

Council Package

November 23, 2021



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**AGENDA
TOWN OF LAMONT
REGULAR MEETING OF COUNCIL
November 23, 2021**

1. CALL TO ORDER AND RELATED BUSINESS

1.1. CALL TO ORDER

1.2. ADOPTION OF AGENDA

1.3. DECLARATION OF PECUNIARY INTEREST

1.4. ADOPTION OF MINUTES

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5307 – 50 Avenue
Lamont, AB T0B 2R0

**Town of Lamont
November 9, 2021
Regular Meeting of Council**

HELD BY ZOOM MEETINGS

PRESENT:

Kirk Perrin	Mayor
Jody Foulds	Councillor
Linda Sieker	Councillor
Al Harvey	Councillor
David Taylor	Councillor
Perry Koroluk	Councillor
Colleen Holowaychuk	Councillor
Rick Bastow	Chief Administrative Officer
Tyler Edworthy	Director, Operations & Infrastructure
Robert Mu	Finance Officer
Jaclyn Ponto	Recording Secretary

CALL TO ORDER AND RELATED BUSINESS:

Call to Order: Mayor Perrin: called the meeting to order at 7:00 p.m.

Adoption of Agenda

MOTION: 254/21 Councillor Sieker: That the Council Agenda be accepted as presented.

CARRIED

Declaration of Pecuniary Interest: None.

ADOPTION OF MINUTES:

a) Organizational Meeting Minutes – October 26, 2021

MOTION: 255/21 Councillor Taylor: That the Minutes of the October 26, 2021 Organizational Meeting be accepted as presented.

CARRIED

b) Council Meeting Minutes – October 26, 2021

MOTION: 256/21 Councillor Holowaychuk: That the Minutes of the October 26, 2021 Council Meeting be accepted as presented.

CARRIED

c) Parks and Recreation Committee Minutes – October 4, 2021

MOTION: 257/21 Councillor Taylor: That the Minutes of the October 4, 2021 Parks and Recreation Committee Meeting be accepted as presented.

CARRIED

DELEGATIONS:

- Northern Lights Library System Board

MOTION: 258/21 Councillor Foulds: That Northern Lights Library System Board be accepted as a delegation.

CARRIED

CORRESPONDENCE:

- CN – Board Appoints Jo-ann dePass Olsovsky to its Board of Directors
- Fortis Between the Lines – Update for Government and Stakeholders
- EIPS Quarterly Update October 2021
- Letter from the Fort Saskatchewan RCMP
- Fortis Alberta – Congratulatory Letter

MOTION: 259/21 Councillor Sieker: That Council accept the correspondence as information.

CARRIED

NEW BUSINESS:

2022 Capital Budget Introduction

MOTION: 260/21 Councillor Holowaychuk: That Council receive the 2022 Capital Budget Introduction as information.

CARRIED

Orientation Information – Utility Rates Restructure

MOTION: 261/21 Councillor Harvey: That Council receives the Utility Rates Restructure Orientation as information.

CARRIED

2022 Tax Recovery Public Auction Conditions of Sale

MOTION: 262/21 Councillor Foulds: That Council approve the Terms and Conditions of the sale for the 2022 Public Auction as presented in Attachment 1.

CARRIED

Policy Update – Council Remuneration and Expense Policy

MOTION: 263/21 Councillor Harvey: That Council direct Administration to revisit Policy 11-06, specifically looking to resolve the items of 1(c) and 1(e) and determine their applicability.

CARRIED

MOTION: 264/21 Councillor Koroluk: That Council approve the Town of Lamont Appointments, Boards and Committees Chart.

CARRIED

Park Sponsorship, Donation and Memorial Contributions Policy #72-08 Amendments

MOTION: 265/21 Councillor Taylor: That Council approve the recommendation by the Parks and Recreation Committee to amend the Park Sponsorship, Donation and Memorial Contributions Policy #72-08 as presented.

CARRIED

Lamont Curling Club Request

MOTION: 266/21 Councillor Koroluk: That Council approve the Curling Club request to maintain operations of the curling rink until December 10, 2021, and pay utility costs until December 31, 2021 to a max of \$13,000, transferring funds from Council Event and Council Goods and Supplies expense budget.

CARRIED

Councillor Harvey left the meeting at 8:27 p.m.

Replace Office Furniture

MOTION: 267/21 Councillor Koroluk: That Council approve an expenditure of up to \$3500.00 to replace the fire stations' old and damaged office furniture. Funds to be sourced from GL 1-2-2300-540 Building Repair/Maintenance.

CARRIED

Councillor Harvey rejoined the meeting at 8:32 p.m.

Property Sale

MOTION: 268/21 Councillor Foulds: That Council approve the sale of Plan 9623213; Lot L for the sum of \$165,000.00 and subject to conditions of sale as outlined in the Commercial Purchase Contract, removing reference of Town Bylaw 04/21 from section 9.3, and attaching Schedule A -Additional Terms and Conditions.

CARRIED

REPORTS:

Council Reports:

Mayor Perrin	Nothing to report.
Councillor Taylor	Written report attached.
Councillor Harvey	Nothing to report.
Councillor Koroluk	Nothing to report.
Councillor Sieker	Attended the November 7 Lamont Christmas Light up set up and the November 8 Governance and Priorities Committee Meeting.
Councillor Foulds	Nothing to report.
Councillor Holowaychuk	Written report attached.

Staff Reports:

CAO

- Reminder about the Remembrance Day event that will take place at the Cenotaph this Thursday at 10:50 a.m.

Director, Operations & Infrastructure

- Sanitary Trunk Line – received a recommendation from Select Engineering on the last day of the trunk line project, which is the relining. Received the costing back that shows significant savings in/around \$70,000.

Finance Officer

- Written report attached.

Fire

- Written report attached.

MOTION: 269/21 Councillor Sieker: That Council accept the reports as presented.

CARRIED

NOTICES OF MOTION: The October 26, 2021 Notice of Motions, Council Remuneration and Expense Policy 11-06 and Utility Rates, deferred to November 23, 2021 Council Meeting.

MOTION: 270/21 Councillor Koroluk: That Council extend the meeting past 9:00 p.m.

CARRIED

CLOSED SESSION:

- **Service Recognition**
 - *FOIP Section 17(1) – Disclosure Harmful to Personal Privacy*

MOTION: 271/21 Councillor Taylor: That Council convene in closed session pursuant to Section 197 of the *Municipal Government Act* to meet in private to discuss matters protected from disclosure by Section 17(1) of the *Freedom of Information and Protection of Privacy Act* at 8:47 p.m.

CARRIED

Councillor Koroluk left the meeting at 9:06 p.m.

MOTION: 272/21 Councillor Holowaychuk: That Council revert to regular Council meeting session at 9:18 p.m.

CARRIED

MOTIONS ARISING FROM CLOSED SESSION:

MOTION: 273/21 Councillor Taylor: That Council direct Administration and participating members of council to recognize former Mayor Bill Skinner for his years of service in an amount not to exceed \$1,000.00.

CARRIED

ADJOURNMENT: Mayor Perrin adjourned the meeting at 9:20 p.m.

Mayor

Chief Administrative Officer

Library Association of Alberta

November 15, 2021

Dear Mayor and elected Councillors,

On behalf of the Library Association of Alberta, I would like to extend my congratulations on your recent election to your municipal council! I'm sure you are eager to begin your work serving constituents.



The purpose of this letter is to introduce the Library Association of Alberta (LAA) as a valuable partner in advocating for your library. The LAA is a non-profit, volunteer run organization whose mission is to strengthen the library community in Alberta by effectively advocating for libraries and library workers from all sectors.

Like you, the LAA believes that libraries are a thriving and vital aspect of Alberta's communities. They are places that serve all members of the community with the programs, resources and technology necessary to build thriving communities and informed citizens. Local entrepreneurs, students, families, newcomers, seniors and educators are just a few examples of the types of people that use your local library to build skills, gain employment, make connections and most importantly, build community.

I am also writing today to highlight the important relationship between municipalities and public libraries. As a member of council, you have the ability to make a significant impact on your community through your support of your local library. If you would like to learn more about the relationship between municipal council and library boards, we recommend [this short document](#) from the Alberta Government. We also encourage you to reach out to your local library if you haven't already, to see firsthand the great work being done for community members.

Once again, my congratulations on your appointment to council. We value the work you are doing to build your community, and we encourage you to reach out at any time with questions or simply to connect.

Warmest regards,

A handwritten signature in black ink, appearing to read "Kirk MacLeod".

Kirk MacLeod

Library Association of Alberta, President

From: Community Engagement <Community.Engagement@albertahealthservices.ca>
Sent: Thursday, November 18, 2021 4:46 PM
To: Community Engagement <Community.Engagement@albertahealthservices.ca>
Subject: AHS Welcome to All Central Zone Municipal Leaders

Good Afternoon,

Please see below a welcome message to all Central Zone Municipal Leaders from Dr. Jennifer Bestard, Zone Medical Director, Central Zone, and Janice Stewart, Chief Zone Officer, Central Zone.

Regards,

Community Engagement
Alberta Health Services



On behalf of Alberta Health Services (AHS), we would like to congratulate you on your success in the October Alberta Municipal Election. We look forward to working with you in your role as a representative and advocate for your community and its residents.

As your Council and community work continues over the coming months, we wanted to take the opportunity to reach out and offer you some general information about AHS and provide you with contact information for local leadership within your area.

Provincially AHS is made up of five zones (North, South, Central, Edmonton and Calgary), and each zone is led locally by a Chief Zone Officer and a Zone Medical Director.

Your community falls within the [Central Zone](#), and we encourage you to reach out to us directly when questions or concerns arise. We can help provide a response to any concern you or a member of the community may have. In the Central Zone, our leadership team consists of:

- Janice Stewart, Chief Zone Officer, Central Zone, Janice.Stewart@ahs.ca; 403-343-4552
- Dr. Jennifer Bestard, Zone Medical Director, Central Zone, Jennifer.Bestard@ahs.ca; 403-343-4519

Alberta Health Services is also supported by our 12 local [Health Advisory Councils](#) or HACs. As you may be aware, two HACs represent the Central Zone:

- David Thompson (davidthompson@ahs.ca)
- Yellowhead East (yellowheadeast@ahs.ca)

You can use this map to determine which [geographic area](#), or HAC, your community falls into. You are always welcome to attend future Health Advisory Council meetings to learn more about local healthcare topics and how AHS partners with the community in addressing these concerns. Meeting times are posted on the [website](#).

As you are aware, the COVID-19 pandemic has been a primary focus on the healthcare system for the past 20 months. We have created a [Community Partners & Stakeholders](#) webpage to provide regular updates and information specifically for municipal leaders. We have also created an [AHS Facilities: ICU updates and temporary space reductions](#) webpage where you can find current information on any changes in service delivery across the province.

We know that the public, our partners and stakeholders including officials like yourself, may have questions about the pandemic and other health-related matters. We want to hear from you, whether you have a question or a concern. We would like to invite you to attend a virtual information session later this month for an update on our pandemic response and recovery efforts.

Two sessions will be offered. Please register for the one that works best with your schedule:

- [Monday, November 29, 2021 from 4 p.m. to 5 p.m.](#)
- [Tuesday, November 30, 2021 from 3:30 p.m. to 4:30 p.m.](#)

Additionally, our colleagues in EMS have been meeting with communities and the public over the last few months to fully understand the concerns of Albertans. EMS leadership participated in the AUMA Fall Convention this week, and will be back in Edmonton for the RMA Convention next week. We hope you will take the opportunity to meet with Chief Paramedic Darren Sandbeck and his team at the conventions.

If you would like to discuss a particular topic or have questions about your local healthcare services, please don't hesitate to connect with us. Our office contacts and emails are included above. You can also contact Central Zone's Communications Director, Heather Kipling (heather.kipling@ahs.ca) who can assist in providing information and support.

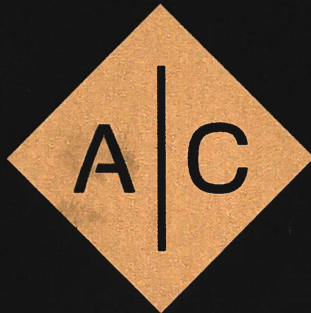
On behalf of AHS, we wish you all the best in your role as an elected official. Please know we are always available to provide any support or assistance you need.

We look forward to working with you.

Dr. Jennifer Bestard
Zone Medical Director, Central Zone

Janice Stewart
Chief Zone Officer, Central Zone

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ALBERTA COUNSEL
LAWYERS ♦ LOBBYISTS

Please accept our heartfelt congratulations on your victory on October 18th. Elections can be a gruelling and challenging time, yet they can also bring out the best in the people who are running to represent our province. Your victory is well deserved.

Municipal leadership plays a vital role in the day to day lives of Albertans and your willingness to work on all of our behalf is commendable.

We look forward to hosting you at our hospitality suite at your association's AGM in November.

Congratulations and best of luck,

The Alberta Counsel team.

10 Frequently Asked Questions

ABOUT THE OMBUDSMAN

1

What is Her Role?

As an independent legislative officer, the Ombudsman investigates complaints made by the public about authorities under her jurisdiction.

2

What Do We Do?

We investigate **final** administrative decisions using the principles of natural justice and administrative fairness. This includes confirming the actions and policies of municipalities are congruent with the *Municipal Government Act* (MGA).

3

What Power Does She Have?

The Ombudsman may make formal recommendations to help municipalities improve decision-making processes or confirm existing processes are fair.

4

Why Do We Investigate Municipalities?

Dec. 6, 2016

- Bill 21 passed: *Modernized Municipal Government Act*
- S. 85 amended MGA, s. 136 amended *Ombudsman Act*

Oct. 26, 2017

- Final amendments to MGA proclaimed into law

Apr. 1, 2018

- Ombudsman's functions and duties now include jurisdiction over municipalities

The Ombudsman is **not** an advocate for complainants, nor does she represent municipalities.

HANDLING COMPLAINTS

5

How Are Complaints Received?

We encourage people to phone our office with inquiries, but all complaints must be submitted in writing.

6

What Happens When We Receive Complaints?

Written complaints are assigned to and analyzed by investigators. Often, referrals are provided if additional reviews are available (e.g., write to the CAO).

INVESTIGATIONS AND OUTCOMES

7

What is an Early Resolution (ER)?

Often the first step of investigation, ER is a collaborative, informal, and efficient process wherein we isolate the core issue of a complaint and provide an objective and impartial assessment using our eight administrative fairness guidelines.

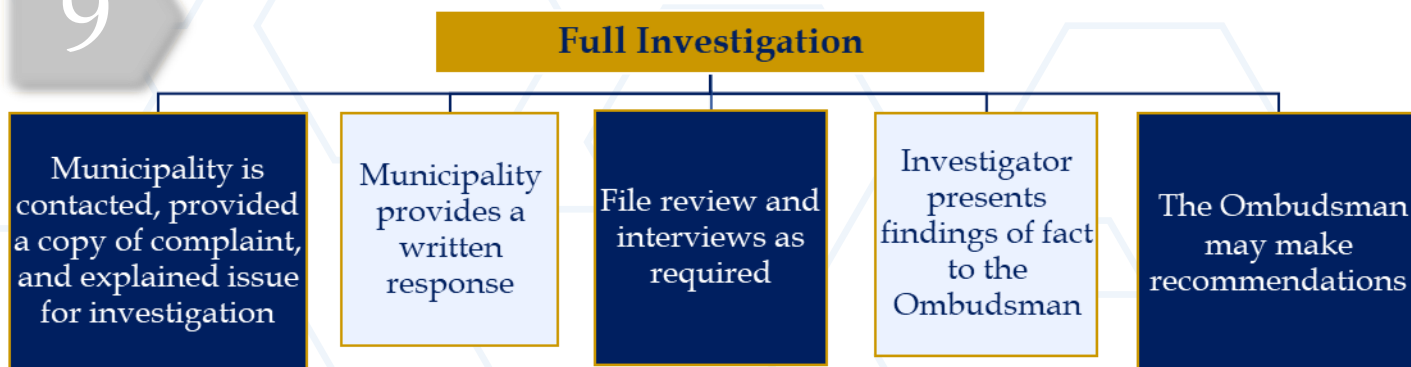
8

How is Early Resolution Collaborative?

An investigator may call to understand both sides of the complaint. We may ask for information about the process followed (e.g., relevant bylaws) and/or request a more detailed response, including reasons for the decision. A case is closed once we are satisfied an administratively fair decision was made.

9

What if Early Resolution is Not Possible?



10

What Are Recommendations?

With the goal of improving decision-making processes, recommendations can be broad or specific. They are **not** substitute decisions, nor are they based on the merits of a decision. For example, the Ombudsman may recommend a process be amended or an appeal matter be reheard.



FAQs for Municipalities



www.ombudsman.ab.ca

10 Tips for Developing and Administering Fair Rebate Programs

COMMUNICATING PROGRAM RULES

1

Explain the Application Process

Post details about how individuals can apply for the rebate, and all the applicable rules, on the municipality's website.

2

Clarify the Eligibility Criteria

Explain the eligibility criteria in plain language, and ensure the criteria are communicated clearly and consistently in the application form, terms and conditions, brochures, and via social media.

3

Be Transparent

Disclose any conditions or limitations of the rebate program to potential applicants.

This will help ensure applicants have a clear understanding of how likely they are to be successful in receiving the rebate.

4

Make the Information Easily Accessible

State the terms and conditions of the program at the beginning of the application process.

This will ensure applicants understand all terms and conditions of the program before entering the required data into their application.

ADMINISTERING THE PROGRAM

5

Follow Your Rules

Administer the program in accordance with your publicly posted program information. If the rules or processes change after the program has launched, explain what has happened and why to all affected applicants.



6

Retain Application Information

Keep the information you used to determine each applicant's eligibility for the program.

Keeping this information ensures accountability of the decision-making process while allowing meaningful reviews to occur during and after the program.

ISSUING DECISIONS

7

Put the Decision in Writing

Give all applicants a written decision within a reasonable time frame. Sign the decision and list a point of contact for the applicant, should they wish to follow up about the decision.

8

Provide Reasons for the Decision

The written decision should include reasons for your decision.

Explain if Discretion was Exercised

9

If the decision maker has discretion (e.g., to relax or vary the eligibility criteria, or to consider each application on a case-by-case basis), the decision should explain this. The decision should then say why and how you applied discretion in each case.

10

Advise Applicants of Available Reviews

The decision should clearly explain whether there are any reviews or appeals available and how applicants can access those levels of review.

Best Practice Guidelines for Municipalities



www.ombudsman.ab.ca



2021 Project and Marketing Report

Your community is Guaranteed to receive visitors by participating in this unique and innovative tourism promotion!

A Proven Success!

Marketing Success...

2021 was the first year it was inserted into the centre pages in the Go East of Edmonton Travel Guide. Game players surveyed stated the **Travel Guide was by far the #1** way they learned about the game and that they preferred to use the Travel guide instead of just downloading the Gameboards.

Go East Website recorded **17,783 pageviews** of Game pages, (as compared to 3340 in 2020), **a growth of 500%**. There were **1984 Downloads** of Gameboards and Sticker station pages from the website and an amazing **80,067 impressions** on the Game Pop-up banner.

Over 100,000 people were reached through Advertising campaigns.

Facebook, Instagram, Google Ads, ran all summer long, plus Radio, Billboards, ongoing blog articles, and social media engagement drove results.

Hundreds of people visited the Communities... The vast majority (75% approx.) of Towns and Villages gave away 200-300 Stickers to people / families playing the game. Some of the larger communities did reach above or below 400 stickers, and a few of the largest communities did reach above or below 500 stickers given away!

How did you hear about the game?

- 2 - Newspaper
- 5 - Radio
- 7 - Local Stores/Attractions
- 7 - Played in previous Year
- 7 - Word of Mouth
- 7 - Other
- 8 - Internet Search
- 15 - Advertisement
- 21 - Sticker stations
- 21 - Friend/Family
- 71 - Social Media
- 177 - Go East Travel Guide**

Where did people come from?

- Edmonton Area - 248
- Calgary & South AB - 12
- In and around our region:
- Northeast Communities - 43
- East Communities - 29
- Southeast Communities - 22
- BC - 1
- ON - 4



2021 Resulted in 936 ENTRIES

= Growth of nearly 900 more gameboards than 2020, an 1800% increase in entries.

Breakdown of the 936 entries include:

- 176 people submitted entries for the **Northeast Lucky 7**
- 179 people submitted entries for the **East Lucky 7**
- 138 people submitted entries for the **Southeast Lucky 7**
- 90 people submitted fully completed **Northeast Gameboards**
- 103 people submitted fully completed **East Gameboards**
- 85 people submitted fully completed **Southeast Gameboards**
- 109 people submitted entries for our **Blackjack Prize**
- 56 people have submitted 3 fully completed gameboards for our **Ultimate Prize Package!**

There were also over **400 entries on social media** for bonus prizes! Check out the awesome posts at [#goroadtrips2021](https://twitter.com/goroadtrips2021)

The winners are all posted on our website at www.GoRoadtripGame.ca

Featured Blog articles, photos and videos were promoted on Go East, Partner and other media websites and through e-newsletter.



