTION

Mackenzie County is Alberta's largest and northwestern-most municipality, covering over 80,000 square kilometres. Formed in 1995, the County has grown rapidly, increasing its population by $40 \%$ from 1996 to 2016. This increase in population is primarily due to two factors: natural population growth and strong economic performance. Natural growth has occurred primarily in the hamlet of La Crete, and has created capacity issues for servicing infrastructure in the hamlet. While the County experiences sustained economic growth pressure, further industrial development in La Crete is constrained by the lack of adequate servicing.

These factors affect the local economy of La Crete. As Mackenzie County's fastest growing hamlet, La Crete has limited developable lands remaining within its boundaries to accommodate industrial growth. Planning staff have recommended that future expansion occur outside the hamlet in order to facilitate larger-scale operations, and the County is targeting specific types of industrial development that are water and land intensive. These industrial uses include wet decortication plants, grain malting and milling facilities, and concrete panel manufacturing, and will require significant investments in servicing infrastructure.

The Industrial Growth Strategy is a response to La Crete's current economic condition. The first section of the Strategy provides context, outlining the challenges and opportunities facing the hamlet and informs the reader about how the Strategy works and should be interpreted. The second section establishes the Strategy's vision for industrial growth, providing concepts to guide future industrial development around La Crete and an implementation plan for enabling it to happen. Taken together, the La Crete Industrial Growth Strategy is a guiding document that should inform investment in the La Crete area for the next 20 years.

### 1.1 Challenges + Opportunities

The La Crete Industrial Growth Strategy focuses on an area stretching eastward from the Peace River to Range Road 140, and from Township Road 1070 in the north to Township Road 1052 in the south. The study area, shown in Figure 1 below, encompasses a range of landscapes including prime agricultural lands, ancient boreal forests, and the developed hamlet itself. The wide perspective on possible new locations for industrial growth ensures a regional context was appropriately considered in the strategy, and exposes many of the challenges and opportunities facing industrial development in the area.

### 1.1.1 Challenges

Industrial growth in the La Crete area is constrained by several existing challenges. These challenges include servicing and transportation infrastructure limitations and a lack of clear direction for industrial development in municipal policy. Addressing these challenges and presenting solutions to them is a major focus of the Industrial Growth Strategy.

## Infrastructure

Development capacity is the function of two major factors: Available land for development and the existence of adequate servicing infrastructure. While Mackenzie County features no shortage of developable land, La Crete is


Figure 01: Regional context map for the study area.


Figure 02: Major servicing infrastructure in the La Crete area.
constrained by capacity issues with its existing servicing infrastructure, including three-phase electricity and natural gas.

The expansion of these services, shown in Figure 2 above, have not kept pace with La Crete's rapid growth and now leads to occasional power brown-outs and natural gas shortages at times of peak demand. While this does not preclude all forms of industrial development from occurring in the hamlet, it does create a downward pressure on the desirability of locating in La Crete as alternative servicing arrangements are often costly or impractical, creating a challenge for industrial growth in the hamlet.

Transportation infrastructure will also grow as a challenge for industrial development. Existing conflict with transport trucks and other industrial vehicles within the hamlet and at the Highway 697-109 Avenue intersection are already a common concern of residents, Council, and County administration. A desire to minimize industrial traffic through the hamlet and to provide safer access to the community from Highway 697 intersections must be addressed as La Crete continues to grow over the planning horizon of this Strategy.

## Policy

Existing municipal policy presents challenges and opportunities for industrial development in the La Crete area. Table 1 to the right summarizes key directions from Mackenzie County's plans and policies regulating industrial growth. While municipal policy surrounding development is generally enabling, there is inconsistency across municipal plans for where and how industrial development should be addressed. Although separation of uses is valued, this can lead to leapfrog development that is undesirable to the County from a servicing cost perspective. This problem is compounded by the amounts of land identified for industrial growth in the Municipal Development Plan and La Crete Area Structure Plan.

Mackenzie County's policy is also aware of its servicing infrastructure constraints and the effect that this has on economic development in the region. However, a policy review identified no clear consensus as to how these constraints should be addressed in order to stimulate further economic growth without exposing the County to risks associated with funding infrastructure improvements.

Establishing a clear framework for industrial growth that can be easily implemented through revisions to existing County policy is an important challenge that the Industrial Growth Strategy must address.

### 1.1.2 Opportunities

Despite the challenges identified in section 1.1.1, many opportunities exist that position the La Crete area well for future industrial growth. County policy and community perception of industrial growth are very supportive, while La Crete is advantageously positioned with ample land suitable for industrial development. The Industrial Growth Strategy takes advantage of these opportunities, leveraging them into a growth-supportive framework that benefits La Crete.

Table 01: Key findings from County policy documents.
\(\left.\left.$$
\begin{array}{|l|l|}\hline \text { Policy Document } & \text { Key Directions } \\
\hline \begin{array}{l}\text { Intermunicipal } \\
\text { Development Plan }\end{array} & , \begin{array}{l}\text { Heavy industrial uses should be } \\
\text { separated from residential areas. }\end{array} \\
\hline \begin{array}{l}\text { Municipal } \\
\text { Development Plan }\end{array} & \begin{array}{l}\text { Industrial development should be } \\
\text { co-located, creating concentrated } \\
\text { areas of development. }\end{array} \\
\text { The County does not have a clear and } \\
\text { consistent approach to servicing } \\
\text { industrial development. }\end{array}
$$ \right\rvert\, \begin{array}{l}Balancing separation of uses and <br>
Ieapfrog development concerns is an <br>

ongoing challenge for La Crete.\end{array}\right\}\)| Industrial development should take |
| :--- |
| advantage of existing assets and |
| infrastructure investments. |

## Policy

While existing municipal policy in the County is sometimes inconsistent or unclear in its approach to industrial development and servicing, it still provides directions for the Growth Strategy to act on. County policy is clear and consistent that industrial uses should be separate from other land uses, and that they should also be clustered together. This provides the County with the necessary backing to recommend a more concentrated form of industrial development through the Growth Strategy than may otherwise have occurred. Similarly, these policies enable the Growth Strategy to promote a transition in downtown La Crete away from active industrial uses in the hamlet core, a key consideration for development over the next 20 years.

## Community Support

Two rounds of public engagement were held over the course of developing the Industrial Growth Strategy in November 2019 and February 2020, with the public overwhelmingly supportive of the initiative and its directions. Key themes heard from the public during engagement were incorporated into policy, and the Strategy reflects a general public consensus on the approach to industrial development in and around La Crete. This provides an opportunity to act quickly on implementing the Strategy with early municipal investments capitalizing on the public's support.

## Land Demand

As the hamlet continues to grow, competition between residential growth, institutional uses, and industrial development will impact land demand in and around La Crete. The existing footprint of industrial development in the area is approximately 250 hectares of land, and the 2013 revisions to the Municipal Development Plan designate approximately 1,068 hectares for existing and future industrial development. Despite this, the draft La Crete ASP projects 88 hectares of industrial land use within the hamlet by 2033, a significantly lower amount than anticipated by the MDP. These inconsistencies are likely due to the atypical and rapid growth of the hamlet, a factor that makes accurate land demand projection difficult.

Fortunately, the hamlet is not constrained by availability of suitable lands for development. This allows the County to plan for the high industrial land uptake contemplated in the MDP. A critical next step with this approach to planning is establishing priority locations for industrial development throughout the plan area, an opportunity that the Industrial Growth Strategy acts on with the Land Use Concept. This approach provides leverage for the County to counteract "leapfrog" development pressure on prime agricultural lands well outside La Crete's developed area while also creating a framework for industrial development that will provide certainty for developers looking to build.

## Growth Suitability Modelling

Building on work completed in the County's initial industrial lands review, a development suitability model for industrial growth was used to identify areas of opportunity for future industrial development. Development suitability is a function of proximity to necessary infrastructure and distance to incompatible land uses and natural features. As shown in Figure 3 below, a development suitability model considers a range of factors that impact development potential, and score values are assigned to each factor depending on whether they represent positive or negative site attributes, and how important each factor is for industrial development.


Figure 03: Development suitability is determined by assigning a distance of influence and weighted scores to spatial data. All the scores are added up, giving the cumulative development suitability.

Scores are calculated based on a distance analysis. A maximum score is given when a factor is close to a proposed area and decreases the further away from the area it is. For example, frontage on Hwy 697 will score the full 20 points for the Provincial Highway factor, but a site located 250 m from Hwy 697 might receive 10 points. All factors are added together to produce a cumulative suitability score for each proposed area.

Figure 4 on the following page illustrates the Development Suitability Model results. The model assigns individual scores to every 20 m by 20 m square in the study area, with the darkest purple areas representing the highest scores, while all areas scoring negative values are shown as white.

The development suitability model results show opportunity areas in three clear nodes of high suitability for industrial development north, east, and south of La Crete. The largest area of suitability is to the south, located in and around the existing La Crete Sawmills along Highway 697. This area benefits from the existing highway infrastructure improvements, servicing infrastructure connectivity, and an ample supply of larger parcels to facilitate future development. The secondlargest area of suitability is located north of the hamlet, in the area previously identified by the industrial lands review as a priority area for future development. This area is unencumbered by Transport Canada airport exclusionary zones, enjoys close proximity to the hamlet, and provides a natural extension of the commercial / industrial character of the 100 Street main street. The final area of highest development suitability is located directly east of La Crete along Highway 697. This area benefits from direct highway access, servicing infrastructure, and an overall lack of push factors to limit its suitability.


Figure 04: Results of the development suitability model indicating areas of highest development suitability in darkest purple.

### 1.2 How the Strategy Works

Development of an Industrial Growth Strategy began in late 2018 with County administration conducting a preliminary industrial lands review in the La Crete area. Since that time La Crete has continued experiencing sustained industrial development interest. Due to this pressure, administration determined an industrial growth strategy was necessary to provide a comprehensive vision for future industrial growth in and around La Crete.

Responding to the challenges and opportunities identified in 1.1, the La Crete Industrial Growth Strategy identifies areas for new development to occur and sets out guidelines for enabling growth, encouraging innovative industrial development, and responsibly using the County's infrastructure investments. As a strategic planning document the Industrial Growth Strategy sets a vision for how industrial growth should be accommodated, is a decision-making tool for all stakeholders involved in industrial development, creates certainty around how land can be used now and in the future, and ensures industrial growth respects and meets the needs of the community. Effectively, the La Crete

As a strategic planning document the Industrial Growth Strategy:

Sets a vision for how to accommodate industrial growth.

, Serves as a decisionmaking tool for Council, County Administration, and stakeholders.

Industrial Growth Strategy is a roadmap for the next 20 years of industrial growth, and should guide all decisions relating to this kind of development over this time frame.

### 1.3 Strategy Development

The La Crete Industrial Growth Strategy was prepared in three distinct phases. This iterative process incorporated technical research, public consultation, and expert stakeholder review to ensure the strategy reflects the diverse interests and expertise involved in La Crete's industrial development.

## Phase 1

The project began with a comprehensive background information review and consultation with County Administration. This process provided the consultant team with important context and direction for the project and allowed for the preparation of meaningful and direct materials for the public engagement and Council update. Input provided during this phase focused on where growth should and should not occur within the hamlet, prior industrial development opportunities, infrastructure

, Helps residents understand how land around La Crete may be used now and in the future.


Ensures industrial growth respects and meets the needs of the community.
constraints, and the types of industrial development most appropriate to different locations in the area.
, Background Information Review
, County Administration Consultation
, Public Open House
, Council Update Meeting

## Phase 2

Following Phase 1, a Growth Analysis Brief was prepared to inform preliminary growth options, and is included as Appendix A to this strategy. These options incorporated findings from a development suitability model, municipal policy review, industrial land demand, and were then refined through a servicing and transportation Technical Brief, included as Appendix B to this strategy. County staff were then consulted to ensure the County's interests and local expertise were considered. From these options a comprehensive growth strategy was prepared.
, Growth Analysis Brief + Technical Brief
, Draft Growth Options
, County Administration Consultation
, Draft Growth Strategy

## Phase 3

A second round of public engagement including a public open house, online survey, interviews, and County staff workshop were held in February 2020 to discuss the draft growth strategy. Based on the findings and feedback from this outreach the draft Growth Strategy was revised and finalized for Council approval.
, Public Open House
, County Staff Workshop
, Expert Stakeholder Interviews
, Council Update Meeting
, Final Growth Strategy


Figure 05: Public open house at the La Crete Heritage Centre


## 2 GROWTH STRATEGY

The Growth Strategy is equal parts infrastructure investment plan and guidebook for future land use, outlining the proposed patterns of industrial development for the next 20 years in La Crete. Divided into six sections, the Growth Strategy provides:
, Overall Objectives that guide broader implementation of the Growth Strategy in La Crete and within the County's policy framework;
, Land Use, Transportation + Servicing, and Public Realm Concepts that provide specific direction for how investment in infrastructure and industrial development should be coordinated; and
, A framework for Implementation of the Growth Strategy that creates certainty for developers, utility providers, and the public as to how industrial growth will occur in and around La Crete.

Each section includes an overview of its intended outcomes in addition to a set of development objectives and corresponding policies. Collectively these concepts provide an integrated approach to industrial development that considers how land use, the transportation network, and public realm all play a role in facilitating industrial development.
, Intent Statements: Establish the purpose for each component of the concept and how they coordinate to achieve the Growth Strategy's goals. These statements inform the development objectives and policies.
, Objectives: Are directly informed by municipal policy and public engagement. These objectives establish outcomes for policy that implement a framework to enable desirable industrial development. , Policies: Are the implementation tools of the Growth Strategy, creating rules for development in each designation that align with the intent statements and development objectives. Policy helps to ensure La Crete grows according to the Strategy.

### 2.1 Overall Development

The La Crete Industrial Growth Strategy lives within a framework of existing municipal policy, plans, and strategies. In order to achieve the timely and coordinated implementation of the Growth Strategy the following overall development objectives establish a set of rules for how the County will employ this document.

## Overall Objectives

, Implement the logical growth of La Crete;
, Provide a safe and connected network for pedestrian, residential, and industrial modes of transportation;
, Leverage industrial development to provide a marketable and attractive public realm; and
, Develop utilities and servicing infrastructure that is sustainable, efficient, and responsive to the County's overall objectives.

## Policy

a. Existing development is considered conforming with this Growth Strategy.
b. Future development must meet the applicable objectives of this Growth Strategy.
c. Mackenzie County will endeavour to revise existing statutory plans, including the Municipal Development Plan and La Crete Area Structure Plan, to reflect the objectives of this Growth Strategy.

### 2.2 Land Use Concept

Land use is the central component the rest of the Growth Strategy is built around. Land use identifies the priority areas where future development should occur to support the logical growth of La Crete, and dictates where different intensities and forms of industrial uses are best suited.

To achieve the intended outcomes of the Growth Strategy, the following five unique land use areas have been developed that respond to La Crete's economic needs and unique context:

Highway Commercial
, Light Industrial
, Heavy Industrial
Core Commercial
Airport Industrial
These are shown in the Land Use Concept (Figure 6) on the following page.

### 2.2.1 Highway Commercial

The Highway Commercial area is located east of La Crete fronting Highway 697 and along 109 Avenue from the highway to 100 Street. This area offers high visibility for commercial and retail-oriented industrial development and reflects existing development pressure in La Crete. Some lands in the Highway Commercial designation are regulated by Transport Canada's airport buffer zone around the La Crete Airport, but with large tracts of undeveloped land the stretch along the highway is ideal for larger-footprint, agriculturally oriented industries.

This location provides several strategic benefits to La Crete, as these uses will draw people likely to be conducting other business in the hamlet while accessing the agricultural services provided. The location of the Highway Commercial designation also keeps heavy machinery and trucks outside of the hamlet proper while remaining in close proximity. The opportunity to develop trucking-oriented business along this stretch of Highway 697, serviced from a new internal arterial road, could also enable additional service-industry development in this area that caters toward through-traffic.

## Overall Objectives

, Provide opportunities for a range of industrial uses and scales of development.
, Consolidate development west of Highway 697 to preserve prime agricultural land.
, Enable limited service-industry development that caters toward commercial trucking.
, Manage commercial and industrial development impacts on local traffic.
, Maintain and enhance 109 Avenue as an attractive gateway to La Crete.

## Policy

a. Access to Highway Commercial development should be provided by new access roads off of 109 Avenue or 94 Avenue and not directly from Highway 697.
b. Encourage the development of vegetative buffers between roads and development.
c. Buildings fronting 109 Avenue should be built close to the north lot line to facilitate the development of a consistent street face.
d. Highway-oriented signage should not be permitted on 109 Avenue.


Figure 06: The La Crete Industrial Growth Strategy's Land Use Concept.

### 2.2.2 Light Industrial

The Light Industrial growth area is located along 100 Street directly north of La Crete. Benefiting from established County policy and investments in infrastructure improvements, this area is a strong candidate for lighter industrial development that does not require large amounts of land such as smaller-scale fabrication, industrial services, and office development ancillary to industry.

The Light Industrial designation provides a natural extension for the historic industrial vernacular along La Crete's main street. This area allows future industrial growth to remain close to the hamlet without compromising the core's transition to a more engaging, pedestrian-friendly, and interactive downtown.

## Overall Objectives

, Capitalize on the County's existing investment in infrastructure improvements to 100 Street north of 109 Avenue.
, Provide a natural extension of 100 Street's traditional industrial built form.

Minimize truck traffic travelling through La Crete by developing an alternate truck route to 100 Street from Highway 697.

Policy
a. Buildings should address the street and be built towards the front lot line.
b. New development should locate parking behind the principle building.
c. Uses that generate excessive noise, odours, or truck traffic should not be permitted in this designation.
d. Measures should be taken to minimize light pollution from new development.

### 2.2.3 Heavy Industrial

The Heavy Industrial designation is located south of La Crete on either side of Highway 697. This area offers a strategic advantage to heavier industrial uses as it is located at the nexus of existing natural gas, three phase electricity, and water servicing infrastructure. The Heavy Industrial area also benefits from existing transportation infrastructure improvements intended to mitigate the impacts of turning trucks on Highway 697.

Collectively these site attributes make this one of the highest-scoring locations in the study area for industrial development suitability. However, while the location is ideal for heavy industrial development it must be noted that La Crete is, as a whole, severely constrained by existing servicing infrastructure capacity. Large-scale expansion and development of heavy industrial uses is currently very limited, and strategic investment in infrastructure is required to realize this area's full development potential.

Existing heavy industrial uses include the La Crete Sawmill and Evergreen Lumber, separated from La Crete by approximately five kilometres. This separation reflects existing County policy for heavy industrial uses while also prioritizing development on lower-quality agricultural lands compared to other areas in the County. This area also benefits from large tracts of undeveloped land.

The Heavy Industrial area is well-suited for expansion of these existing uses as well as new large-scale industrial developments. Potential future oil and gas processing and high truck-traffic generating industry should be prioritized in this land use designation.

## Overall Objectives

, Provide opportunity for the expansion and development of heavy industrial uses.
, Minimize traffic disruption caused by heavy industrial uses.
, Leverage co-location of heavy industry for investment in servicing infrastructure.

## Policy

a. Future development should access Highway 697 from the existing truck turning loop on Township Road 1055.
b. Existing industrial uses should grow predominantly to the east and southward in order to avoid environmentally sensitive areas.
c. Surrounding hydrological features including wetlands should be protected from future development.

### 2.2.4 Core Commercial

The Core Commercial designation is intended to enable the gradual transition of La Crete's main street to more engaging, pedestrian-friendly, and interactive industrial and commercial uses. This does not mean replacing existing industrial uses in the downtown, but rather facilitating infill development and adaptive reuse that accentuates the existing public realm improvements to 100 Street.

As La Crete continues to grow, its downtown core will take on an increasingly important role in day-to-day community commerce. Planning proactively for this shift will allow the County to appropriately respond to and mitigate potential land use conflicts as existing industrial developments on 100 Street expand, redevelop, or capitalize on their real estate through infill development.

This area currently features pockets of under-utilized land and is well-suited for small-scale commercial infill development including banks, cafés, restaurants, and service centres. Larger industrial sites could potentially be redeveloped into commercial manufacturing with front-of-house retail (such as a bakery), larger-format retail (such as a Canadian Tire), or non-traditional commercial activities (such as an indoor climbing gym or fitness centre).

Development of the 109 Avenue and 100 Street intersection will play an important role in defining the entrance to the Core Commercial area and downtown La Crete, and special consideration should be given to this location.

## Overall Objectives

, Facilitate a transition to more interactive industrial uses and increased commercial activity on 100 Street.
, Complement and enhance ongoing public realm improvements.
, Develop the 109 Avenue and 100 Street intersection as a gateway to downtown La Crete.

## Policy

a. Encourage and streamline commercial infill development applications in the Core Commercial area.
b. Expansion and redevelopment of existing industrial uses should reduce associated noise, odour, and truck traffic to the greatest extent possible.
c. Buildings should address the street and be built towards the front lot line.
d. New development should locate parking behind the principle building.
e. New development should complement the existing public realm improvements on 100 Street.

### 2.2.5 Airport Industrial

The Airport Industrial designation takes advantage of its strategic location directly adjacent to the La Crete Airport and the intersection between Highway 697 and Township Road 1060. This designation should encourage developing this intersection as a "gateway" to La Crete along the highway.

The boundary with the Heavy Industrial district to the south is loosely defined as it is intended to develop into an interconnected industrial node. There are synergistic benefits to locating heavy industrial uses near airports, and the industrial development contemplated for the Airport Industrial designation is intended to comprise primarily of agriculture-related technology and aeronautics-oriented uses in addition to industrial
services, warehousing and storage. It is important to note that a Transport Canada buffer exists around the airport (shown in Figure 7 below) that limits bird-attracting development in this area.

## Overall Objectives

, Complement heavy industrial development to the south along Highway 697.
, Leverage Mackenzie County's investments in the La Crete Airport to foster local aeronautical and agriculture technology-oriented industries.
, Develop the intersection of Highway 697 and Township Road 1060 as an attractive gateway to La Crete.

Policy
a. New industrial uses in this designation must follow Transport Canada regulations related to development around the La Crete airport.
b. Commercial retail development is not encouraged in this designation.
c. Access to Airport Industrial development should be provided by access roads off of Township Road 1060 and not directly from Highway 697.
d. The built form of development at the intersection of Highway 697 and Township Road 1060 should address the intersection.
e. Encourage the development of vegetative buffers between roads and industrial development.