Go Southeast on the Roadtrip Adventure Game – A Complete Guide to Sticker Stations & Places to Go! #goroadtrips2021

2021 ROADTRIP ADVENTURES: BEAVER COUNTY CAMROSE CAMROSE COUNTY DAYLANDS FLAGSTAFF COUNTY FORESTBURG HARDISTY HAY LAKES HIGHWAY 13 HIGHWAY 14 ITINERARY KILLAM RYLEY SEDGWICK SOUTHEAST OF EDMONTON TOPFIELD YIRING

Go East on the Roadtrip Adventure Game – A Complete Guide to Sticker Stations & Places to Go! #goroadtrips2021

2021 ROADTRIP ADVENTURES: ANDREW BRUGSERVING CAMPGROUNDS & RV PARKS CLANDONALD DRINK, EAT & SHOP EAST OF EDMONTON FORT SASKATCHEWAN HIGHWAY 15 HIGHWAY 16 HIGHWAY 20 HIGHWAY 45 ITINERARY NORTIS CITY LAMONT LAMONT COUNTY MANNVILLE MARKWAYNE MONTBURN COUNTY MUNDARE RYERBURN OUTDOOR ADVENTURES PARKS & TRAILS ROADTRIPS SHERWOOD PARK SHOPPING STRATHCONA COUNTY TWO HILLS TWO HILLS COUNTY VEGREVILLE VERMILION VERMILION RIVER COUNTY

Go Northeast on the Roadtrip Adventure Game – A Complete Guide to Sticker Stations & Places to Go! #goroadtrips2021

2021 ROADTRIP ADVENTURES: BONNYVILLE CAMPGROUNDS & RV PARKS COLD LAKE DRINK, EAT & SHOP ELA POINT GIBBONS GLENDEAN HIGHWAY 2 HIGHWAY 25 HIGHWAY 55 IRON HORSE TRAIL ITINERARY LAKE LA BICHE REGION LAVELAND REGION LEGG LOCAL FOODS MOUNT OF BONNYVILLE NATIS CROSSING NORTHWEST OF EDMONTON OUTDOOR ADVENTURES REDWATER RESTAURANTS ROADSIDE ATTRACTION ROADTRIPS SHOPPING SMOYLY LAKE SMOYLY LAKE COUNTY ST. PAUL ST. PAUL COUNTY THORHELD THORHELD COUNTY WASKATULA

Ad campaigns included Facebook/Instagram Ads, Google, Youtube ads, local and regional radio stations, billboards and other digital media. **The Billboard advertising reached over 50,000 weekly in Edmonton.**



In total, across Google and Facebook, on Roadtrip Game Advertised content there have been:

334,795 Google Impressions
461,806 Facebook Impressions
= 796,601 Interactions/Clicks total of 7529

Over 500 Posts and Ads on Social Media!
Every Community was featured and promoted on Facebook & Instagram!



ROI- Return on Investment to Partners...

Total Project value is calculated at over \$30,000 to coordinate, organize, advertise and implement the 2021 Game project. Includes Partner and Grant funds received.

42 communities participated in 2021, (as compared to 16 in 2020.) Hundreds of stickers were handed out to travellers between June and August 2021 in all our Communities, (as compared to dozens in 2020.) **All sizes of Communities and all areas of Northeast, East and Southeast benefited from Increased Roadtrips from Visitors.**

Over \$100,000 in spending is currently estimated from the Roadtrip Adventure Game into our region- a 3 to 1 gain in ROI for our region (as compared to 2020 this is a minimum 5X increase).

Over \$5000 in Prize Contributions is expected to return a minimum of another \$5000 in ROI to the region.

We are grateful to all our partners who generously contributed over \$5000 in prizes from their communities. These prizes will also bring back all the winners to our local businesses and attractions to redeem and visit once again - further supporting the region.

It's a proven success and proves that Go East of Edmonton works to grow tourism and bring travellers to every part of our region!

Be sure your community participates in 2022!

Radio campaigns ran each month on CFCW, Country 106 and 8 local radio stations.



Contact: Kevin Kisilevich



ROADTRIP ADVENTURE GAME!



Community & Sticker Station Testimonials

Only a few of the many comments received to date...

Vermilion VIC –

...this year we (tripled our visitors) blew it out of the charts. And I would like to contribute a portion of our success to GO EAST!!!

We had so many people come through from Edmonton and beyond just

to complete your game. So what you are doing is working and we love you for it. Please keep doing it and upping your game to attract visitors. Consider us in for next year! And THANK YOU for all that you do!

Lac La Biche VIC (and Chamber of Commerce) –

The Roadtrip Game is the best promotion we have ever been a part of!

St. Paul VIC – *The game is great! We had lots of visitors. We hope it runs again next year!*

Mannville - Confectionary 881 – *Very happy with the game, it went very well. Very impressed with the amount of people it brought to town. Hope it will be on again next year and we would love to be the sticker station again.*

Forestburg - Golf Course – *Looking forward to next year! Things went so smooth.*

Kitscoty - Farmstead Market – *We are very happy with the game!*

Daysland - Golf Course – *Looking forward to next year!*

Strathcona Wilderness Centre – *It's been a very successful campaign this summer and SWC staff are keen to participate next year. People use both digital and hard copies, so we hope that guide continues. Congratulations on a successful summer campaign in 2021!*

Viking Golf Course – *The game was very good overall. It brought in a lot of people. Keep up the good work you are doing to promote all of the communities. We had a lot of fun being the sticker station. It has been a great way to give people something to do during Covid that kept everyone safe still.*

Vegreville VIC – *We had lots of new visitors who had never been here and were visiting because of the Game.*

The sticker game is a great way to encourage road trips in and around our community. Visitors love it and employees who worked the sticker station enjoy it too. It is an opportunity to bring people to our community who may have not known we were here. We got to connect with visitors, share the town's backstory, and encourage them to visit our local businesses.

Many of our Roadtrip players were families on road trips or looking for ideas for daytrips. Lots of people talked about having been cooped up during COVID restrictions and couldn't wait to get out and explore the areas they could.

The Go East magazine was the most popular brochure taken from the Visitor Centre, because it had the Roadtrip Game, a map and information on where to travel.

Visitors loved all the ways to win, and people found it easy to participate.

It was hugely successful for the Town of Vegreville and we look forward to seeing what new twist you add in 2022!

Over 200 more Social Media Testimonials and Comments can be found at #goroadtrips2021 !!!

(Facebook - 19, Twitter – 12, Instagram - 170)

See the 2021 Game pages at www.GoEastGuide.ca

Hundreds of Testimonials and more coming in!!!

Roadtrip Game Winners Testimonials:

Maureen Krenz – Edmonton - *“Since travel was restricted due to varying Covid numbers, exploring local was a great option and it made me feel like I still had holidays! Most of the time, we pass by some of these smaller towns en route to a destination. This experience allowed me to take the time to stop and admire what each area had to showcase and offer. These Go Explore East road trips really taught me to appreciate all of the great things Alberta has to offer. You don't have to go far to enjoy summer. I recommend people slow down, stop and smell the roses and spend time with your family & friends.”*

Ava Bendick Whitticase – Fort Saskatchewan - *“We played the game because of Covid and the restrictions on travel. It was something we could still do together for fun. It was very fun and would love to do it again!”*

Tracey Courtepatte – Fort Saskatchewan - *The vendors I have encountered have been wonderful. I am enjoying the game and love doing the drive to all the communities. I had no clue that there were so many little Hamlets, Villages, Towns, M.D.'s and county's. I am really impressed. I was extremely impressed with the gluten free stores that sold food and flour. Also the little “shops” with great items you wouldn't see anywhere else. I would absolutely do this game again. I pick up the “Go East of Edmonton” book every year. I actually planned out day trips the year before Covid hit for my family to do. But Covid came and everything stopped.”*

Stacey Leaman – Sherwood Park - *“It was free and a great way to get out with the family to explore other places while making memories.”*

Sophie Regnier – Sturgeon County - *“I loved the zipline in Cold Lake and camping there. My brother loved the zipline in Glendon at the park.”*

Pam Regnier – Sturgeon County - *“We needed a way to take a break from homeschooling due to Covid and this was a great option for that. We bought a tent trailer and started planning!”*



Game Player Testimonials from emails:

Louise Carter, Edmonton - *Fabulous, Have had great fun collecting all the stickers!*

Julie Martin, Edmonton - *It was so much fun, we can't wait to do it again next year. We hope your doing it again!*

Jenny Takenaka, Beaumont - *I would like to thank you for this wonderful activity for our family to enjoy. The kids are loving being able to collect the stickers and we are getting to experience places that we would have never thought to stop at.*

Linda Ronsko, Edmonton - *Thank you so much for a wonderful way to see parts of Alberta we would not have another reason to visit. We all really enjoyed the experience.*

Denise Dueck, Thorhild - *This is a wonderful game for this summer! Kudos to you and your team!*

Our most heartfelt Testimonial:

Matthew Levicki – Lamont - *The Go East of Edmonton road trip adventure was a truly memorable experience for my family. My wife Maryia (Levicki) Talkachova has been through things that no one could imagine...receiving treatments for stage II Hodgkin's Lymphoma and having a newborn daughter this past May...we feel thankful for your game as it has resulted in countless moments of joy driving highways across the east of Edmonton in our great province.*

My wife has been very active on Instagram posting many photos on the @rural_alberta page and hash tagging goeastofedmonton. She has been so excited about getting comments and likes on her photos as we went along.

Once we started during the last week of July, we treated the adventure game like it was the most important thing in our lives, like we had to accomplish it and get every sticker. My wife has shown incredible strength and it feels good to share our adventure story with Go East of Edmonton. The road trips gave us hope and courage through nothing but the fear and angst we feel every day. Thank you.

See the 2021 details at www.GoRoadtripGame.ca



ALBERTA
JUSTICE AND SOLICITOR GENERAL

*Office of the Minister
MLA, Edmonton - South West*

AR 43835

Dear Mayor/Reeve and Council:

I am pleased to announce the release of the *Alberta Provincial Police Service Transition Study* completed by PricewaterhouseCoopers (PwC) Canada, and to invite your municipality to participate in further engagement on the findings of this report.

The Department of Justice and Solicitor General will be hosting virtual and in-person municipal engagement sessions between January 2022 and March 2022. Municipal engagement sessions will be open to municipal elected representatives, municipal employees, and organizations representing municipalities. Please see the attachment for instructions on how to register for a session near your community.

The engagement sessions will explore the concepts and information outlined in PwC's work, gather feedback on these ideas as well as local policing perspectives that will be used to refine PwC's proposed model and inform provincial government decision making. Discussions during the engagement sessions will draw on material from all three PwC reports:

- PwC's Final report: <https://open.alberta.ca/publications/apps-transition-study-final-report>
- PwC's Current state report: <https://open.alberta.ca/publications/apps-current-state-report>
- PwC's Future state report: <https://open.alberta.ca/publications/apps-future-state-report>

It is important to emphasize that no decisions have been made with regard to Alberta establishing its own provincial police. The Royal Canadian Mounted Police (RCMP) is an important Canadian institution consisting of exceptional women and men who perform great work, risking their lives every day to keep our communities safe. While Alberta's government has the utmost respect and appreciation for the work of the RCMP's front-line members, we also have a responsibility to examine our model of provincial policing to see if there are other innovative alternatives that would increase policing services for Albertans, involve Albertans in key decision-making processes, is cost-effective, and places community policing at the forefront.

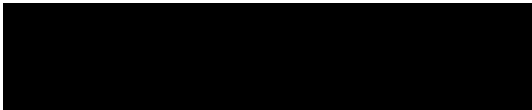
In 2020, the Fair Deal Panel consulted with tens of thousands of Albertans and heard many people's frustrations with the challenges of relying on a contracted provincial police force that is ultimately managed by Ottawa. The panel recommended that the province create an Alberta Provincial Police Service to replace the RCMP. The Alberta government supported this recommendation in principle, but committed to additional analysis. In October 2020, Justice and Solicitor General contracted with PwC to develop this analysis, and on April 30, 2021 PwC delivered their report. PwC's *Alberta Provincial Police Service Transition Study* details the operational requirements, process steps, and costs of a potential transition to an Alberta provincial police service.

The *Alberta Provincial Police Service Transition Study* presents an innovative provincial policing model that would:

- Increase the number of front-line police officers and civilian specialists serving our communities;
- Have dedicated mental health nurses and social workers to assist front-line police response;
- Prioritize community policing that would see Albertans recruited and serving in their local communities;
- See less transfer of officers in and out of communities (and the province) which would increase police knowledge of local public safety issues and improve detachment staffing levels;
- Reduce federal/provincial jurisdictional barriers that limit the integration of police services across Alberta;
- Have a governance model to increase the provincial police's accountability to local priorities and policing needs;
- Introduce new approaches to detachment deployment models to reduce police response times; and
- Leverage efficient back-office functions by utilizing existing provincial government resources to make the provincial police more cost effective.

I encourage you to attend a virtual or in-person engagement session to discuss the proposed model for an Alberta provincial police service, and to discuss what this model could mean for your community. If you have questions about the engagement sessions, please contact my department by emailing jsg.appstranstionstudy@gov.ab.ca.

Yours very truly,



Kaycee Madu, QC
Minister

Attachment

cc: Honourable Rick McIver, Minister of Municipal Affairs



November 2 2021

Mayor and Council

The Town of Lamont

5303 50 ave. Lamont

Alberta T0B 2R0

Dear Sirs and Madams:

This is a formal request to have a snow fence installed on the right side of 55 street from the alley behind 5504 52 street to the far edge of town across from the mobile home park area at the west end of Lamont.

The mobile homes coming off of 55 street all have driveways facing west onto 55 street and the snow drift becomes impacted on 55 street, the front yards and driveways of these mobile homes, making it extremely difficult to remove without heavy equipment.

Anyone seeking to leave for work after a night's storm will have difficulty getting out of their driveway let alone proceeding down the street.

The wind drift of snow comes across the field, over the train tracks and highway 15 and beyond with nothing to stop it. The few evergreen trees on the west side of the street have little to no impact on preventing the wind drift of snow. With a heavy snowfall prediction for this coming winter, we are asking for some assistance in this matter.

There was at one time a snow fence in that area. It was the old fashioned kind with wooden slats but through time it deteriorated and became non-existent.

With a mixture of residents, some elderly, some working and some with schoolaged children needing the prompt arrival of a schoolbus, the ability to control the snow on the street and driveways is a genuine need.

Thank-you for your consideration in this matter.

Yours truly, Residents of the mobile home park in Lamont.



TOWN OF LAMONT COUNCIL AGENDA REQUEST FOR DECISION

AGENDA ITEM: 4.1

COUNCIL MEETING DATE:
November 23, 2021

ITEM DESCRIPTION OR TITLE

Waste, Recycle, and Organics Hauling Services

RECOMMENDATION

That Council direct administration to finalize the agreement with GFL environment for Waste, Recycle and Organics Hauling Services.

BACKGROUND

In 2015 the Town of Lamont entered into an agreement for residential and commercial waste, recycle, and organics hauling services. The original agreement has been renewed twice and has not gone out for tender in this time. In August 2021 administration sent a letter of intent in line with the current agreement 6 months prior to the agreement renewal, that a request for proposals would be posted for the current waste, recycling, and organics hauling services.

The request for proposals was posted at Alberta Purchasing Connection, the Town of Lamont website and invitation was sent to 5 vendors. Three bids were received, one did not qualify under the mandatory requirements. GFL has submitted a proposal with service enhancements including a waste education plan, annual large item pick up, and complaint resolution service. The remaining bid offers comparable services but have come in at a higher fee.

Administration is working with GFL on an updated waste, recycle, and organics hauling service agreement that will provide an option for haul away service of organics. Administration is asking Council to direct administration to finalize the Waste, Recycle, and Organics Hauling Services with GFL Environment for a 5 year term.

COMMUNICATIONS

Finalize waste, recycle, and organics hauling services.
Work with vendor on service enhancement marketing.
Work with Vendor implementing the waste education plan.

IMPLICATIONS OF DECISION

This agreement will provide the Town of Lamont with enhanced waste, recycle, and organics hauling services.



**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

FINANCIAL IMPLICATIONS

Residential Waste Carts: \$3.95 per cart per month
Residential Seasonal Yard Waste Carts: \$1.60 per cart per month
Residential Blue bag/bin: \$3.50 per month
Organics Haul away Service: \$80 per Metric Tonn processing fee.
Commercial Bins:

- 2 yd bin tipped weekly - \$56.29
- 3yd bin tipped weekly - \$64.82
- 4 yd bin tipped weekly - \$86.43
- 6 yd bin tipped weekly - \$120.03
- 8yd bin tipped weekly - \$160.04

+ 3% per year for 5-year agreement.
Anticipated savings of \$100,000 compared to 2021 rates.


POLICY AND/OR LEGISLATIVE REFERENCES

Town Fee's Policy

ATTACHMENTS

N/A

Report Prepared By: Tyler Edworthy, Director Operations & Infrastructure

Approved by CAO: 



**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

AGENDA ITEM: 4.2

**COUNCIL MEETING DATE:
November 23rd, 2021**

ITEM DESCRIPTION OR TITLE

2022 Utility Cost Recovery Increase for Debenture Repayment and Future Maintenance and Improvement

RECOMMENDATION

That Council approve an additional increase of 5.7% above the annual water services rate increase from John S. Batiuk Regional Water Commission for the 2022 utility charges.

BACKGROUND

As presented during the Utility Cost Recovery Orientation on the November 9th, 2021 Council meeting, the administration identified the utility deficits of \$152,266, \$124,175, and \$50,908 for the water, sewer, and garbage collection respectively. The 2020 utility deficit for 2020 was \$327,348 and the current direct cost recovery rate is 77%.

To eliminate and/or reduce the utility deficit, the Administration is actively seeking cost savings, for example, currently the Administration is under negotiations with a new garbage collection company with a potential cost saving of at least \$100,000.

The past 3 year and 10 months payments to GFL is as below:

Payments to GFL	2021 (10months)	2020	2019	2018
With GST	249,961.92	297,314.16	289,957.76	280,911.77
Without GST	238,058.97	283,156.34	276,150.25	267,535.02

The potential cost saving of \$100,000 will be considered as a source of funding for the debt repayment of the 2022 proposed debenture if Council approves.

If Council approve the Option I.C of the 2022 Capital Budget, the proposed 5.7% of increase, which represent \$92,756 in total of additional revenue for the Town, or \$14 per bill per unit increase for ratepayers, includes the following:

- 2.7% of the increase (\$28,876 in total, or \$6.6 per bill per unit) used for the Option I.C debt repayments.
- 3% of the increase (\$31,940 in total, or \$7.4 per bill per unit) will be classified as Maintenance and Improvement Fee at reserve.



**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

COMMUNICATIONS

Once Council approves the rate of increase, the reports will be posted on the Town website.

IMPLICATIONS OF DECISION

N/A

FINANCIAL IMPLICATIONS

Please refer to 2022 Capital Budget Presentation

POLICY AND/OR LEGISLATIVE REFERENCES

N/A

ATTACHMENTS

2022 Capital Budget

Report Prepared By:

- Tyler Edworthy, Director, Operations & Infrastructure
- Robert Mu, Finance Officer

Approved by CAO: 

2022 Capital Budget

Presented to the Town of Lamont
Council on November 23rd, 2021

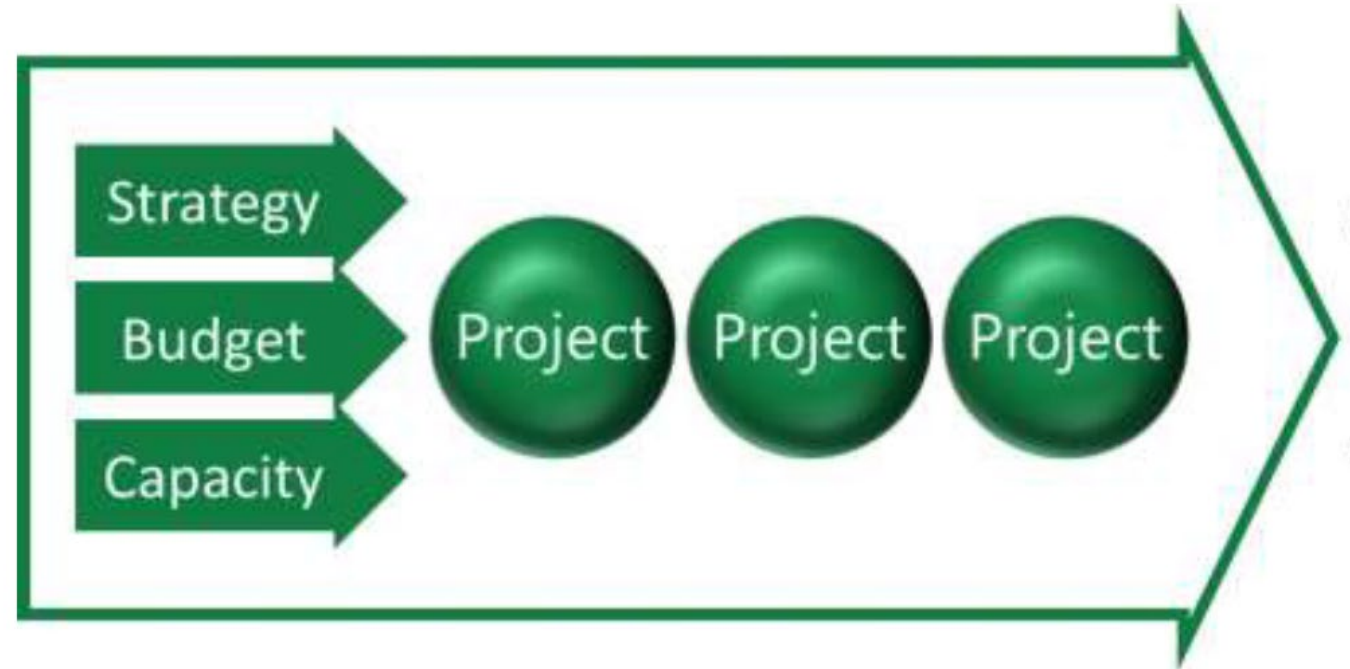


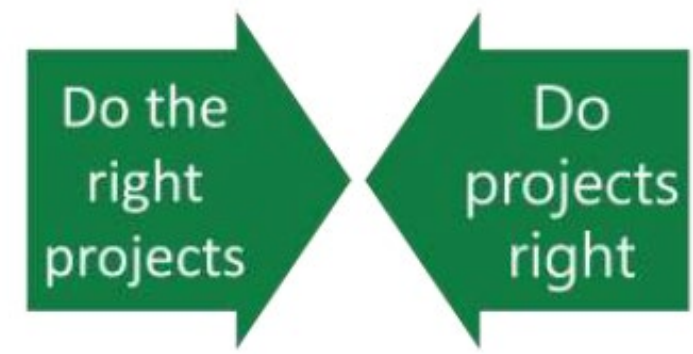
Review and Approved by: Rick Bastow, CAO

Prepared by: Tyler Edworthy, Director, Operations & Infrastructure and Robert Mu, Finance Officer

The Purpose of the Presentation

Further to the Introduction Presentation and the feedback received from the Governance and Priorities Committee, the administration prepared five (5) options for Council's considerations.





#	Projects	Amount
1	Campbell improvement stage 2-phase 1	\$ 866,351
2	Operations skid steer purchase	\$ 80,000
3	57 Avenue/45 Street, road reconstruction (Edna subdivision)	\$ 477,400
4	54 Street & Campbell reservoir SCADA system	\$ 55,000
5	4x4 1 ton truck with dump box	\$ 75,000
6	51 Avenue (50A Street to 51 Street) road reconstruction	\$ 213,200
7	51 Avenue (53 to 54 Street) road reconstruction	\$ 166,000
8	49 Street (50 to 51 Ave) road reconstruction	\$ 182,600
9	55 Street (51 to 52 Ave) road reconstruction	\$ 214,400
10	52 Avenue (55 St to Alley West) road reconstruction	\$ 180,360
11	Operations vibration roller packer purchase	\$ 20,000
12	Operations tiller attachment purchase	\$ 12,000
13	Operations ditch cutter attachment purchase	\$ 12,000
14	Operations ½ ton truck purchase	\$ 45,000
Total Cost of the Proposed Projects		\$2,599,311



2022 CAPITAL INFRASTRUCTURE PROJECTS PROPOSED



Table of Contents

01 Updated Cash Position &
Interest Rates

02 Option I

03 Option II

04 Option III

05 Option IV

06 Option V



SECTION - I UPDATES ON CASH POSITION

Updated as of November 15th, 2021		Cash on Hand	Reserve	Surplus
Lamont		\$ 5,918,422	\$2,505,227	\$2,167,721

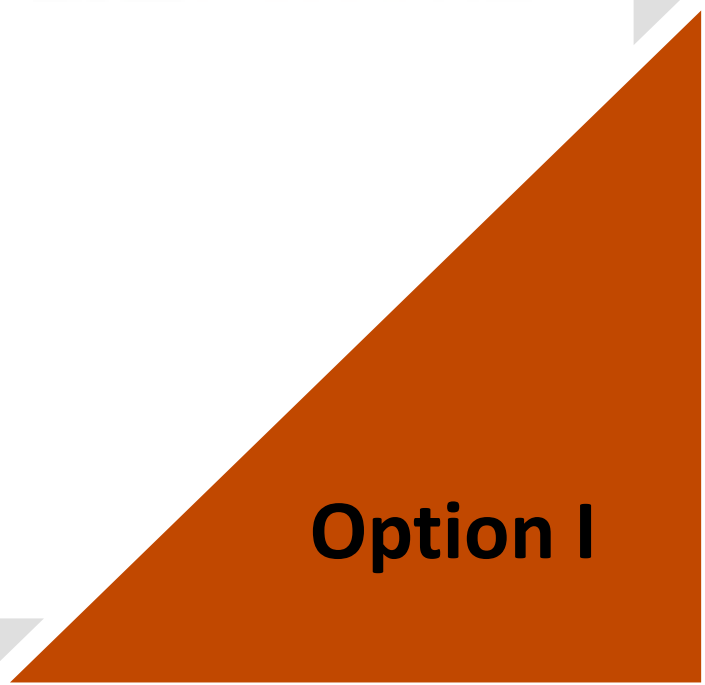


<u>As of</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>15 Year</u>	<u>20 Year</u>	<u>25 Year</u>	<u>30 Year</u>
15-Nov-21	2.14%	2.41%	2.87%	3.19%	3.39%	3.53%	3.62%
01-Nov-21	2.16%	2.43%	2.92%	3.23%	3.41%	3.55%	3.63%
15-Oct-21	1.8870%	2.1535%	2.7210%	3.0800%	3.2980%	3.4600%	3.5640%
01-Oct-21	0.9639%	1.2477%	1.8734%	2.2804%	2.5355%	2.7027%	2.8147%

SECTION - I UPDATES ON INTEREST RATES



#	Projects (Option I)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200
3	57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	477,400
4	49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600
5	55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400
6	52nd Avenue Road Reconstruction (55 St to Alley West)	180,360
7	Operations – 4x4 1 ton Truck with dump box	75,000
8	Campbell Improvement Stage 2-Phase 1	866,351
9	Operations Skid Steer Purchase	80,000
10	Operations vibration roller packer	20,000
11	Operations ditch cutter attachment	12,000
12	Operations tiller Attachment	12,000
13	54 st & Campbell Reservoir Scada system install	55,000
14	Operations 1/2 Ton truck replacement	45,000
Total Cost of the Proposed Projects		2,599,311
Equipment Cost Identified		244,000
Total 2023-2026		1,996,861
Total 5 Year		4,596,172



Source of Funding for Option 1

Source of Funding for Option 1	Capital		Reserve		Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance	Debenture					
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 2,286,063	\$ 191,801	\$ 100,000	9%	\$ 127	\$ 21.1
Option 1.B G, Reserve (R), D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 1,786,063	\$ 149,851	\$ 100,000	5%	\$ 69	\$ 11.5
Option 1.C - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 1,536,063	\$ 128,876	\$ 100,000	2.7%	\$ 40	\$ 6.6
Option 1.D - G, R, D	\$313,248	\$ 1,000,000	\$ 1,505,227	\$ 1,286,063	\$ 107,901	\$ 100,000	1%	\$ 11	\$ 1.8
Option 1.E - G, R, D	\$313,248	\$ 1,250,000	\$ 1,255,227	\$ 1,036,063	\$ 86,926	\$ 100,000	-1%	\$ (18)	\$ (3.0)

#	Projects (Option II)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200
3	57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	477,400
4	49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600
5	55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400
6	52nd Avenue Road Reconstruction (55 St to Alley West)	180,360
7	Operations – 4x4 1 ton Truck with dump box	75,000
8	Operations Skid Steer Purchase	80,000
9	54 st & Campbell Reservoir Scada system install	55,000
10	Campbell Improvement Stage 2-Phase 2	790,861
Total Cost of the Proposed Projects		2,434,821
	Equipment Cost Identified	155,000
	Total 2023-2026	2,241,351
	Total 5 Year	4,596,172



Option II

Source of Funding for Option II

Source of Funding for Option 2	Capital		Reserve		Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance	Debenture					
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 2,121,573	\$ 178,000	\$ 100,000	7%	\$ 108	\$ 18
Option 1.B G, Reserve (R), D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 1,621,573	\$ 136,050	\$ 100,000	3%	\$ 50	\$ 8
Option 1.C - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 1,371,573	\$ 115,075	\$ 100,000	1%	\$ 21	\$ 3
Option 1.D - G, R, D	\$313,248	\$ 875,000	\$ 1,630,227	\$ 1,246,573	\$ 104,587	\$ 100,000	0%	\$ 6	\$ 1
Option 1.E - G, R, D	\$313,248	\$ 1,250,000	\$ 1,255,227	\$ 871,573	\$ 73,125	\$ 100,000	-3%	(\$ 37)	(\$ 6)



#	Projects (Option III)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200
3	49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600
4	55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400
5	52nd Avenue Road Reconstruction (55 St to Alley West)	180,360
6	Operations – 4x4 1 ton Truck with dump box	75,000
7	Campbell Improvement Stage 2-Phase 1	866,351
8	Operations Skid Steer Purchase	80,000
9	54 st & Campbell Reservoir Scada system install	55,000
Total Cost of the Proposed Projects		2,032,911
	Equipment Cost Identified	155,000
	Total 2023-2026	2,563,261
	Total 5 Year	4,596,172

Option III

Source of Funding for Option III

Source of Funding for Option 3	Capital		Reserve		Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance	Debenture					
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 1,719,663	\$ 144,280	\$ 100,000	4%	\$ 61	\$ 10
Option 1.B G, Reserve (R), D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 1,219,663	\$ 102,330	\$ 100,000	0%	\$ 3	\$ 1
Option 1.C - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 969,663	\$ 81,355	\$ 100,000	-2%	\$ (26)	\$ (4)
Option 1.D - G, R, D	\$313,248	\$ 875,000	\$ 1,630,227	\$ 844,663	\$ 70,867	\$ 100,000	-3%	\$ (40)	\$ (7)
Option 1.E - G, R, D	\$313,248	\$ 1,250,000	\$ 1,255,227	\$ 469,663	\$ 39,405	\$ 100,000	-6%	\$ (84)	\$ (14)

#	Projects (Option IV)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200
3	49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600
4	55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400
5	52nd Avenue Road Reconstruction (55 St to Alley West)	180,360
6	Operations – 4x4 1 ton Truck with dump box	75,000
7	Campbell Improvement Stage 2-Phase 1	460,187
8	Operations Skid Steer Purchase	80,000
9	Operations vibration roller packer	20,000
10	Operations ditch cutter attachment	12,000
11	Operations tiller Attachment	12,000
12	54 st & Campbell Reservoir Scada system install	55,000
13	Operations 1/2 Ton truck replacement	45,000
Total Cost of the Proposed Projects		1,715,747
	Equipment Cost Identified	244,000
	Total 2023-2026	2,880,425
	Total 5 Year	4,596,172



Option IV

Source of Funding for Option IV

Source of Funding for Option 4	Capital		Reserve	Debenture	Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance						
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 1,402,499	\$ 117,670	\$ 100,000	2%	\$ 24	\$ 4
Option 1.B G, Reserve (R), D	\$313,248	\$ 100,000	\$ 2,405,227	\$ 1,302,499	\$ 109,280	\$ 100,000	1%	\$ 13	\$ 2
Option 1.C - G, R, D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 902,499	\$ 75,720	\$ 100,000	-2%	\$ (34)	\$ (6)
Option 1.D - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 652,499	\$ 54,745	\$ 100,000	-4%	\$ (63)	\$ (10)
Option 1.E - G, R, D	\$313,248	\$ 1,000,000	\$ 1,505,227	\$ 402,499	\$ 33,770	\$ 100,000	-6%	\$ (91)	\$ (15)



#	Projects (Option V)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	10,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	20,000
3	57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	25,000
4	49th Street Road Reconstruction (50 Ave to 51 Ave)	5,000
5	55th Street Road Reconstruction (51 Ave to 52 Ave)	20,000
6	Operations – 4x4 1 ton Truck with dump box	75,000
7	Campbell Improvement Stage 2-Phase 1	460,493
8	Operations Skid Steer Purchase	80,000
9	Operations vibration roller packer	20,000
10	Operations ditch cutter attachment	12,000
11	Operations tiller Attachment	12,000
12	54 st & Campbell Reservoir Scada system install	55,000
13	Campbell Improvement Stage 2-Phase 2	384,688
14	Operations 1/2 Ton truck replacement	45,000
Total Cost of the Proposed Projects		1,224,181
	Equipment Cost Identified	244,000
	Total 2023-2026	3,371,991
	Total 5 Year	4,596,172



Option V

Source of Funding for Option V

Source of Funding for Option 5	Capital		Reserve		Debenture	Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance	Debenture						
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 910,933	\$ 76,427	\$ 100,000	-2%	\$ (33)	\$ (5)	
Option 1.B G, Reserve (R), D	\$313,248	\$ 250,000	\$ 2,255,227	\$ 660,933	\$ 55,452	\$ 100,000	-4%	\$ (62)	\$ (10)	
Option 1.C - G, R, D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 410,933	\$ 34,477	\$ 100,000	-6%	\$ (91)	\$ (15)	
Option 1.D - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 160,933	\$ 13,502	\$ 100,000	-8%	\$ (119)	\$ (20)	
Option 1.E - G, R, D	\$313,248	\$ 910,933	\$ 1,594,294	\$ -	\$ -	\$ 100,000	-9%	\$ (138)	\$ (23)	



RICK BASTOW, CAO
TYLER EDWORTHY, DIRECTOR, OPERATIONS & INFRASTRUCTURE
ROBERT MU, FINANCE OFFICER



5307 50 Ave, Lamont, AB T0B 2R0



(780) 895-2010



general@lamont.ca



www.lamont.ca



THANK YOU!

Do you have any questions?



**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

AGENDA ITEM: 4.3

**COUNCIL MEETING DATE:
November 23rd, 2021**

**ITEM DESCRIPTION OR TITLE
2022 CAPITAL BUDGET & 5YR CAPITAL PLAN**

RECOMMENDATION

THAT Council determine appropriate course of action.

Options include:

1. Accept the update for information.
2. Accept the 2022 Capital Budget and 5-Year Capital Plan as presented.
3. Defer to a future Council meeting.
4. Refer to administration for further follow up.
5. Assign to Governance and Priorities committee for further review.
6. Other

BACKGROUND

The 2022 Capital Budget and 5-Year Capital Plan presentations identify the Town of Lamont’s current financial position, sources of funding, and proposed projects. The administration is seeking the Council’s direction on the proposed Capital Projects.

During the preparation of the 2022 Capital Budget and 5-Year Capital Plan, Administration identified the total cost of the top priority capital projects in the amount of \$4,596,172 for the years of 2022 to 2026. The average cost per year is \$919,234, which is less than the average capital cost of \$1,041,536 for the past five (5) years.

If Council is prepared to accept and approve the 2022 Capital Budget as presented and the 5-Year Capital Plan as presented, the following motions would be required.

1. That Council approve the option – 1.C of the 2022 Capital Budget as presented.
2. That Council approve the option – 1 of the 2022 5-Year Capital Plan as presented.

Year	2021	2020	2019	2018	2017	Average
Capital Cost	1,407,520	694,400	1,024,303	1,042,457	1,039,000	1,041,536

Furthermore, taking into account the current economic environment, especially the potential increase on the interest rates, and the priorities identified on the town’s infrastructure, the administration prepared five (5) options for the Council’s consideration.



**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

Options	2022	2023	2024	2025	2026	Total	Average
I	\$ 2,599,311	\$ 790,861	\$ 620,000	\$ 85,000	\$ 501,000	\$ 4,596,172	\$ 919,234
II	\$ 2,434,821	\$ 955,351	\$ 620,000	\$ 85,000	\$ 501,000	\$ 4,596,172	\$ 919,234
III	\$ 2,032,911	\$ 879,861	\$ 1,057,400	\$ 125,000	\$ 501,000	\$ 4,596,172	\$ 919,234
IV	\$ 1,715,747	\$ 1,015,850	\$ 1,178,574	\$ 185,000	\$ 501,000	\$ 4,596,171	\$ 919,234
V	\$ 1,224,181	\$ 2,165,791	\$ 580,000	\$ 125,000	\$ 501,000	\$ 4,595,972	\$ 919,194

For details on the five (5) options of projects and sources of funding, please refer to the enclosed presentations of 2022 Capital Budget and 5-Year Capital Plan. Administration recommends taking advantage of the current low interest rates in 2022 and approving Option I.C.

COMMUNICATIONS

Once Council approved the 2022 Capital Budget and 5-Year Capital Plan, the reports will be posted on the Town website.

IMPLICATIONS OF DECISION

A backlog of capital infrastructure projects puts the community at a high risk of service failure and unanticipated costs due to increased operation of systems and emergency repairs. The proposed projects will rectify the infrastructure investment backlog and put the Town in a position to support the Town of Lamont Strategic Plan.

FINANCIAL IMPLICATIONS

Project costs and funding sources for each option have been provided in the presentations. Debenture costs will need to be confirmed.

POLICY AND/OR LEGISLATIVE REFERENCES

MGA Section 283
Town of Lamont Strategic Plan 2019-2022



**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

ATTACHMENTS

1. 2022 Capital Budget
2. 5-Year Capital Plan

Report Prepared By:

- Tyler Edworthy, Director, Operations & Infrastructure
- Robert Mu, Finance Officer

Approved by CAO:

A handwritten signature in black ink, appearing to be "RB", is written over the text "Approved by CAO:".

2022 Capital Budget

Presented to the Town of Lamont
Council on November 23rd, 2021

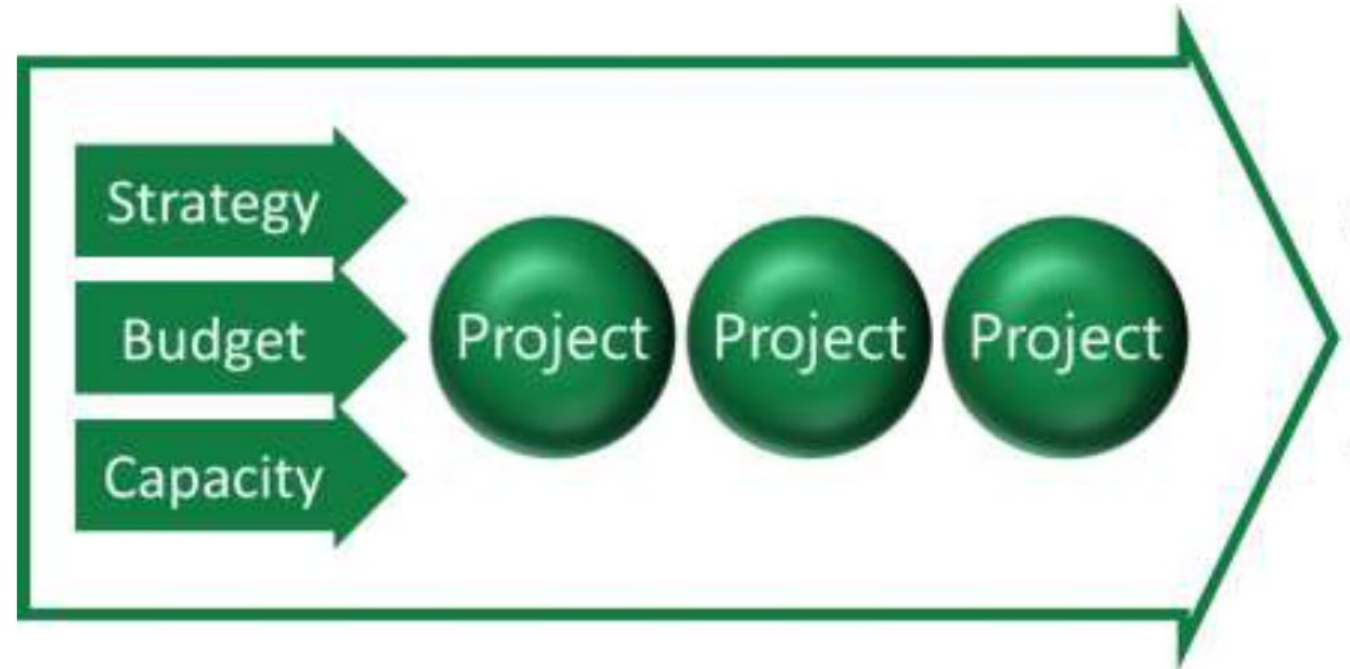


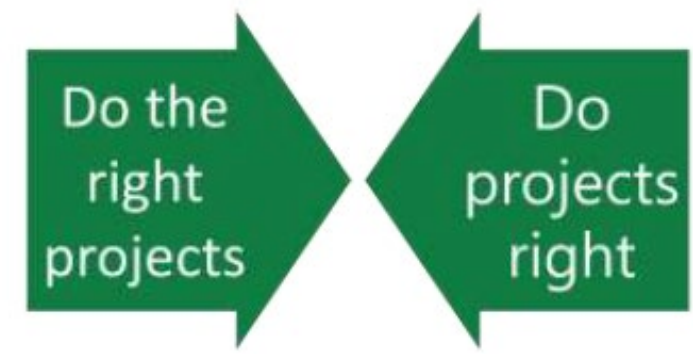
Review and Approved by: Rick Bastow, CAO

Prepared by: Tyler Edworthy, Director, Operations & Infrastructure and Robert Mu, Finance Officer

The Purpose of the Presentation

Further to the Introduction Presentation and the feedback received from the Governance and Priorities Committee, the administration prepared five (5) options for Council's considerations.