Figure 07: Transport Canada's airport development buffer zones.

### 2.3 Transportation + Servicing Concepts

Central to industrial growth is providing the necessary transportation and servicing infrastructure required by new development. La Crete is currently constrained by natural gas and electrical servicing capacity, and future
 industrial growth will warrant improvements to the transportation network in and around the hamlet.

The Transportation Concept (Figure 8) and Servicing Concept (Figure 9) on the following pages were informed by County Engineering staff and an independent assessment of County infrastructure conducted by a professional engineer. These concepts provide a road map for the investments in infrastructure improvements that will be required to support the fully built out Industrial Growth Strategy. Order of magnitude cost estimates for new water and sewer servicing, as well as identified road improvements, are included in the Appendix B Technical Brief.

### 2.3.1 New Roads

Additional development along the Highway 697 corridor will require new roads to service increased traffic. In keeping with direction from Alberta Transportation, the primary improvement proposed by the Industrial Growth Strategy is developing two service roads that run parallel to Highway 697. The first service road runs for 3.2 kilometres one quarter section west of Highway 697 from Township Road 1060 to 109 Avenue, and the second runs for 1.6 kilometres one quarter section east of Highway 697 from Township Road 1060 south to the existing truck turning improvements on Township Road 1055.

It is anticipated that Mackenzie County will recover the cost for these roads through off-site levies, developing this infrastructure to allow for a higher density of highway commercial businesses along Highway 697 frontage. This in turn will enable the Province and Mackenzie County to prioritize improvements to the existing major intersections with the highway instead of creating new ones. These service roads can also be developed with a service industry node that keeps businesses such as
truck stops and drive-through restaurants outside of La Crete while still providing these amenities to throughtraffic.

Additional linkages in the Highway Commercial land use area are proposed to be built as growth warrants their development.

## Overall Objectives

, New roads directly contribute to development and growth in La Crete.
, New roads minimize cost to Mackenzie County while maximizing businesses served by them.

Policy
a. Development of the north half of the west service road should be prioritized, followed by the south half, then east service road.
b. Cost recovery of service roads should occur through off-site levies on properties fronting them.
c. Service roads should be built to a standard that enables transport-truck serving businesses.
d. Other roads should be built as demand warrants.


### 2.3.2 Road Improvements

The Light Industrial area on 100 Street north of La Crete has already undergone small-scale road improvements to support its role as an extension of downtown's industrial growth. In order to support the vision for this area alternate access routes to Highway 697 are necessary over the longer-term. This will enable industrial businesses in the area to avoid going through the heart of La Crete and 109 Avenue, instead accessing the hamlet from the north. The proposed roads for improvement are 100 Street north of 109 Avenue to Township Road 1064, and Township Road 1064 east of 100 Street to Highway 697, but this alignment can be revised by the County should a more beneficial route be determined.

Overall Objectives
, Provide an alternate route to Highway 697 for industrial development on 100 Street.

## Policy

a. The County should incorporate these road improvements into long-range capital budgeting.
b. If divided into different projects, road improvements should occur within one season of each other to provide the full benefit of an additional improved connection to Highway 697.

### 2.3.3 Intersection Improvements

Four intersections have been identified for improvement over the life of the Industrial Growth Strategy. The northernmost new intersection with Highway 697 will facilitate alternate north access to La Crete and the Light Industrial area while the remaining two intersections identified on Highway 697 will support increased traffic demands generated by locating road access to Highway Commercial development off of service roads. These two intersections will effortlessly split residential traffic accessing the hamlet and industrial through-traffic, while also establishing a visual gateway indicating a sense of
arrival to La Crete. The last intersection identified for improvement is the main intersection entering La Crete at 100 Street and 109 Avenue. As this part of La Crete develops and intensifies, larger traffic counts will likely warrant intersection improvements that manage increased volume while still serving as an introduction to downtown La Crete.

## Overall Objectives

, Facilitate safe and easy passage through improved intersections.
, Provide an alternate north route to 100 Street.
, Engage with Alberta Transportation on funding options for Highway 697 intersection improvements.

## Policy

a. The County should prioritize planning for the 109 Avenue - 100 Street intersection so that future adjacent development reflects the longer-term vision for the intersection.
b. The Highway 697-109 Avenue and Highway 697-94 Avenue intersection improvements should follow after development of the west service road.
c. The Highway 697 - Township Road 1064 intersection improvements should occur within one season of the north access road improvement.
d. The County should revise the recommended intersection improvements every five years to reflect changes in traffic demand from development.
e. Intersection improvements should be completed concurrently with proposed provincial highway maintenance in order to leverage economic efficiencies.

### 2.3.4 Sanitary + Sewer Servicing

Sanitary and sewer servicing is largely sufficient to support long-term industrial growth in and near La Crete. However, as development occurs further away from the hamlet core, extensions to the sanitary and sewer service area will be necessary. An engineering assessment of the existing system recommends the development of:
, A new lagoon near the Airport Industrial and Heavy Industrial areas;

, A reservoir/pumphouse near the Airport Industrial and Heavy Industrial areas; and
, Approximately seven kilometres of main extension in order to fully service all proposed growth areas.

These improvements can be developed through a phased approach over time, allowing the County to appropriately fund the improvements as they are required. It is likely that servicing will first be extended east along 109 Avenue to Highway 697, then south in a second phase along the proposed west service road. In the final phase of expansion sanitary and sewer servicing could be extended to the Airport Industrial and Heavy Industrial areas. This development should be carefully coordinated with the La Crete Infrastructure Master Plan to ensure the County is pursuing infrastructure improvements when most appropriate.

As new development occurs, the cost of internal looping of this infrastructure is anticipated to be borne by developers.

## Overall Objectives

, Provide sanitary and sewer servicing that meets the needs of future development in areas identified for growth.

Policy
a. Develop a long-range capital plan for incrementally delivering sanitary and sewer servicing infrastructure.
b. Incorporate flexibility into long-range capital budgeting to respond to where and when market demand requires servicing infrastructure.
c. Utilize off-site levies to recover costs of developing sanitary and sewer servicing infrastructure.

### 2.3.5 Three-Phase Electricity

The hamlet of La Crete has limited electrical capacity through its existing three-phase connection to the main ATCO substation near Fort Vermilion. Recent investments in the network by ATCO have increased capacity by 35\% - providing much-needed short-term relief to La Crete's energy needs. However, significant allocations of this upgrade have already been spoken for, and with its sustained growth the hamlet will soon require additional electrical capacity. Without a concrete plan to address La Crete's energy needs, future industrial growth in particular will be limited by this lack of capacity. Routing a future transmission line from the Fort Vermilion sub-station to the proposed industrial growth areas is necessary to accommodate future growth.

## Overall Objectives

, Improve the supply of three-phase electricity to La Crete and its businesses.
, Connect all growth areas identified in the Industrial Growth Strategy to three-phase electricity.

## Policy

a. Consider future electrical utility corridors when planning new roads and road improvements.
b. Engage utility companies in the planning of future hamlet expansion.

### 2.3.6 Natural Gas

One of the most restrictive limitations on industrial growth in and around La Crete is a recurring shortage of natural gas capacity leading to public safety hazards and reductions in industrial operating capacity. Natural gas is critical for most industrial businesses and the existing capacity provided by the Northern Lights Gas Co-op is barely sufficient to support current hamlet demand, and insufficient to support future growth.

Fortunately the Co-op has secured funding to build an additional natural gas pipeline to La Crete, with planned completion by early 2022. The County should now prioritize ensuring natural gas access is extended to the Heavy Industrial areas. The existing uses and uses contemplated for this area have the highest demand for natural gas and will provide the stable and consistent base demand that will help justify the
expenses necessary to connect these areas. The future of La Crete's local ecoonmic growth will be dictated by access to natural gas.

## Overall Objectives

, Improve the supply of natural gas to the Heavy Industrial area.
, Ensure appropriate long-range planning for the provision of natural gas that meets La Crete's industrial development goals.

## Policy

a. Prioritize alignment of a new higher capacity natural gas pipeline through the Heavy Industrial area.
b. If possible the County should encourage alignment of a new higher capacity natural gas pipeline along Highway 697 through the Airport Industrial and Highway Commercial areas.
c. Engage utility companies in the planning of future hamlet expansion.

### 2.3.7 Future Rail

The Alaska to Alberta Railway proposal contemplates building a railway corridor from Fort McMurray area to Alaska, crossing the Peace River near Fort Vermilion. In support of this concept, La Crete should maintain a clear corridor from Fort Vermilion to the Heavy Industrial area for a future spur line.

## Overall Objectives

, Maintain a direct and unencumbered rail corridor to the Heavy Industrial land use area from Fort Vermilion.

## Policy

a. Identify a corridor through the Heavy Industrial area that allows for rail loading and unloading to be accommodated.
b. Encourage development in the Heavy Industrial area to consider potential future rail connection.

### 2.3.8 Possible Airport Expansion or Relocation

The La Crete airport is currently an underutilized asset. As La Crete's population continues to grow at a high rate, the hamlet will eclipse High Level as the population centre of north-western Alberta. This presents an opportunity to capitalize on the increasing demand for out-of-region flights from La Crete residents by enabling commercial airlines to operate regularly scheduled flights from the hamlet. At the same time, the airport in its current location restricts certain types of development within the Transport Canada buffer. If economically feasible, realignment of the airport to a north-south orientation would open up more areas of the hamlet for industrial development longer-term.

## Overall Objectives

, Investigate the possibility of expanding or relocating the La Crete airport to accommodate scheduled commercial flights.

## Policy

a. The County should support and streamline proposals from commercial airlines to move to the Airport Industrial area.
b. The County should investigate the order-ofmagnitude cost of expanding the airport versus relocating it.

### 2.4 Public Realm Concept

La Crete takes pride in its attractive public realm, and new development arising from the Industrial Growth Strategy should contribute positively to the community's overall look and feel. By planning for attractive development pre-preemptively, the Industrial Growth Strategy provides a comprehensive and consistent approach to improving the public realm.

The Public Realm Concept (Figure 10) on the following page identifies key areas where the County should focus on improving the public realm through new development.

### 2.4.1 Gateway Corridor

Mackenzie County has undertaken considerable investment in La Crete's public realm and future industrial development in and around the hamlet should contribute to these ongoing streetscape improvement efforts. Developing gateway corridors that create attractive entrances to La Crete was identified as a priority by residents, Council, and County administration. These corridors are envisioned as connectors from Highway 697 to the hamlet along 109 Avenue, 94 Avenue, and Township Road 1060 that establishes a sense of arrival to the hamlet and maintains the attractive character that La Crete is known for in Mackenzie County.

## Overall Objectives

, Identified corridors are established as attractive entrances to La Crete through ongoing development.

La Crete is maintained and enhanced as an attractive place to live and do business.

Policy
a. Storage of industrial materials (such as scrap metal or old equipment) for developments along Gateway Corridors should be located behind buildings in a way that is not visible from the highway.
b. New development on Gateway Corridors will plant a row of trees 15 m long from the road along their west property line.
c. New development in these areas should be evaluated based on how they contribute to the streetscape, minimize light pollution, and improve the public realm.
d. The County should adopt a comprehensive and costed approach to streetscape design along Gateway Corridors.
e. Streetscape design improvements should be incorporated into regular maintenance roadwork.
f. 109 Avenue between Highway 697 and 100 Street should be the primary focus for beautification efforts, as this is the primary access point to La Crete.


### 2.4.2 Gateway Intersection

Residents of La Crete take great pride in their community, and industrial development, particularly at key gateways to the hamlet, should contribute positively to this civic pride. The key gateways identified in the Public Realm Concept are Highway 697 at 109 Avenue, 94 Avenue, and Township Road 1060, as well as 109 Avenue at 100 Street.

Several tools can be used to ensure the Gateway Intersections are improved through industrial growth, including the creation of development standards, special policy areas, or funding improvements to Gateway Intersections through off-site levies.

Overall Objectives
, Gateway Intersections signal a sense of arrival to La Crete.
, Gateway Intersections are established through ongoing road improvements and development.

Policy
a. Large-scale highway-style signage will not be permitted at Gateway Intersections.
b. Properties adjacent to Gateway Intersections should locate development near the intersection.
c. The County should adopt a comprehensive and costed approach to streetscape design at Gateway Intersections.
d. Streetscape design improvements should be incorporated into intersection improvements where contemplated by this Strategy.
e. The Highway 697-109 Avenue and Highway 697 and Township Road 1060 intersections should be the primary focus for beautification efforts, as these are primary access points to La Crete.

### 2.4.3 Stormwater Management Public Pathway

The development of a new industrial district is an opportunity for the County to plan a comprehensive approach to stormwater management. Properly planned for, a district-scale stormwater management network can provide a linear park network that connects to the entire hamlet. La Crete already enjoys several trails throughout the hamlet, and planning for the Airport Industrial and Highway Commercial areas to incorporate public pathways through comprehensive stormwater management will enable this part of the hamlet to connect to this existing network. While the Public Realm Concept shows only a hypothetical pathway alignment, it conveys the idea that the pathways should provide residents with an attractive new community asset and active transit accessibility to new jobs that will be generated in this area.

Overall Objectives
, A comprehensive plan for stormwater management in the growth areas east of La Crete is developed.

Stormwater management for new development provides active transportation connections to the rest of La Crete's public pathway network.

Policy
a. Develop a comprehensive stormwater management plan including pathway connectivity throughout that addresses the four sections between Highway 697, 100 Street, 109 Avenue, and Township Road 1060.
b. Incorporate this approach into the appropriate plans, policies, or through bylaw to ensure future development contributes to this plan.

### 2.5 Implementation

Given the opportunities and constraints facing La Crete there are a range of areas that should be contemplated for future industrial growth. As a strategic planning document the Industrial Growth Strategy gives this guidance as well as providing:
, A Vision for how to accommodate industrial growth in and around La Crete;
, A Decision-Making Tool for Council, County Administration, and stakeholders;
, A Guide to help residents and landowners understand how lands around La Crete may be used; and
, Industrial growth that respects and meets the needs of the community.
La Crete faces significant challenges to realizing its full development potential. The lack of servicing infrastructure capacity requires County action in order to create the requisite conditions for industrial growth. In doing so the County must also provide certainty and consistency for developers, utility providers, and the public as to how the County will address these constraints. Collectively the County can achieve these outcomes through strategic implementation of the Industrial Growth Strategy, accomplished by:
, Aligning Existing Policy with the Industrial Growth Strategy;
, Identifying Stakeholders for successful implementation;
, Growing Responsibly according to economic and infrastructure conditions; and
, Developing a Business Case for funding the infrastructure improvements required to reach La Crete's full potential.


### 2.5.1 Aligning Existing Policy

The Industrial Growth Strategy provides important strategic direction for future industrial development in and around La Crete. Implementing these strategic directions requires the County's statutory planning documents to be aligned with the Strategy for maximum utility. The current Municipal Development Plan contains a dated perspective of where industrial development should occur in La Crete, while the La Crete Area Structure Plan in turn requires updating to align with this new policy direction. Updating both of these plans will provide statutory consistency that the County needs to ensure growth occurs according to the Industrial Growth Strategy.

An additional step to encourage industrial development according to the Industrial Growth Strategy is Countyinitiated land use redesignations. By proactively redesignating lands identified in the Industrial Growth Strategy the County removes a costly and time-intensive hurdle to development. Providing a planning framework that is "shovel-ready" for the right kinds of industrial development makes La Crete a more attractive place to invest in.

## Action Items

, Amend the MDP to reflect the Industrial Growth Strategy and generally modernize the County's industrial development policy.
, Develop a Transportation Master Plan that reflects the Industrial Growth Strategy.
, Revise the La Crete ASP to reflect the Industrial Growth Strategy .
Initiate land use redesignations for the areas identified by the Industrial Growth Strategy.

### 2.5.2 Identifying Stakeholders

Existing industrial businesses in La Crete have indicated a desire to expand their operations. However, servicing infrastructure capacity is a significant barrier to growth, and transportation network improvements are required to accommodate growth in certain areas. Strategic opportunities to leverage this interest from local businesses to grow must be investigated as an opportunity to expand municipal infrastructure through mutually beneficial cost-sharing agreements. The County can take a leadership role in identifying strategic infrastructure investments with its clear understanding of potential partners. By bringing stakeholders together and leveraging collective private and public capital, the County can expedite servicing expansion and transportation improvements to La Crete faster than any individual actor on their own.

## Action Items

, Identify stakeholders interested in expanding servicing capacity.
, Identify stakeholders interested in expanding in key transportation infrastructure improvement areas.
, Where stakeholder interests align, determine priority area(s) for infrastructure expansion and improvement.
, Develop cost-sharing agreements to leverage private and public capital into infrastructure expansion that benefits all stakeholders.

### 2.5.3 Growing Responsibly

New and increased servicing and transportation infrastructure have been identified as critical ingredients for large-scale industrial growth in La Crete. However, development in La Crete must still occur in a fiscally sustainable manner that does not expose the County to excessive risk through bankrolling infrastructure expansion by itself. While the Industrial Growth Strategy identifies broad areas for future development, the County should allow market forces to determine early nodes of industrial development and then prioritize infrastructure investment in these areas. These investments can be facilitated through partnerships with new development or the expansion of existing businesses in the area. The priority is to leverage private sector investment into additional funds for infrastructure improvements. Following these initial investments, the County should then prioritize further development and intensification around these growth areas.

This approach to growing responsibly ensures that future investments in infrastructure can be borne by, and will benefit, the greatest number of industrial users possible. In turn, this reduces the potential risk to the County by leading investment in infrastructure while also making La Crete's business case for provincial and federal-level infrastructure investment more compelling.

## Action Items

, Respond to market pressure through the lens of the Industrial Growth Strategy.
Prioritize development around these growth nodes as they develop.
Revise the County's policy for financing servicing infrastructure investments.

Investigate the use of off-site levies to provide increased transportation and servicing infrastructure capacity.

### 2.5.4 Developing A Business Case

Some infrastructure expansion may be too cost-prohibitive for Mackenzie County and local businesses to bear alone. In order to access external funding from provincial and/or federal partners, the County should prepare a comprehensive business case that outlines the economic benefits that will be created by expanding La Crete's servicing infrastructure capacity.

Through development of this Industrial Growth Strategy the County has already expressed its dedication to enabling industrial growth in the La Crete area. This strategic approach to longer-term growth presents a compelling argument to provincial and federal governments about why investing in Mackenzie County makes sense. Capitalizing on this requires the County to be able to express the real dollar-value benefits an injection of government funding will realize. Leveraging momentum from the Industrial Growth Strategy through a business case creates an even stronger narrative for investing in La Crete.

Action Items
, Prepare a business case for expanding servicing infrastructure capacity to La Crete.
Lobby provincial and federal governments for funding using the Industrial Growth Strategy and business case findings.

### 2.6 Recommendations Summary

The following provides a summary of the key action items from section 2.5 's Implementation framework.

### 2.6.1 Policy Alignment

, Amend the MDP to reflect the Industrial Growth Strategy and generally modernize the County's industrial development policy.
, Develop a Transportation Master Plan that reflects the Industrial Growth Strategy.
, Revise the La Crete ASP to reflect the Industrial Growth Strategy .
, Initiate land use redesignations for the areas identified by the Industrial Growth Strategy.

### 2.6.2 Identify Stakeholders

) Identify stakeholders interested in expanding servicing capacity.
, Identify stakeholders interested in expanding in key transportation infrastructure improvement areas.
, Where stakeholder interests align, determine priority area(s) for infrastructure expansion and improvement.
, Develop cost-sharing agreements to leverage private and public capital into infrastructure expansion that benefits all stakeholders.

### 2.6.3 Responsible Growth

, Respond to market pressure through the lens of the Industrial Growth Strategy.
, Prioritize development around these growth nodes as they develop.
, Revise the County's policy for financing servicing infrastructure investments.
, Investigate the use of off-site levies to provide increased transportation and servicing infrastructure capacity.

### 2.6.4 Develop Business Case

, Prepare a business case for expanding servicing infrastructure capacity to La Crete.
, Lobby provincial and federal governments for funding using the Industrial Growth Strategy and business case findings.


## APPENDIX A

GROWTH ANALYSIS
BRIEF

## GROWTH ANALYSIS BRIEF

Many factors influence the suitability of industrial development. A comprehensive analysis of these factors and their relationship to La Crete is necessary to understand where and how growth should be expected over the planning horizon of the Industrial Growth Strategy. This Growth Analysis includes an overview of the relevant site context, municipal policy, public engagement findings, industrial land demand, infrastructure and servicing capacity, and development suitability modelling. Taken together, this information provides an understanding of the opportunities and constraints facing industrial development in La Crete.


Figure 11: Servicing Infrastructure context for the study area.

## Site Context

Existing industrial development in La Crete is focused in two areas. 100 Street was the first area to develop in La Crete and today serves as the hamlet's downtown core, while more recent industrial development has favoured 100 Street north of 109 Avenue and the stretch of 109 Avenue connecting La Crete to Highway 697. The older, more central industrial development caters to a range of industries, although it features oil and gas related businesses more prominently than newer developments.

Newer growth along 101 Street towards Highway 697 focuses primarily on providing agricultural services including the sale of farm implements and seed decortication. This section of 101 Street serves as the primary entrance to the hamlet for industrial and residential traffic, and features existing gateway signage welcoming visitors to La Crete.

Limited light manufacturing and fabrication also exist in and around the hamlet. However, the community's largest-scale industrial development, La Crete Sawmills, is co-located with another sawmill approximately eight kilometres southeast of the hamlet.

## Policy Context

Industrial development in La Crete is regulated by the many existing municipal plans, policies, and studies in the County. These documents include high-level policy, detailed technical studies, and business development initiatives. Reviewing these documents presents a picture of the County's stated objectives and intentions for industrial development. Reviewed documents include:

## Statutory Plans

, Intermunicipal Development Plan - High Level and Mackenzie County
, Municipal Development Plan
, Area Structure Plans
, La Crete ASP
, Fort Vermilion ASP
, Connector Industrial ASP
, Mackenzie Highway Industrial ASP
, Land Use Bylaw
Strategic Plans, Policies, + Studies
, Community Sustainability Plan
, Economic Regeneration Strategy
, Policy PW025 - Infrastructure for New Development
> Rural Water Servicing Strategy


Figure 12: Key existing land uses in the La Crete area.