#	Projects	Amount
1	Campbell improvement stage 2-phase 1	\$ 866,351
2	Operations skid steer purchase	\$ 80,000
3	57 Avenue/45 Street, road reconstruction (Edna subdivision)	\$ 477,400
4	54 Street & Campbell reservoir SCADA system	\$ 55,000
5	4x4 1 ton truck with dump box	\$ 75,000
6	51 Avenue (50A Street to 51 Street) road reconstruction	\$ 213,200
7	51 Avenue (53 to 54 Street) road reconstruction	\$ 166,000
8	49 Street (50 to 51 Ave) road reconstruction	\$ 182,600
9	55 Street (51 to 52 Ave) road reconstruction	\$ 214,400
10	52 Avenue (55 St to Alley West) road reconstruction	\$ 180,360
11	Operations vibration roller packer purchase	\$ 20,000
12	Operations tiller attachment purchase	\$ 12,000
13	Operations ditch cutter attachment purchase	\$ 12,000
14	Operations ½ ton truck purchase	\$ 45,000
Total Cost of the Proposed Projects		\$2,599,311



2022 CAPITAL INFRASTRUCTURE PROJECTS PROPOSED



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01 Updated Cash Position & Interest Rates

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SECTION - I UPDATES ON CASH POSITION

Updated as of November 15th, 2021		Cash on Hand	Reserve	Surplus
Lamont		\$ 5,918,422	\$2,505,227	\$2,167,721



<u>As of</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>15 Year</u>	<u>20 Year</u>	<u>25 Year</u>	<u>30 Year</u>
15-Nov-21	2.14%	2.41%	2.87%	3.19%	3.39%	3.53%	3.62%
01-Nov-21	2.16%	2.43%	2.92%	3.23%	3.41%	3.55%	3.63%
15-Oct-21	1.8870%	2.1535%	2.7210%	3.0800%	3.2980%	3.4600%	3.5640%
01-Oct-21	0.9639%	1.2477%	1.8734%	2.2804%	2.5355%	2.7027%	2.8147%

SECTION - I UPDATES ON INTEREST RATES



#	Projects (Option I)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200
3	57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	477,400
4	49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600
5	55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400
6	52nd Avenue Road Reconstruction (55 St to Alley West)	180,360
7	Operations – 4x4 1 ton Truck with dump box	75,000
8	Campbell Improvement Stage 2-Phase 1	866,351
9	Operations Skid Steer Purchase	80,000
10	Operations vibration roller packer	20,000
11	Operations ditch cutter attachment	12,000
12	Operations tiller Attachment	12,000
13	54 st & Campbell Reservoir Scada system install	55,000
14	Operations 1/2 Ton truck replacement	45,000
Total Cost of the Proposed Projects		2,599,311
Equipment Cost Identified		244,000
Total 2023-2026		1,996,861
Total 5 Year		4,596,172

Option I

Source of Funding for Option 1

Source of Funding for Option 1	Capital		Reserve		Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance	Debenture					
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 2,286,063	\$ 191,801	\$ 100,000	9%	\$ 127	\$ 21.1
Option 1.B G, Reserve (R), D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 1,786,063	\$ 149,851	\$ 100,000	5%	\$ 69	\$ 11.5
Option 1.C - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 1,536,063	\$ 128,876	\$ 100,000	2.7%	\$ 40	\$ 6.6
Option 1.D - G, R, D	\$313,248	\$ 1,000,000	\$ 1,505,227	\$ 1,286,063	\$ 107,901	\$ 100,000	1%	\$ 11	\$ 1.8
Option 1.E - G, R, D	\$313,248	\$ 1,250,000	\$ 1,255,227	\$ 1,036,063	\$ 86,926	\$ 100,000	-1%	\$ (18)	\$ (3.0)

#	Projects (Option II)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200
3	57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	477,400
4	49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600
5	55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400
6	52nd Avenue Road Reconstruction (55 St to Alley West)	180,360
7	Operations – 4x4 1 ton Truck with dump box	75,000
8	Operations Skid Steer Purchase	80,000
9	54 st & Campbell Reservoir Scada system install	55,000
10	Campbell Improvement Stage 2-Phase 2	790,861
Total Cost of the Proposed Projects		2,434,821
	Equipment Cost Identified	155,000
	Total 2023-2026	2,241,351
	Total 5 Year	4,596,172



Option II

Source of Funding for Option II

Source of Funding for Option 2	Capital		Reserve		Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance	Debenture					
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 2,121,573	\$ 178,000	\$ 100,000	7%	\$ 108	\$ 18
Option 1.B G, Reserve (R), D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 1,621,573	\$ 136,050	\$ 100,000	3%	\$ 50	\$ 8
Option 1.C - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 1,371,573	\$ 115,075	\$ 100,000	1%	\$ 21	\$ 3
Option 1.D - G, R, D	\$313,248	\$ 875,000	\$ 1,630,227	\$ 1,246,573	\$ 104,587	\$ 100,000	0%	\$ 6	\$ 1
Option 1.E - G, R, D	\$313,248	\$ 1,250,000	\$ 1,255,227	\$ 871,573	\$ 73,125	\$ 100,000	-3%	(\$ 37)	(\$ 6)



#	Projects (Option III)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200
3	49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600
4	55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400
5	52nd Avenue Road Reconstruction (55 St to Alley West)	180,360
6	Operations – 4x4 1 ton Truck with dump box	75,000
7	Campbell Improvement Stage 2-Phase 1	866,351
8	Operations Skid Steer Purchase	80,000
9	54 st & Campbell Reservoir Scada system install	55,000
Total Cost of the Proposed Projects		2,032,911
	Equipment Cost Identified	155,000
	Total 2023-2026	2,563,261
	Total 5 Year	4,596,172

Option III

Source of Funding for Option III

Source of Funding for Option 3	Capital		Reserve		Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance	Debenture					
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 1,719,663	\$ 144,280	\$ 100,000	4%	\$ 61	\$ 10
Option 1.B G, Reserve (R), D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 1,219,663	\$ 102,330	\$ 100,000	0%	\$ 3	\$ 1
Option 1.C - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 969,663	\$ 81,355	\$ 100,000	-2%	\$ (26)	\$ (4)
Option 1.D - G, R, D	\$313,248	\$ 875,000	\$ 1,630,227	\$ 844,663	\$ 70,867	\$ 100,000	-3%	\$ (40)	\$ (7)
Option 1.E - G, R, D	\$313,248	\$ 1,250,000	\$ 1,255,227	\$ 469,663	\$ 39,405	\$ 100,000	-6%	\$ (84)	\$ (14)

#	Projects (Option IV)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200
3	49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600
4	55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400
5	52nd Avenue Road Reconstruction (55 St to Alley West)	180,360
6	Operations – 4x4 1 ton Truck with dump box	75,000
7	Campbell Improvement Stage 2-Phase 1	460,187
8	Operations Skid Steer Purchase	80,000
9	Operations vibration roller packer	20,000
10	Operations ditch cutter attachment	12,000
11	Operations tiller Attachment	12,000
12	54 st & Campbell Reservoir Scada system install	55,000
13	Operations 1/2 Ton truck replacement	45,000
Total Cost of the Proposed Projects		1,715,747
	Equipment Cost Identified	244,000
	Total 2023-2026	2,880,425
	Total 5 Year	4,596,172



Option IV

Source of Funding for Option IV

Source of Funding for Option 4	Capital		Reserve	Debenture	Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance						
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 1,402,499	\$ 117,670	\$ 100,000	2%	\$ 24	\$ 4
Option 1.B G, Reserve (R), D	\$313,248	\$ 100,000	\$ 2,405,227	\$ 1,302,499	\$ 109,280	\$ 100,000	1%	\$ 13	\$ 2
Option 1.C - G, R, D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 902,499	\$ 75,720	\$ 100,000	-2%	\$ (34)	\$ (6)
Option 1.D - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 652,499	\$ 54,745	\$ 100,000	-4%	\$ (63)	\$ (10)
Option 1.E - G, R, D	\$313,248	\$ 1,000,000	\$ 1,505,227	\$ 402,499	\$ 33,770	\$ 100,000	-6%	\$ (91)	\$ (15)



#	Projects (Option V)	Amount
1	51st Avenue Road Reconstruction (53rd Street to 54th Street)	10,000
2	51st Avenue Road Reconstruction (50A Street to 51st Street)	20,000
3	57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	25,000
4	49th Street Road Reconstruction (50 Ave to 51 Ave)	5,000
5	55th Street Road Reconstruction (51 Ave to 52 Ave)	20,000
6	Operations – 4x4 1 ton Truck with dump box	75,000
7	Campbell Improvement Stage 2-Phase 1	460,493
8	Operations Skid Steer Purchase	80,000
9	Operations vibration roller packer	20,000
10	Operations ditch cutter attachment	12,000
11	Operations tiller Attachment	12,000
12	54 st & Campbell Reservoir Scada system install	55,000
13	Campbell Improvement Stage 2-Phase 2	384,688
14	Operations 1/2 Ton truck replacement	45,000
Total Cost of the Proposed Projects		1,224,181
	Equipment Cost Identified	244,000
	Total 2023-2026	3,371,991
	Total 5 Year	4,596,172



Option V

Source of Funding for Option V

Source of Funding for Option 5	Capital		Reserve		Annual debenture payment	Cost Saving from New Garbage Collection Agreement	Utility Increase for the Debenture annual payment	Average Increase per Household	Per Bill (two months)
	Grants	Reserve used	Balance	Debenture					
Option 1.A - Grants (G) & Debenture (D)	\$313,248	\$ -	\$ 2,505,227	\$ 910,933	\$ 76,427	\$ 100,000	-2%	\$ (33)	\$ (5)
Option 1.B G, Reserve (R), D	\$313,248	\$ 250,000	\$ 2,255,227	\$ 660,933	\$ 55,452	\$ 100,000	-4%	\$ (62)	\$ (10)
Option 1.C - G, R, D	\$313,248	\$ 500,000	\$ 2,005,227	\$ 410,933	\$ 34,477	\$ 100,000	-6%	\$ (91)	\$ (15)
Option 1.D - G, R, D	\$313,248	\$ 750,000	\$ 1,755,227	\$ 160,933	\$ 13,502	\$ 100,000	-8%	\$ (119)	\$ (20)
Option 1.E - G, R, D	\$313,248	\$ 910,933	\$ 1,594,294	\$ -	\$ -	\$ 100,000	-9%	\$ (138)	\$ (23)



RICK BASTOW, CAO
TYLER EDWORTHY, DIRECTOR, OPERATIONS & INFRASTRUCTURE
ROBERT MU, FINANCE OFFICER



5307 50 Ave, Lamont, AB T0B 2R0



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THANK YOU!

Do you have any questions?



2022 – 2026 Capital Plan

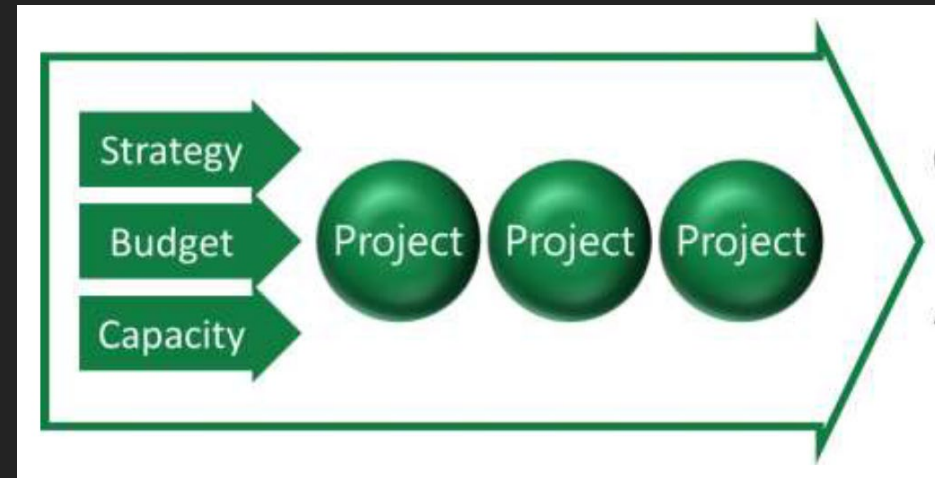
Presented to the Town of Lamont Council on
November 23rd, 2021

Review and Approved by: Rick Bastow, CAO

Prepared by: Tyler Edworthy, Director, Operations & Infrastructure and Robert Mu, Finance Officer

The Purpose of the Presentation

Further to the Introduction Presentation and the feedback received from the Governance and Priorities Committee, the administration prepared five (5) options for Council's considerations.



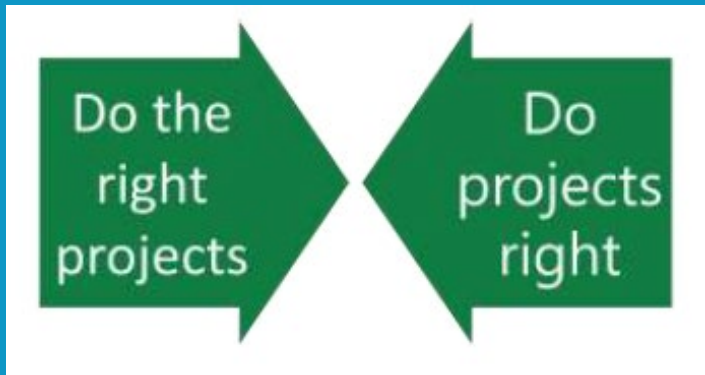


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SECTION - I UPDATES ON CASH POSITION

Updated as of November 15th, 2021		Cash on Hand	Reserve	Surplus
Lamont		\$ 5,918,422	\$2,505,227	\$2,167,721

<u>As of</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>15 Year</u>	<u>20 Year</u>	<u>25 Year</u>	<u>30 Year</u>
15-Nov-21	2.14%	2.41%	2.87%	3.19%	3.39%	3.53%	3.62%
01-Nov-21	2.16%	2.43%	2.92%	3.23%	3.41%	3.55%	3.63%
15-Oct-21	1.8870%	2.1535%	2.7210%	3.0800%	3.2980%	3.4600%	3.5640%
01-Oct-21	0.9639%	1.2477%	1.8734%	2.2804%	2.5355%	2.7027%	2.8147%

SECTION - I UPDATES ON INTEREST RATES



OPTION I

Asset Group - Option I	2022	2023	2024	2025	2026	Total
Buildings	-	-	170,000	-	-	170,000
Equipment & Fleet	299,000	-	305,000	85,000	40,000	729,000
Infrastructure	2,300,311	790,861	145,000	-	461,000	3,697,172
Total	2,599,311	790,861	620,000	85,000	501,000	4,596,172

Project Description - Option I	2022	2023	2024	2025	2026
51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000				
51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200				
57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	477,400				
49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600				
55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400				
52nd Avenue Road Reconstruction (55 St to Alley West)	180,360				
Operations – 4x4 1 tonne Truck with dump box	75,000				
Campbell Improvement Stage 2-Phase 1	866,351				
Operations Skid Steer Purchase	80,000				
Operations vibration roller packer	20,000				
Operations ditch cutter attachment	12,000				
Operations tiller Attachment	12,000				

Project Description - Option I	2022	2023	2024	2025	2026
54 st & Campbell Reservoir Scada system install	55,000				
Operations 1/2 Ton truck replacement	45,000		45,000	45,000	
Campbell Improvement Stage 2-Phase 2		790,861			
Multi Purpose equipment (Gator & attachments)			40,000		
50 Ave Storm Improvements			145,000		
44A Street Road Improvements (56 Ave to Ally North)					310,600
Arena Roof Repair			170,000		
Asset Management Repair Implementation					
Back Hoe & attachment Replacement			180,000		
Riding Mower Replacement			40,000	40,000	40,000
Avenue Between Greenfield Echoes & Lamont Health Care Centre					150,400
Total	2,599,311	790,861	620,000	85,000	501,000

OPTION II

Asset Group - Option II	2022	2023	2024	2025	2026	Total
Buildings	-	-	170,000	-	-	170,000
Equipment & Fleet	210,000	89,000	305,000	85,000	40,000	729,000
Infrastructure	2,224,821	866,351	145,000	-	461,000	3,697,172
Total	2,434,821	955,351	620,000	85,000	501,000	4,596,172

Project Description - Option II	2022	2023	2024	2025	2026
51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000				
51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200				
57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	477,400				
49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600				
55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400				
52nd Avenue Road Reconstruction (55 St to Alley West)	180,360				
Operations – 4x4 1 tonne Truck with dump box	75,000				
Operations Skid Steer Purchase	80,000				
54 st & Campbell Reservoir Scada system install	55,000				

Project Description - Option II	2022	2023	2024	2025	2026
Campbell Improvement Stage 2-Phase 2	790,861				
Campbell Improvement Stage 2-Phase 1		866,351			
Operations vibration roller packer		20,000			
Operations ditch cutter attachment		12,000			
Operations tiller Attachment		12,000			
Operations 1/2 Ton truck replacement		45,000	45,000	45,000	
Multi Purpose equipment (Gator & attachments)			40,000		
50 Ave Storm Improvements			145,000		
44A Street Road Improvements (56 Ave to Ally North)					310,600
Arena Roof Repair			170,000		
Back Hoe & attachment Replacement			180,000		
Riding Mower Replacement			40,000	40,000	40,000
Avenue Between Greenfield Echoes & Lamont Health Care Centre					150,400
Total	2,434,821	955,351	620,000	85,000	501,000

OPTION III

Asset Group - Option III	2022	2023	2024	2025	2026	Total
Buildings	-	-	170,000	-	-	170,000
Equipment & Fleet	210,000	89,000	265,000	125,000	40,000	729,000
Infrastructure	1,822,911	790,861	622,400	-	461,000	3,697,172
Total	2,032,911	879,861	1,057,400	125,000	501,000	4,596,172

Project Description - Option III	2022	2023	2024	2025	2026
51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000				
51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200				
49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600				
55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400				
52nd Avenue Road Reconstruction (55 St to Alley West)	180,360				
Operations – 4x4 1 tonne Truck with dump box	75,000				
Campbell Improvement Stage 2-Phase 1	866,351				
Operations Skid Steer Purchase	80,000				
54 st & Campbell Reservoir Scada system install	55,000				
Operations vibration roller packer				20,000	
Operations ditch cutter attachment				12,000	
Operations tiller Attachment				12,000	

Project Description - Option III	2022	2023	2024	2025	2026
Campbell Improvement Stage 2-Phase 2		790,861			
Operations 1/2 Ton truck replacement		45,000	45,000	45,000	
57 Avenue/45 Street Road Reconstruction (Edna Subdivision)			477,400		
50 Ave Storm Improvements			145,000		
Arena Roof Repair			170,000		
Multi Purpose equipment (Gator & attachments)				40,000	
Back Hoe & attachment Replacement			180,000		
Riding Mower Replacement			40,000	40,000	40,000
44A Street Road Improvements (56 Ave to Ally North)					310,600
Avenue Between Greenfield Echoes & Lamont Health Care Centre					150,400
Total	2,032,911	879,861	1,057,400	125,000	501,000

OPTION IV

Asset Group - Option IV	2022	2023	2024	2025	2026	Total
Buildings	-	-	170,000	-	-	170,000
Equipment & Fleet	299,000	225,000	125,000	40,000	40,000	729,000
Infrastructure	1,416,747	790,850	883,574	145,000	461,000	3,697,171
Total	1,715,747	1,015,850	1,178,574	185,000	501,000	4,596,171

Project Description - Option IV	2022	2023	2024	2025	2026
51st Avenue Road Reconstruction (53rd Street to 54th Street)	166,000				
51st Avenue Road Reconstruction (50A Street to 51st Street)	213,200				
49th Street Road Reconstruction (50 Ave to 51 Ave)	182,600				
55th Street Road Reconstruction (51 Ave to 52 Ave)	214,400				
52nd Avenue Road Reconstruction (55 St to Alley West)	180,360				
Operations – 4x4 1 tonne Truck with dump box	75,000				
Campbell Improvement Stage 2-Phase 1	460,187	406,163			
Operations Skid Steer Purchase	80,000				
Operations vibration roller packer	20,000				
Operations ditch cutter attachment	12,000				
Operations tiller Attachment	12,000				
54 st & Campbell Reservoir Scada system install	55,000				

Project Description - Option IV	2022	2023	2024	2025	2026
Operations 1/2 Ton truck replacement	45,000	45,000	45,000		
Campbell Improvement Stage 2-Phase 2		384,687	406,174		
Back Hoe & attachment Replacement		180,000			
Riding Mower Replacement			40,000	40,000	40,000
57 Avenue/45 Street Road Reconstruction (Edna Subdivision)			477,400		
Multi Purpose equipment (Gator & attachments)			40,000		
Arena Roof Repair			170,000		
50 Ave Storm Improvements				145,000	
44A Street Road Improvements (56 Ave to Ally North)					310,600
Asset Management Repair Implementation					
Avenue Between Greenfield Echoes & Lamont Health Care Centre					150,400
Total	1,715,747	1,015,850	1,178,574	185,000	501,000

OPTION V

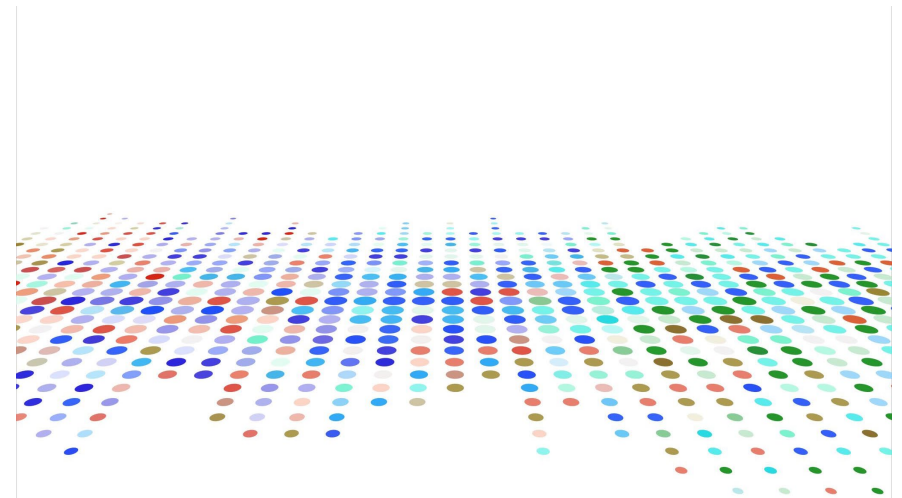
Asset Group - Option V	2022	2023	2024	2025	2026	Total
Buildings	-	-	170,000	-	-	170,000
Equipment & Fleet	299,000	-	265,000	125,000	40,000	729,000
Infrastructure	925,181	2,165,791	145,000	-	461,000	3,696,972
Total	1,224,181	2,165,791	580,000	125,000	501,000	4,595,972

Project Description - Option V	2022	2023	2024	2025	2026
51st Avenue Road Reconstruction (53rd Street to 54th Street)	10,000	156,000			
51st Avenue Road Reconstruction (50A Street to 51st Street)	20,000	193,000			
57 Avenue/45 Street Road Reconstruction (Edna Subdivision)	25,000	452,400			
49th Street Road Reconstruction (50 Ave to 51 Ave)	5,000	177,600			
55th Street Road Reconstruction (51 Ave to 52 Ave)	20,000	194,400			
Campbell Improvement Stage 2-Phase 1	460,493	405,858			
Campbell Improvement Stage 2-Phase 2	384,688	406,173			
Operations – 4x4 1 tonne Truck with dump box	75,000				
Operations Skid Steer Purchase	80,000				
Operations vibration roller packer	20,000				
Operations ditch cutter attachment	12,000				

Project Description - Option V	2022	2023	2024	2025	2026
Operations tiller Attachement	12,000				
54 st & Campbell Reservior Scada system install	55,000				
Operations 1/2 Ton truck replacement	45,000		45,000	45,000	
52nd Avenue Road Reconstruction (55 St to Alley West)		180,360			
Back Hoe & attachement Replacement			180,000		
50 Ave Storm Improvements			145,000		
Arena Roof Repair			170,000		
Riding Mower Replacement			40,000	40,000	40,000
Multi Purpose equipment (Gator & attachements)				40,000	
44A Street Road Improvements (56 Ave to Ally North)					310,600
Avenue Between Greenfield Echoes & Lamont Health Care Centre					150,400
Total	1,224,181	2,165,791	580,000	125,000	501,000

Summary of the 5 Options

Options	2022	2023	2024	2025	2026	Total
I	\$ 2,599,311	\$ 790,861	\$ 620,000	\$ 85,000	\$ 501,000	\$ 4,596,172
II	\$ 2,434,821	\$ 955,351	\$ 620,000	\$ 85,000	\$ 501,000	\$ 4,596,172
III	\$ 2,032,911	\$ 879,861	\$ 1,057,400	\$ 125,000	\$ 501,000	\$ 4,596,172
IV	\$ 1,715,747	\$ 1,015,850	\$ 1,178,574	\$ 185,000	\$ 501,000	\$ 4,596,171
V	\$ 1,224,181	\$ 2,165,791	\$ 580,000	\$ 125,000	\$ 501,000	\$ 4,595,972





RICK BASTOW, CAO
TYLER EDWORTHY, DIRECTOR, OPERATIONS & INFRASTRUCTURE
ROBERT MU, FINANCE OFFICER



5307 50 Ave, Lamont, AB T0B 2R0



(780) 895-2010



general@lamont.ca



www.lamont.ca



THANK YOU!

Do you have any questions?



TOWN OF LAMONT COUNCIL AGENDA REQUEST FOR DECISION

AGENDA ITEM: 4.4

COUNCIL MEETING DATE:
November 23, 2021

ITEM DESCRIPTION OR TITLE
Sanitary Trunk Line Project- Relining

RECOMMENDATION

That Council approve the recommendation by Select Engineering Consultants Ltd. awarding the Sanitary Trunk Line Relining Project to Insituform Technologies Ltd and budget \$50,000 for site access to be coordinated by the Town of Lamont.

BACKGROUND

Through the 2021 capital budget process Council approved the Sanitary Trunk Line Project. The project was identified in 3 phases, inspection, repair, and relining. The inspection and repair work were completed before the end of April, with the relining scheduled for completion before March 30, 2021, this will limit any impacts to landowners and crops.

The tender for the re-lining work closed November 2, 2021, and a recommendation was made to administration November 5, 2021. A total of 3 bids were received with Insituform Technologies Ltd being the lowest bid. After an addendum to the original bid specifications, it was identified that coordinating the site access would be more cost effective coordinated by the Town of Lamont.

Administration is asking Council to approve recommendation by Select Engineering and award the Sanitary Trunk Re-lining Project to Insituform and coordinating the site access. This will have an overall Project savings of approximately \$79,000.

COMMUNICATIONS

Communicate Council's decision to the vendor.
Coordinate site access.
Notify Landowners.

IMPLICATIONS OF DECISION

Completing the final stage of this project will improve infiltration and reduce demand on our sanitary system, while improving flow and trunk line condition to the West Lift Station.



**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

FINANCIAL IMPLICATIONS

\$620,773.00 Insituform Technologies Ltd
\$50,000 Site access
Total \$670,773.00


POLICY AND/OR LEGISLATIVE REFERENCES

N/A

ATTACHMENTS

1. 2021 Capital Works- Sewer Trunk Lining- Tender Results.

Report Prepared By: Tyler Edworthy, Director Operations & Infrastructure

Approved by CAO: 

November 5, 2021

File No.: 13-20047-4.3

Tyler Edworthy
Director of Operations and Infrastructure
Town of Lamont
Box 330, 5307 – 50 Avenue
Lamont, AB TOB 2R0

Dear Tyler,

**Re: Town of Lamont
2021 Capital Works – Sewer Trunk Lining – Tender Results**

As requested, Select Engineering Consultants Ltd. received and opened tenders for the above noted project on November 2, 2021 at 2:00 pm. Tenders were received and opened electronically. A total of three (3) general contractors submitted bids for this project, with the following results in ascending order, excluding G.S.T.:

Insituform Technologies Ltd.....	\$620,773.00
Alberta Pipe Inspection Ltd.	\$687,100.00
IVIS Construction Inc.	\$800,475.00

We have spoken to the low bidder, Insituform Technologies Ltd. and they indicated they understand the intent of the project and have reviewed the specifications. Insituform has also indicated that if awarded the project they are prepared to immediately procure materials and manufacturing of the lining materials to meet all project scheduling requirements with a project completion date of March 30, 2022 . We have worked with Insituform Technologies Ltd. in the past on projects similar in scope and scale and have successfully completed those projects. We have discussed the specific project requirements related to scheduling, coordination, access, weather and manpower and are satisfied with the responses that Insituform Technologies Ltd. has provided.

Based on the lowest bid submitted, our conversations with the contractor, and proposed schedule, we are recommending award of this project to Insituform Technologies Ltd., in the amount of \$620,773.00.

As discussed during the tender process, it was determined that it would be the most advantageous and cost effective to have the Town of Lamont coordinate directly providing and maintaining access to the sanitary sewer trunk during the project. This work would entail snow clearing and potential access matting in specific locations, and as indicated by the Town of Lamont, this work could be provided by local contractors. Insituform Technologies Ltd. has indicated they anticipate a four to six week construction time frame, and will be monitoring weather forecasts to ensure work is scheduled during optimal conditions. Based on this information, we recommend the Town of Lamont budgets an additional \$50,000 for the costs associated with providing and maintaining this access.

I trust this information meets your requirements. Should you have any questions, or require additional information, please feel free to call me at (780) 651-5773.

Sincerely,

Select Engineering Consultants



Neil Renneberg, P.Eng
Senior Project Manager
nrenneberg@selecteng.ca

NR/nr
L-2-Lamont-13-20047-4.3-Contract Award Recommendation-Sewer Trunk Lining-211105



TOWN OF LAMONT COUNCIL AGENDA REQUEST FOR DECISION

AGENDA ITEM: 4.6

COUNCIL MEETING DATE:
November 23, 2021

ITEM DESCRIPTION OR TITLE

Lamont Catering Club License Agreement

RECOMMENDATION

That Council authorize Administration to enter a five (5) year License Agreement with the Lamont Catering Club for use of the Hall.

BACKGROUND

Administration has worked extensively with legal consult, the Lamont Catering Club, and the Director of Operations and Infrastructure, to complete the License Agreement. The updated Agreement is based solely on existing practices, with no changes to the current terms and conditions.

The Agreement has been expanded to include required legal terms and conditions that will protect the Municipality and the Lamont Catering Club, should any unforeseen circumstances arise. The Lamont Catering Club has reviewed and authorized its' Chair and Secretary to execute the agreement with the Town of Lamont.

Administration recommends that Council authorize the execution of the License Agreement.

COMMUNICATIONS

The executed agreement will be provided to the Lamont Catering Club if approved.

IMPLICATIONS OF DECISION

The Town of Lamont and the Lamont Catering Club will be covered under the new License Agreement until Dec 31, 2026.

FINANCIAL IMPLICATIONS

The Town of Lamont will receive annual payments of \$5,000 for executing the License Agreement starting December 2021 unless Sections 3.1 and 3.2 are actioned.

POLICY AND/OR LEGISLATIVE REFERENCES

Strategic Plan Goal #6: Ensure Council and Administration are meeting the needs of the residents of the Town of Lamont with progressive, transparent, and effective governance practices: 6.7 Review and update Town agreements.




**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

ATTACHMENTS

1. Lamont Catering Club License Agreement

Report Prepared By: Dawn Nielsen, Deputy CAO

Approved by CAO: 

THIS AGREEMENT made effective the _____ day of _____, 2021 (the "Effective Date").

BETWEEN:

TOWN OF LAMONT
(hereinafter referred to as the "Municipality")

- and -

LAMONT CATERING CLUB
(hereinafter referred to as the "Licensee")

LICENSE AGREEMENT

WHEREAS:

- A. The Municipality is the registered owner of those lands legally described as follows:
PLAN 8122388
BLOCK 9
LOT 4
EXCEPTING THEREOUT ALL MINES AND MINERALS
AREA: 1.18 HECTARES (2.92 ACRES) MORE OR LESS
(the "Lands"), and the lamont hall is located on that portion of such Lands as outlined in yellow in Schedule "D" attached hereto (the "Hall");
- B. The "Facility" is located on that portion of the Lands as highlighted in red in Schedule "D" attached hereto and consists of: (i) the kitchen in the Hall, together with any and all equipment, appliances, fixtures, furniture, structures, chattels, property or improvements now or hereafter located or erected on or within such kitchen, and (ii) any additions, alterations or improvement to be constructed upon such kitchen and portion of the Lands that such kitchen is located on by the Licensee in accordance with the terms hereof; and
- C. The Municipality desires to grant an exclusive license to the Licensee to enable the Licensee to use, occupy and enjoy the Facility and that portion of the Lands that the Facility is located on as highlighted in red in Schedule "D" attached hereto (collectively referred to as the "Licensed Premises"), and the Licensee has agreed to accept such license, upon, subject to and in accordance with the terms, covenants and conditions contained within this license agreement (the "Agreement").

NOW THEREFORE that in consideration of the mutual covenants and agreements contained within this Agreement, other good and valuable consideration, and the sum of \$1.00 now paid by each party to the other (the receipt and sufficiency of which is hereby acknowledged), the parties hereby covenant and agree as follows:

- 1. Grant of License:** The Municipality hereby grants to the Licensee an exclusive license to use the Licensed Premises for the purposes permitted within this Agreement, and upon, subject to and in accordance with the terms, covenants and conditions contained within this Agreement.
- 2. Permitted Use:** The Licensee covenants and agrees with the Municipality that the Licensee shall use the Licensed Premises solely for the provision of catering, including that the Licensee shall provide catering for all renters of the Hall that require food and non-alcoholic beverages (the "Permitted Use") upon, subject to and in accordance with the terms, covenants and conditions contained within this Agreement, as well as those policies and procedures established from time to time by the Municipality for the safe, secure and efficient operation and maintenance of the Licensed Premises, as amended or replaced by the Municipality from time to time (the "Policies and Procedures").
- 3. License Fee:** In consideration of the rights herein conferred upon the Licensee, the Licensee shall pay to the Municipality the license fee in the amount of \$5,000.00 per year (the "License Fee"), which shall become due and payable on the 15th day of December each and every year during the Term.
- 4. Term:** This Agreement shall remain in full force and effect from the Effective Date to the 31st day of December, 2026 (the "Term"), subject to renewal or earlier termination as set forth herein. The parties may mutually agree to renew this Agreement for additional five (5) year terms commencing upon the expiration of the Term or the applicable renewal term, on the same terms and conditions contained within this Agreement, except as otherwise agreed to in writing by the parties. A party must provide written notice to the other party of their desire to renew at least sixty (60) days prior to the expiry of the Term or the applicable renewal term. Unless otherwise agreed to in writing, if such mutual agreement to renew is not made by the parties at least sixty (60) days prior to the expiration of the Term or the applicable renewal term, this Agreement shall expire on the last day of the Term or the applicable renewal term.

5. **Agreement Entire Relationship:** This Agreement constitutes the entire agreement between the parties hereto and the parties acknowledge and agree that there are no covenants, representations, warranties, agreements or conditions expressed or implied, collateral or otherwise forming part of or in any way affecting or relating to this Agreement save as expressly set out in this Agreement.

6. **Notices:** Whether or not stipulated in this Agreement, all notices, communication, requests and statements required or permitted under this Agreement shall be in writing. Notices shall be served by one of the following means:

- (a) personally, by delivering it to the party on whom it is to be served at the address of such party set out in this Agreement, provided such delivery shall be during normal business hours. Personally delivered notices shall be deemed received when actually delivered as aforesaid; or
- (b) by fax or email, directed to the party on whom it is to be served at the fax number or email address of such party set out in this Agreement. Notices so served shall be deemed received on the day of transmission thereof if received during normal business hours of the recipient or on the first business day after its transmission if it is received on a non-business day or after the end of normal business hours on the date of its transmission; or
- (c) by mailing by registered mail, postage prepaid, to the party on whom it is served at the address of such party set out in this Agreement. Notice so served shall be deemed to be received 72 hours after the date it is postmarked. In the event of postal interruption, no notice sent by means of the postal system during or within 7 days prior to the commencement of such postal interruption or 7 days after the cessation of such postal interruption shall be deemed to have been received unless actually received.

7. **Address for Notice:** All notices to be sent in accordance with this Agreement shall be addressed as follows:

- (a) If to the Municipality then:
 - Town of Lamont
 - Box 330
 - Lamont, AB T0B 2R0
 - Attention: CAO
 - Fax: 780-895-2595
 - Email: general@lamont.ca
- (b) If to the Licensee then:
 - Lamont Catering Club
 - PO Box 1173
 - Lamont, AB T0B 2R0
 - Attention: Betty Malica

8. **Counterparts:** This Agreement may be executed and delivered in any number of counterparts, by facsimile copy, by electronic or digital signature or by other written acknowledgement of consent and agreement to be legally bound by its terms. Each counterpart when executed and delivered will be considered an original but all counterparts taken together constitute one and the same instrument.

9. **Schedules:** In addition to the provisions contained in the text of this Agreement, the parties shall be bound by the additional provisions found in the schedules of this Agreement as if the provisions of the schedules were contained in the text of this Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK. EXECUTION PAGE TO FOLLOW.]

IN WITNESS WHEREOF the parties hereto have executed this Agreement by the hands of their authorized signatories, under their respective corporate seals, on the date first written above, notwithstanding the actual date of execution hereof.

TOWN OF LAMONT

Per: _____
Name:
Position:
(c/s)

Per: _____
Name:
Position:

LAMONT CATERING CLUB

Per: _____
Name:
Position:
(c/s)

Per: _____
Name:
Position:

SCHEDULE "A"
Terms and Conditions

ARTICLE 1 – DEFINITIONS

1.1 Definitions: In this Agreement, unless the context otherwise requires:

(a) **"Hazardous Substance"** (including **"Hazardous Substances"**) means any substance which is defined as a contaminant or pollutant or as a hazardous or toxic substance under any law, regulation, rule, policy, directive, procedure, standard, order, guideline or requirement now or hereafter enacted or promulgated by any governmental authority having jurisdiction over the parties hereto, the Facility or the Lands, and as amended or replaced from time to time, or which is hazardous to persons or property;

(b) **"Licensee's Equipment"** means that certain equipment and other personal property owned by the Licensee and listed within **Schedule "C"** attached to this Agreement, as amended from time to time by agreement in writing between the parties. All other equipment, appliances, chattels, property, furniture and fixtures located or erected on or within the Licensed Premises are owned by the Municipality; and

(c) **"OHS Act"** means the *Occupational Health and Safety Act*, SA 2017, c O-2.1, as amended or replaced from time to time, as well as all regulations made pursuant thereto and promulgated thereunder.

ARTICLE 2 – GRANT OF LICENSE

2.1 Expiration: Upon the expiry or earlier termination of this Agreement, as the case may be, the limited license granted by the Municipality pursuant to this Agreement shall, without further action or notice, be deemed to be revoked and the Licensee, and those for whom the Licensee is responsible for at law, shall have no right to gain access to or otherwise physically occupy all or any portion of the Licensed Premises, except for the limited purpose of carrying out any and all obligations of the Licensee which arise or remain upon such expiry or earlier termination of this Agreement. Further, and except for the limited revocable license granted to the Licensee pursuant to this Agreement, the Licensee has no other rights to gain access to or occupy all or any part of the Licensed Premises and is forever estopped from asserting any claims to the contrary.

2.2 Previous Agreements: Upon the execution of this Agreement by the parties, all existing agreements between the parties respecting the use, occupation or enjoyment of all or any portion of the Licensed Premises shall terminate without further rights, remedies or interests whatsoever.

2.3 Non-Exclusive Uses: During the Term, the Licensee shall have non-exclusive access to the public washrooms in the Hall and the public parking outside the Hall, and shall exercise reasonable care when using such public areas and shall not use them for any purpose except those for which they were each constructed. It is hereby agreed that the Licensee and those persons for whom the Licensee is responsible at law shall use such public areas at the Licensee's sole risk, and under no circumstances shall the Municipality, its officials, officers, servants, employees, contractors, agents, invitees, attendees, volunteers, insurers, administrators, representatives, successors, assigns or all others for whom the Municipality is responsible for at law be liable for any damages or injuries resulting to any persons or property when using such areas.

ARTICLE 3 – CAPITAL PROJECTS AND GRANTS

3.1 Capital Projects: Should the Licensee wish to undertake any capital project in the Licensed Premises, the Hall or the adjoining

areas, the Licensee must request the Municipality's prior written approval in accordance with Article 9 of this Schedule "A".

3.2 Fee Waiver: Should the Licensee undertake any capital project that is approved by the Municipality in accordance with Section 3.1 of this Schedule "A", which costs in excess of \$5,000.00, the Municipality may, in its sole discretion, waive the License Fee or a portion of the same for that year of the Term.

3.3 Grants: The Municipality and the Licensee acknowledge and agree that they shall work together using commercially reasonable best efforts to apply for any available grants related to the Licensed Premises or the Permitted Use, with any such grant funding received to be distributed as agreed upon by the Municipality and the Licensee, acting reasonably.