## Statutory Plans

Mackenzie County has a full complement of statutory plans, most of which have been written and approved within the past eight years. These documents include an Intermunicipal Development Plan (IDP) with the Town of High Level, a County-wide Municipal Development Plan (MDP), area structure plans (ASPs) for La Crete and Fort Vermilion, and several industrial development-specific ASPs. The policy intents of these plans are in turn implemented through the Land Use Bylaw (LUB), approved by Council in 2017.

The IDP with the Town of High Level provides insight for how and where Mackenzie County envisions industrial development. This document identifies heavier industrial uses as requiring separation from residential areas. Further, industrial development must not impede the safe operation of highways or the provision of municipal services.

The Municipal Development Plan (MDP) sits directly beneath the IDP in terms of legal precedence, and the County's MDP provides a clear vision for industrial development within its boundaries. Under the MDP, industrial development is intended to support agriculture in the County and should be provided in a concentrated pattern of development, minimizing the negative impacts of rural industrial development and avoiding better agricultural lands. The plan is also clear that growth within hamlets should include industrial development in identified development nodes and industrial parks. However, this development must minimize its impacts on urban areas with appropriate setbacks between industrial and non-industrial uses.

Servicing for industrial development is primarily the responsibility of the developer under the MDP, although the County remains open to cost-sharing agreements
when such improvements are required for development deemed to be in the County's interest. Economic diversification is important to the County, and industrial development is seen as a means to achieve this.

A draft Area Structure Plan (ASP) was prepared for La Crete in 2013. While never formally approved by Council, the ASP provides important insight into the development patterns envisioned for the community and provides a starting point for discussions about industrial growth in and around La Crete. The ASP is clear that with future development a separation of uses, particularly between heavier industrial and residential areas, should be maintained. This separation carries throughout the plan with the ASP identifying significant landscaping, buffering, and other means that industrial uses must employ in order to mitigate their potential impact on surrounding sensitive uses. However, this focus on separation is juxtaposed by policy outlining that leapfrog development should be controlled as it is detrimental to the County from a servicing cost perspective.

The Fort Vermilion Industrial ASP, Connector Industrial ASP, and Mackenzie Highway Industrial ASP were concurrently developed in 2013 to provide policy direction for three areas in the County identified for future industrial growth. While these plans were never formally adopted by Council, they again provide insight into the development patterns envisioned for industrial growth in Mackenzie County. The three industrial ASPs again identify the primary role of industrial development in the County as supporting agriculture and forestry operations while diversifying the local economy. Industrial development is encouraged to occur in a concentrated pattern and should be visually attractive, minimizing their negative impacts on agricultural and residential uses.

An additional component of the ASPs visions includes promoting existing assets in and around the plan areas such as highways, airports, servicing, and existing major employment nodes. While promoting existing assets, the ASPs also sought to ensure development allows for orderly expansion of the same municipal, provincial, and federal infrastructure.

The Land Use Bylaw (LUB) implements the County's planning and development policy using district-specific rules for the types of permitted development, building form and height, and other matters that influence how land is used in Mackenzie County. Definitions for general industrial use and heavy industrial use are provided in the LUB, providing clarity for what types of industry should be located further away from residential areas.

## Strategic Plans + Policies

In addition to statutory plans, Mackenzie County has prepared several strategic plans and policies that, while not recognized under the Municipal Government Act, still inform and direct the County's investments in infrastructure and support for development.

The Community Sustainability Plan incorporates many considerations for the County's long-term economic health that planning for industrial growth supports. These include providing sustainable employment opportunities for County youth, anticipating growth by preparing evidence-based plans such as this one, and creating the conditions to attract small and medium-sized enterprises that support existing businesses and industries. The plan also highlights the need to seek out, foster, and strengthen relationships with other partners in Northern Alberta and at various levels of government, leveraging relationships into investment in Mackenzie County.

The Economic Regeneration Strategy highlights the growth of inter-regional and organizational partnerships as a critical factor in future economic expansion throughout the County. Understanding that opportunities exist to expand co-operation and collaboration with area First Nations groups and other northern communities, the Strategy is clear that interaction between all of the

| Policy Document | Key Findings |
| :---: | :---: |
| Intermunicipal Development Plan | , Heavy industrial uses should be separated from residential areas. |
| Municipal Development Plan | , Industrial development should be co-located, creating concentrated areas of development. <br> , The County does not have a clear and consistent approach to servicing industrial development. |
| Area Structure Plans | , Balancing separation of uses and leapfrog development concerns is an ongoing challenge for La Crete. <br> , Industrial development should take advantage of existing assets and infrastructure investments. |
| Community Sustainability Plan | Infrastructure is a key barrier to economic growth in Mackenzie County. |
| Policy PW025 Infrastructure for New Development | , The County's existing policy does not support investing in infrastructure upgrades. |

Table 02: Summary of key findings from the policy review.
diverse communities of the region will contribute to the betterment of all. In particular the Strategy recognizes the necessity of championing infrastructure for business development, including power, gas, and water, to create more attractive costs and consistency in service delivery.

Policy PW025 - Infrastructure for New Development outlines the County's existing position relating to the procurement of infrastructure for new industrial development. Under this policy the County states it is not feasible to provide infrastructure for industry, and that the development of infrastructure is primarily the responsibility of the property owner. While this approach protects the County from exposure to the financial risks involved in infrastructure investment it also limits the marketability of the County when seeking to attract business development and expansion.

Technical studies commissioned by the County can provide important context for the servicing capacity of infrastructure. Mackenzie County's Rural Water Servicing Strategy provides an analysis of the rural water line connecting Fort Vermilion and La Crete, concluding that Mackenzie County is not constrained by the same limitations to expansion experienced by other franchise utilities such as natural gas and electricity.

## Summary

Mackenzie County's policy framework provides an outline for where and how industrial development should occur in the County. While industrial development within La Crete is contemplated primarily to the north along 100 Street and to the east along 109 Avenue, opportunity exists under the existing policy for growth outside of the hamlet. This is particularly true as the proposed uses may include heavier industry less compatible with the hamlet's primarily residential land uses. Beyond specific land use regulations Mackenzie County's policy is also aware of its servicing infrastructure constraints and the effect that this has on economic development in the region. The policy review identified no consensus as to how these constraints should best be addressed in order to stimulate further economic growth without exposing the County to risks associated with funding infrastructure improvements.

## Community Perspective

Beyond technical considerations, it is also important to incorporate local knowledge when contemplating future growth. The first round of public engagement for La Crete's Industrial Growth Strategy was held in November 2019 and focused on asking residents in and around the hamlet what kinds of growth are best suited to different locations and where growth should and should not occur. Key themes emerged from this round of engagement, including:
, Industrial access to La Crete should be consolidated;
, Servicing constraints pose a large barrier to industrial growth;
, Turning trucks pose a safety issue in and around La Crete; and
, The County's preferred northern industrial area is not desirable for some developments.

A second round of engagement was held in February 2020 and presented a draft Industrial Growth Strategy to residents, County staff, Council, and stakeholders through workshops, interviews, a public open house, and online survey. This engagement helped refine the policy directions and identified growth areas to best reflect La Crete's growth trajectory.

## Land Demand

Mackenzie County's economy is based on three key industries-oil and gas, forestry, and agriculture. The hamlet of La Crete's local economy focuses on forestry and agriculture, with a developing services industry as well. As the hamlet continues to grow, competition between residential growth, institutional uses, and industrial development will impact land demand in and around La Crete. Based primarily on economic forecasts for these key industries as well as historic industrial land use in and around La Crete, this section of the Growth Analysis Brief provides insight into the approach to managing land demand over the Industrial Growth Strategy's planning horizon.

## Economic Trends

The main economic drivers in La Crete are agriculture and forestry, with a large array of secondary and tertiary businesses providing ancillary services to these core industries. La Crete's rapidly growing and young population also helps contribute to ongoing economic growth. Expanding from only 479 residents in 1981 to over 3,642 by 2018, La Crete is projected to continue growing to over 5,000 by 2030. This rapid natural population growth has led to an average age of approximately 22 years old, making the hamlet incredibly young relative to the rest of Mackenzie County, the province, and all of Canada. A younger population creates additional economic activity as the need for government services including schools and medical clinics contributes additional external investment into the community.

Over the planning horizon of the Industrial Growth Strategy the local agricultural industry is expected to continue growing as a warming global climate contributes to a longer growing season and higher crop yields in Northern Alberta. Recent provincial policy direction will also contribute to further agricultural development, as the government has indicated a desire to open additional "Green Area" lands for agricultural use. With continued population and agricultural expansion, spin-off industries supporting this development including fertilizer mixing, seed cleaning, and diversified on-farm businesses will create pressure for industrial lands to meet these needs.

The forestry industry is also expected to experience growth over the planning horizon of the Industrial Growth Strategy. Domestic timber markets are currently experiencing sustained contraction, creating an opportunity for local sawmills that have so far weathered a slow American housing market. However, local sawmills will struggle to fully capitalize on this potential increase in market capture as they are currently limited in operating capacity due to local natural gas and electrical constraints.

While never a core component of La Crete's local economy, in the context of Mackenzie County oil and gas also play a significant role in the regional economy. The long-term outlook for these commodities does not favour appreciable expansion of this industry in the County, and should not be expected to substantially influence La Crete's industrial land requirements over the planning horizon of the Industrial Growth Strategy.


Figure 13: Natural areas that impact development suitability in the La Crete area.

## Industrial Space Requirements

The existing footprint of industrial development in and surrounding the hamlet of La Crete is approximately 250 hectares of land, and the 2013 revisions to the Municipal Development Plan designate approximately 1,068 hectares for existing and future industrial development. Despite this, the draft La Crete ASP projects 88 hectares of industrial land use within the hamlet by 2033, a significantly lower amount than anticipated by the MDP. These inconsistencies are likely due to the atypical and rapid growth of the hamlet, a factor that makes accurate land demand projection difficult.

Fortunately, the hamlet is not constrained by availability of suitable lands for development. This allows the County to plan for the high industrial land uptake contemplated in the MDP. A critical next step with this approach to planning is establishing priority areas for industrial development throughout the plan area. This approach provides leverage for the County to counteract "leapfrog" development pressure on prime agricultural lands well outside La Crete's developed area while also creating a clear framework for industrial development that will provide certainty for developers looking to build.

## Existing Development Capacity

Development capacity is the function of two major factors: Available land for development and the existence of adequate servicing infrastructure. While Mackenzie County features no shortage of developable land, La Crete is currently severely constrained by its existing servicing infrastructure, including three-phase electricity and natural gas. While it should be noted that development to increase this capacity has occurred, and will continue to occur, this still reflects a constraint in La Crete's long-term development potential. Importantly, while this constraint does not preclude all forms of industrial development from occurring in the hamlet, it does create a downward pressure on the desirability of locating in La Crete as alternative servicing arrangements are often costly and/or impractical.

## Development Suitability Model

Industrial development suitability is a function of proximity to necessary infrastructure and distance to incompatible land uses and natural features. A development suitability model considers a range of factors that impact development potential. Score values are assigned to each factor depending on whether they represent positive or negative site attributes, and how important each factor is for industrial development.

Scores are calculated based on a distance analysis. A maximum score is given when a factor is close to a proposed area and decreases the further away from the area it is. For example, frontage on Hwy 697 will score the full 20 points for the Provincial Highway factor, but a site located 250 m from Hwy 697 might receive 10 points. All factors are added together to produce a cumulative suitability score for each proposed area.

Building on work completed in the County's previous industrial lands review, the development suitability model was refined to reflect newly available data and the specific project scope, resulting in the factors and suitability score values shown in Table 02 on page 43.

Figure 05 and Figure 06 show where the environmental factors, including soil classification, wetlands, and other protected watercourses exist in and around La Crete.

## Development Suitability Model Results

Figure 08 on page 44, illustrates the Development Suitability Model results. The model assigns individual scores to every 20 m by 20 m square in the study area, with the darkest purple areas representing the highest scores, while all areas scoring negative values are shown as white.

The development suitability model results show three clear nodes of high suitability for industrial development north, east, and south of La Crete. The largest area of suitability is to the south, located in and around the existing La Crete Sawmills along Highway 697. This area benefits from the existing highway infrastructure improvements, servicing infrastructure connectivity, and an ample supply of larger parcels to facilitate future


Figure 14: Canadian Land Inventory soil classifications in the La Crete area.
development. The second-largest area of suitability is located north of the hamlet, in the area previously identified by the industrial lands review as a priority area for future development. This area is unencumbered by Transport Canada airport exclusionary zones, enjoys close proximity to the hamlet, and provides a natural extension of the commercial / industrial character of the 100 Street main street. The final area of highest development suitability is located directly east of La Crete along Highway 697. This area benefits from direct highway access, servicing infrastructure, and an overall lack of push factors to limit its suitability.

## Analysis Summary

La Crete is well suited for ongoing expansion of its industrial base, although the existing policy framework does not provide clear direction for where and how this growth should occur. As the hamlet's population and economy are projected to continue their rapid growth over the Industrial Growth Strategy's planning horizon, it is imperative to approach future industrial development with a comprehensive planning framework that enables continued industrial growth while focusing it in a way that maximizes utility for developers and return on infrastructure investments for the County and other government stakeholders. The development suitability model provides insight into what this prioritization could look like, and further discussions with key stakeholders in La Crete, County Administration, Council, and the public will help refine these findings into a cohesive strategy for future industrial growth.

| Pull Factors | Weight | Influence <br> Distance (m) |
| :--- | :--- | :--- |
| Large Parcels | 10 | 0 |
| Rural Waterlines | 10 | 100 |
| Three Phase Electricity | 20 | 1000 |
| Provincial Highway | 20 | 500 |
| Natural Gas Pipelines | 20 | 1000 |
| Push Factors | Wcore | Influence <br> (m) |
| Airport Buffer Zone | 10 | 0 |
| Soil - Class 3 | 5 | 10 |
| Soil - Class O | 5 | 10 |
| Waterbodies | 20 | 50 |
| Wetlands (>10 ha) | 10 | 100 |
| Lotic Riparian Areas | 20 | 10 <br> Small Parcels |

Table 03: Factors incorporated in the development suitability model.


Figure 15: Results of the development suitability model indicating areas of highest development suitability in darkest purple.

## APPENDIX B

TECHNICAL BRIEF

## TECHNICAL BRIEF

This technical brief summarizes the findings of Helix Engineering's investigation into the servicing infrastructure requirements for the Industrial Growth Strategy's identified land use concept. The condition of existing infrastructure is first summarized, followed by an overview by growth area of the projected servicing demand and required infrastructure upgrades to support build-out. Servicing concepts for the growth areas are presented as figures at the end of this brief.

It is important to note that since completing this brief, the County has begun work revising the General Municipal Improvement Standards. These revisions will largely address the engineering recommendations made in this brief.

## Existing Infrastructure

This overview of the issues and capacity of the existing infrastructure systems in La Crete is based on a 2015 Infrastructure Master Plan (IMP) prepared by MPE, a 2016 report on the water treatment plant by Associated Engineering, and discussions with County staff.

## Shallow Utilities

Based on discussions with Mackenzie County, there are issues with the existing power and gas systems. Both have a limited capacity and will require upgrading at some point in the future. While unable to determine the capacity of the system to estimate growth capacity, it is understood that the community has experienced brownouts in the past which indicates the power system is at or near capacity. The ability to service the potential growth areas will require planning and investment in the shallow utilities. The Industrial Growth Strategy should form, in part, the basis for planning required upgrades.

## Water

The existing water treatment plant, reservoir and pumphouse are located on the south side of the hamlet. The existing raw water and treatment systems have a significant amount of capacity available. Field testing completed by Associated Engineering in 2016 indicates
the existing system may be capable of supporting upwards of $40 \%$ growth in demand.

In the distribution system, there is a limited amount of 300 mm and 250 mm mains extending north from the pumphouse. There are also some 200 mm mains, but most of the existing water mains are 150 mm . Minimum pipe sizes required under the County's General Municipal Improvements Standards are as follows:
, Single family residential 150 mm
, Multi-family 200 mm
, Industrial or commercial 250 mm
The fire flow requirements under the County's General Municipal Improvement Standards are as follows:
, Single family residential $3.64 \mathrm{~m} 3 / \mathrm{min}(61 \mathrm{I} / \mathrm{s})$
, Town houses $5.45 \mathrm{m3} / \mathrm{min}(91 \mathrm{l} / \mathrm{s})$
, Walk-up apartments $9.10 \mathrm{~m} 3 / \mathrm{min}(152 \mathrm{l} / \mathrm{s})$
, Schools $5.45 \mathrm{~m} 3 / \mathrm{min}(91 \mathrm{l} / \mathrm{s})$
, Commercial $11.40 \mathrm{~m} 3 / \mathrm{min}(190 \mathrm{l} / \mathrm{s})$
, Industrial is $13.64 \mathrm{~m} 3 / \mathrm{min}(227 \mathrm{l} / \mathrm{s})$
The IMP does not cover the entire growth area. It does reference a 300 mm ring watermain to improve flows to the community. It also indicates that some modelling was done, though results are not presented within the report. Modelling of the water system was not part of the scope for this project. It is recommended that a water model be developed or if one exists, that it be updated to reflect the existing system. This model can then be used to confirm the assumptions made in this report.

## Sanitary Sewer

The existing sewage lagoon was recently upgraded, and there is significant treatment capacity available for growth. The IMP by MPE indicated that the lagoon has capacity to 2031 from 2016 at a $3.5 \%$ growth rate, which represents an overall growth rate in excess of $65 \%$.

The County's General Municipal Improvements Standards indicate sewage generations rates of 17,000 I/ ha/day for Industrial, Commercial and Institutional subdivisions. The study area for the La Crete Industrial Growth Strategy has 3 industrial zones and 2 industrial/ commercial flex zones.

Helix Engineering is currently working on a project in the County of Grande Prairie for Aquatera utilities. The area is substantially built out industrial development that would be similar to the light industrial and airport zoning in the La Crete study area. The standard for sewage generation in the County for industrial is 26,000 I/ha/day and 10,000 $\mathrm{I} / \mathrm{ha}$ /day for commercial. By pulling the water usage records for existing businesses it was determined that the average usage in the La Crete area was closer to 2,300 I/ha/day.

As the La Crete study area has large service areas and the anticipated coverage is light, based on local experience, it is recommend that $17,000 \mathrm{l} / \mathrm{s} /$ ha that would be a very high flow generation rate. For the purposes of preliminary sizing and cost estimates, the following rates were used:
, Light Industrial: 3,000 I/ha/day
, Highway Commercial and Airport Industrial: 10,000 I/ha/day
, Heavy Industrial: Should be calculated on a sitespecific basis

## Storm

There is some existing storm sewer servicing within the hamlet. Based on the IMP, this storm sewer infrastructure has been designed for a 2-year rainfall event. There are currently no storm water ponds controlling the peak or volume of runoff. Based on discussions with the County staff, there are areas in the hamlet that are experiencing drainage issues. It is assumed that all future development areas will be required to have stormwater management. This may include development ponds or, for large industrial sites, on-site detention. All flows from developed areas released to existing drainage courses should be restricted to pre-development flow rates.

## Growth Areas

## Light Industrial

The Light Industrial area is highlighted in Figure 2 of this brief. The lands comprise approximately 8 quarter
sections and are located at the north end of the hamlet. The site is bisected by the existing paved Range Road 153 which is an extension of 100 Street. The lands generally slopes from the west to the east and from the north to the south. The southwest quarter has some existing commercial and industrial development.

## Water

Modelling the water system was not part of this project's scope. However, a 400 mm water main is recommended to be extended from the existing pumphouse north to the subject property. This main would feed the light industrial area as well as provide looping for the general benefit of La Crete. It would also be able to feed a future reservoir or booster station in the north area should one be required. The light industrial area will be serviced with a 300 mm loop connecting to the 400 mm pipe. Internal piping is considered part of the development cost and therefore an estimate is not included. The 400 mm connection is estimated to cost $\$ 1.40$ million.

## Sanitary Sewer

The southern two quarter sections of the Light Industrial area have been included in an existing sanitary sewer design, while the remaining six quarter sections require new servicing. Based on spot elevations from Google Earth TM, it appears that the subject lands can be serviced with a gravity sewer connecting to the previously designed trunk system.

The land lends itself to a gravity trunk running along the eastern boundary. The trunk would range in size from 300 mm to 450 mm . Based on the existing ground elevations from Google Earth TM, it appears the land would drain west to east into the trunk, with the trunk draining from the north to the south. The trunk is estimated to cost $\$ 1.65$ million and the oversizing of the previously designed sewer is estimated at $\$ 250,000$. The system of 250 mm and 300 mm laterals to convey flows to the trunk are considered part of the development cost and are not estimated.

## Roads

Access for the developed site would be from 100 Street north. The existing road is paved but narrow. Development of the light industrial land may necessitate upgrading this road.

Upgrading to a 10 m paved rural road in this study area is estimated at $\$ 2.24$ million. It is also proposed that Township Road 1064 be upgraded to a 10 m paved rural road from Highway 697 to Range Road 153 in order to facilitate an alternative industrial access point to the hamlet. This would cost an addition \$16 million. Internal roads have not been detailed or estimated.

## Core Commercial

The Core Commercial area is outlined in Figure 3 of this brief, and contains approximately 71 ha of land located in the centre of the hamlet. Comprising the main commercial trade area of La Crete, future development in this area will be commercial land uses.

## Water

The water distribution is a mix of $150 \mathrm{~mm}, 200 \mathrm{~mm}$ and 250 mm watermains. It is likely that for a commercial area, the 150 mm watermains are not sufficient to provide the required fire flow of $190 \mathrm{l} / \mathrm{s}$. These areas are highlighted in Figure 3 and at 250 mm mains have estimated replacement costs of:

```
> 100 Street - 820 m $1.06 million
, 101 Street - 890 m $1.15 million
```


## Sanitary Sewer

There were no issues reported with the existing sanitary sewers. No replacements or upgrades are contemplated to support the growth.

Roads
Access is existing for the area and no further road improvements are contemplated to support the growth.