3.4 Requisitions: Should the Licensee have insufficient funds to perform any of its obligations under this Agreement, the Licensee may submit a requisition for funds to the Municipality for such amount that it reasonably requires to perform its obligations under this Agreement. The Municipality may, in its sole discretion, provide the Licensee with such requested funds or a portion of the same under such terms as determined in the Municipality's sole discretion, but the Municipality shall not be obligated to provide such funds.

ARTICLE 4 – COSTS

4.1 Goods and Services Tax: All amounts or payments stated or otherwise contemplated within this Agreement are deemed to be exclusive of goods and services tax (or any other value added of sales tax replacing such tax) which tax, if applicable, shall be payable in addition to the amount required.

4.2 Licensee's Costs: Save and except for as specifically set forth otherwise within this Agreement, the Licensee shall be responsible for any and all costs associated with the operation and cleaning of the Licensed Premises and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, the operating, maintenance, repairs, replacement and cleaning of the Licensee's Equipment, the Permitted Use and the Licensee's operations and activities within the Licensed Premises, including but not limited to the costs of all food, non-alcoholic drinks, supplies, cleaning products, and all other costs associated with catering.

4.3 Taxes: The Licensee shall pay all business, sales, equipment, machinery or other taxes, charges and license/permit fees levied or imposed by any competent authority respecting the Permitted Use, the business conducted, and the sales and income received, by the Licensee upon or within the Licensed Premises, as well as respecting the Licensee's Equipment, provided that the Licensee shall not be responsible for payment of any part of the property taxes which may be levied in respect of the Licensed Premises.

ARTICLE 5 – ASSIGNMENT AND SUBLICENSE

5. Prohibited Assignment or Sublicensing: The Licensee shall not assign or otherwise transfer this Agreement or any of the rights and privileges contained herein, nor sub-license or share possession of the Licensed Premises, in each case either in whole or in part, without first obtaining the prior written consent of the Municipality in each and every case. In this regard, a change of the members of the Licensee as a society, or any other form of amalgamation or merger of the Licensee with any other corporate entity or society, shall be deemed to be a prohibited assignment.

ARTICLE 6 – OPERATION

6.1 Operational Requirements: Without restricting in any manner whatsoever the generality of the forgoing, Licensee shall:

(a) operate the Licensed Premises in a first class standard and reputable manner, and in a manner befitting the character of the Licensed Premises and the community-at-large, and at all times provide a high quality of food and non-alcoholic beverages;

(b) at all times maintain a high level of cleanliness in the Licensed Premises, including, without limitation, thoroughly cleaning the Licensee's Equipment, the Licensed Premises and all other equipment, appliances, chattels, property, furniture and fixtures contained therein during and after each time the Licensed Premises are used in accordance with all requirements of Alberta Health Services and any other governing authority as are now or hereinafter in affect and as may be amended or replaced from time to time;

(c) act diligently and use all proper and reasonable efforts consistent with good business practice at all times;

(d) use the Licensed Premises only in accordance with the terms and provisions of this Agreement;

(e) not sell, provide or serve any alcohol;

(f) provide appropriately qualified employees to carry out the obligations of the Licensee hereunder. The Licensee shall be responsible for all employment responsibilities and the payment of all costs and benefits related to the Licensee's employees, including but not limited to, compensation and benefits, holiday pay, sick time allowance, employment insurance, workers' compensation, Canada Pension or any other pension plan contributions, health care insurance premiums, liability insurance, and/or group life insurance, if and where applicable, compliance with the OHS ACT, and employee remittances and withholdings;

(g) obtain and maintain current and appropriate workers' compensation coverage through an account in good standing with the Alberta Workers' Compensation Board (WCB) and, upon request from the Municipality, provide written certification of the same, such evidence to include coverage of the Licensee and all its employees and contractors;

(h) observe, comply with and do nothing to jeopardize all agreements entered into by the Municipality and affecting the Licensed Premises or the Permitted Use from time to time (including, without restriction, licenses to permit utility crossings through the Lands, as well as arrangements with suppliers of products and services), provided always that such compliance with agreements arising after the date of the execution of this Agreement does not conflict with this Agreement nor any other enforceable agreement affecting the Licensee's operations upon or within the Licensed Premises;

(i) be deemed to be the owner, employer, service provider, prime contractor, supplier, contractor and/or supervisor, as those terms are defined in the OHS Act, as it relates to the Licensee's operation, maintenance, cleaning, replacements, decoration and repairs of the Licensed Premises, the Licensee's Equipment and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, the Permitted Use and the Licensee's operations and activities within the Licensed Premises, including without restriction the construction of any improvements or alterations to the Licensed Premises by the Licensee in accordance with the provisions hereof, and, in any event the Licensee is solely responsible for compliance with the OHS Act

with respect to the Licensee's operation, maintenance, cleaning, replacements, decoration and repairs of the Licensed Premises, the Licensee's Equipment and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, the Permitted Use and the Licensee's operations and activities within the Licensed Premises, including without restriction the construction of any improvements or alterations to the Licensed Premises by the Licensee in accordance with the provisions hereof. Compliance with the OHS Act shall include, but not be limited to, the provision of all applicable training and the provision of all safety equipment and other equipment as now or hereinafter required and the costs thereof, including, without limitation, any training and equipment required in response to all pandemics/epidemics/other illnesses and all public health directives; and

(j) obtain and maintain all necessary permits, licenses, certifications, consents and approvals required by all authorities having jurisdiction incidental to the performance of the Licensee's obligations under this Agreement.

6.1 Policies and Procedures: The Policies and Procedures established by the Municipality for the safe, secure, and efficient operation and maintenance of the Licensed Premises:

(a) may be implemented before or after the date of the execution of this Agreement;

(b) shall be of general application to all users of the Licensed Premises; and

(c) may be amended or replaced by the Municipality from time to time, such amendments or replacements to be in full force and effect from and after the time that the amendments and/or replacements, as the case may be, are given by the Municipality to the Licensee; and

The Licensee shall observe, perform and comply with all Policies and Procedures. For the enforcement of all Policies and Procedures the Municipality shall have available to it all remedies in this Agreement provided for a breach of any provision of this Agreement and all legal rights and remedies including injunction, whether or not provided for in this Agreement, both at law and in equity.

6.3 Compliance with Laws: The Licensee shall carry out all its obligations hereunder in compliance with all applicable laws, regulations, bylaws, procedures, directives, guidelines, standards, rules, codes, requirements, programs, orders and policies that are now or hereinafter in effect and as may be amended or replaced from time to time, including, without limitation:

(a) those dealing with health and safety matters and nuisances;

(b) those dealing with food and beverage safety; and

(c) those dealing with pandemics/epidemics/other illnesses and preventing the spread of the same,

and the Licensee shall not do or cause anything upon the Licensed Premises in contravention thereof.

6.4 Signage: Unless otherwise agreed to by the parties, the Licensee shall not erect, install or maintain any outdoor or indoor sign on the Licensed Premises.

6.5 Compliance: The Licensee shall cause all its officials, officers, employees, servants, agents, invitees, contractors, attendees, volunteers, administrators, representatives, permitted successors and assigns, and anyone else for whom the Licensee is liable for at law to comply with all terms of this Agreement, and the Licensee shall be responsible for any failure to comply of such parties.

ARTICLE 7 – ACCEPTANCE

7.1 Acceptance of Licensed Premises: The execution of this Agreement by the Licensee shall be conclusive evidence, as against the Licensee, that the Licensed Premises is accepted by the Licensee “as is, where is” as at the Effective Date.

7.2 Utility Connections: Unless otherwise agreed to by the parties, the Municipality shall be responsible for the costs of those utilities and services in existence on the Effective Date; however, if the Licensee requires new connections to, or an extension of, a utility or other service to the Licensed Premises, the Licensee shall be responsible for the cost of such work and the supply of the new utility or service and shall, if required by the Municipality, provide for separate metering of such utility or service.

7.3 No Representations or Warranties: The Licensee acknowledges and agrees that there are no warranties or representations given by the Municipality to the Licensee, either express or implied, relating to all or any portion of the Licensed Premises, nor the condition or quality of the foregoing, nor the suitability of the Licensed Premises for the purposes intended by the Licensee. The Licensee has relied totally upon its own investigations of the Licensed Premises and due diligence in entering into this Agreement and is forever estopped from making any claim to the contrary against the Municipality.

ARTICLE 8 – CLEANING, MAINTENANCE AND REPAIR

8.1 Licensee’s Obligations:

(a) At all times during the Term the Licensee shall, at its sole cost and expense:

- (i)** properly and sufficiently repair, maintain, replace and keep the Licensee’s Equipment in good and substantial repair and condition; .
- (ii)** properly and sufficiently decorate the Licensed Premises, as applicable; and
- (iii)** properly and sufficiently clean the Licensed Premises, the Licensee’s Equipment and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, so that the same are clean and tidy at all times.

Such cleaning, repair, replacement, decoration and maintenance is to be performed by the Licensee when, where and as often as necessary to ensure the Licensed Premises, Licensee’s Equipment, and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, as applicable, are not offensive to the public and to maintain a condition substantially similar to the condition existing as of the Effective Date or the date upon which any item was located or erected on or within the Licensed premises (reasonable wear and tear excepted), and the Licensee shall provide, at its cost, all supplies, parts and materials required to carry out the foregoing.

(b) The Licensee shall ensure that all of its cleaning, decoration, replacement, maintenance and repairs as set out within this Agreement shall be performed to a standard at least equal to the quality of the original work and material and shall meet the requirements of applicable municipal and/or governmental authorities and applicable fire insurance underwriters. All cleaning, decoration, replacement, maintenance and repairs to be carried out by the Licensee as set forth herein are to be handled expeditiously and in a good workmanlike manner.

8.2 Municipality’s Equipment:

(a) Subject to the performance of the obligations of the Licensee contained within this Agreement, the Municipality shall be solely responsible for all costs to repair and replace the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises. However, if such repair or replacement under this Section 8.2(a) is necessitated or caused by the actions, inactions, misconduct and/or negligence of the Licensee and/or any of those persons for whom the Licensee is responsible at law or by breach of this Agreement by the Licensee, the Licensee shall be solely responsible for the same at its sole cost, reasonable wear and tear excepted, and shall forthwith attend to the same.

(b) Notwithstanding any other term herein, in the event of theft, disappearance or vandalism to all or any of the furniture, equipment, appliances, fixtures, chattels, property and inventory located or erected on or within the Licensed Premises, said items shall be repaired or replaced by the Licensee as soon as reasonably practicable at the Licensee’s sole cost, provided that if such item is covered by insurance, the Licensee shall pay any deductible relating to such insurance.

8.3 Municipality May Repair: If the Licensee fails to carry out any of its obligations as required in this Article 8 and further, if within 10 days (or such other period as the Municipality feels is reasonable in the circumstances) of receipt of notice from the Municipality to carry out such obligation or obligations the Licensee fails to do so, the Municipality may (but is not obligated to), without prejudice to any of its other rights under this Agreement or otherwise, carry out such obligation(s) without liability to the Licensee for any loss or damage of any kind by reason thereof and, upon completion thereof, the Licensee shall, on demand, pay the Municipality’s cost of carrying out such obligation(s).

8.4 Municipality’s Obligations: Subject to the performance of the obligations of the Licensee contained within this Agreement, the Municipality shall be responsible for the following at its sole cost and expense, unless otherwise agreed to by the parties:

(a) maintaining, repairing and replacing the Licensed Premises and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, as determined by the Municipality in its sole discretion;

(b) those capital works related to the Licensed Premises as the Municipality, in its sole discretion, deems necessary and that are not being undertaken by the Licensee in accordance with this Agreement;

(c) major repairs to, and replacements of, all structural components of the Licensed Premises (consisting of roof trusses and structural ceiling members, foundations, structural floor members, and weight-bearing walls);

(d) at a minimum, quarterly inspections of the Licensed Premises, as determined by the Municipality in its sole and absolute discretion; and

(e) preventive maintenance for the Licensed Premises and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, as determined by the Municipality in its sole discretion.

Notwithstanding any other term in this Agreement, to the extent that any of the Municipality’s obligations set out in this Section 8.4 are necessitated or caused by the actions, inactions, misconduct and/or negligence of the Licensee and/or any of those persons for whom the

Licensee is responsible at law or by breach of this Agreement by the Licensee, the Licensee shall be solely responsible for the same at its sole cost, reasonable wear and tear excepted, and shall forthwith attend to the same.

8.5 Municipality Not Responsible: The Municipality shall not be liable for any loss or damage to any person or property arising from its failure to maintain, repair or replace in accordance with this Article 8 and the Licensee releases the Municipality accordingly and is forever estopped from making any claim against the Municipality to the contrary; provided however, that the provisions of this Section shall not apply in the event of loss or damage to any person or property arising due to the negligence of the Municipality.

8.6 Hazardous Substances: The Licensee hereby represents, covenants and warrants to and in favour of the Municipality that in carrying out its obligations hereunder:

(a) it shall not allow any Hazardous Substance to be utilized, placed, held, located or disposed of on, under or at the Licensed Premises, without the prior written consent of the Municipality;

(b) the Licensee shall not allow any part of the Licensed Premises to be utilized in any manner in contravention of any applicable laws, regulations, bylaws, procedures, directives, guidelines, standards, rules, codes, requirements, programs, orders or policies that are now or hereinafter in effect and as may be amended or replaced from time to time, which are intended to protect the environment, including without limitation, respecting the handling, use, storage, disposal and emission of Hazardous Substances;

(c) to the extent that any Hazardous Substance is, subject to the Municipality's consent as herein provided, utilized, placed, held, located or disposed of on, under or at any part of the Licensed Premises in accordance with the terms hereof, the Licensee:

(i) shall comply with, or cause to be complied with, all applicable laws, regulations, bylaws, procedures, directives, guidelines, standards, rules, codes, requirements, programs, orders and policies that are now or hereinafter in effect and as may be amended or replaced from time to time relating to the handling, use, storage, disposal and emission of the Hazardous Substance, as well as all terms or conditions required by the Municipality;

(ii) shall, at the request of the Municipality, provide evidence to the Municipality of compliance with all applicable laws, regulations, bylaws, procedures, directives, guidelines, standards, rules, codes, requirements, programs, orders and policies that are now or hereinafter in effect and as may be amended or replaced from time to time, such evidence to include inspection reports and such tests as the Municipality may reasonably require, all at the Licensee's expense;

(iii) acknowledges and agrees that all such Hazardous Substances shall be and remain the sole and exclusive property of the Licensee and shall not become the property of the Municipality notwithstanding the degree of affixation to the Licensed Premises of the Hazardous Substance or the goods containing the Hazardous Substance, and notwithstanding the expiry or early termination of this Agreement; and

(iv) acknowledges and agrees that upon the expiration or early termination of this Agreement, the Licensee at its sole expense shall remove and dispose of all Hazardous

Substances and all storage tanks and other containers therefor in accordance with all applicable laws, regulations, bylaws, procedures, directives, guidelines, standards, rules, codes, requirements, programs, orders and policies that are now or hereinafter in effect and as may be amended or replaced from time to time and to the extent required by the Municipality, and to the extent that such removal and disposal involves any excavation work at the Licensed Premises, the Licensee shall restore the Licensed Premises to the same grade level and condition as immediately prior to the excavation, using only clean uncontaminated soil and other material satisfactory to the Municipality.

ARTICLE 9 – ALTERATIONS AND IMPROVEMENTS

9.1 Alterations and Improvements: The Licensee shall not, without first obtaining the Municipality's written approval thereto:

(a) make or cause to be made any alterations, additions or improvements or erect or cause to be erected any partitions or install or cause to be installed any trade fixtures, floor coverings, interior or exterior lighting, plumbing fixtures, shades, awnings, exterior decorations or make any changes to the Licensed Premises, provided however, that temporary improvements such as equipment and other items may be installed in support of any Permitted Use taking place at the Licensed Premises if such improvements or the removal thereof does not damage the Licensed Premises or any part thereof; or

(b) install in or for the Licensed Premises any special locks, safes, or apparatus for air-conditioning, cooling, heating, illuminating, refrigerating or ventilating equipment or systems, (collectively, the "Alterations"), and all Alterations must pass inspection by the Municipality.

9.2 Plans and Specifications: Prior to the construction of any Alterations, all of which shall be constructed at the sole cost of the Licensee, and in strict conformance with the plans and specifications approved by the Municipality below, as well as in strict conformance with the current building codes, the Licensee shall:

(a) instruct the Licensee's contractor(s) or engineering consultant(s) to prepare plans depicting the Alterations in accordance with Municipality's standards and requirements together with the estimated costs of constructing and installing the Alterations, all of which are to be reasonably satisfactory to the Municipality; and

(b) submit the plans to the Municipality's administration for review and acceptance by the Municipality, and receive the Municipality's approval and acceptance of such plans, which approval and acceptance may be withheld in the sole discretion of the Municipality.

9.3 Conditions on Approval: The Municipality's approval shall be subject to such conditions as the Municipality deems appropriate, acting reasonably, on a case by case basis (including, without restriction, the removal or forfeiture of Alterations upon the expiration or earlier termination of this Agreement).

ARTICLE 10 – MUNICIPALITY'S RIGHT TO USE AND ACCESS LICENSED PREMISES

10.1 Access: In fulfilling its obligations pursuant to this Agreement, and in addition to the Municipality's rights to enter the Licensed Premises as set forth elsewhere within this Agreement, the Municipality shall be entitled to enter the Licensed Premises at all times, and in a manner which does not unreasonably prevent the Licensee from complying with its obligations hereunder (unless

circumstances make this unavoidable, as determined by the Municipality, acting reasonably) and the Municipality shall act as expeditiously as is reasonably possible in the circumstances. Without restricting the foregoing, the Municipality may enter the Licensed Premises at any reasonable time during business hours for any purpose and at any time during an emergency as determined by the Municipality, acting reasonably.

10.2 Security Locks and Codes: The Licensee shall not change any locks, security codes, or security devices without first obtaining the prior written consent of the Municipality in each and every case. At all times, the Licensee shall provide the Municipality with all necessary keys and codes to enter all or any part of the Licensed Premises as aforesaid, and the Licensee shall deposit duplicates of all access keys not issued by the Municipality to the designate of the Municipality. The Licensee accepts full responsibility for the control and issuance of keys issued for the Licensee's operations on or within the Licensed Premises, and shall maintain up-to-date records of such transactions. Where keys are lost or otherwise no longer available to the Licensee, all costs to re-secure the areas that could be rendered insecure through such loss shall be at the expense of the Licensee.

10.3 Alterations: The Municipality may attend upon the Licensed Premises and make any changes and/or additions to all or any portion of the Licensed Premises in its unfettered discretion, provided that the Municipality consults with the Licensee prior to making any such changes and/or additions. However, if any such changes and/or additions are required due to an emergency, as determined in the sole discretion of the Municipality acting reasonably, the Municipality shall not be required to consult with the Licensee prior to making such changes and/or additions. The rights set forth in this Section may be exercised by the Municipality without the Municipality being responsible or liable in any way whatsoever for any matter, cause or thing to the Licensee, subject only to damages suffered by the Licensee which are directly attributable to the negligence of the Municipality in making the aforesaid changes and/or additions. Notwithstanding anything contained within this Agreement, the Municipality shall be entitled to utilize or grant licenses to third parties to utilize the portion of the Lands that the Facility is located on as highlighted in red in Schedule "D" attached hereto for the purposes of constructing, operating and maintaining any public utilities, provided always that the said use shall not prevent or unreasonably interfere with the continued use of the Licensed Premises by the Licensee for the Permitted Use. In the event that the Municipality deems it necessary or appropriate to cause or allow the Municipality or third parties to construct, install or perform such other work upon or within the Licensed Premises as may be deemed necessary in the sole discretion of the Municipality, the Licensee shall in no way interfere or hinder the construction, installation, repair or maintenance undertaken by the Municipality or any person to whom the Municipality has granted such permission, and further, the Licensee shall forthwith upon the request of the Municipality, execute such further documentation as deemed appropriate in the sole discretion of the Municipality for the purposes of expediting or permitting the construction, installation or performance of such work within the Licensed Premises by the Municipality or any nominee, permittee or licensee of the Municipality.

ARTICLE 11 – INSURANCE

11.1 Licensee's Insurance: The Licensee shall, during the whole of the Term, take out and maintain, at the Licensee's sole expense and in such form as the Municipality may reasonably approve, that is from an insurer licensed in the Province of Alberta:

- (a) liability insurance with coverage for a limit of not less than Two Million (\$2,000,000.00) Dollars per occurrence;
- (b) Tenants Legal Liability (TLL) with inclusive limits of not less than Two Million (\$2,000,000.00) Dollars per occurrence;
- (c) all risks insurance on all property from time to time located or erected on or within the Licensed Premises owned by the Licensee or for which the Licensee is legally liable, all in an amount equal to the full replacement value thereof including, without restriction, the Licensee's Equipment and all of the Municipality's equipment, appliances, chattels, property, furniture and fixtures located or erected on or within the Licensed Premises; and
- (d) coverage for such other risks which a prudent society licensing similar premises for a similar use in Alberta might reasonably be expected to insure, and, in any event, in compliance with all applicable laws, regulations, bylaws, procedures, directives, guidelines, standards, rules, codes, requirements, programs, orders and policies that are now or hereinafter in effect and as may be amended or replaced from time to time;

together with such other insurance or coverage as the Municipality may reasonably require from time to time. The Municipality shall have the right to require the minimum limits of this insurance to be increased or require additional insurance if the Municipality, acting reasonably, determines that such increase or addition is necessary in light of the activities and risks occurring upon or within the Licensed Premises by providing to the Licensee written notice of the increased limit or addition, in which case, the Licensee shall obtain and maintain the aforesaid insurance during the term of this Agreement for the increased limit or addition. Each of the Licensee's insurance policies shall provide that the respective insurers shall give to the Municipality at least 30 days' prior written notice of cancellation, lapse, non-renewal or alteration of such policies, shall contain a clause stating that the Licensee's policy will be considered as the primary insurance and further, shall name the Municipality as an additional insured.

11.2 Certificates of Insurance: Certificates of insurance evidencing all of the insurance required to be obtained and maintained by the Licensee hereunder will be delivered to the Municipality on or prior to the Effective Date and annually thereafter, on or prior to the anniversary of the Effective Date each year during the Term. Further, the acquisition and maintenance by the Licensee of the insurance policies as required pursuant to this Article 11 shall, in no manner whatsoever, limit or restrict the liability of the Licensee to the Municipality under this Agreement or the Municipality's ability to enforce its rights as against the Licensee under this Agreement.

11.3 Municipality's Insurance: The Municipality shall maintain such liability and building insurance for the Licensed Premises as the Municipality, in its sole discretion, feels is necessary. For the purposes hereof, the Municipality shall provide such documentation and information to the Licensee respecting such coverage as requested from time to time. The Licensee shall be responsible for any deductibles payable by the Municipality as a

result of any insurance claims arising due to the use or occupation of the Licensed Premises by the Licensee.

11.4 Increases in Rates: The Licensee shall not do, nor omit or permit to be done, upon the Licensed Premises or any part thereof, as the case may be, any act, occurrence or thing which shall cause any rate of insurance upon the Licensed Premises or any part thereof to be increased or cause any insurance to be cancelled. If any such rate of insurance shall be increased as aforesaid, the Licensee shall pay to the Municipality the amount of the increase on demand. If any insurance policy upon the Licensed Premises or any part thereof is cancelled or threatened to be cancelled by reason of the use or occupancy by the Licensee or any act or omission as aforesaid, the Licensee shall forthwith remedy or rectify such use, occupation, act or omission upon being requested to do so by the Municipality.

ARTICLE 12 – SUBSTANTIAL DAMAGE/DESTRUCTION

12.1 Substantial Damage or Destruction

(a) In the event of substantial damage or destruction of the Licensed Premises, as determined solely by the Municipality, acting reasonably, the Municipality may terminate this Agreement on 30 days' written notice.

(b) In the event the Municipality elects not to terminate this Agreement in accordance with Section 12.1(a) above, the Licensee and the Municipality may agree to repair such damage in accordance with Section 12.2 hereof, to the limits of the proceeds of insurance that the Municipality and/or the Licensee maintains pursuant to this Agreement.

12.2 Distribution of Insurance Proceeds: Unless otherwise agreed to by the parties, the proceeds of any insurance to be maintained by the Licensee under this Agreement which are received by the Municipality and/or the Licensee as a result of the damage or destruction of the Licensed Premises, or a portion thereof, shall be applied to the costs of repairing, replacing, or reconstructing the Licensed Premises.

12.3 Licensee to Assist: In the event the Municipality elects to terminate this Agreement in accordance with Section 12.1(a) above, the Licensee shall cooperate with and assist the Municipality after such damage or destruction, including without restriction, producing all records required to be maintained hereunder, making all employees and contractors available for interview, and attending all meetings with the Municipality's insurance adjusters.

ARTICLE 13 – INDEMNITY, SECURITY, LIENS

13.1 Licensee's Indemnity: The Licensee shall at all times and without limitation, indemnify and save harmless the Municipality, its officials, officers, servants, employees, contractors, agents, invitees, attendees, volunteers, insurers, administrators, representatives, successors, assigns and all others for whom the Municipality is responsible for at law of and from and against all liabilities, losses, suits, costs, fees, damages, legal costs (on a solicitor and his own client full indemnity basis), disbursements, fines, debts, penalties, expenses, all manner of actions, causes of action, claims, injuries, demands, obligations, proceedings, settlements and judgements, all of whatever nature and kind, which any of the Municipality, its officials, officers, servants, employees, contractors, agents, invitees, attendees, volunteers, insurers, administrators, representatives, successors, assigns or all others for whom the Municipality is responsible for at law may become liable for, sustain, pay, suffer or incur or which may be brought or made against all or any of them, and whether or not incurred in connection with any action or other

proceedings or claims or demands made by third parties, with respect to:

(a) any act or failure to act, as the case may be, of the Licensee and/or any of those persons for whom the Licensee is responsible at law (including without limitation, any of the Licensee's officials, officers, employees, servants, agents, contractors, invitees, attendees, volunteers, representatives, administrators, or permitted successors or assigns);

(b) any breach, violation or non-performance of any representation, warranty, obligation, covenant, condition or agreement contained in this Agreement to be fulfilled, kept, reserved or performed, as the case may be, by the Licensee;

(c) personal injury or death or damage to any property, as the case may be, relating directly or indirectly to the use or occupation of the Licensed Premises or to any part thereof, or relating directly or indirectly to the access or use of the public washrooms in the Hall or the public parking outside the Hall or any part thereof; or

(d) the alteration, postponement, interruption, cancellation or termination of any proposed or actual use of all or any part of the Licensed Premises by the Licensee or any other person or otherwise arising.

13.2 Personal Injury and Property Damage: Notwithstanding anything in this Agreement to the contrary, neither the Municipality nor any of its officials, officers, servants, employees, contractors, agents, invitees, attendees, volunteers, insurers, administrators, representatives, successors, assigns and all others for whom the Municipality is responsible for at law, as the case may be, shall, except as directly caused by the negligence of the Municipality, in any way whatsoever be liable or responsible for:

(a) any loss or damage of any nature whatsoever, howsoever caused, to any property belonging to the Licensee or to any other person while such property is in or about the Licensed Premises, the public washrooms in the Hall or the public parking outside the Hall;

(b) any injury or death, howsoever caused, to any person while in or about the Licensed Premises, the public washrooms in the Hall or the public parking outside the Hall; or

(c) any special, incidental or consequential damages for loss of profits, for loss of goodwill, for loss of use, for loss of savings or revenue, costs of capital, or the claims of third parties arising in any way whatsoever (including, without limitation, arising by virtue of the fact that any or all utilities are not being supplied to the Licensed Premises or due to any existing or intended event not occurring at the Licensed Premises).

Further, the Licensee hereby waives and releases, on behalf of itself and those for whom it is responsible at law, any and all claims against the Municipality for any matter, cause or event as described in this Section and the Licensee shall be forever estopped from advancing any such claims against the Municipality.

13.3 Liens: The Licensee shall, immediately upon demand by the Municipality, remove or cause to be removed, and thereafter institute and diligently prosecute any action pertinent thereto, any builders' or other lien or claim of lien noted or filed against or otherwise constituting an encumbrance on any title of the Municipality. Without limiting the foregoing obligations of the Licensee, the Municipality may cause any such lien to be removed, in which case the Licensee shall pay to the Municipality the cost thereof, including but not limited to the Municipality's legal costs (on a solicitor and his own client full indemnity basis) and disbursements, on demand.

ARTICLE 14 – DEFAULT, REMEDIES, TERMINATION

14.1 Default: If and whenever:

(a) the Licensee shall become insolvent or commit an act of bankruptcy or become bankrupt or take the benefit of any statute that may be in force for bankrupt or insolvent debtors or become involved in voluntary or involuntary winding up, dissolution or liquidation proceedings, or if a receiver or receiver and manager shall be appointed for the affairs, business, property or revenues of the Licensee; or

(b) the Licensee, if a corporation or society, is dissolved, is subject to an application to wind up, or otherwise ceases to exist or fails to remain in good standing under the applicable legislation pursuant to which it is incorporated, organized or otherwise created; or

(c) if the Licensee neglects or fails to observe, perform or comply with each and every of its covenants, agreements or obligations under this Agreement and shall persist in such neglect or failure after 10 days following written notice from the Municipality requiring that the Licensee cure such neglect or failure or, in the case of any such neglect or failure which would reasonably require more than 10 days to cure but could be cured within a commercially reasonable period of time, all as determined by the Municipality acting reasonably, unless the Licensee shall commence rectification as soon as reasonably possible within the said 10 day notice period and thereafter promptly and diligently and continually proceed to cure such neglect or failure within such commercially reasonable period of time;

then, in each of such events which are events of default, at the option of the Municipality, and in addition to and without prejudice to any other rights or remedies the Municipality may have hereunder or at law or equity (including, without limitation, injunctive relief), the Municipality may do all or any of the following, namely, enter upon the Licensed Premises, expel all occupants thereof utilizing such force as it may deem reasonably necessary for the purpose thereof, remove all property of the Licensee from the Licensed Premises and terminate this Agreement. The Licensee hereby releases the Municipality from all actions, proceedings, claims and demands whatsoever for or in respect of any action taken by the Municipality in the event of a default by the Licensee as aforesaid.

14.2 Municipality May Perform: If the Licensee shall fail to observe, perform or comply with any of its covenants, agreements or obligations under this Agreement, the Municipality may, but shall not be obliged to, at its discretion and without prejudice to any other right, claim or action it may have, rectify such non-observance, non-performance or non-compliance, as the case may be, whether or not performance by the Municipality on behalf of the Licensee is otherwise expressly referred to in the applicable Section of this Agreement. For such purpose the Municipality may make any payment or do or cause to be done such things as may be required including, without limiting the generality of the foregoing, entry upon the Licensed Premises. Any such performance by or at the behest of the Municipality shall be at the expense of the Licensee and the Licensee shall pay to the Municipality on demand all costs thereof.

14.3 Costs and Interest: In addition to and without derogating from the provisions hereof, all costs incurred by the Municipality in exercising any of its rights upon any default by the Licensee hereunder, including, without limitation, the legal costs incurred by

the Municipality on a solicitor and his own client full indemnity basis and disbursements, shall, forthwith on demand, be paid by the Licensee to the Municipality. All other sums due to the Municipality pursuant to the terms of this Agreement shall be paid by the Licensee promptly when due. If any sums due to the Municipality are not paid, they shall bear interest from their respective due dates at the rate of 2.5 percent per month, both before and after default, demand and judgment.

14.4 Dissolution: If the Licensee is dissolved, liquidated, wound up or otherwise ceases to exist, once all liabilities and debts have been settled, the Licensee's remaining assets, including but not limited to financial assets and the Licensee's Equipment, shall be transferred to the Municipality. The Licensee shall ensure that its bylaws provide for such transfer.

14.5 Obligations of the Licensee on Termination or Expiry: Upon expiry of the Term of this Agreement or earlier termination of this Agreement and, in addition to the other obligations of the Licensee as set forth herein, the Licensee shall, at its sole cost:

(a) vacate and leave the Licensed Premises in the same state and condition as it was in as at the Effective Date subject to only reasonable wear and tear, provided however that if any part of the Licensed Premises is replaced, upgraded, or constructed upon after the Effective Date, then such part shall be left in the same state and condition as it was in immediately after such replacement, upgrade or construction, as the case may be, subject only to reasonable wear and tear thereafter; and

(b) immediately surrender all keys to the Licensed Premises to the Municipality and inform the Municipality of all combinations to locks, safes and vaults, if any, in the Licensed Premises.

14.6 Termination: Either party may terminate this Agreement upon three (3) months' written notice to the other party.

14.7 Transfer of Assets upon Termination/Expiration: Upon the expiration or earlier termination of this Agreement, the Licensee may transfer its assets, including but not limited to financial assets and the Licensee's Equipment, to the Municipality, and the Licensee shall ensure that its bylaws permit such transfer.

ARTICLE 15 – GENERAL PROVISIONS

15.1 Registration: Notwithstanding anything herein contained to the contrary, the provisions of this Agreement do not in any way whatsoever constitute or create an interest in all or any portion of the Lands in favour of the Licensee. Neither the Licensee nor anyone on the Licensee's behalf or claiming under the Licensee shall register this Agreement or any instrument relating to this Agreement against the Lands.

15.2 Survival: The provisions of this Agreement which, by their context are meant to survive the expiry or earlier termination of this Agreement (including, without limitation, the indemnities provided herein) shall survive the expiry or earlier termination of this Agreement, as the case may be, and shall not be merged therein or therewith and further, shall bind the parties accordingly.

15.3 Enurement: This Agreement shall enure to the benefit of and be binding upon the parties hereto, the successors and assigns of the Municipality, and the permitted successors and assigns of the Licensee.

15.4 Governing Law: This Agreement shall be construed and governed by the laws of the Province of Alberta and the laws of Canada applicable therein and the parties hereto irrevocably attorn to the exclusive jurisdiction of the Courts of the Province of Alberta.

15.5 Time of the Essence: Time shall be of the essence of this Agreement.

15.6 Relationship Between the Parties: Nothing contained herein shall be deemed or construed by the parties hereto nor by any third party, as creating the relationship of employer and employee, principal and agent, partnership, or of a joint venture between the parties hereto, it being understood and agreed that none of the provisions contained herein nor any act of the parties hereto shall be deemed to create any relationship between the parties hereto other than an independent license agreement between the two parties at arm's length.

15.7 No Authority: Except as may from time to time be expressly stated in writing by the one party, the other party has no authority to assume or create any obligation whatsoever, expressed or implied, on behalf of or in the name of the other party, nor to bind the other party in any manner whatsoever.

15.8 Further Assurances: Each of the parties do hereby agree to do such things and execute such further documents, agreements and assurances as may be necessary or advisable from time to time in order to carry out the terms and conditions of this Agreement in accordance with their true intent.

15.9 Waiver: No waiver shall be inferred or implied by any forbearance by a party or anything done or admitted to be done by a party with respect to a default, breach or non-observance by the other party of the terms, covenants or conditions of this Agreement save only an express waiver in writing. Any such waiver shall not be and shall be deemed not to be a waiver of any continuing or subsequent default, breach or non-observance of such term, covenant or condition (except as specifically expressed in writing) or of any other term, covenant or condition contained in this Agreement. Failure on the part of either party to complain of any act or failure to act of the other party or to declare the other party in default, irrespective of how long such failure continues, shall not constitute a waiver by such party of its rights hereunder.

15.10 Unenforceability: All provisions of this Agreement are severable. If any term, covenant or condition of this Agreement or the application thereof to any party or circumstances shall be invalid or unenforceable to any extent, the remainder of this Agreement or application of such term, covenant or condition to a party or circumstance other than those to which it is held invalid or unenforceable shall not be affected thereby and each remaining term, covenant and condition of this Agreement shall be valid and shall be enforceable to the fullest extent permitted by law.

15.11 Remedies Generally: All remedies, whether available at law or in equity or by statute or expressly provided for in this Agreement may be exercised in addition to each other or in combination, such remedies being cumulative and not alternative.

SCHEDULE "B"
Licensee's Additional Obligations

The Licensee shall carry out the following obligations at its sole cost to the reasonable satisfaction of the Municipality:

1. **Inspect:** The Licensee shall undertake inspections of the Licensee's Equipment and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, as frequently as would a prudent owner of same, prepare and submit reports on the findings of the inspections to the Municipality when requested, and advise of actions taken or recommended, resulting from such inspections.

2. **Reporting of Deficiencies:** The Licensee shall report to the Municipality all deficiencies respecting the Licensed Premises, the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises, and/or the Licensee's Equipment as the Licensee may be or become aware of through the performance of their duties, and forthwith notify the Municipality of the same and of any corresponding repairs and replacements necessary;

3. **Equipment Inspections:** Without limiting the generality of Section 1 of this Schedule "B", the Licensee shall undertake annual inspections of the Licensee's Equipment and the equipment, appliances and fixtures of the Municipality located or erected on or within the Licensed Premises by the end of May of each year during the Term, prepare and submit reports on the findings of such inspections to the Municipality by the end of May of each year during the Term, and advise of actions taken or recommended, resulting from such inspections.

4. **Records, Reporting and FOIP:** prepare and provide all such reports, information and records regarding the Licensee's use of the Licensed Premises as required from time to time by the Municipality or other authorities having jurisdiction. The Licensee acknowledges and agrees that the Municipality is subject to the *Freedom of Information and Protection of Privacy Act*, RSA 2000, c F-25, as amended or replaced from time to time, as well as all regulations made pursuant thereto and promulgated thereunder ("FOIP"), and accordingly:

(a) FOIP applies to all "records" and "personal information", both as defined in FOIP, relating to, or obtained, generated, compiled, collected or provided under or pursuant to this Agreement which are under the custody or control of the Municipality, save and except for where exempted under FOIP;

(b) the Licensee recognizes the responsibility of the Municipality in relation to FOIP, subject always to the notification and exemptions to disclosure provisions which exist under FOIP; and

(c) without limiting any of the rights of the Municipality under

FOIP, the Licensee will cooperate with the Municipality in the performance and discharge of the Municipality's obligations under FOIP.

5. **Preventive Maintenance:** preventive maintenance for the Licensee's Equipment in accordance with such preventive maintenance plan as may be reasonably required by the Municipality so as to ensure the condition required under this Agreement;

6. **Janitorial Services:** perform all janitorial and cleaning services as required from time to time in order that the Licensed Premises and all constituent parts thereof are, at all times, in a clean and first-class condition, all as determined by the Municipality, acting reasonably. The Licensee shall provide, at its cost, all supplies, parts and materials required to carry out the foregoing;

7. **Garbage Services:** not allow any refuse, garbage or other loose or objectionable or waste material to accumulate in or about the Licensed Premises, and shall dispose of the same in accordance with applicable regulations and laws. In the event that the Municipality does not supply a garbage service for the Licensed Premises, the Licensee shall contract, obtain or otherwise perform all services necessary to remove and properly dispose of all garbage and solid waste produced or otherwise located upon or within the Licensed Premises;

8. **Disposal:** ensure that all cooking oil, grease, fat and other chemicals are properly disposed of and not disposed through the plumbing or sewer system of the Licensed Premises;

9. **Decoration:** the Licensee shall not mark, paint, drill or in any way deface any walls, ceilings, partitions, floors, wood, stone or ironwork of the Licensed Premises, or change the existing colours of the interior of the Licensed Premises, all without the prior written approval of the Municipality;

15. **Booking:** the Licensee shall be responsible for the booking of all catering provided by the Licensee pursuant to the Permitted Use;

16. **Billing for Catering:** the Licensee shall determine the fees charged for and undertake billing of all third parties for catering provided by the Licensee pursuant to the Permitted Use, and be responsible for the accounts receivable related to the same;

17. **Safety & Evacuation Protocols:** the Licensee shall be familiar with and abide by the Municipality's safety and evacuation protocols and procedures respecting the Licensed Premises; and

18. **Financial Statements:** The Licensee shall provide to the Municipality a copy of its most recent audited financial statement forthwith after such statement is available and in any event, prior to the end of each calendar year during the Term.

SCHEDULE "C"
Licensee's Equipment

The following is the Licensee's Equipment that is provided by the Licensee for use upon or within the Licensed Premises for the purposes permitted within this Agreement, and shall remain the property of the Licensee except as otherwise set out herein:

DESCRIPTION	MAKE/MANUFACTURER	MODEL	SERIAL NUMBER
Stand Alone Floor Mixer	Globe	SP-30	73-14984
Chafing Dishes	N/A	N/A	N/A
Self-Cleaning Oven	Rational	SCC WE102G	G12SH14062409487
Dinnerware Setting for 400	N/A	N/A	N/A
3 Door Upright Freezer (with Lightup)	Traulsen	G31310	T01863G15
2 Stainless Steel Work Tables with Wheels	N/A	N/A	N/A

SCHEDULE "D"
The Hall and Licensed Premises



4848 49 Street



**TOWN OF LAMONT
COUNCIL AGENDA
REQUEST FOR DECISION**

AGENDA ITEM: 4.7

COUNCIL MEETING DATE: November 23, 2021
ITEM DESCRIPTION OR TITLE

Whistle Cessation Report

RECOMMENDATION

That Council accept the Whistle Cessation Report as information.

BACKGROUND

Council approved the Whistle Cessation study through the 2021 budget process, that would investigate the requirements of implementing train whistle cessation at three grade crossing locations (highway 831, 50 Avenue, and range road 195) through the Town of Lamont.

Bunt & Associates Engineering Ltd; was secured to identify the following objectives:

- Needs of pedestrian, cyclists, and emergency vehicles.
- Required improvements to ensure grade crossings comply with Transport Canada’s regulations and standards.
- Assess and prioritize improvements required to facilitate whistle cessation at the 3 grade crossings identified in the report.
- Identify the road authority and railway company responsible for improvements.