## Highway Commercial

The Highway Commercial area is illustrated in Figure 4 of this brief, and includes approximately 4.5 quarter sections, or 300 ha of land in the northeast part of the hamlet. The area is bounded on the north by 109 Avenue and the east by Highway 697. The land is relatively flat with elevations ranging from 317 m to 320 m , based on Google EarthTM. Existing land uses are agricultural, commercial, and industrial.

## Water

Modelling the water system was not part of the scope for this project, however, a 400 mm water main will likely be required to extend from the existing pumphouse east to the subject area. This main would feed the Highway Commercial and Airport Industrial areas and may provide service to the Heavy Industrial area to the south. It would also be able to feed a future reservoir or booster station in the east area should one be required. The Highway Commercial area will be serviced with a 300 mm interior loop connecting to the 400 mm pipe. Internal piping is considered part of the development cost and therefore an estimate is not included. The 400 mm connection is estimated to cost $\$ 1.18$ million.

## Sanitary Sewer

The Highway Industrial area is proposed to be serviced by a gravity trunk. The trunk will extend from the Airport Industrial area to the south to the existing lift station located on 106 Avenue east of 92 Street. There is an existing pipe stub has an invert of 311.97 at the lift station and the forcemain is a 150 mm DR17.

Based on preliminary sizing, the trunk would range in size from 300 mm to 450 mm and would connect at the lift station approximately 4 m below the existing stub. As a result, the lift station will likely need to be deepened to allow this land to be serviced. Additionally, the forcemain will require upsizing to 300 mm . The cost of this is estimated at $\$ 5.33$ million.

Connections from the lots to the trunk could be accomplished by gravity or by low pressure, as cover at the top end of the system may be an issue.

Should the area be serviced by a Low Pressure System (LPS), the mains replacing the trunk would range from 150 mm to 250 mm . The estimated cost for an LPS would be in the order of $\$ 2.05$ million. This system would by-pass the existing lift station and instead discharge directly to the lagoon site.

## Roads

Access for the developed site would be from limited intersections with Highway 697 and 94 Avenue. Access from the highway will likely be limited to one intersection
per quarter section. Intersection improvements are contemplated to be incorporated into the cost of development and therefore estimates have not been provided.

## Airport Industrial

The Airport Industrial area is illustrated in Figure 5 of this brief, and is comprised of approximately 323 ha located in the vicinity of the airport southeast of the hamlet. The area is bisected by Highway 697 and Township Road 1060. The land is relatively flat with elevations ranging from 317 m to 322 m based on Google EarthTM. The existing land use is predominantly agricultural.

## Water

To service this area the 400 mm water main will need to be extended from the Highway Commercial area south to the Airport Industrial area. This main would feed the Highway Commercial and the Airport Industrial areas and may provide future service to the Heavy Industrial area to the south. It would also be able to feed a future reservoir or booster station in the east area should one be required. The Airport Industrial area will be serviced with a 300 mm interior loop connecting to the 400 mm pipe. Internal piping is considered part of the development cost and therefore an estimate is not included. The estimated cost to extend the 400 mm main 800 m to the south would be $\$ 0.39$ million. Modelling of the system may indicate the need for a booster station or possibly a reservoir and pumphouse.

## Sanitary Sewer

The area is proposed to be serviced by a low-pressure sewer system that connects to the gravity trunk in the Highway Commercial area. This will require the trunk to be oversized to accommodate the flows. The trunk size would be increased to 525 mm and 600 mm and the existing forcemain will required upsizing to 350 mm . The incremental cost for the gravity trunk and forcemain is estimated at $\$ 1.23$ million. Internal LPS piping is assumed to be a development cost, thus estimates are not provided.

Should the Highway Commercial area develop with LPS servicing, the main line to the lagoon will require upsizing
to accommodate the Airport Industrial lands. The resulting estimated incremental cost is $\$ 0.34$ million.

## Roads

The developed site would be accessed from limited intersections with Highway 697 and Township Road 1060. The intersection improvements would be considered part of the development costs and therefore estimates have not been provided.

## Heavy Industrial

The Heavy Industrial area is illustrated in Figure 6 of this brief, and the lands in question comprise approximately 600 ha. The Heavy Industrial area is located south of the airport along Highway 697. The area is bisected by Highway 697 and Township Road 1054. The land is relatively flat with elevations ranging from 319 m to 324 m based on Google EarthTM. The land is predominantly farm land with existing sawmill sites.

## Water

Estimating the water requirements for heavy industrial uses is difficult. The range of water needs can vary widely by industry. Individual developments will have differing potable water and process water demands. It is possible that the water demand for heavy industrial uses could be greater than that for the Hamlet, exceeding the capacity of the existing system. Given the extreme variability possible, providing a servicing concept for this land is difficult.

For the purpose of protecting the County from excessively overdeveloping its servicing capacity for uncertain servicing demand, it is proposed that industry in this area will take care of their own water demand. This could be accomplished by drilling well water, collecting surface water, connecting to the municipal system extended from the hamlet through case-by-case agreements with the County, a new river intake and pipeline, or any combination of these. For this reason, no costs have been estimated to service the Heavy Industrial area.

## Sanitary Sewer

In many cases, industry will have multiple waste streams that include domestic sewage and process water. A high water use industry could generate process wastewater that far exceeds the capacity of the hamlet's treatment and conveyance system. Heavy Industrial plants will typically treat process wastewater prior to discharging back to the environment. Domestic sewage flow is typically small in comparison to process water, and in some cases, the addition of the sewage to the process water can aid in the treatment process.

For the purpose of this study, it is assumed that industry will treat and discharge their wastewater to the applicable environmental standards and that municipal services would not be provided. For this reason, no costs have been estimated to service the Heavy Industrial area.

## Roads

Access for the developed site would be from limited intersections with Highway 697 and Township Road 1054. The intersection improvements would be considered part of the development costs and therefore estimates have not been provided.

## Summary of Costs

Based on the servicing concepts described, the table below summarizes the estimated costs of servicing. The LPS option shows the difference in servicing infrastructure costs for the Highway Commercial and Airport Industrial areas. The costs for the Airport Industrial change with the LPS option as the cost of oversizing through the Highway Commercial area change. Costs have not been included for the Heavy Industrial servicing as there is no way to accurately estimate the scale or demand for service.

| Gravity Sewer Option |
| :--- |
| Area |
| Light Industrial |

Table 04: Summary of the estimated costs for the identified infrastructure servicing improvements







## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: |  <br> Julius Peters, IT Manager |
| Title: | 5G Telecommunication Network |

## BACKGROUND / PROPOSAL:

Administration has been requested to research options to regulate the implementation of 5G telecommunication services in Mackenzie County and the effect to telecommunication services in the municipality.

Innovation, Science and Economic Development Canada (Industry Canada) regulates all telecommunication towers in Canada.

The federal Minister of Industry has the authority under the Radiocommunication Act to issue radio authorizations, to approve each site on which radio apparatus, including antenna systems (referred to as "antenna systems" or "installations"), may be located and to approve the erection of all masts, towers and other antenna-supporting structures. Industry Canada's role includes ensuring the orderly development and efficient operation of radiocommunications in Canada. In this regard, Industry Canada considers that the questions, comments and concerns of the local public and the Land Use Authorities (municipalities) are important elements for proponents to consider when seeking to install, or make major modifications to, an antenna system.

Municipalities have the ability to encourage the structure and preferred placement of communication towers within the municipality. Essentially, there is public consultation that must take place. The carrier must respond to concerns or questions within a certain time period. Carriers will respect and do their best to adhere to recommendations based on future planning documents, public space considerations, and public response regarding placement of the tower.

As stated in the Guide to Assist Land-use Authorities in Developing Antenna System Siting Protocols by Industry Canada:
$\qquad$ CAO: $\qquad$

Furthermore, Land Use Authorities (LUA) can:

- encourage the placement of new towers in commercial, industrial/agricultural areas and utility or roadway easements;
- ask the proponent to suggest various options for consideration; and
- identify preferred criteria for antenna structure siting for new structures that exceed a specified height.

The only action for a municipality to take is to implement a more robust public consultation period on the future placement of telecommunication towers in hamlet. The Guide to Assist Land-use Authorities in Developing Antenna System Siting Protocols states that while LUAs are free to structure their public consultation process to meet their needs, Industry Canada's process consists of two distinct components:

- Public Notification - where the proponent informs the public of the proposed antenna system installation or modification, providing the information needed for a complete understanding of the proposal.
- Public Engagement - where the proponent engages the public and responds to all questions and comments, addressing all reasonable and relevant concerns. Public engagement may take various forms, from answering letters to hosting a public meeting or drop-in, depending on the community's level of interest.

To avoid unnecessary delays, Industry Canada's process indicates that LUAs are normally expected to conclude the consultation process within 120 days from the receipt of the formal consultation request. Accordingly, when developing protocols, LUAs should not exceed these timelines.

In speaking with a representative from the Innovation, Science and Economic Development Canada, he explained that if the municipality and carrier were unable to reach a decision or compromise on communication services/towers, Industry Canada will step in and make the decision without consultation from the municipality or the carrier. He has reviewed Mackenzie County's existing antenna siting protocol policy and he believes that it is sufficient and that in his experience, it has been followed correctly by administration and carriers alike.

If the municipality passed a resolution to prohibit telecommunication towers in any capacity, federal jurisdiction will supersede the local jurisdiction.

5G works in conjunction with existing 4G and older generation networks, that operate your cellular and internet systems. This new system is thought of as a faster and a better network to service legacy devices and new generation devices. 5 G is another generation of the existing 4G network, the concern is expected to be the millimeter wave technology which would include more antennas throughout the hamlet to be located on existing infrastructure (light poles, power poles, roofs, etc.). Carriers are not required to request approval for this system. If we request consultation on all upgrades, we will be notified prior to installation and we can conduct public engagement and make recommendations at that time.
$\qquad$ Reviewed by:

Restrictions to telecommunication towers and their frequencies, can and will have negative effects on overall service to all local customers and businesses.

## OPTIONS \& BENEFITS:

The only feasible option is adding a robust public consultation process that will allow residents to voice their concerns to the carriers and to be more involved in locating tower sites. Administration can also preliminarily identify preferred areas for new tower locates to ensure distance from residential areas or areas of concern.

If Council should decide to add red tape to new telecommunication towers:

- Existing Carriers may lose interest and can pull towers out of the area entirely;
- Existing Carriers with towers existing will have a competitive advantage and essentially have a monopoly on the area;
- New Carriers will not be able to compete;
- Carriers may be hindered to upgrade or service their existing systems which would mean that we would not have the technology to support new generation devices such as cell phones, GPS and navigation systems, tablets, televisions, wifi, etc. and our existing devices would eventually age out;
- Industry Canada will step in and make decisions without municipal input;
- Carriers can seek out landowners and enter into lease agreements without municipal input and place towers in areas of concern;
- Businesses dependent on technology will be expected to upgrade their internet services themselves by installing fiber-optic lines, which can be up to $\$ 100,000$ per install and a high monthly cost of $\$ 500$ as opposed to cheaper and more efficient service via telecommunication towers;
- Businesses can lose out on technological opportunities;
- Residents and Businesses will receive a poorer service in general;


## COSTS \& SOURCE OF FUNDING:

## N/A

## SUSTAINABILITY PLAN:

Goal E21 That County residents and businesses have access to the most current telecommunication technologies to permit them to participate in global opportunities.

Strategy E21.1 Encourage the existing internet service providers in the region to continue to upgrade their systems, both in terms of reliability and speed.

Strategy E21.2 Encourage existing cellular service providers to continue to expand their coverage areas along existing highway corridors and areas with First Nations peoples.

Author: $\qquad$ Reviewed by: $\qquad$ CAO: $\qquad$

Strategy E21.3 Encourage existing cellular service providers to install better battery backup infrastructure at the towers that will allow for improved service during times of crisis.

Strategy E21.4 Lobby the province to invest in additional fiber optic infrastructure improvements in order to reduce the reliance on the existing infrastructure.

Strategy E21.5 Explore the possibility of other businesses such as Shaw, CCI, SIS, NorthwesTel, Axia, etc. expanding their service in the region to serve the hamlets within the County.

Strategy E21.6 Lobby government and telecommunications industry to increase cooperation between providers to allow greater network access, especially during emergencies.

## COMMUNICATION / PUBLIC PARTICIPATION:

All carriers that propose to install new telecommunication towers notify and consult Mackenzie County prior to application. Applicant makes application and they notify adjacent landowners. The public has 30 days to respond from date of notification. Questions and concerns are sent to the carrier and County administration. Carriers are to respond and if there are concerns, they are to be addressed in the development permit approval.

## POLICY REFERENCES:

DEV006 Antenna Siting Protocol Policy

## RECOMMENDED ACTION:

$\square$ Simple Majority $\quad \square$ Requires $2 / 3 \quad \square \quad$ Requires Unanimous
That administration implement a more robust and informative public consultation process into DEV006 Antenna Siting Protocol prior to development permit approval.
$\qquad$ CAO: $\qquad$

## Guide to Assist Land-use Authorities in Developing Antenna System Siting Protocols

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## 1. Introduction

This guide is intended to assist Land-use Authorities (LUA) in ensuring effective local participation in decisions regarding proposals to build antennas and their supporting structures within their communities. For the purposes of this guide, an LUA means any local authority that governs land-use issues and includes a municipality, town council, regional commission, development authority, township board, band council or similar body. This guide complements Industry Canada's Client Procedures Circular CPC-2-0-03, Issue 5, Radiocommunication and Broadcasting Antenna Systems. LUAs are encouraged to consult CPC-2-0-03 to better understand roles and responsibilities.

The requirements of CPC-2-0-03 apply to anyone (referred to as a "proponent") who is planning to install or modify an antenna system, ${ }^{1}$ regardless of the type. This includes telecommunications carriers, businesses, governments, Crown agencies, operators of broadcasting undertakings and the public (including for amateur radio operation and over-the-air and satellite TV reception). The requirements also apply to those who install towers or antenna systems on behalf of others or for leasing purposes ("third party tower owners"). As well, the procedures contain obligations that apply to existing antenna system owners and operators, including those relating to the use of existing infrastructure (sharing).

This guide specifically addresses two areas:

- Participation Process: Addresses the LUA's role in effectively participating and influencing decisions with respect to proposed antenna systems within Industry Canada's antenna siting procedures. Industry Canada believes that antenna siting protocols jointly developed between proponents and LUAs can supplement the Department's antenna siting procedures, while at the same time having a higher degree of acceptance and compliance.
- Local Protocol Development: Sets out elements that LUAs might wish to include when developing protocols with proponents of antenna systems.

The federal Minister of Industry has the authority under the Radiocommunication Act to issue radio authorizations, to approve each site on which radio apparatus, including antenna systems(referred to as "antenna systems" or "installations"), may be located and to approve the erection of all masts, towers and other antenna-supporting structures.Industry Canada's role includes ensuring the orderly development and efficient operation of radiocommunications in Canada. In this regard, Industry Canada considers that the questions, comments and concerns of the local public and the LUA are important elements for proponents to consider when seeking to install, or make major modifications to, an antenna system.

Radiocommunication and broadcasting services are important for all Canadians and are used daily by the public, safety and security organizations, all levels of government, wireless service providers, broadcasters, utility companies and other businesses. Antenna systems are an essential component in providing these services and must be installed on towers, buildings or other antenna-supporting structures. Antennas and the structures that support them are integral to wireless network communication systems

[^1]and they provide the radio coverage the public and safety services need. With advancements in technology and given the growing demand for high-speed wireless access, communities in Canada are currently experiencing, or will soon experience, the deployment of new antenna systems.

Thanks to their local knowledge, LUAs are well qualified to explain to proponents the particular amenities, cultural or environmental sensitivities, planning priorities and other relevant characteristics of their area. The LUA may also be aware of potential Aboriginal or treaty rights or land claims that may be affected by a proposed installation. Working together, LUAs and proponents can find solutions which address reasonable and relevant concerns or point the way to alternative antenna system siting arrangements. Accordingly, Industry Canada encourages LUAs to develop local protocols to manage the process of identifying their own concerns, as well as those of the public they represent, regarding antenna system modifications or installations.

For the purposes of this document, Industry Canada will refer to any written local guideline, policy or process that addresses the issue of antenna placement as a "protocol". Cooperation between LUAs and proponents through clear and reasonable protocols can result in the development of new and enhanced wireless services in a community-friendly manner.

Industry Canada ${ }^{2}$ is available to assist in the creation of local land-use protocols for antenna system installations.

## 2. Participation Process

There are a number of steps a proponent typically follows in choosing a site for an antenna system installation; unless specifically excluded under Industry Canada's process, one of these steps is consulting with the LUA. The community in an LUA's area expect it to provide local knowledge, experience and leadership. The LUA can also ensure that any questions, comments or concerns are appropriately addressed by the proponent.

The subsections that follow suggest various aspects of a consultation process that an LUA may want to take into consideration when developing antenna siting protocols. Protocols are an effective means for an LUA to use to convey its preferences, as well as those of the community it represents, to antenna system proponents.

### 2.1 Placement of Antenna System

Proponents must consider various antenna system placement options, including using existing structures such as building rooftops and water towers, to minimize the impact on the local community. Radiocommunication antennas need to be strategically located to satisfy specific technical criteria and operational requirements. Therefore, there is a limited measure of flexibility in the placement of antennas and proponents are constrained to some degree by:

[^2]- the need to achieve the required radiocommunication coverage, often in response to public demand;
- the availability and physical limitations of nearby existing structures (towers, rooftops, water towers, etc.) to accommodate additional antennas; and
- the securing of lease agreements to permit access to an existing structure.

Consequently, the LUA's or the public's preferred location for siting an antenna installation may not always be feasible.

LUAs are encouraged to develop protocols that are clear and within their area of responsibility. Protocols can include promoting the placement of antennas in optimal locations from a land-use point of view, or excluding certain types of installations from protocol requirements. Through protocols, an LUA can highlight its local knowledge and expertise related to area sensitivities, including environmental or cultural concerns, and land-use compatibility. Protocols can recognize local amenities and planning priorities while expediting the planning and approvals necessary for the installation of radiocommunication and broadcasting antenna systems.

### 2.2 Use of Existing Infrastructure (Sharing) ${ }^{3}$

The installation of a new antenna structure may at times reveal sensitivity in the local community. Therefore, Industry Canada requires proponents to first consider using existing towers or infrastructure (such as rooftops, water towers, utility poles, etc.). This approach is intended to minimize the proliferation of antenna towers. However, it is important to note that technical constraints, such as the need to: achieve a certain amount of radiocommunication coverage; re-use frequencies; and address equipment isolation issues; etc., may prevent a proponent from using an existing structure.

### 2.3 Preliminary Consultation

LUAs may wish to include in their protocols a mechanism for preliminary consultation. This would allow the proponent, before making any site selection decisions, to inform the LUA of its plans. Also, this initial contact allows a proponent to determine whether an LUA has a protocol in place regarding antenna system installations preferences. Within its own process, Industry Canada considers written formal contact as marking the official commencement of its $120-$ day $^{4}$ consultation process between the LUA and the proponent.

With a protocol in place, this initial contact allows the LUA an excellent opportunity to:

- inform the proponent of established and documented local requirements and consultation procedures;

[^3]- advise the proponent of historic and environmental land-use sensitivities including any related to potential Aboriginal or treaty right or land claim; ${ }^{5}$
- provide guidance and preferences to the proponent on the various preferred areas and sites to be considered;
- indicate its preferences; and
- provide information concerning any aesthetic or landscaping preferences.


### 2.4 Involving Local Public

Local public consultation offers a forum for members of the public located near the proposed installation to make comments, ask questions or raise concerns related to the proposed antenna system installation. This is an opportunity for the local public and the LUA to make the proponent aware of local considerations and, in so doing, influence the siting.

Industry Canada's own process recognizes two possible public consultation scenarios:

1. The LUA can set the format for public consultation in its protocol. This could identify situations that require public consultation and those that do not. It is important to note that, in all cases, telecommunications carriers, broadcasting undertakings and third party tower owners must notify and consult with the local public when proposing a new antenna tower.
2. If an LUA's protocol is silent on the issue of public consultation, or if there is no protocol, then the proponent will be required to follow Industry Canada's default public consultation process.

However an LUA is in an ideal position to develop a public consultation process because of its local experience and knowledge. For this reason, the Department encourages LUAs to include public consultation as part of their processes. The LUA, as the representative of the local community, can assist and guide proponents to conduct meaningful consultation by establishing reasonable and timely protocols which ensure local land-use concerns are appropriately addressed.

### 2.5 Responding to Consultation

Even in cases where the LUA does not have a local protocol, the LUA should take the opportunity built into Industry Canada's procedures to examine carefully the details of the proponent's proposal. During its examination of the proposal, an LUA may ask the proponent for additional information to determine whether there are any local land-use or public concerns. As part of the discussions, the LUA can engage the proponent by suggesting reasonable alternatives and/or mitigation measures that would address any questions, comments or concerns.

To maximize the benefit of this consultation process, both parties have to consider each other's requirements and constraints so they can work effectively together. In so doing, the parties can devise solutions that will minimize the impact of the proposed structure on the local surroundings, while at the same time taking into consideration each other's interests.

5 LUAs are encouraged to refer to online resources [for example, the Aboriginal and Treaty Rights Information System (ATRIS) (http://sidait-atris.aadnc-aandc.gc.ca/atris_online/home-accueil.aspx)] as applicable.

### 2.6 Concluding Consultation

Industry Canada advises that an LUA's protocol should include a mechanism for issuing a formal concurrence to mark the end of the consultation with the proponent. This may consist of a formal decision by a designated official or relevant committee or another formal means, such as a sentence or other reference in the town council minutes. If an LUA decides that a consultation ends with the issuance of a building permit, then the protocol should indicate this.

If the proponent has met the public consultation requirements, either through the LUA's or Industry Canada's default process, and neither the LUA nor the public formally communicates any concerns to the proponent about its proposal, Industry Canada will deem that the land-use authority and the public have no objections.

### 2.7 Impasse Negotiations, Dispute Resolution Process

When developing protocols, LUAs should consider the means by which disputes will be resolved, ensuring they are appropriate for the local community. By documenting this process, all stakeholders will understand their roles and responsibilities as well as the process for resolving disputes. Industry Canada generally favours having the proponent, the local public and the LUA work toward a solution which takes each other's interests into consideration. Where an LUA or a proponent feels it may be helpful to do so, it may engage Industry Canada in an effort to move the discussions forward. Under Industry Canada procedures, if either the LUA or proponent believes discussions have reached an impasse, either can formally request departmental intervention concerning a reasonable and relevant concern. It is anticipated this will occur rarely.

LUAs may wish to consider incorporating alternate dispute resolution options into their protocols. Many alternate dispute resolution processes are interest-based rather than regulatory in nature. Therefore, the parties are more likely to find a mutually beneficial resolution.

### 2.8 A Timely Process

To avoid unnecessary delays, Industry Canada's process indicates that LUAs are normally expected to conclude the consultation process within 120 days from the receipt of the formal consultation request. Accordingly, when developing protocols, LUAs should not exceed these timelines.

## 3. Local Protocol Guide Development ${ }^{6}$

### 3.1 Protocol Principles

The following set of considerations and suggested principles may serve as a guide to LUAs developing protocols that respectfully balance local land-use interests with the benefits that radiocommunication, including broadcasting, brings to a community. The protocol should, as appropriate, address the following:

[^4]- Information to proponents describing:
- areas of historic or environmental importance to the community and the need to minimize the impact of the proposal on these areas; and
- local preferences for antenna siting.
- Incentives to encourage aesthetically pleasing structures.
- Exclusions, which may build upon those established by Industry Canada (CPC-2-0-03, Section 6).
- Public consultation requirements that Industry Canada believes should be proportional to the proposal and its impact on the local surroundings. LUAs may wish to consider establishing a two-track process:
- a streamlined concurrence process for less controversial proposals, such as new sites in industrial areas or on municipal properties, for emergency services or personal installations by members of the public (including for amateur radio operation and over-the-air and satellite TV reception), and
- a process that includes broader public consultation for non-excluded structures likely to be of interest to the local community, such as the construction of new towers used by telecommunications carriers, broadcasting undertakings and third party tower owners.

The protocol should also establish a reasonable processing timeline that respects the timelines established in CPC-2-0-03 for proposals submitted to the LUA for concurrence.

### 3.2 General Protocol Template

The following elements are provided to aid LUAs in developing protocols dealing with antenna system installations:

## Objectives

A short discussion on the overall objectives of the local protocol.

## Jurisdiction

A discussion of the LUA's responsibilities and obligations in safeguarding legitimate concerns related to local land-use. Also, the role and responsibility of Industry Canada and the authority granted under the Radiocommunication Act to approve the location of radiocommunication facilities.

## Consultation with the LUA

This may include:

- criteria for excluding additional antenna systems, other than those listed in the CPC-2-0-03, from LUA consultation;
- process for LUA notification;
- list of all documents and drawings that the proponent must submit;
- processing and administrative fees;
- the means by which the LUA will indicate concurrence; and
- process time frames that respect those established by CPC-2-0-03.


## Excluded Antenna Structures

Industry Canada believes that not all antenna systems should be subject to a full land-use or public consultation process. Subjecting all proposals to the full consultation process would place an unnecessary and significant administrative burden on proponents, the LUA and the local public. Under Industry Canada's process, certain proposals are considered to have minimal impact on the local surroundings and so are excluded from public and land-use consultations. Industry Canada believes that consultation requirements should be proportional to the potential impact of the proposal. When establishing a local protocol, LUAs should consider the types of proposals that have minimal impact and so would warrant exemption from land-use and/or public consultation. It should be noted that any exclusion criteria established by the LUA can only augment, as appropriate, those established under Industry Canada's Exclusion List (CPC-2-0-03, Section 6).

## Antenna Structures Not Excluded

LUAs may wish to consider the following when developing consultation protocols:

- the type of structure: new, temporary or existing antenna systems as well as non-tower structures;
- the intended use of the structure, whether personal, commercial or safety;
- the effect on significant natural or cultural features; and
- the landscaping, access control, fencing and road access.

Furthermore, LUAs can:

- encourage the placement of new towers in commercial, industrial/agricultural areas and utility or roadway easements;
- ask the proponent to suggest various options for consideration; and
- identify preferred criteria for antenna structure siting for new structures that exceed a specified height.


## Public Consultation

Public consultation is an important part of the overall consultation process. Industry Canada believes that the local public should be consulted regarding non-excluded antenna proposals. Consultation allows the community to be involved and so ultimately influence the proposal's siting. Discussions can allow stakeholders to work towards a consensus. While LUAs are free to structure their public consultation process to meet their needs, Industry Canada's process consists of two distinct components:

- Public Notification - where the proponent informs the public of the proposed antenna system installation or modification, providing the information needed for a complete understanding of the proposal.
- Public Engagement - where the proponent engages the public and responds to all questions and comments, addressing all reasonable and relevant concerns. Public engagement may take various forms, from answering letters to hosting a public meeting or drop-in, depending on the community's level of interest.


## Establishing Appropriate Time Frames

It is important that the protocol establish time frames for a consultation process, to ensure timely response to any questions or concerns and to avoid unnecessary delays to the proponent and the LUA.
Industry Canada expects that any time frames established within an LUA's protocol will respect those established by CPC-2-0-03.

Under Industry Canada's procedures (CPC-2-0-03, Section 4.4), construction of an antenna system must be completed within three years of the conclusion of consultation. After three years, consultations will no longer be deemed valid except in the case where a proponent secures the agreement of the relevant land-use authority to an extension for a specified time period in writing. While Industry Canada does not
support a reduction of the three-year time limit, LUAs may wish to consider including in their protocols procedures related to extending the time limit for construction.

## Criteria not Necessary to Address Through Local Protocols

As described in Industry Canada's procedures (CPC-2-0-03, Section 7), proponents have specific obligations already subject to federal requirements. Protocols should not impose additional obligations in these areas. However, an LUA may wish to ask questions or seek clarification from proponents concerning their proposed steps and the alternatives available to satisfy these and any other radio authorization requirements. Proponents must comply with:

Health Canada's public radio frequency exposure guidelines - Safety Code 6 (Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz - Safety Code (2009));
Radio Frequency Interference and Immunity - EMCAB-2 - Criteria for Resolution of Immunity Complaints Involving Fundamental Emissions of Radiocommunications Transmitters;

- Canadian Environmental Assessment Act,2012 - CEAA 2012
- Aeronautical Safety - Transport Canada and NAV CANADA requirements for aeronautical safety


## 4. Conclusion

Land-use authorities, with their local knowledge, experience and leadership ability, have an important role in the consultation process relating to the siting of antenna systems. Clear and reasonable protocols will enable effective participation and cooperation between the LUA and the proponent. Such protocols can be used to identify the interests of the community as well as guiding land-use principles. Moreover, protocols allow for the introduction of radiocommunication services, including broadcasting, in the local community in a timely manner. Protocols can assist proponents planning to install antenna systems, while at the same time giving due consideration to local land-use issues.

## 5G and the Business Community

5G will be a determining factor in whether or not mobile-dependent users fully partake in the global digital economy, especially as smartphones, cell phones, and other wirelessenabled devices become the only gateway to the internet for rural populations.

For rural communities that often lack reliable broadband access, 5G represents increased economic opportunity through improved access to social services, such as health care, education, transportation, energy, and employment.

While lower-income households have similar levels of smartphone ownership they are more likely to depend on mobile services for online access, which is why 5G networks must be widely available, affordable, and able to support emerging technologies.

## In brief

- The estimated economic impact of 5G deployment in Canada will reach \$40B of annual GDP uplift by 2026.
- In addition to its significant economic benefits, 5 G has the potential to bring quality-of-life benefits to Canadian rural communities.
- below are three main 5G use cases, with a focus on the estimated benefits their adoption will bring in rural settings.
- Precision Agriculture: innovation technologies for crop and soil management.
- Energy Management: smart grid sensor densification and smart street lighting.
- Rural Connectivity: efficient broadband rollout to underserved areas.


## Precision agriculture

With lots of digital innovation in agriculture, 5G can support such improvement by enabling "precision agriculture." For example, 5G can support the minimization of pesticide use by enabling farmers to diagnose and isolate problem areas on a large farm through massive penetration of large-scale loT sensor networks, aerial scanning and detection, and autonomous, targeted (reduced) application of pesticides. In one example, the average Saskatchewan oilseed farmer can expect to see upwards of
$\$ 40,000$ in savings annually, once 5G networks are established and further regulations are put in place to allow for precision agriculture technologies to take off in Canada.

## Energy management

Electricity is distributed from the 20 Mw transmission at Blumenort corner. There is considerable demand put on existing electrical infrastructure. 5 G would be considered an important enabler for dealing with the increasing demand for electricity, with 5 G technologies unlocking further efficiencies. It is estimated that 5G-connected smart grids can enable a wide range of applications that can help reduce energy consumption by up to 12 percent.

## Rural Connectivity

The business case for fibre direct to businesses in small communities involves a high capital outlay, and many large telecommunications companies will not consider this option. 5G fixed wireless access technologies will provide a cost-efficient way to improve rural Connectivity at up to 40 percent less cost than Fibre-to-the-Premise (FTTP) deployment.

## Examples for Rural Alberta

- Farmers will not be required to be in tractors for seeding or combines for harvesting.
- Farmers can track cattle with individual animal tags (lofT)
- Municipalities can use 5G technology to improve energy consumption.
- Shorten the digital divide between rural Connectivity.
- Allow rural businesses to participate in the next wave of e-commerce.
- Increased Internet of Things sensors will allow more connected vehicles.

Strategy E20.2 Identify and advocate for the implementation of strategies that would increase the attractiveness of distance learning in the region.

Strategy E20.3 Expand the availability and local awareness of high quality distance learning opportunities.

Strategy E20.4 Advocate for student housing and dormitories at current facilities.

## Public Services: Telecommunications

Goal E21 That County residents and businesses have access to the most current telecommunication technologies to permit them to participate in global opportunities.

Telus, Rogers and Bell currently serve the region with cellular coverage and there are several internet providers; however, many of the internet options are slow, unreliable and relatively expensive.

Mackenzie County currently lacks internet speeds that are competitive with other regions in Alberta. NorthwesTel currently serves High Level with adequate internet speeds but their services do not currently expand into the County. Corridor Communications Inc. (CCI) does a respectable job serving the farmers and rural customers although there are still gaps in their service area as well.

Reliability of the internet and cellular service are both big concerns for the region. There is only one fiber optic line feeding most of northwest Alberta including the entire County.

NorthwesTel is the only service provider that has their primary infrastructure north of the County and does not rely on the fiber optic line that comes up from southern Alberta. This positions them uniquely as a possible alternative to the current service providers and offers opportunities for communications backup, especially in case of emergencies.

La Crete and Zama are particularly underserved by internet. It is difficult to obtain a new hardwired internet connection and the current upload and download speeds are also at the lowest end of the entire high speed service spectrum with no option to upgrade your service.

Cellular coverage while generally quite comprehensive considering both the County's population and area still has several gaps along both key transportation routes and First Nations settlements.

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Power to the portion of the County located south of the river is only provided by one line. This highlights another vulnerability to telecommunications within this region. During long duration power outages (20+ hours) the backup batteries are insufficient to maintain cellular service for the duration of the outage. This then leads to the County needing to make large investments in communications equipment for their emergency personnel.

Given the size of our region and the distribution of the people within the region the availability of world-class telecommunications is essential to the growth of our region. Better connectivity supports all aspects of the region; medical, business, family, which increases the quality of life of the region.

Strategy E21.1 Encourage the existing internet service providers in the region to continue to upgrade their systems, both in terms of reliability and speed.

Strategy E21.2 Encourage existing cellular service providers to continue to expand their coverage areas along existing highway corridors and areas with First Nations peoples.

Strategy E21.3 Encourage existing cellular service providers to install better battery backup infrastructure at the towers that will allow for improved service during times of crisis.

Strategy E21.4 Lobby the province to invest in additional fiber optic infrastructure improvements in order to reduce the reliance on the existing infrastructure.

Strategy E21.5 Explore the possibility of other businesses such as Shaw, CCI, SIS, NorthwesTel, Axia, etc. expanding their service in the region to serve the hamlets within the County.

Strategy E21.6 Lobby government and telecommunications industry to increase cooperation between providers to allow greater network access, especially during emergencies.

## Tourism

Goal E22 Mackenzie County accommodates a thriving tourist sector without compromising the natural environment that hosts it.

Tourism does not yet play a significant role in the County's economy but the region has potential for a strong tourist sector. In addition to the adjacent Caribou Mountains Wildland Provincial Park and Wood Buffalo National Park, the County is host to numerous provincial recreation areas, natural and wildland parks, day-use and

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## Mackenzie County

| Title: | Antenna System Siting Policy | Policy No: | DEV006 |
| :--- | :--- | :--- | :--- |
| Legislation Reference: | Approval legislation: <br> Radio-communication Act, R.S.C., 1985, c. R-2 <br> Consultation and Facility sharing reference: |  |  |
|  | Industry Canada Client Procedures Cirular CPC-2-0-03 <br> Local jurisdiction: <br> Municipal Government Act, R.S.A. 2000, Part 17 |  |  |

## Purpose:

To establish a policy for the installation, placement and consultation requirements of antenna systems (telecommunication towers) within Mackenzie County.

## Policy Statement:

Industry Canada is the approving authority for the development and operation of radio communication in Canada, including telecommunication antenna structures, pursuant to the Radio Communication Act. Industry Canada is tasked with, among other things, administering the orderly development and operation of telecommunication antenna structures.

The County cannot prevent a proponent from ultimately gaining permission from Industry Canada to install a telecommunications antenna structure on any lands; privately held, County owned or otherwise.

Industry Canada requires that the local land use authority be consulted for input regarding the proposed placement of telecommunication antenna structures. This policy provides applicants with clear guidelines regarding the acceptable locations and consultation requirements of telecommunications antenna structures.

## General Provisions:

1. Applicants wishing to install a telecommunications antenna structure within the County must first complete the consultation requirements before applying for a Development Permit;
2. Development Permits are required for all telecommunications antenna structures;
3. Development Permits shall be accompanied with a letter stating that co-location with other users will be permitted, so long as structural and technological requirements can be met;
4. The co-location of multiple devices on towers is encouraged. Where appropriate, new towers shall be constructed to accommodate multiple wireless tenants. Any exclusivity agreement that limits access to other providers is strongly discouraged;
5. Telecommunications antenna structures will ideally be placed in:
a. Forestry zoned areas,
b. Agricultural zoned areas, or
c. Industrial zoned areas
6. All providers interested in locating a telecommunication tower within the County shall first contact all other tower owners that provide similar services in the area of the proposed development and pursue co-location opportunities before meeting with the County. A copy of the initial letter and all responses must be provided to the County prior to a pre-consultation meeting with the Planning \& Development Department;
7. Mackenzie County will notify residents and land owners in writing within a 2 kilometer radius for all wireless communication towers greater than 20 meters in height;
8. If a tower located on the top of a building is proposed to exceed $25 \%$ of the height of the building or be greater than 3.5 metres in height, a notification to adjacent landowners is required;
9. A notification will not be required for modifications to existing towers or installations in areas zoned as Forestry (F) in the Land Use Bylaw, so long as the proposed location is greater than 2 kilometers from another zoning district;
10. The provider will be requested to provide Mackenzie County with a letter for a direct mail out which will give notification of the location, physical details of the proposed structure, and the contact name and number of the service provider. Responses will be accepted for a period of 30 days from the day the letters are sent out;
11.The provider will be required to pay for all the costs of mail outs, newspaper advertisements, and property signs where required;
11. Issues and concerns expressed by the public shall be sent directly to the Planning \& Development Department with a copy to the provider. These, as well as the responses given by the service provider on how issues will be addressed,
will be reviewed by the Planning \& Development Department and included in the Development Permit application;
12. If a notification is initiated, a recommendation of support or non-support based on the results of issues and concerns expressed by the public will be provided by the Planning \& Development Department to the Development Authority for consideration along with the development permit;
13. The decision of the Development Authority, including the recommendation of support or non-support from the Planning \& Development Department, will be sent to the applicant and Industry Canada no later than 90 days after the development permit application has been received;
14. A sign not greater than one (1) square meter in size may also be requested on site at the discretion of the Planning \& Development Department. The sign must be visible from any roadway abutting the subject site;
15. Telecommunications antenna structures shall, at a minimum, meet the same minimum setback requirements as any other structure for the zoning district where the structure is proposed to be located;
17.Tower minimum distance from a property line must be tower height $+10 \%$, except for areas districted as Forestry (F) in the Land Use Bylaw (example: 100 metre tower must be setback 110 metres from the property line);
16. All telecommunications antenna structures, located in Agricultural zoned areas or within hamlet boundaries, shall be set back adequately from roadways to allow the road frontage and servicing to be utilized more productively;
17. Notwithstanding Section 20, where Transport Canada requires that tower facilities be lighted:
a. All lighting should be a minimum number of low intensity white lights
b. The strobe interval should be the maximum allowable by Transport Canada
c. The lighting will be maintained by the owner of the tower facilities
20.Any telecommunications antenna structure proposed to be located within four (4) kilometers of the end of a runway or three (3) kilometers of any air traffic facility will be strongly discouraged,
a. Should a tower be located near an airport or helipad, high visibility lighting that is clearly visible and distinguishable for air traffic is required;
21.The design or appearance of all communication facilities including antennas, antenna mounts, equipment shelters, and cable runs, should minimize the
visibility of facilities through the use of color, consistent architectural styles and aesthetic design;
18. Guyed facilities are encouraged to have bird deflectors on the top guyed wires;
19. The County requires that signs only be placed on a communications facility to:
a. Identify the facility
b. Identify the owner, contact information and emergency phone number
c. Warn of any safety issues
20. When possible, providers will provide the following information:
a. Estimated coverage of the new tower by township
b. Spectrum being deployed on the tower including licensed, unlicensed, and lightly licensed
21. Communication facilities and towers are to be removed within six months of cessation of use.

|  | Date | Resolution Number |
| :--- | :---: | :---: |
| Approved | 14-May-13 | 14-05-327 |
| Amended |  |  |
| Amended |  |  |

## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Caitlin Smith, Manager of Planning \& Development |
| Title: | Municipal Planning Commission Meeting Minutes |

## BACKGROUND / PROPOSAL:

The unapproved minutes of the October 8 and 22, 2020 Municipal Planning Commission meeting are attached.

## OPTIONS \& BENEFITS:

N/A

## COSTS \& SOURCE OF FUNDING:

N/A

SUSTAINABILITY PLAN:
N/A

COMMUNICATION / PUBLIC PARTICIPATION:
N/A

## POLICY REFERENCES:

$\qquad$ CAO: $\qquad$

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires 2/3 $\square$ Requires Unanimous
That the unapproved Municipal Planning Commission meeting minutes of October 8 and 22, 2020 be received for information.
$\qquad$

i. None.

## 4. TERMS OF REFERENCE

For Information.
5. DEVELOPMENT
a) 310-DP-20 Abe Dyck

Change of Use (Automotive Equipment \& Vehicle Services - Major) (Remote Repairs) in "A" (La Crete Rural) NW 32-104-15-W5M

## MPC 20-10-132 MOVED by David Driedger

That Development Permit 310-DP-20 on in the name of Abe Dyck/Remote Repairs be APPROVED with the following conditions:

Failure to comply with one or more of the attached conditions shall render this permit Null and Void

1. This permit approval is for the operation of an Automotive Equipment and Vehicle Services - Major (Remote Repairs) out of the existing building.
2. This permit approval is subject to approval from the Alberta Motor Vehicle Industry Council (AMVIC). The developer is required to obtain written approval from the Alberta Motor Vehicle Industry Council regarding the proposed development prior to commencement of the development. Failure to do so shall render this permit Null and Void.
3. All conditions and requirements by the Alberta Motor Vehicle Industry Council "AMVIC" are to be met to their specifications and standards.
4. No vehicle shall be located in such a way that it impedes visibility for vehicular and/or pedestrian traffic.
5. The Automotive Equipment and Vehicle Services, Major shall meet all National Building Code 2019 Alberta Edition requirements for Buildings and any other requirements specified by Superior Safety Codes. Failure to do so shall render this permit Null and Void.
6. This permit may be revoked at any time, if in the opinion of the Development Authority, the development has become detrimental or otherwise incompatible with the amenities of the neighborhood.
7. The architecture, construction materials and appearance of buildings and other structures shall be to accepted standards.
8. If a sign is placed on the property the sign shall be located a minimum of:
a. 200 meters from regulatory signs, and
b. 3 meters ( 9 feet) from the outer edge of the road or not less than 1.5 meters from the property line if on private property.
9. The sign shall be a minimum of 1.5 meters to a maximum of 2.5 meters in height above the shoulder of the road.
10. The site and sign shall be kept in a safe, clean, and tidy condition, or may be required to be renovated or removed.
11. The sign shall:
a. Not obstruct the orderly and safe flow of vehicular and pedestrian traffic,
b. Not unduly interfere with the amenities of the district,
c. Not materially interfere with or affect the use, enjoyment or value of neighbouring properties, and
d. Not create visual or aesthetic blight.
12. All sewage disposals shall conform to the Alberta Private Sewage Systems Standard of Practice 2015.
13. PRIOR to installation of a new access or changing location of existing access, complete a Request for Access form by contacting the Operational Services Department for Mackenzie County at 780-928-3983. Access to be constructed to Mackenzie County standards and at the developers' expense.
14. No construction or development is allowed on or in a right-of-way. It is the responsibility of the developer/owner/occupant to investigate the utility rights-of-way, if any, that exist on the property prior to commencement of any construction and to ensure that no construction or development is completed on any utility right-of-way.
15. The total site area (lot) shall have a positive surface drainage without adversely affecting the neighbouring properties.
16. The Developer shall at all times comply with all applicable Federal, Provincial and Municipal legislation and regulations and County Bylaws and resolutions relating to the development of the lands.

## CARRIED

b) 334-DP-20 Aaron Unruh Home Based Business Minor in "H-CR" (La Crete)

Plan 032 5931, Block 03, Lot 01
MPC 20-10-133 MOVED by John W. Driedger
That Development Permit 334-DP-20 on Plan 032 5931, Block 03, Lot 01 in the name of Aaron Unruh be APPROVED with the following conditions:

Failure to comply with one or more of the attached conditions shall render this permit Null and Void

1. This development permit may be revoked at any time, if, in the opinion of the Development Authority, the Home Based Business, Minor has become detrimental or otherwise incompatible with the amenities of the neighborhood.
2. This development permit will expire upon the expiration, cancellation or revocation of your business license. This development permit shall become null and void if a County business license is not maintained in good standing.
3. At all times, the privacy of the adjacent dwellings shall be preserved and the Home Based Business shall not unduly offend the surrounding residents by way of excessive lighting, noise, traffic, congestion, late visitations by clients.
4. The business shall be operated by the resident of the principal dwelling and may include one (1) non-resident employee.
5. The Home Based Business shall not involve client and customer visits outside of the hours of 8:00 a.m. - 6:00 p.m.
6. Provide adequate off street parking as follows: The minimum parking standards are 1 space per 37.2 square meters ( 400 square feet) of business area which in this case is 2 public parking stall. "One parking space, including the driveway area, shall occupy 27.87 square meters (300 square feet)."
7. The Municipality has assigned the following address to the noted property (9313-95 ${ }^{\text {th }}$ Avenue). You are required to display the address (9313) to be clearly legible from the street and be on a contrasting background. The minimum size of the characters shall be four inches in height.
8. No construction or development is allowed on a right-of-way. It is the responsibility of the developer/owner/occupant to investigate the utility rights-of-way, if any, that exist on the property prior to commencement of any construction and to ensure that no construction or development is completed on any utility right-of-way.
9. Home Based Businesses are limited to one sign not exceeding 1.1 square meters ( 12 square feet) in area.
10. The sign shall not be placed within the Road Right of Way.
11. The site and sign shall be kept in a safe, clean, and tidy condition, or may be required to be renovated or removed.
12. The sign shall:
a. Not obstruct the orderly and safe flow of vehicular and pedestrian traffic,
b. Not unduly interfere with the amenities of the district,
c. Not materially interfere with or affect the use, enjoyment or value of neighbouring properties, and
d. Not create visual or aesthetic blight.
13. Illumination of any signs must not negatively affect, nor pose a safety hazard to, an adjacent site or street.
14. Wiring and conduits of any signs must be concealed from view.
15. The total site area (lot) shall have a positive surface drainage without adversely affecting the neighbouring properties.
16. The Developer shall at all times comply with all applicable Federal, Provincial and Municipal legislation and regulations and County Bylaws and resolutions relating to the development of the lands.

## CARRIED

## c) 343-DP-20 Countryside Ventures Tarp Shelter with a 50\% Setback Variance in "A" (La Crete Rural) Plan 162 1963, Block 01, Lot 01

MPC 20-10-134
MOVED by John W. Driedger
That Development Permit 343-DP-20 on Plan 162 1963, Block 01, Lot 01 in the name of Countryside Ventures be APPROVED with the following conditions:

Failure to comply with one or more of the attached conditions shall render this permit Null and Void

1. A $\mathbf{5 0 \%}$ Setback Variance for the Tarp Shelter is hereby granted. The Tarp Shelter shall be a minimum of 25 feet ( 7.62 meters) from the east property line.
2. This permit expires October 14, 2022, should the Tarp Shelter need to remain on location, please contact Mackenzie County Planning and Development Department at (780) 928-3983 for a time extension.
3. Remaining Minimum building setbacks:
a) 41.2meters (135 feet) front yard ;
b) $\mathbf{1 5 . 2}$ meters ( 50 feet) west side yard;
c) $\mathbf{1 5 . 2}$ meters ( 50 feet) rear yard; from the property lines.
4. The Tarp Shelter shall meet all National Building Code 2019 Alberta Edition requirements for Buildings and any other requirements specified by Superior Safety Codes. Failure to do so shall render this permit Null and Void.
5. No accessory building erected/or moved onto the site shall be used as a dwelling.
6. The architecture, construction materials and appearance of buildings and other structures shall be to accepted standards and shall compliment the natural features and character of the site and the aesthetics of the neighbouring residences to the satisfaction of the Development Authority.
7. All sewage disposals shall conform to the Alberta Private Sewage Systems Standard of Practice 2015.
8. This permit approval is subject to the access to the property being constructed to County standards. PRIOR to installation of a new access or changing location of existing access, complete a Request for Access form by contacting the Operational Services Department for Mackenzie County at 780-928-3983. Access to be constructed at the developers' expense.
9. No construction or development is allowed on or in a right-of-way. It is the responsibility of the developer/owner/occupant to investigate the utility rights-of-way, if any, that exist on the property prior to commencement of any construction and to ensure that no construction or development is completed on any utility right-of-way.
10. The total site area (lot) shall have a positive surface drainage without adversely affecting the neighbouring properties.
11. The Developer shall at all times comply with all applicable Federal, Provincial and Municipal legislation and regulations and County Bylaws and resolutions relating to the development of the lands.

## CARRIED

## d) 346-DP-20 Target Construction Residential Sales Centre in "RCR3" (Pinnacle Estates) SW 8-106-15-W5M

## MPC 20-10-135 MOVED by Beth Kappelar

That Development Permit 346-DP-20 on Part of SW 8-106-15-W5M (Proposed Lot 13) in the name of Target Construction be APPROVED with the following conditions:

Failure to comply with one or more of the attached conditions shall render this permit Null and Void

1. Minimum building setbacks for the Residential Sales Centre are:
a) 15.2 meters ( 50 feet) front yard; and
b) 7.6 meters ( 25 feet) interior side yard
c) 15.2 meters ( 50 feet) exterior side yard
d) 7.6 meters ( 25 feet) rear yard; from the property lines, or setbacks required by Safety Codes, whichever is greater. It is the responsibility of the developer to find out the Safety Codes setbacks.
2. The developer shall enter into a Development Agreement with Mackenzie County.
3. The Residential Sales Centre shall meet all National Building Code 2019 Alberta Edition requirements for Buildings and any other requirements specified by Superior Safety Codes. Failure to do so shall render this permit Null and Void.
4. The developer must provide design drawings prior to construction. The architecture, construction materials and appearance of the Residential Sales Centre shall be to accepted standards and shall compliment the natural features and character of the site to the satisfaction of the Development Authority.
5. The Residential Sales Centre is to be connected to the municipal water and sewer system and the cost of connection fees will be borne by the owner.
6. The Municipality has assigned the following address to the noted building 114 Pinnacle way. You are required to display the address to be clearly legible from the street and be on a contrasting background. The minimum size of the characters shall be four inches in height.
7. The siting and development of the Residential Sales Centre shall be in compliance with the regulations of the Land Use Zone intended to
be applied to the site to accommodate future residential development; provided that the development officer may attach additional conditions to minimize adverse impacts on adjacent development, including the construction of roadways or temporary turnarounds, in accordance with Mackenzie County's Design Standards.
8. On-site parking shall be provided at a rate of parking spaces per $100.0 \mathrm{~m}^{2}$ (1076.9ft${ }^{2}$ ) of FLOOR AREA of the RESIDENTIAL SALES CENTRE, and all curb crossings and access points shall be designed and located so as to minimize on-site and off-site traffic impacts, to the satisfaction of the DEVELOPMENT AUTHORITY.
9. The colours and materials employed for the exterior finishes, whether permanent or temporary, shall be compatible with those commonly found in Residential Zones.
10. Any exterior lighting shall be designed and located such that no light is directed at adjoining properties and such that the effectiveness of any traffic control devices is not impaired.
11. A development permit for occupancy must be obtained by the developer after the subdivision conditions have been met and the lots have been registered.
12. A RESIDENTIAL SALES CENTRE may not be used for occasional or permanent residential accommodation purposes.
13. Where full services are not available to the site, a RESIDENTIAL SALES CENTRE shall be provided with a sanitary privy which meets the standards of all applicable health and safety legislation.
14. The owner of the site on which a RESIDENTIAL SALES CENTRE is located shall, within two (2) weeks or otherwise determined by the DEVELOPMENT AUTHORITY following the placement of BASEMENT or foundation walls, provide to the Planning \& Development Department a Real Property Report confirming the location of the same on the site.
15. Prior to the commencement of any clearing, excavation or other work in respect of the construction of the RESIDENTIAL SALES CENTRE, the permit holder shall:

- Contact an Alberta Land Surveyor to survey the proposed LOTS in accordance with the Plan of Subdivision;
- Provide access to the RESIDENTIAL SALES CENTRE such that the total unobstructed distance from a fire hydrant / fire pond to the principal entrance of each RESIDENTIAL SALES CENTRE is not more than 90.0 m (295.3ft) or such distance as approved by Fire Rescue Operations. An access ROAD(S)
- Have erected on the site a SIGN bearing the words:
"This RESIDENTIAL SALES CENTRE has been approved for the sole purpose of marketing homes in this area. Be advised that this RESIDENTIAL SALES CENTRE cannot be sold or occupied as a residential dwellings until such time that it has been approved for occupancy by Mackenzie County. For more information call - Insert Developer Name and Phone Number".

16. No construction or development is allowed on a right-of-way. It is the responsibility of the developer/owner/occupant to investigate the utility rights-of-way, if any, that exist on the property prior to commencement of any construction and to ensure that no construction or development is completed on any utility right-of-way.
17. This permit approval is subject to the access to the property being constructed to County standards. PRIOR to installation of a new access or changing location of existing access, complete a Request for Access form by contacting the Operational Services Department for Mackenzie County at 780-928-3983. Access to be constructed at the developers' expense.
18. The total site area (lot) shall have a positive surface drainage without adversely affecting the neighbouring properties.
19. The Developer shall at all times comply with all applicable Federal, Provincial and Municipal legislation and regulations and County Bylaws and resolutions relating to the development of the lands.

## CARRIED

MPC 20-10-136
e) 347-DP-20 John Zacharias Shop - Farm with a 50\% Setback Variance in "A" SE 14-104-17-W5M

## MOVED by Beth Kappelar

That Development Permit 347-DP-20 on SE 14-104-17-W5Min the name of John Zacharias be APPROVED with the following conditions:

Failure to comply with one or more of the attached conditions shall render this permit Null and Void

1. A $\mathbf{5 0 \%}$ Setback Variance for the Shop-Farm is hereby granted. The Shop-Farm shall be a minimum of 67.5 feet (20.6 meters) from the east road allowance.
2. Remaining Minimum building setbacks:

## a. 41.2 meters ( 135 feet) from the south road allowance;

b. 15.2 meters ( 50 feet) west side yard;
c. $\mathbf{1 5 . 2}$ meters ( 50 feet) rear yard; from the property lines.
3. The Shop-Farm shall not be used as a dwelling.
4. The Shop-Farm is approved for personal use only and no commercial activity is permitted in this building. If the developer/landowner/occupant or other person or persons intend to use the Shop-Farm for commercial or industrial uses, a new development permit is required prior to the commencement of the commercial or industrial use.
5. The architecture, construction materials and appearance of buildings and other structures shall be to accepted standards and shall compliment the natural features and character of the site and the aesthetics of the neighbouring residences to the satisfaction of the Development Authority.
6. All sewage disposals shall conform to the Alberta Private Sewage Systems Standard of Practice 2015.
7. This permit approval is subject to the access to the property being constructed to County standards. PRIOR to installation of a new access or changing location of existing access, complete a Request for Access form by contacting the Operational Services Department for Mackenzie County at 780-928-3983. Access to be constructed at the developers' expense.
8. No construction or development is allowed on or in a right-of-way. It is the responsibility of the developer/owner/occupant to investigate the utility rights-of-way, if any, that exist on the property prior to commencement of any construction and to ensure that no construction or development is completed on any utility right-of-way.
9. The total site area (lot) shall have a positive surface drainage without adversely affecting the neighbouring properties.
10. The Developer shall at all times comply with all applicable Federal, Provincial and Municipal legislation and regulations and County Bylaws and resolutions relating to the development of the lands.

CARRIED

## 6. SUBDIVISIONS

## a) 42-SUB-20 Clint Bundy (Time Extension) 80.00 Acre Subdivision SE 14-104-17-W5M (Rocky Lane)

MPC 20-10-137 MOVED by Beth Kappelar
That a one (1) year time extension for Subdivision Application 42-SUB19 in the name of Clint Bundy on NW 15-108-14-W5M be GRANTED to expire on October 3, 2021.

## CARRIED

b) 32-SUB-20 William B \& Margaret Fehr 15.00 Acre Subdivision SE 34-105-15-W5M (South La Crete)

MPC 20-10-138 That Subdivision Application 32-SUB-20 in the name of Curtis Fehr on SE 34-105-15-W5M be APPROVED with the following conditions:

1. This approval is for a TYPE B subdivision, 15.00 acres (6.07 hectares) in size.
2. Applicant/developer shall enter into and abide by a Development Agreement with Mackenzie County which shall contain, but is not limited to:
a) Prior to any development on the proposed subdivision, the developer shall obtain a development permit from the Municipality.
b) Provision of a road and access to both the subdivision and the balance of the lands in accordance with Mackenzie County standards at the developer's expense.
c) All sewage disposals shall conform to the Alberta Private Sewage Systems Standard of Practice 2015.
d) Provision of a storm water management plan. Contact Planning and Development staff at 780-928-3983 to discuss the requirements for your subdivision.
e) Any outstanding property taxes are to be paid on the land proposed to be subdivided prior to registration.
f) Provision of utility rights-of-way as required by ATCO Electric, TELUS, Northern Lights Gas Co-op, and others.
g) Provision of an off-site levy as required by the County as follows:
i. Subdivision Off-Site Levy Bylaw 780-10 is imposed for the construction and upgrade of Range Road 15-2 which serves the surrounding lands:

The levy is calculated at $\$ 377.34$ per acre. Fifteen (15) acres at $\$ 377.34$ equals $\$ 5,660.01$.

Total levies $=\mathbf{\$ 5 , 6 6 0 . 0 1}$
h) Provision of and negotiations for utility rights-of-way and/or easements as required by utility companies. The Developer shall be responsible for any line relocation or correction costs that occur as a result of this development. Responses from utilities companies are shown in Schedule " $C$ " hereto attached.
i) Mackenzie County shall not be held liable for any concerns, issues or damages related to and/or resulting from the water tables and any other water problems as a result of any low land levels of the proposed development. It is the responsibility of the developer to ensure that adequate drainage and other precautions are taken to avoid water seepage into the dwellings/basement and/or flooding of the basement, and/or any ancillary buildings.

## CARRIED

## c) 33-SUB-20 Abe \& Lisa Doerksen <br> 10.00 Acre Subdivision <br> NW 15-107-14-W5M (Blumenort)

MPC 20-10-139 MOVED by John W. Driedger
That Subdivision Application 33-SUB-20 in the name of Abe \& Lisa Doerksen on NW 15-107-14-W5M be APPROVED with the following conditions:

1. This approval is for a TYPE B subdivision, 10.00 acres (4.04
hectares) in size.
2. Applicant/developer shall enter into and abide by a Development Agreement with Mackenzie County which shall contain, but is not limited to:
a) Prior to any development on the proposed subdivision, the developer shall obtain a development permit from the Municipality.
i. Any permanent buildings on the property must be constructed equal to or greater than the grade of the road.
b) Mitigation measures must be in place in order to avoid water damage from potential seasonal flooding.
c) A caveat will be registered on the title of this property.
d) Provision of a road and access to both the subdivision and the balance of the lands in accordance with Mackenzie County standards at the developer's expense.
e) All sewage disposals shall conform to the Alberta Private Sewage Systems Standard of Practice 2015.
f) Provision of a storm water management plan. Contact Planning and Development staff at 780-928-3983 to discuss the requirements for your subdivision.
g) Any outstanding property taxes are to be paid on the land proposed to be subdivided prior to registration.
h) Provision of utility rights-of-way as required by ATCO Electric, TELUS, Northern Lights Gas Co-op, and others.
i) Provision of and negotiations for utility rights-of-way and/or easements as required by utility companies. The Developer shall be responsible for any line relocation or correction costs that occur as a result of this development. Responses from utilities companies are shown in Schedule "C" hereto attached.
j) Mackenzie County shall not be held liable for any concerns, issues or damages related to and/or resulting from the water tables and any other water problems as a
result of any low land levels of the proposed development. It is the responsibility of the developer to ensure that adequate drainage and other precautions are taken to avoid water seepage into the dwellings/basement and/or flooding of the basement, and/or any ancillary buildings.

CARRIED
7. MISCELLANEOUS ITEMS
a) None
8. IN CAMERA
a) None.
9. MEETING DATES

* Thursday, October $22^{\text {nd }}, 2020 @ 10: 00$ a.m. in Fort Vermilion

10. ADJOURNMENT

MPC 20-10-140 MOVED by John W. Driedger
That the Municipal Planning Commission Meeting be adjourned at 10:24
a.m.

CARRIED

These minutes were adopted this $22^{\text {th }}$ day of October, 2020.

## Original Signed

Erick Carter, Chair

# MACKENZIE COUNTY <br> Municipal Planning Commission Meeting <br> Mackenzie County Office 

Fort Vermilion, AB
Thursday, October 22, 2020 @ 10:00 a.m.

PRESENT:

ADMINISTRATION: Caitlin Smith Nicole Friesen

Chair, MPC Member via Teleconference Vice Chair, MPC Member MPC Member via Teleconference Councillor, MPC Member via Teleconference Councillor, MPC Member via Teleconference

Manager of Planning and Development Administrative Assistant, Planning/Recording Secretary

## MOTION 1. CALL TO ORDER

Beth Kappelar called the meeting to order at 10:04 a.m.

## 2. ADOPTION OF AGENDA

MPC 20-10-141 MOVED by Erick Carter
That the agenda be adopted as presented.

## CARRIED

## 3. MINUTES

## a) Adoption of Minutes

MPC 20-10-142 MOVED by David Driedger
That the minutes of the October 8, 2020 Municipal Planning Commission meeting be adopted as presented.

## CARRIED

b) Business Arising from Previous Minutes
i. None.

## 4. TERMS OF REFERENCE

For Information.
5. DEVELOPMENT
a) None

## 6. SUBDIVISIONS

a) 34-SUB-20 Diedrich \& Margaret Loewen
10.00 Acre Subdivision

NW 7-105-15-W5M (West La Crete)
MPC 20-10-143 MOVED by Jacquie Bateman
That 34-SUB-20 be TABLED to the next meeting date.
CARRIED

## 7. MISCELLANEOUS ITEMS

a) None
8. IN CAMERA
a) None.
9. MEETING DATES

* Thursday, November $12^{\text {th }}, 2020$ @ 10:00 a.m. in La Crete


## 10. ADJOURNMENT

MPC 20-10-144 MOVED by John W. Driedger
That the Municipal Planning Commission Meeting be adjourned at 10:13 a.m.

CARRIED

These minutes were adopted this $12^{\text {th }}$ day of November, 2020.

Erick Carter, Chair

## REQUEST FOR DECISION

| Meeting: | Regular Council Meeting |
| :--- | :--- |
| Meeting Date: | November 10, 2020 |
| Presented By: | Len Racher, Chief Administrative Officer |
| Title: | Information/Correspondence |

## BACKGROUND / PROPOSAL:

The following items are attached for your information, review, and action if required.

- Action List
- Correspondence - Alberta Municipal Affairs (Infrastructure Funding)
- Correspondence - VSI Services (VSI Expenditures Third Quarter Report)
- Municipal Operating Support Transfer (MOST) Frequently Asked Questions
- Spring 2019 Wildfire Review
- Regional Economic Development Initiative (REDI) Meeting Minutes

OPTIONS \& BENEFITS:

CAO: $\qquad$

## SUSTAINABILITY PLAN:

## COMMUNICATION / PUBLIC PARTICIPATION:

## POLICY REFERENCES:

## RECOMMENDED ACTION:

$\square$ Simple Majority $\square$ Requires $2 / 3 \quad \square$ Requires Unanimous
That the information/correspondence items be accepted for information purposes.
$\qquad$

## Mackenzie County

Action List as of October 28, 2020

## Council and Committee of the Whole Meeting Motions Requiring Action

| Motion | Action Required | Action By | Status |
| :--- | :--- | :--- | :---: |


| February 22, 2016 Council Meeting |  |  |  |
| :---: | :---: | :---: | :---: |
| 16-02-135 | That the County covers the additional cost of the survey on Plan 5999 CL , Lot E to date and have administration release a copy of the report to the landowner informing them that the initial investigation survey has been completed. | Byron | Refer to <br> Motion 18-06-411 <br> In progress. Meeting with landowners. <br> Impacted by 2020 flood. |
| May 10, 2016 Regular Council Meeting |  |  |  |
| 16-05-354 | That administration be authorized to proceed as follows in regards to the Zama Crown Land Procurement: <br> - cancel PLS 080023; <br> - pursue acquisition of land parcels as identified on the map presented in red; <br> - identify a parcel of land to be subdivided from Title Number 102145574 +1 (Short Legal 0923884; 21; 1) and offered for trade or sale to Alberta Environment and Parks due to its unsuitability for a hamlet development, specifically the land use restrictions per Alberta Energy Regulator. | Don | PLS Cancelled. <br> Asset list with all leases, caveats, dispositions, easements, etc. <br> Response Received from AEP 2017-11-27. <br> Application submitted. <br> RFD to Council once response is received to our application. |
| July 12, 2016 Regular Council Meeting |  |  |  |
| 16-07-526 | That the County pursue purchasing the leased lands at the Hutch Lake campground. | $\begin{aligned} & \hline \text { Don } \\ & \text { Len } \end{aligned}$ | Application for purchase of Hutch Lake has been filed. |
| August 9, 2016 Regular Council Meeting |  |  |  |
| 16-08-599 | That administration proceed with registering the utility right of way on NE 3-106-15-W5M and NW 3-106-15W5M. (La Crete SE Drainage Ditch) | Caitlin | Re-survey completed. <br> NE 3-106-15-W5M Complete <br> Offer to purchase sent to landowner for 9920894, Block 2, Lot 1 |
| April 11, 2017 Regular Council Meeting |  |  |  |
| 17-04-254 | That administration bring back options for an additional sub-class under residential for lots too small to legally develop. | Caitlin | Completed |
| August 23, 2017 Council Meeting |  |  |  |
| 17-08-593 | That administration proceed with meeting with the developers and draft an off-site levy bylaw for the La Crete Sanitary Sewer Expansion project. | Fred | Finalizing report then draft offsite levy bylaw. Working with engineer on draft design. |


| Motion | Action Required | Action By | Status |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  | (Helix Engineering) |
| April 25, 2018 Council Meeting |  |  |  |
| 18-04-314 | That administration be authorized to proceed with a Department License of Occupation (DLO) for existing and future walking trail expansion on SE 14-106-15W5 once the title transfer has been completed for SE 15-106-15-W5. | Don | Application submitted. FNC process |
| 18-04-315 | That administration move forward in purchasing more land north of the existing Hutch Lake Cabins and that final costs be brought back to Council for decision. | Don | Sketch plan completed. Application to purchase is in progress. |
| June 12, 2018 Council Meeting |  |  |  |
| 18-06-432 | That the County apply to Alberta Environment \& Parks for a bank stabilization and clean-up along the Peace River in the Hamlet of Fort Vermilion as a result of the ice jam flooding event. | Byron | In progress. Engineering report received. (WSP) Working on application. <br> 2020 Flood Mitigation |
| October 9, 2018 Council Meeting |  |  |  |
| 18-10-763 | That administration proceeds with the water diversion license's as discussed. | Fred | No response from Bev Yee, Deputy Minister |
| November 13, 2018 Regular Council Meeting |  |  |  |
| 18-11-885 | That the Zama Water Treatment Improvements Project be retendered with a project scope change. | Fred | 2021 Budget Discussion |
| February 27, 2019 Regular Council Meeting |  |  |  |
| 19-01-117 | That administration proceed with Plan 5999CL in Fort Vermilion as discussed. | Byron | Impacted by 2020 flood |
| October 8, 2019 Regular Council Meeting |  |  |  |
| 19-10-548 | That the Proposed Fire Salvage Plan and Community Management Zone from Tolko, Norbord, and La Crete Sawmills be received for information and that a letter be sent to Alberta Agriculture \& Forestry regarding stumpage fees for forest fire salvage. | Len | Letter drafted |
| 19-10-559 | That administration enter into an agreement with the owners of Tax Roll 155377 as discussed. | Jennifer | Ongoing <br> Awaiting response from ratepayer |
| November 5, 2019 Regular Council Meeting |  |  |  |
| 19-11-671 | That the three County owned quarter sections immediately east of the Norbord plant south of High Level be offered for farmland lease in exchange for clearing. | Grant | See Motion 20-10-601 <br> Completed |
| 19-11-676 | That Mackenzie County representatives appointed to a provincial task force must provide regular written reports to council, shall immediately forward all task force material and information to council and CAO, and shall receive specific, prior approval from council to represent views or negotiate on behalf of the County. | Council | To be incorporated into the Procedural Bylaw |


| Motion | Action Required | Action By | Status |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| 19-11-685 | That administration work with Paramount Resources Ltd. and lobby the government to leave the road infrastructure intact. | Len | In progress |
| December 10, 2019 Regular Council Meeting |  |  |  |
| 19-12-757 | That Alberta Transportation be invited to attend a Council meeting to discuss highway accesses. | Len | Hwy 697 Upgrade |
| 19-12-758 | That the Rural Municipalities of Alberta (RMA) Resolution 15-19F Provincial Highway Access and Setback Authority be brought to the January 14, 2020 council meeting for review. | Carol | Will be presented at the meeting which Alberta Transportation attends. |
| 19-12-781 | That a letter be sent to the Minister of Energy regarding industry lease renewals. | Len | In progress |
| December 18, 2019 Budget Council Meeting |  |  |  |
| 19-12-820 | That Mackenzie County lobby the government for incentives to complete the Paramount abandonments within the next five years. | Council |  |
| January 29, 2020 Regular Council Meeting |  |  |  |
| 20-01-055 | That Administration move forward with applying for Recreational Leases for the Bistcho Lake cabin areas and consideration be given to the work being done by the Caribou Sub-regional Task Force. | Don | On hold. Pursuing reinstatement of commercial fishing. |
| 20-01-067 | That a letter be sent to the Minister of Municipal Affairs in regards to the Section 627(3) of the Municipal Government Act that relates to the number of councillor's on a Subdivision and Development Appeal Board. | Carol | In progress |
| March 25, 2020 Regular Council Meeting |  |  |  |
| 20-03-219 | That administration be authorized to allow burn salvage harvesting within municipal road allowances on a case by case basis. | Operations Director | Policy amendment required. |
| April 22, 2020 Regular Council Meeting |  |  |  |
| 20-04-265 | That the County and applicable developers co-develop a storm water management plan for the La Crete North Storm Catchment area (as delineated in red on the attached map), and that a storm water management fee of $\$ 4,000 / \mathrm{ha}$ be applied effective immediately to subdivision applications within the defined catchment area, with a fee adjustment to be completed once detailed construction costs are finalized. | Byron | In progress |
| 20-04-266 | That an offsite levy bylaw be established for the La Crete North Storm Catchment area as soon as detailed construction costs are finalized. | $\begin{gathered} \hline \text { Byron } \\ \text { Fred } \\ \text { Jennifer } \end{gathered}$ | Storm Water Management and costs associated are almost finalized. Costs will be brought to Council for |


| Motion | Action Required | Action By | Status |
| :---: | :---: | :---: | :---: |
|  |  |  | review prior to offsite levy bylaw process. |
| 20-04-267 | That administration proceed with obtaining the right-ofway on 26-108-14-W5M and that the budget be amended to include $\$ 50,000$ for surveying, etc. with funding coming from the General Operating Reserve. | Operations Director | Budget amendment completed. <br> Following up with Borderline Eng. |
| 20-04-268 | That a letter be sent to the Minister of Energy and the Alberta Orphan Well Association in support of our industry ratepayers and to request that a portion of the Federal energy stimulus funding be channeled to assist the energy communities, service businesses and families in northwestern Alberta. | Len | In progress |
| May 22, 2020 Special Council Meeting |  |  |  |
| 20-05-279 | That charges be laid by Mackenzie County to the noneligible individuals that fraudulently registered as an evacuee during the Fort Vermilion flood, and to evacuees that have incurred significant costs related to hotel room damages. | Jennifer | In progress of finalizing the list. |
| May 27, 2020 Regular Council Meeting |  |  |  |
| 20-05-299 | That rural cemeteries be added to the annual dust control map. | Operations Director | Tabled to 2021 Budget Workshop |
| 20-05-300 | That the dust control deadline remain as April 1, 2020 and that the remaining calcium storage, following municipal application, be sold at cost for ratepayers to self-apply. | Operations Director | Tabled to 2021 Budget Workshop |
| June 5, 2020 Special Council Meeting |  |  |  |
| 20-06-334 | That administration continues to support a community recovery plan that includes a community engagement component. | DRT | Ongoing |
| June 15, 2020 Special Council Meeting |  |  |  |
| 20-06-373 | That the Fort Vermilion future development continue to be investigated. | DRT | Ongoing |
| June 24, 2020 Regular Council Meeting |  |  |  |
| 20-06-383 | That applications be submitted for the three boat launch locations and that the Mackenzie County Search and Rescue River Access Plan be amended to include the additional access sites as identified in the 1991 Recreation Sites in the Lower Peace River Valley Report and be brought back to Council for approval. | Don | Application submitted for three boat launches. <br> River Access Plan in progress. |
| 20-06-396 | That second reading of Bylaw 1181-20 being a Land Use Bylaw Amendment to rezone Plan 2938RS, Block 02, Lots 15 \& 16 from Fort Vermilion Commercial Centre "FV-CC" to Hamlet Residential 1 " $\mathrm{H}-\mathrm{R} 1$ " to accommodate a Manufactured Home-Mobile be TABLED. | Caitlin | Tabled due to flood recovery process. |


| Motion | Action Required | Action By | Status |
| :---: | :---: | :---: | :---: |
| July 14, 2020 Committee of the Whole Meeting |  |  |  |
| $\begin{aligned} & \text { COW-20- } \\ & 06-014 \end{aligned}$ | That administration proceed with review of the Regional Service Sharing Agreement with the Town of High Level and bring recommendations forward to Council. | Len | 2020-11-09 |
| July 15, 2020 Regular Council Meeting |  |  |  |
| 20-07-422 | That administration contact the bidders of the Heliport Road Asphalt Overlay project to obtain an overlay quote for the La Crete North and South Accesses. | Operations Director | Quotes were over budget. 2021 budget discussions. |
| 20-07-427 | That the Mackenzie Applied Research Association (MARA) Agronomy Building project be awarded to the most qualified bidder and that the budget be amended to include $\$ 60,000.00$ for the project overage, with the County's portion of $\$ 25,000$ funding coming from the General Capital Reserve and the remainder being funded by MARA. | Byron Jennifer | In progress. <br> Awaiting down payments from all parties. |
| 20-07-435 | That the 1990 Ford Superior Fire Truck and the 1991 GMC C7H042 Superior Fire Truck be offered to the Paddle Prairie Metis Settlement and that the book value of the vehicles in the total amount of $\$ 10,000$ be written off if the offer is accepted. | Don Willie | In progress. Waiting for transfer documents and Paddle Prairie to pick up units. |
| 20-07-438 | That Administration proceed with the one-year extension and creating a two-year sub-contract request for proposals for the Construction and Maintenance of the Tompkins Crossing Ice Bridge. | Operations Director | RFP - August 2021 |
| August 18, 2020 Committee of the Whole Meeting |  |  |  |
| $\begin{aligned} & \text { COW-20- } \\ & 08-019 \end{aligned}$ | That administration further investigate information regarding 5G technology and the rollout schedule from the cellular service providers and report back to Council. | Carol | In progress |
| August 19, 2020 Regular Council Meeting |  |  |  |
| 20-08-465 | That administration bring forward a review of the linepainting program during the 2021 budget deliberations. | Operations Director | 2021 Budget Deliberations Workshop |
| 20-08-488 | That a letter of concern be placed on file for the engineering error on the Heliport Road Asphalt Overlay project tender. | Operations Director | In progress |
| 20-08-497 | That administration proceed with the sale of the 0.09 acres on Part of Plan 182 2539, Block 01, Lot K in the Hamlet of La Crete, subject to developer agreeing to create a treed buffer on the west and south property line and paying all fees. | Caitlin | Landowner has to apply for subdivision and consolidation |
| 20-08-503 | That administration prepare a press release and information material regarding the impacts of the assessment model review. | Jennifer | Under review based on new direction from Municipal Affairs |
| 20-08-512 | That Mackenzie County issue an Order for sewer encroachment and that the landowner be required to | Caitlin | Landowner complied and met the requirements. |


| Motion | Action Required | Action By | Status |
| :---: | :---: | :---: | :---: |
|  | bring the systems to compliance in a manner and time period specified by the Order. |  | Completed. |
| 20-08-513 | That three (3) recipients be awarded a Mackenzie County Bursary, as presented, for a total amount of $\$ 3,500$, with the understanding that the bursary amount be extended for an additional year due to any COVID19 restrictions prohibiting attendance this fall, and that the remaining budget amount of $\$ 3,500$ be transferred to the Bursaries Reserve. | Jennifer | Completed. Year End Transfer to Reserves. |
| September 8, 2020 Regular Council Meeting |  |  |  |
| 20-09-534 | That Policy PW009 Dust Control be TABLED to the 2021 budget workshop. | Operations Director | 2020-10-20 |
| 20-09-539 | That Bylaw 1194-20 being a Fee Schedule Bylaw amendment for Mackenzie County be TABLED to the 2021 budget workshop. | Carol | 2020-10-20 |
| September 22, 2020 Regular Council Meeting |  |  |  |
| 20-09-567 | That Mackenzie County, as the Primary Policy Holder, and the Old Bay House Society, as the Additionally Named Insured, jointly sign the settlement of loss offer presented in the letter sent September 1, 2020 in the amount of $\$ 258,914.38$. | Jennifer | Awaiting confirmation from insurance and Old Bay House |
| 20-09-568 | That a letter be sent to the Old Bay House Society supporting repairs of the Old Bay House and requesting a meeting to discuss an anticipated opening date. | Jennifer | In progress |
| 20-09-571 | That administration make application under the Municipal Stimulus Program (MSP) for the development of Phase 1 and 2 for the relocation of residents from the 2020 flood, as part of the mitigation funding. | Jennifer | Completed |
| 20-09-576 | That the budget be amended to include an additional $\$ 250,000$ to be added to the Gravel Operating Budget with funding coming from the General Operating Reserve. | Jennifer | Completed |
| 20-09-577 | That first reading be given to Bylaw 1198-20 being a Land Use Bylaw Amendment to Add Definition of Pluvial Flooding to Section 2.3, Amend Flood Plain Requirements in Section 5, and Add Restrictions to Sections $8 \& 9$, subject to public hearing input. | Caitlin | Completed |
| 20-09-585 | That administration send a link to the local community La Crete Ferry camera service to Alberta Transportation. | Carol |  |
| 20-09-586 | That administration investigate the initial capital cost to participate in the Mackenzie Regional Waste Management including inflationary rates. | Jennifer Carol |  |
| October 13, 2020 Regular Council Meeting |  |  |  |


| Motion | Action Required | Action By | Status |
| :--- | :--- | :--- | :---: |


| 20-10-599 | That a letter be sent to the Government of Alberta regarding potential funding due to the impact of the Site C Clean Energy Project downstream effects. |  |  |
| :---: | :---: | :---: | :---: |
| 20-10-600 | That the Minister of Municipal Affairs and the local MLA be invited to a Council meeting to discuss flood mitigation. | Carol | Completed |
| 20-10-601 | That the Agricultural Service Board be authorized to issue a Request for Proposals to rent out the SW 6-109-19-W5 and NW 6 \& SW of 7-109-19-W5M for agricultural use. | Grant | In progress |
| 20-10-604 | That the request to remove the late payment penalty on Tax Roll \#082263 and Tax Roll \#082269 be denied. | Jennifer | In progress |
| 20-10-607 | That administration bring back options for Bistcho Lake cabins tax assessments to the next meeting. | Jennifer | 2020-11-10 |
| 20-10-612 | That first reading be given to Bylaw 1199-20 being a Partial Plan Cancellation and Consolidation Bylaw for Plan 052 4423, Block 25, Lots 34 \& 35, subject to public hearing input. | Caitlin | Completed |
| 20-10-613 | That first reading be given to Bylaw 1200-20 being a Partial Plan Cancellation and Consolidation Bylaw for Plan 2938RS, Block 3, Lots 12 \& 13, subject to public hearing input. | Caitlin | Completed |
| 20-10-614 | That first reading be given to Bylaw 1201-20 being a Plan Cancellation Bylaw for Plan 082 6817, subject to public hearing input. | Caitlin | Completed |
| 20-10-616 | That Administration be authorized to purchase Plan 192 3085, Block 24, Lot 02 and to proceed with the Survey to register lands as a Public Works - Drainage Right of Way plan for the La Crete Southeast Drainage Ditch Project. | Caitlin | Offer to purchase sent to the landowner |
| 20-10-617 | That the budget be amended to include the La Crete Southeast Drainage Ditch (Plan 992 0894, Block 02, Lot 01) project in the amount of $\$ 8,000$, with funding coming from the Surface Water Management Reserve. | Jennifer |  |
| 20-10-618 | That Administration be authorized to purchase Plan 992 0894, Block 02, Lot 01 and to proceed with the Survey to register lands as a Public Works - Drainage Right of Way plan for the La Crete Southeast Drainage Ditch Project. | Caitlin | Offer to purchase sent to landowner for 992 0894, Block 2, Lot 1 |
| 20-10-619 | That administration develop a Tax Deferral Bylaw for lot improvements in Mackenzie County. | Jennifer Caitlin | 2020-11-25 |
| 20-10-620 | That Byron Peters, as Administrative Lead, work with the Regional Economic Development Initiative's (REDI) | Byron | In progress |


| Motion | Action Required | Action By | Status |
| :---: | :---: | :---: | :---: |
|  | Rail to Alaska lobbying efforts and other groups and individuals as required. |  |  |
| 20-10-621 | That a letter be sent to the Minister of Jobs, Economy and Innovation and MLA Dan Williams requesting that the Government of Alberta restore funding for Regional Economic Development Alliances to the full $\$ 100,000$ annually, with a five-year commitment. | Bryon | Letter drafted |
| 20-10-622 | That administration submit the Municipal Survey on RCMP Police Services in Alberta as discussed. | Carol | Completed |
| 20-10-632 | That the Agricultural Service Board be authorized to extend the current agreement between Frontier Veterinary Services Ltd. and Mackenzie County for a period of one (1) year. | Grant | In progress |
| 20-10-633 | That the Town of High Level be invited to a meeting to discuss the Regional Service Sharing Agreement. | Len | $\begin{gathered} \text { 2020-11-17 } \\ \text { Completed } \end{gathered}$ |
| October 27, 2020 Organizational Council Meeting |  |  |  |
| 20-10-642 | That the Community Services Committee Terms of Reference be approved as amended. | Carol |  |
| 20-10-643 | That the following Members at Large be appointed to the Community Streetscape Implementation Committee for a two year term - October 27, 2020 to October 2022 and that the remaining positions be re-advertised. | Carol |  |
| 20-10-682 | That the Procedural Bylaw be brought back with amendments in the following areas: <br> - Section 67 - Electronic participation at meetings <br> - Section 99 - Delegations relating to legislated appeal processes | Carol |  |
| 20-10-683 | That Policy ADM050 Council/Administration Protocol Council Self-Evaluation be completed at a Committee of the Whole Meeting. | Carol | 2020-11-24 |
| October 28, 2020 Regular Council Meeting |  |  |  |
| 20-10-690 | That flood mitigation options be brought back to the next Council meeting. | Fred | 2020-11-25 |
| 20-10-693 | That administration investigate the insurance requirement for Waste Transfer Station Caretakers and bring it back to the next meeting. | Jennifer Don |  |
| 20-10-695 | That the 2020 Campground Caretaker bonuses be approved as follows: <br> - Hutch Lake - $\$ 7,225$ <br> - Machesis Lake - $\$ 1,517$ <br> - Wadlin Lake - $\$ 8,000$ | Don |  |
| 20-10-710 | That Policy DEV006 Antenna System Siting Protocol be TABLED for more information. | Caitlin | 2020-11-10 |


| Motion | Action Required | Action By | Status |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| 20-10-719 | That the County suspend all land purchases until the provincial funding is received and the mitigation plan is supported. | DRT |  |

## Dear Chief Elected Official,

As you are aware, our province is facing some very challenging economic circumstances. Resource revenues are lower than they were in the early 1970s, while expenses are higher than anticipated due to the need to respond to the COVID-19 pandemic. This will cause financial challenges that will be felt for many years.

In light of these economic circumstances, Alberta may not be able to sustain our current levels of infrastructure and operating spending. We are already planning for Budget 2021; there will be some difficult choices the province must make to ensure Alberta's finances are sustainable over the long-term.

Having met with many municipalities recently, I understand your communities are also facing significant challenges. I will ensure your views are represented as we plan the provincial budget. In the meantime, I strongly encourage you to make certain all of your capital spending is used to support critical infrastructure that will benefit future generations of Albertan and position your community to participate in our economic recovery.

I look forward to working with you to create a sustainable and prosperous future for our province and our communities.

Sincerely,


Tracy L. Allard Minister

November 1, 2020
Mr. Len Racher, CAO
Mackenzie County
Box 640
Fort Vermilion, AB T0H 1N0
Dear Len


I am sending this letter as a follow up to the third quarter report of VSI expenditures, for your jurisdiction, that was e-mailed to gsmith@mackenziecounty.com and csarapuk@mackenziecounty.com

Following is an estimate of your current VSI account status:

|  | Claims |  |  |  | Payments |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Jan. 1, 2020 |  |  |  | $\$$ | Balance |
| Payments in 2020 |  |  | $\$$ | 47,900 | $\$$ |
| First Quarter | $\$$ | 11,171 |  |  | 51,969 |
| Second Quarter | $\$$ | 17,133 |  |  | $\$$ |
| Third Quarter | $\$$ | 3,785 |  |  | $\$$ |

Administrative fees and investment income have not been calculated or included for the first nine months of 2020.

Overall, VSI had a $0.3 \%$ increase in total claims for the third quarter of 2020 compared to 2019. Total costs have increased $\$ 164$ over the same time period.

Four (4) of the sixteen (16) VSI jurisdictions had an increase in their third quarter costs. Increases ranged from $7.7 \%$ to $87.0 \%$ of 2019 third quarter costs. Decreases in the other twelve (12) jurisdictions ranged from $12.9 \%$ to $70.3 \%$ of 2019 third quarter costs.

For the year VSI cost increased by $1.0 \%$ or $\$ 4,261$. Three (3) jurisdictions have increases between $9.2 \%$ and $20.8 \%$ for the year, nine (9) have decreases between 1.9 and $37.4 \%$. Three (3) stayed virtually (within 1\%) unchanged.

Your 2020 third quarter claims are $\$ 976$ (34.8\%) higher than they were in 2019. For the year you are $\$ 253(0.8 \%)$ below last year's pace.

If you have any questions or if you detect any errors in the report or in my calculations in this letter please let me know.

Yours sincerely
Rik Vandekerkhove, Manager
cc Grant Smith
Colleen Sarapuk

# Municipal Operating Support Transfer (MOST) Frequently Asked Questions 

## Introduction

On September 25, 2020, the Government of Alberta announced the Municipal Operating Support Transfer (MOST) program, which is intended to distribute federal and provincial operating funding support to Alberta municipalities to help offset increased operating costs or lost revenues incurred due to the COVID-19 pandemic. Funding is provided as part of the Safe Restart Agreement between Alberta and Canada.

The Government of Alberta has released MOST program guidelines and funding allocations that provide information on the program. This document is intended to provide municipalities with answers to common questions not addressed in the guidelines or allocations document.

## Frequently Asked Questions

## Application Process

1. How can my municipality apply for MOST funding? Is it a competitive process?

All municipalities in Alberta will receive MOST funding and there is no application required. Municipalities received a memorandum of agreement (MOA) by email on September 25. The MOA must be signed by the chief elected official and chief administrative officer of the municipality and returned to the Government of Alberta at ma.municipalstimulus@gov.ab.ca before October 30. Submitting the signed MOA to the Government of Alberta will trigger payment.

## Reporting Requirements

2. Although we know we incurred increased operating costs and/or lost revenue due to the pandemic, we did not specifically document pandemic-related revenue and expense impacts. How do we accurately report on the use of our MOST allocation?

The Government of Alberta's goal is to ensure municipalities are able to use MOST funding to offset fiscal challenges caused by the COVID-19 pandemic, without any unnecessary red tape. The pandemic was an unexpected event, and we recognize that not all municipalities had the resources and capacity available to accurately track pandemic-related fiscal impacts as they were occurring.

We recommend that municipalities make use of invoices, timesheets, etc. that are part of typical municipal business practices to identify increased expenses and use year-to-year comparisons for reduced revenues. The Government of Alberta will not require detailed proof of expenses incurred or revenue lost.

Each municipality that receives MOST funding will receive a statement of funding and expenditure (SFE) form at a later date and will be required to submit this form to the Government of Alberta by July 2, 2021. More details on reporting will be available when the SFE is released, but we anticipate that requirements will be minimal, with
municipalities' use of the grant reported in broad categories such as the examples provided in the guidelines, similar to the MSI operating SFEs.
3. How do we accurately determine lost revenue in a certain area?

We recommend a comparison of revenue in areas such as, but not limited to, user fees, building permits, or property tax collection rates decreased during the pandemic period compared to the same period in the previous year. Alternatively, the comparison could be between a 2020 budget passed prior to the pandemic and a budget amended in response to the pandemic.

Municipalities will not be required to provide comparative data in the SFE process, but are encouraged to use these approaches to develop an estimate of COVID-19-related revenue impacts.
4. How do we prove that increased internal staffing costs are linked to COVID-19?

Municipalities will not be required to provide proof that costs are linked to COVID-19. To determine whether a staffing cost is associated with COVID-19, we encourage municipalities to consider the decision that led to the costs (management approval for overtime, hiring decisions, etc.) and determine whether that decision would have been made differently in the absence of COVID-19.

## Eligibility Requirements

5. Can MOST funding be shared with other municipalities, or with regional entities such as Regional Services Commissions?

Yes. If a municipality decides to contribute funding to another municipality or to a regional municipal entity, and this decision can be reasonably linked to COVID-19, the expenditure is eligible for MOST funding.
6. Can MOST funding be used to contribute to Agricultural Societies, or other non-profit societies active in our municipality?

Yes. If a municipality decides to contribute funding to an external entity for a purpose related to COVID19, this constitutes an incremental operating cost for the municipality and MOST funding can be used for this expense.
7. Can some or all of our MOST funding be used to support our housing management body (HMB)?

Yes. As municipalities are required to pay a requisition to support HMB operating costs, additional requisitions to support COVID-19 expenses or operating losses in the HMB are considered a municipal operating expense for the purposes of MOST, and may be shared with HMBs.
8. Can some or all of our MOST funding be used to off-set unpaid property taxes?

Yes. Any property taxes from the 2020 property tax year that remain uncollected as of March 31, 2021, are eligible as lost revenue and MOST funding can be used to compensate. There is no need to write off these unpaid taxes and municipalities should continue with all available tax collection methods. Later collection of the taxes will not retroactively impact MOST funding.
9. If a municipality chooses to forgive taxes for some property owners due to COVID-19 related challenges, can some or all of our MOST funding be used to off-set forgiven property taxes?

Yes, this would be eligible under the MOST.
10. Can MOST funding be used for capital expenses associated with COVID? For example, a small renovation to add a barrier to a customer-facing reception area or the purchase of camera equipment to broadcast council meetings.

Yes. While the funding is described as operating funding, it can be used for a very broad range of expenses associated with the pandemic response, including expenses that may be considered capital in some smaller municipalities.

## 11. Can MOST funding be used for partnerships

 with local economic development agencies such as Chambers of Commerce?Yes. If the municipality decides that such expenditures are a priority to help the municipality safely restart its local economy the province would consider these costs eligible under the MOST program provided they are incurred before March 31, 2021.
12. Due to COVID-19, several staff in our municipality have taken on new or different duties. For example, some have been seconded to an emergency operations centre, and others have additional cleaning tasks that reduce their capacity for their normal work. Are these labour costs eligible for MOST funding?

Not directly. Since the municipality intended to pay these employees prior to COVID-19, their compensation is not related to COVID-19 so is not eligible for MOST funding. However, if there are incremental expenditures associated with these situations, then these incremental costs are eligible. For example, if an employee is seconded to an emergency operations centre and a temporary employee is hired to backfill them, then the temporary employee's salary is eligible. If an employee has additional COVID-19-related cleaning duties and then requires overtime to fulfill their normal duties, then the overtime costs would be eligible under MOST.

For any additional questions regarding the MOST program, please contact a Municipal Affairs grant advisor at 780-422-7125, toll-free in Alberta by first dialing 310-0000, or ma.municipalstimulus@gov.ab.ca.

## Spring 2019 Wildfire Review

## Background

This review looks at spring 2019 wildfire activity and conditions; the department's preparedness and response to the Chuckegg Creek wildfire, McMillan complex and Battle complex wildfires; and the department's wildfire management program.

## Recommendation

## Next steps

## Preventative actions to decrease wildfires

Immediately implement a government wide disaster resilience and prevention focused task force to enhance the adoption of FireSmart activities and principles across government, at the community level and to incorporate fire prevention in community services.

Immediately develop a comprehensive strategy for incendiary fire prevention to reduce the number and severity of incendiary fires.

Government will promote the enhanced adoption of FireSmart across government and at the municipal and community level.

An incendiary wildfire is a fire that is intentionally ignited in an area or under circumstances where and when there should not be a fire. For example: arson, mischief or playing with matches.
In an effort to reduce the number and severity of incendiary-related wildfires, government will:

- Target education, communication and enforcement to address incendiary-related wildfires;
- Target enforcement with partner agencies (such as the RCMP, Fish and Wildfire Officers and local Indigenous communities) in high-risk arson areas;
- Complete a statistical analysis of incendiaryrelated wildfires to better direct resources for prevention activities; and
- Offer enhanced wildfire investigation courses for government staff and partners (such as municipalities, specialized contractors, the Fire and Arson Investigation Association of Alberta and the Canadian Interagency Forest Fire Centre).

Conduct a more comprehensive review of WMB communications and stakeholder engagement strategies, systems and processes with an objective of improving the experience of community members and stakeholders who are directly or indirectly being impacted by wildfire or other natural disasters.

To improve external communication with community members and stakeholders, government will:

- Conduct research to better understand Alberta Wildfire's target audience and evaluate communication strategies and approaches;
- Identify best method for emergency communications;
- Update wildfire-focused digital information tools; and
- Develop protocol that clarifies communications roles and responsibilities during an emergency event.


## Ready to respond to wildfire

Develop and implement a new preparedness planning framework that balances risk, hazard, values and cost to improve overall outcomes.

As part of preparedness planning for a better wildfire response, government will assess current systems and available technologies and implement learnings by:

- Enhancing wildfire occurrence prediction models; and
- Updating the approach to having firefighters, aircraft and equipment prepositioned in areas of high hazard to be able to respond quickly to new wildfire starts.

In order to better respond to wildfires, government will:

- Create detailed fuel mapping around communities including identifying municipal developments, critical infrastructure, utility corridors, telecommunications, and culturally important land; and
- Integrate fire weather and behaviour knowledge and expertise.

Government will emphasize completing the remaining WMPs for the Grande Prairie, Peace River, High Level, Whitecourt and Slave Lake forest areas.

Accelerate the development and approval of the remaining Wildfire Management Plans (WMPs) to have them completed in the shortest possible timeframe.

In order to improve wildfire response, government will:

- Develop a SOP for situations when a wildfire escapes initial attack during high-risk conditions and where there are significant values at risk; and
- Enhance training and retention of senior Incident Commanders.

Revise standard tactics and strategies for sustained attack to have better, safer, and more cost-effective results.
Review current policy and provide direction to wildfire
management staff regarding wildfire status to clarify
stages of control and the status of wildfires being
monitored.
Develop and train staff, including staff from other
ministries, to support Incident Management Team (IMT)
deployments and Forest Areas under escalating
workloads.

Implement a common mandatory radio communication plan and system for all WMB wildfire personnel, municipal firefighters and first responders working on wildfire incidents.

Government will improve sustained attack methods by providing training for lower and mid-level Incident Commanders and communicating with public and stakeholders on value of indirect attack and use of hand or aerial ignition.

Government will use clear, consistent language to communicate the status of a wildfire and will share information about the wildfire operations techniques being used on those fires.

Government will recruit and train staff across ministries. Staff will receive mentorship and necessary certifications to be ready for deployment.

In order to improve communication in wildfire response, government will:

- Review Alberta First Responders Radio Communications System for functionality and acceptance by users;
- Engage Public Safety Committee ministries for support; and
- Determine if single communications system is suitable on wildfire incidents.

To promote a safety culture, government will:

- Conduct an annual review and update of threeyear occupational health and safety (Occupational Health and Safety) plan;
- Maintain Certificate of Recognition for employers who develop health and safety programs that meet established standards; and
- Increase reporting of incidents, enhanced hazard assessments and incident analyses, and have more staff engaged in participation on workplace committees and inspections.


## Information and technology systems

WMB should continue with the legacy modernization program to provide functionality required by WMB to help improve the delivery of wildfire management activities and help reduce the impact of wildfires in Alberta.

Government will:

- Develop a single integrated system to make enhanced decisions using better and most recent data, including record keeping of decisions; and
- Use improved tools and technologies to help reduce impacts of wildfires in Alberta.


## Cost management

Undertake a deeper cost-benefit analysis of program spending with a focus on major suppression items.

In order to ensure efficient and effective spending, government will:

- Review and refine wildfire contract processes;
- Review and adjust helicopter rates;
- Review and adjust heavy equipment contract rates and process; and
- Review and assess privatization of CL215T skimmer airtankers.


## Risk management and strategic response

Accelerate the development and organization of the Intelligence Unit in the AWCC to support strategic risk management and resource planning.

Government will:

- Provide longer-term weather forecasting with the intent to forecast resource needs out 10 to 14 days for sustained action wildfires;
- Integrate fire weather and behaviour knowledge and expertise; and
- Align this work with a cost-benefit analysis of program spending.

Board Meeting REDI Northwest Alberta DRAFT MINUTES<br>Video Conference Call - Zoom<br>September 23, 2020<br>6:00 REDI Meeting

## APPROVED MEETING MINUTES

## REDI Board Members Present

Lisa Wardley, Chair, Mackenzie County
Boyd Langford, Vice Chair, Town of High Level
Michelle Farris, Secretary/Treasurer, Town of Rainbow Lake
Peter Braun, Mackenzie County
Larry Neufeld, La Crete Chamber of Commerce
Crystal McAteer, Town of High Level
Jessica Juneau, Town of Rainbow Lake
Alden Armstrong, Paddle Prairie Metis Settlement
Greg McIver, Zama Chamber Committee

## Staff \& Guests

Andrew O'Rourke, REDI Manager
Byron Peters, Mackenzie County
Kamie Currie, Northwest R.E.D. Manager, Ministry of Jobs, Economy and Innovation

## 1. CALL TO ORDER

Chair Wardley called the meeting to order at 6:05 pm.

## 2. REVIEW \& ADOPTION OF THE AGENDA

Motion:
Moved by Michelle Farris
That REDI accept the agenda as presented
Carried
3. PRESENTATIONS

No presentations

## 4. MINUTES OF JUNE 24, 2020 MEETING

Motion:
Moved by Crystal McAteer
That the minutes of the June 24, 2020 REDI meeting be accepted as presented.

## Carried

5. YTD FINANCIALS REPORT YTD AUGUST 31, 2020

Motion:
Moved by Boyd Langford
That REDI accepts the YTD Financial report to August 31, 2020, as information.

## Carried

## 6. CHAIRS REPORT

## Verbal

The chair had a conversation with Minister Tracy Allard at R.M.A. zone meetings regarding NADC appointments. REDI chair is looking forward to eventually meeting the new minister Doug Schweitzer of Jobs, Economy and Innovation.

## 7. MANAGERS REPORT

## Written \& Verbal

REDI Manager is meeting with each of the municipal C.A.O.'s in the region. I met with the Town of High Level C.A.O. Clark McAskile and Hayley Gavin to understand the town's economic development priorities. I'm planning to meet with Dan Fletcher of Rainbow Lake and Len Racher with Mackenzie County over the next month.

I provided the REDI retail analysis to a local retail developer. Our retail and industrial reports are pivotal for supporting the business case to invest locally in our region. It has come to my attention that there are some gaps in our catchment area for the Town of High Levels retail report. This is on my radar, and REDI must look at ways to update statistics and catchment populations.

At the end of August, I attended the Mackenzie County stakeholder meeting at MARA, where Corey Keith presented two agriculture investment concepts. Corey was tasked with finding differentiating factors that would support value-added agriculture. The two projects identified were growing and marketing pedigree seeds to be sold as seed and processing organic oats and peas.

I visited Fort Vermilion on two occasions over the summer and spoke to a number of business owners whose premises were flooded. We talked about topics such as the future location of their business, reopening and D.R.P. decisions that had to be made.

## Motion:

## Moved by Jessica Juneau

That the managers report and expense claim be accepted.

## Carried

## 8. NEW BUSINESS

i. REDI Operational Plan 2020/2021

REDI's budget for the year 2020/2021 has been reduced due to less operational grant funding coming from the Alberta Government. It was decided that it is not appropriate to ask for a membership increase, and REDI should work within its current budget. If a large project comes along, REDI should look at grant funding to support costs.

Project Priorities: Promote projects and reports that REDI has previously done. MoveUp Magazine advertorial (ask for a price reduction), Tourism Project, Website and Marketing, Townfolio, A2A Rail project, CanExport Grant, Shop Local Campaign, Retail Analysis updates, Broadband and Business Recovery.

REDI's operational plan will be submitted to the Alberta Government by the end of September as part of the requirements to obtain the $\$ 50,000$ in operating grant funding.

## ii. Paddle Prairie - Strategic Planning Request

Paddle Prairie was requesting assistance to find a facilitator to conduct a strategic planning session and create a short term, three-year strategy with a deadline of January 2021.

REDI manager recently made contact with Dr. Marie Delorme, a respected strategic planning facilitator based out of Calgary. The total cost of facilitating a two-day strategic planning session would be $\$ 8,400$. Or reduced to $\$ 6,300$ if Paddle Praire had the capacity to undertake planning session online. Community Futures is also interested in supporting financially. REDI Manager has asked Paddle Prairie to contribute one-third of the cost $(\$ 2,800)$.

## Motion:

Moved by Crystal McAteer
That REDI commits to support Paddle Prairie with its Strategic Planning Session with a contribution not exceeding $\$ 2800$ or $1 / 3$ of the cost.

## Carried

## iii. D.M.S. Digtal Main Street ‘Shop Here’ Program

The 'Shop Here' program powered by digital main street is designed to provide main street businesses free and quick access to an online store to sell their goods and services. The program was first developed to assist storefront businesses to pivot to online sales at the start of the COVID 19 pandemic.

The program run by Digital Main Street (D.M.S.) accesses federal grant funding to pay $\$ 7,500$ of the wages for college students to build Shopify online stores for individual businesses. To take part in this initiative, REDI would pay the remaining wages for the student along with an operational program fee to Digital Main Street D.M.S.

## Motion:

Moved by Cheryll Welke
That REDI proceeds with a letter of support for Digital Main Street 'Shop Here’ program addressed to honourable Mary Ng, Minister of Small Business, Export Promotion and International Trade. REDI to promote the program through local chambers to gauge participation for the program from local businesses.

## Carried

## iv. Tourism Proposal MFTA

MFTA has partnered with Might Peace Tourism and received \$70,000 from Travel Alberta for a one-year promotional program. REDI has set aside $\$ 15,000$ in its 2020/2021 operational plan for a partnership tourism project over the next year. If the opportunity arises, REDI will have the means to partner or match additional grant funding.

## v. Film Ready - Lets Keep Alberta Rolling (R.M.A.)

In January 2020, the Government of Alberta introduced the Film and Television Tax Credit, which is part of the government's commitment to grow Alberta's cultural industries by $25 \%$ or $\$ 1.5$ billion over the next 10 years.

Keep Alberta Rolling is calling for municipalities to share their stories and show how the Alberta screen industry has had a positive impact from productions on businesses and the local community.

## Motion:

Moved by Jessica Juneau
That REDI research and start the process of putting together a package that would promote the region as a film production-ready location.

## Carried

## vi. CanExport Community Investment Grant

The CanExport Community Investments program provides financial support to communities for their foreign direct investment (FDI) initiatives and activities. The program provides support to Canadian communities seeking to improve their capacity to attract, retain and expand FDI in order to create jobs for Canadians, support innovation and increase exports.

## Motion:

Moved by Boyd Langford
That REDI applies for the CanExport Federal Grant to support a joint project of investment attraction for the Pea Processing Project and A2A Rail Advocacy.

## Carried

## 9. OLD BUSINESS

## i. A2A Rail Snapshot and Introduction

New two-page marketing document presented. REDI manager reached out to A2A but has not got a response. REDI Chair to reach out to A2A through different channels.

## ii. Shop Local Campaign

The REDI manager created a regional shop local campaign that collaborates with the local Chambers of Commerce, the campaign was media-driven and designed with a message to educate on the benefits of shopping locally.

An e-vote went to REDI Executive on July 31, 2020 to increase the budget to $\$ 3,680$ to build upon the momentum created from the MoveUp magazine 'Shop Local’ article. The motion was moved by Chair Wardley.

## E- Vote Ratification Motion:

Moved by Lisa Wardley That REDI increases the 'Shop Local’ marketing campaign budget to $\$ 3,680$ to create a broader distribution of the marketing message.

## Carried

## iii. 5-year G.O.A. Reporting (2019-2020)

## Motion:

Moved by Boyd Langford
That REDI accepts the five-year operational funding report and approves it to be sent to the Alberta Government.

## Carried

## iv. Review of REDI Financial Policy

REDI updated its financial policy to include an independent review of financial statements by a certified accounting professional after every third year. With REDI conducting financial peer review statements for the two interim years. And any contracts being entered into of \$25,000 or over must have Request for Proposals created and must be put to tender to allow for fair trading practices. Contracts under $\$ 25,000$ are not required to be put to tender.

## Motion:

Moved by Michelle Farris
That REDI accepts the updated financial policy as presented.

## Carried

## v. Letter to Minister of Jobs, Economy \& Innovation

## Motion:

Moved by Larry Neufeld
That REDI sends a letter to welcome the new Minister of Jobs, Economy \& Innovation Doug Schweitzer and attach several regional snapshots.

## Carried

## vi. Industry Snapshots

Tourism and Agriculture Snapshots presented.

## vii. MoveUp Magazine Article Selection

REDI agrees to a future article on the new Tolko / Pinnacle Energy Pellet plant but should wait until after the official opening when photos and quotes can be gathered.

## Motion:

Moved by Peter Braun
That REDI creates an advertorial in the November issue of MoveUp Magazine to promote the work REDI does and include the launch of the new webpage.

## Carried

viii. REDI New Webpage, Design and Layout

Presentation of REDI webpage with new features.

## Motion:

Moved by Greg McIvor
That REDI launches the new website.

## Carried

## 10. ROUNDTABLE

Greg McIvor - The website looks excellent. Hopefully, we can make contact with A2A and get some updates, and create a little more conversation, as that is one more thing I'd like to see.

Cheryll Welke - High Level Chamber is working on a TV advertising program, which would be at the High Level Arena, promoting shop local. The Chamber is in contact with the Peace Drivers, and they are going to work on a seminar for Small Business Week.

Rural Health - We are featuring health care practitioners, focusing on positions, highlighting and acknowledging nurse practitioners that have been active in the region for a significant number of years.

Jasmine Light - There is a four-phase relaunch plan on Northern Lakes College campus, similar to the Alberta Government. The relaunch plan is available on the website. Right now, we are in phase two of the plan, where the campus is open to students only by appointment, as there are restrictions on the number of students allow. We have to balance the priorities of students with labs and practicums. Each college location does offer a drive-up WIFI, to anyone in the community, as NLC recognize the value of internet access to communities.

Larry Neufeld - Waiting to hear about Tompkins bridge, the Minister for Transport was up in the region. There is now a live website at Tompkins landing to show if the ferry is active or if there is a line of traffic. The La Crete Chamber is gearing up for Moonlight Madness.

Alden Armstrong - Appreciate the support on the strategic planning session. The politics of the region and the discussion on the bridge, in particular, we had the opportunity to spend some time with the Minister of Transport, and we have work to do, and as the opportunities are there.

Lisa Wardley - AUMA last week had some excellent sessions; in particular, an economist mentioned that if Canada does not get its energy sector back on track that we will probably see a ten-year depression before we can get back to pre-covid levels. The three big-ticket items moving forward in the future are advanced oil recovery, carbon capture and natural gas power production. Our region has some real opportunities in each of these segments.

Broadband has been highlighted because of covid for small towns, and rural and is relatively lacking. And broadband based on the business case is not necessarily what Canada needs to survive. It doesn't make business sense to shareholders for large IPS to upgrade, so there might be a rework of Federal and Provincial policy to provide rural and northern internet.

## ADJOURNMENT \& NEXT MEETING

The Next REDI meeting takes place on Wednesday, October 28, 2020, at 6:00 on Zoom or a combination of Zoom and board members present at High Level town office.

## Motion:

Moved by Jasmine Light
That the REDI meeting be adjourned at $8: 08 \mathrm{pm}$.

## Carried


[^0]:    * Denotes that the standard will be decided by evaluating anticipated traffic volumes, design speed, continuity with existing infrastructure and future proposed upgrades, and other criteria as deemed necessary.

[^1]:    1 For the purposes of this document, an "antenna system" is normally composed of an antenna and some sort of supporting structure, normally a tower. Most antennas have their own integral mast so they can be fastened directly to a building or a tower.

[^2]:    2 Please refer to Radiocommunication Information Circular RIC-66 for a list of addresses and telephone numbers for Industry Canada's regional and district offices. RIC-66 is available via the Internet at: http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf06073.html.

[^3]:    3 See also Client Procedures Circular CPC-2-0-17, Conditions of Licence for Mandatory Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements. CPC-2-0-17 is available via the Internet at: http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09081.html.

    4 The 120-day consultation period commences only once the proponent has formally submitted, in writing, all plans required by the LUA, and does not include preliminary discussions with the LUA.

[^4]:    6 Municipalities may also wish to refer to the protocol template developed in partnership between the Federation of Canadian Municipalities (FCM) and the Canadian Wireless Telecommunications Association (CWTA). The FCM/CWTA template can be found on the FCM's website, www.fcm.ca.