The following historical data was collected at the 3 grade crossing sites:

- 5-year grade crossing collision data.
- 5-year railway collision data.
- Field inspection including visual exam, traffic volume, and railway crossing sight distance and queuing.
- Daily train volumes
- Traffic volumes

Conclusion and recommendation for each site is outlined below:

Highway 831:

- The crossing appears to comply with basic and additional requirements of the “grade crossing regulations and standards”.
- Re-paint stop bar pavement markings.
- No additional measures are required for Highway 831 crossing to be eligible for whistle cessation based on the criteria set out in the “Railway Safety Act”.



TOWN OF LAMONT COUNCIL AGENDA REQUEST FOR DECISION

50 Avenue:

- For this crossing to comply with basic requirements of the “grade crossing regulations and standards” the following measures should be implemented:
 - Install supplemental flashing light units on the warning system on the West approach.
- For this crossing to comply with the additional requirements of the “grade crossing regulations and standards” the road authority should implement the following measures:
 - Install DO NOT STOP ON TRACKS sign on the West approach.
- For this crossing to comply with remaining requirements of the “grade crossing regulations and standards” the railway company should implement the following measures:
 - Paint double stop bars, RAILWAY CROSSING symbol pavement markings on both approaches.
- No measures would be required for the 50 Avenue crossing to be eligible for whistle cessation based on the criteria set out in the “Railway Safety Act”.

Range Road 195:

- The crossing appears to comply with basic and additional requirements of the “grade crossing regulations and standards”.
- For the crossing to comply with the remaining requirements identified in the “grade crossing regulations and standards” the following measures need to be implemented:
 - Install flashing lights and bells (FLB) warning system.
 - Install DO NOT STOP ON TRACKS sign on North approach.
 - Install RAILWAY CROSSING AHEAD sign on North approach.
 - Remove YIELD sign on South approach.
 - Paint double stop bars RAILWAY CROSSING symbol pavement markings on both approaches.
 - Confirm horizontal and vertical curvature is appropriate on the North approach.
- Installation of flashing lights and bells would be required at this location to be eligible for whistle cessation.

Administration asked for clarifying information not included in the report as follows:

- It is possible CN may require fencing but is unlikely as the requirement is based on accident history or signs of trespassing.
- Installation of ‘Do not stop on tracks’ signs have been identified at locations given the road intersections in close proximity to the rail based on the requirements of the Grade Crossing Regulations. No additional mitigation is identified for the purposes of whistle cessation (except for the upgrading of control at Range Road 195 to FLB).
- Additional lighting at 50th Avenue, the West approach would be installed on the existing post angled in the line of sight of traffic turning onto 50 Avenue from Highway 15. Should a second post be required costs would more than double.
- For the range road 195 crossing, it is anticipated, based on the site visit, that appropriate horizontal and vertical curvature was considered in the design of this roadway approach. However, “this could not be confirmed” as design plans were not



TOWN OF LAMONT COUNCIL AGENDA REQUEST FOR DECISION

available for review. Notwithstanding, sightline requirements as they relate to the crossing have been confirmed appropriate based on stop control on the north approach.

- Significant road construction costs may be required if road geometry is not satisfactory.

This report will provide Council with the required information to determine the feasibility and priority of Whistle Cessation in the Town of Lamont.

COMMUNICATIONS

N/A

IMPLICATIONS OF DECISION

The report outlines requirements with costs of implementing whistle cessation through the Town of Lamont.

FINANCIAL IMPLICATIONS

N/A

POLICY AND/OR LEGISLATIVE REFERENCES

N/A

ATTACHMENTS

1. Grade Crossing Safety Assessment (Draft – for Review) CN Vegreville Sub, Mile 92.08 (Secondary Highway 831) – Lamont, AB Lamont Railway Crossing Safety Assessments
2. Grade Crossing Safety Assessment (Draft – for Review) CN Vegreville Sub, Mile 92.79 (50 Avenue) – Lamont, AB Lamont Railway Crossing Safety Assessments
3. Grade Crossing Safety Assessment (Draft - for Review) CN Vegreville Sub, Mile 93.26 (Range Road 195) – Lamont, AB Lamont Railway Crossing Safety Assessments
4. Whistle Cessation Requirements (Draft) Lamont Railway Crossing Safety Assessments

Report Prepared By: Tyler Edworthy, Director Operations & Infrastructure

Approved by CAO:

September 8, 2021
03-20-0074

Mr. Neil Renneberg
Select Engineering Consultants
Suite 100, 17413 – 107 Avenue NW
Edmonton, AB T5S 1E5

Dear Mr. Renneberg:

Re: **Grade Crossing Safety Assessment (Draft – for Review)**
CN Vegreville Sub, Mile 92.08 (Secondary Highway 831) – Lamont, AB
Lamont Railway Crossing Safety Assessments

1. INTRODUCTION

At the request of the Town of Lamont, Bunt & Associates Engineering Ltd. (Bunt) completed a detailed safety assessment of the above captioned grade crossing for the existing conditions as observed on Wednesday, August 11, 2021. **Figure 1.1** shows the location of the grade crossing.



Figure 1.1 – Site Location

Source: Transport Canada (2021)

2. OBJECTIVES

Transport Canada updated the *Grade Crossings Regulations* and *Grade Crossings Standards* in 2019. Consequently, this detailed safety assessment of the Highway 831 crossing was conducted in accordance with the methodology outlined in the *Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide* (Ottawa, ON: Transport Canada, April 2005) to:

- Address the needs of pedestrians, cyclists, and emergency vehicles.
- Identify the improvements that are required to ensure that the grade crossing complies with Transport Canada's updated *Grade Crossings Regulations* and *Grade Crossings Standards* of 2019.
- Identify the improvements that are required to facilitate whistle cessation at the subject crossing.
- Identify the order of magnitude costs of such improvements.
- Assess when these improvements should be implemented, such as:
 - **High** – Basic Requirement as per Section 58 of the *Grade Crossings Regulations* or safety related. Improvements must be implemented forthwith.
 - **Medium** – Additional Requirement as per Section 59 of the *Grade Crossings Regulations* and must be implemented by November 27, 2021.
 - **Low** – Improvements must be implemented as soon as practicable.
- Identify the party (Road Authority or Railway Company) that is responsible for the improvements.

3. METHODOLOGY

In order to complete the safety review of the subject crossing, Bunt completed the following work program:

- Background Information – Obtained available data pertaining to the subject grade crossing, including:
 - Reviewing data received from the Town;
 - Coordinating and consulting with the Railway Company (CN) to facilitate a safe field investigation / audit and acquisition of rail data; and
 - Obtaining traffic and crash data from the appropriate agencies:
 - Alberta Transportation – 5-year vehicle collision data; and
 - Transportation Safety Board of Canada – 5-year railway collision data.
- Field Investigation / Audit – Deployed a team to conduct a field investigation/audit of the subject railway crossing and adjacent roads and to record the findings in Appendix C2: Field Data Forms for Active Crossings of the *Canadian Road / Railway Grade Crossing Detailed Safety Assessment Field Guide* (Ottawa: Transport Canada, April 2005). This task included:
 - Visually examining the railway crossing and adjacent roads;
 - Reviewing traffic volume data (see **Appendix D**);
 - Assessing railway crossing sight distance and queuing;

- Identifying and recording any indication of trespassing in the area;
- Identifying and recording the type, condition, length, and height of any existing fencing in the area;
- Railway Crossing Assessment – Assessed the subject crossing using the criteria identified in the *Grade Crossings Regulations*, which included:
 - Analyzing traffic, collision, and rail activity data;
 - Reviewing the crash history at the railway crossing;
 - Assessing railway crossing sight distance and queuing;
 - Identifying any higher level of crossing protection needed to address potential sightline issues and to facilitate anti-whistling; and
 - Identifying remedial works and associated Class D cost estimates that are required to ensure the crossings meet the Basic Requirements as well as improvements required to permit whistle cessation.

The current acts, regulations, standards, and guidelines governing these federally regulated grade crossings as encapsulated in the *Grade Crossing Handbook* (Transport Canada, July 2019) and referred to as needed included:

- *Railway Safety Act* (RSA)
- *Grade Crossings Regulations* (Transport Canada, November 2014 amended March 2019)
- *Grade Crossings Standards* (Transport Canada, July 2014 amended April 2019)
- *Supplemental Engineering Design Guidance for Vulnerable Road Users at Grade Crossings* (Transport Canada, April 2019)

Other documents of note included:

- *Geometric Design Guide for Canadian Roads* (Transportation Association of Canada (TAC), June 2017)
- *Manual of Uniform Traffic Control Devices for Canada* (TAC, January 2014)
- *Alberta Transportation Geometric Design Guide* (February, 2021)

4. FIELD INVESTIGATION/AUDIT AND ASSESSMENT TEAM

The field investigation/audit of the subject grade crossing and adjacent roads was completed on Wednesday, August 11, 2021 between 9:30 and 11:30 a.m. The assessment team included:

- Ms. Nicole Farn, P.Eng, Bunt & Associates Engineering Ltd.
- Ms. Lena Yuan, TT, Bunt & Associates Engineering Ltd.

The railway company was invited to participate in the field investigation / audit but were not available to participate at the time of the visit. The weather was sunny, clear, and windy, and the roads were dry.

5. FINDINGS

5.1 Key Features

Highway 831 at the south end of the Town of Lamont intersects Canadian National (CN) Railway tracks at a grade crossing equipped with flashing light units and bells. For the purposes of this report, Highway 831 is described in a north-south orientation while the rail line is described as east-west. **Figure 5.1** illustrates key features of the grade crossing, while photos of the crossing can be found in **Appendix A**. Key features include:

Railway Tracks

- The railway track is a single track along which freight trains can travel at speeds of up to 40 mph.
- Train volume averages 5 daily trains based on data obtained from Transport Canada.

Road Approaches

- In the vicinity of the crossing, Highway 831 is a two-lane asphalt Rural Collector Undivided roadway with no sidewalk accommodation on either side. The posted speed limit is 50 km/hr, and the Average Annual Daily Traffic (AADT) is in the order of 1,400 vehicles per day, including many large, slow trucks that use this route (about 9% Trucks/Tractor Trailers).
- Design vehicle - WB20 semi-tractor trailer

Vulnerable Road Users

- There are no pedestrian or cyclist facilities provided at the subject crossing.
- Pedestrian and cycling traffic is anticipated to be low.

Crossing Surface

- Asphalt crossing surface with rubber flangeway gap fillers with a crossing angle of 120 degrees.



Figure 5.1 – Key features of the Hwy 831 grade crossing

Warning System

- Vehicles crossing the tracks are controlled by a RAILWAY CROSSING sign, flashing light units on both approaches, and a bell on the south approach; all maintained by CN.

Traffic Control Devices

- There are no prescribed traffic control devices on the road approaches to the railway crossing.
- In the vicinity of the crossing, a SB stop sign is located at the intersection of Highway 831 with Highway 15 approximately 65m south of the railway crossing.
- 50 Avenue intersects Highway 831 as the stop-controlled west leg of a T-intersection approximately 55m north of the railway crossing.

Fencing & Gates

- Neither fencing nor gates delineate the railway right-of-way within 400 m east or west of the crossing.

Sightlines

- Stopping Sight Distance (SSD)
 - North approach - 110 m (required and achieved)
 - South approach - 110 m required if approach was free-flow. However, the intersection of Hwy 15 with Highway 831 south of the crossing reduces the SSD required to 100 m measured from the stop-controlled west approach to Highway 15.
- Stopping design distance (D_{SSD}) and departure design distance ($D_{Stopped}$) do not apply at the crossing given the current level of protection.

Safety

- AT- no grade crossing-related vehicle collisions reported within the past five years.
- Transportation Safety Board of Canada - no grade crossing-related railway collisions reported within the past five years.
- A notable collision occurred at the crossing in 1960 involving a freight train and a school bus resulting in 16 fatalities and 27 injuries.

Whistle Cessation

- Train whistling currently occurs at this crossing and is required.
- No evidence of routine trespassing was observed.

Cross-product

- As illustrated in **Figure 5.2**, the minimum level of control that should be provided is flashing lights and bells. As noted earlier, the grade crossing is currently equipped with flashing lights and bells to actively warn motorists, cyclists, and pedestrians of approaching trains.

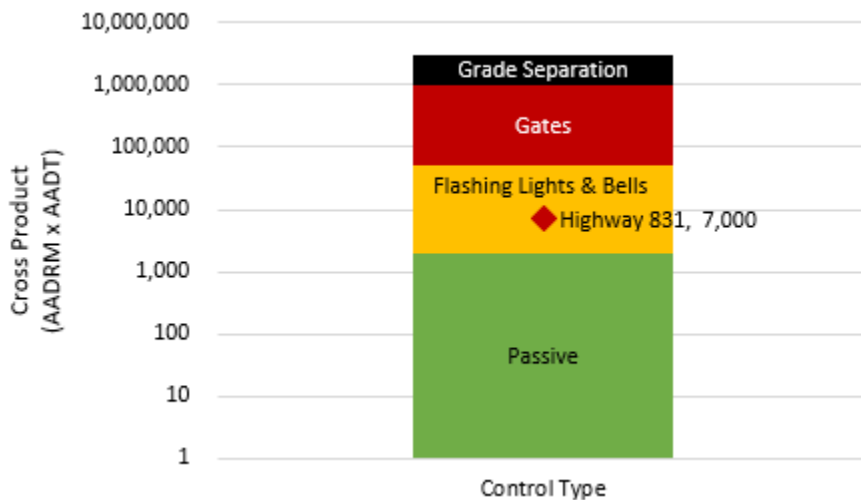


Figure 5.2 - Cross-Product at the Highway 831 grade crossing

Outstanding issues that affect safety and whistle cessation are outlined in **Appendix B** along with the suggested remediation. As data about the crossing were collected in accordance with Transport Canada’s *Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide*, the completed field data forms are attached as **Appendix C**.

6. RECOMMENDATIONS AND CONCLUSIONS

A field investigation / audit of the public grade crossing located at Highway 831 in Lamont, AB identified the following issues:

1. The crossing appears to comply with the Basic Requirements as per Section 58 of the *Grade Crossings Regulations* and the safety related requirements identified in the *Grade Crossings Regulations* and *Grade Crossings Standards* (High Priority).
2. The crossing appears to comply with the additional requirements of Section 59 identified in the *Grade Crossings Regulations* (Medium Priority).
3. In order for this crossing to comply with the remaining requirements identified in the *Grade Crossings Regulations* and *Grade Crossings Standards*, the road authority and railway company should implement the following measures as soon as practicable (Low Priority):
 - a. Re-paint stop bars and longitudinal pavements markings as per MUTCDC.
4. No additional measures would be required for the Highway 831 Crossing to be eligible for whistle cessation based on the criteria as set out in the *Railway Safety Act*.

Table 6.1 - Order of Magnitude Cost Estimate at Highway 831

ITEM	RECOMMENDED ACTION	RESPONSIBILITY		ORDER OF MAGNITUDE COST	PRIORITY			WHISTLE CESSATION
		ROAD AUTHORITY	RLWY CO.		HIGH	MEDIUM	LOW	
1	Paint double stop bars and longitudinal pavements markings as per MUTCDC standards on both approaches.	✓		\$10,000			✓	
	COST ESTIMATE (+/- 30%)			\$10,000				

- Notes:
1. Cost estimation based on information in Bunt files.
 2. All costs related to rail replacements or improvements must be confirmed by the railway company.
 3. Price does not include cost for any permits or fees associated with railway work.
 4. Price does not include any soft engineering costs (i.e. Geotechnical engineering or environmental engineering).
- High - Basic Requirement as per Section 58 of the *Grade Crossings Regulations* or safety related. Improvement must be implemented forthwith.
- Medium - Additional Requirement as per Section 59 of the *Grade Crossings Regulations* and must be implemented by November 27, 2021.
- Low - Improvement must be implemented as soon as practicable.

Note: The safety assessment of the grade crossing at CN Vegreville Sub, Mile 92.08 (Highway 831) in Lamont, AB covers physical features which may affect road and rail user safety and identifies potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this assessment were to be addressed, this would not confirm that the crossing is 'safe', rather, adoption of the recommendations should improve the level of safety at this facility.

If you have any questions regarding our review, please call me at (780) 732-5373 Ext. 222 or e-mail me at nfarn@bunteng.com.

Yours truly,
Bunt & Associates

Nicole Farn, P.Eng.
Senior Transportation Engineer

Appendix A – Site Photographs
Appendix B – Outstanding Safety Issues
Appendix C – Field Assessment Forms
Appendix D – Traffic Count Data

APPENDIX A – SITE PHOTOGRAPHS

Date of Pictures: Wednesday, August 11, 2021



Photo 1: Looking South along Highway 831 towards railway crossing



Photo 2: Looking South along Highway 831 at railway crossing



Photo 3: Looking Left from North approach



Photo 4: Looking Right from North approach



Photo 5: Looking North along Highway 831 towards railway crossing



Photo 6: Looking North along Highway 831 at railway crossing



Photo 7: Looking Left from South approach



Photo 8: Looking Right from South approach



Photo 9: Looking East at Railway Crossing



Photo 10: Looking West at Railway Crossing

APPENDIX B – OUTSTANDING SAFETY ISSUES

Table B.1: Outstanding Safety and Whistle Cessation Issues

OBSERVATION	SUGGESTED ACTION	RESPONSIBILITY		BASIC REQ	WHISTLE CESS. REQ	PRIORITY	ORDER OF MAGNITUDE COST	
		ROAD AUTH.	RLWY CO.					
GCS ARTICLE 7 - SIGHTLINES								
1. Signal bungalow located in northeast quadrant is within site triangle for vehicles stopped on north approach and looking left. Obstructs view immediately behind it; however can see beyond it down the rail.	No action required given active warning system provided at crossing.							
GCS ARTICLE 8 - SIGNS								
2. Paintline markings are worn. No stop bar on south approach. Single stop bar on north approach. Longitudinal Pavement markings are faded.	Paint double stop bars and longitudinal pavements markings as per MUTCDC standards on both approaches.	X				Low	\$10,000	
CS APPENDIX D - WHISTLING CESSATION								
3. The current warning system (FLB) meets the requirement for whistle cessation.	No action required.							
TOTAL (+/- 30%):							LOW - \$10,000	TOTAL - \$10,000
							WHISTLE CESSATION - \$0	TOTAL IF WHISTLE CESSATION IS REQUIRED - \$10,000

- Notes:
1. Cost estimation based on information in Bunt files.
 2. All costs related to rail replacements or improvements must be confirmed by the railway company.
 3. Price does not include cost for any permits or fees associated with railway work.
 4. Price does not include any soft engineering costs (i.e. geotechnical engineering or environmental engineering).
 5. The assignment of responsibility (Railway Company, Road Authority) reflects the *Grade Crossings Regulations*, and does not reflect financial responsibility and any other agreements between the Railway Company and the Road Authority.
- High** – Basic Requirement as per Section 58 of the *Grade Crossings Regulations* or safety related. Improvement must be implemented forthwith.
- Medium** – Additional Requirement as per Section 59 of the *Grade Crossings Regulations* and must be implemented by November 27, 2021.
- Low** – Improvement should be implemented as soon as practicable.

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APPENDIX C – FIELD ASSESSMENT FORMS

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Appendix C2: FIELD DATA FORMS



Active Crossings

Mile 92.08 (Secondary Highway 831) Vegreville Subdivision, CN Railway
Lamont, AB

NOTE: The safety assessment of this grade crossing covers physical features which may affect road and rail user safety, and identifies potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this assessment were to be addressed, this would not confirm that the crossing is 'safe', rather, adoption of the recommendations should improve the level of safety at this facility.

This assessment is based on the operation and site conditions noted. Should any operation and site conditions change, this assessment will no longer be valid and the grade crossing should be reassessed. Operation and site condition changes may include, but not limited to, design vehicle, posted roadway speed, major user groups such as cyclists for new bike route, road classification, addition of sidewalk, new bikeway, train speed, train frequency, road traffic volume range, new truck or transit route designation, etc.

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Date of Assessment: Wednesday, August 11, 2021

Assessment Team Members & Affiliations: Ms. Nicole Farn, P.Eng - Bunt
Ms. Lena Yuan, TT - Bunt

Reason for Assessment: periodic assessment significant change in infrastructure significant change in road or rail volumes
 cessation of whistling significant change in train operations significant change in road or rail speeds
 change in vehicle types 2+ fatal collisions in 5yr. period other collision experience (see below)

Track 1

Railway Company:	CN Railway		
Crossing Location:	Secondary Highway 831		
Location Number:	16649		
Municipality:	Town of Lamont		
Railway:	CN Railway		
Subdivision:	Vegreville	Mile:	92.08
Spur:	--	Mile:	--
Type of Grade Crossing:	FLB		
Track Type:	Class 3		

Road Authority:	Alberta Transportation		
Road Name / Number:	Secondary Highway 831		
Province:	Alberta		
Location Reference:	53.7544, -112.777		
Road Classification:	Rural Collector Undivided		
Notes:	N/A		

Collision History (5-year period): -

Property Damage Collisions: 0

+ Personal Injury Collisions: 0

Number of Persons Injured: 0

+ Fatal Injury Collisions: 0

Number of Persons Killed: 0

= Total Collisions in last 5 year period: 0

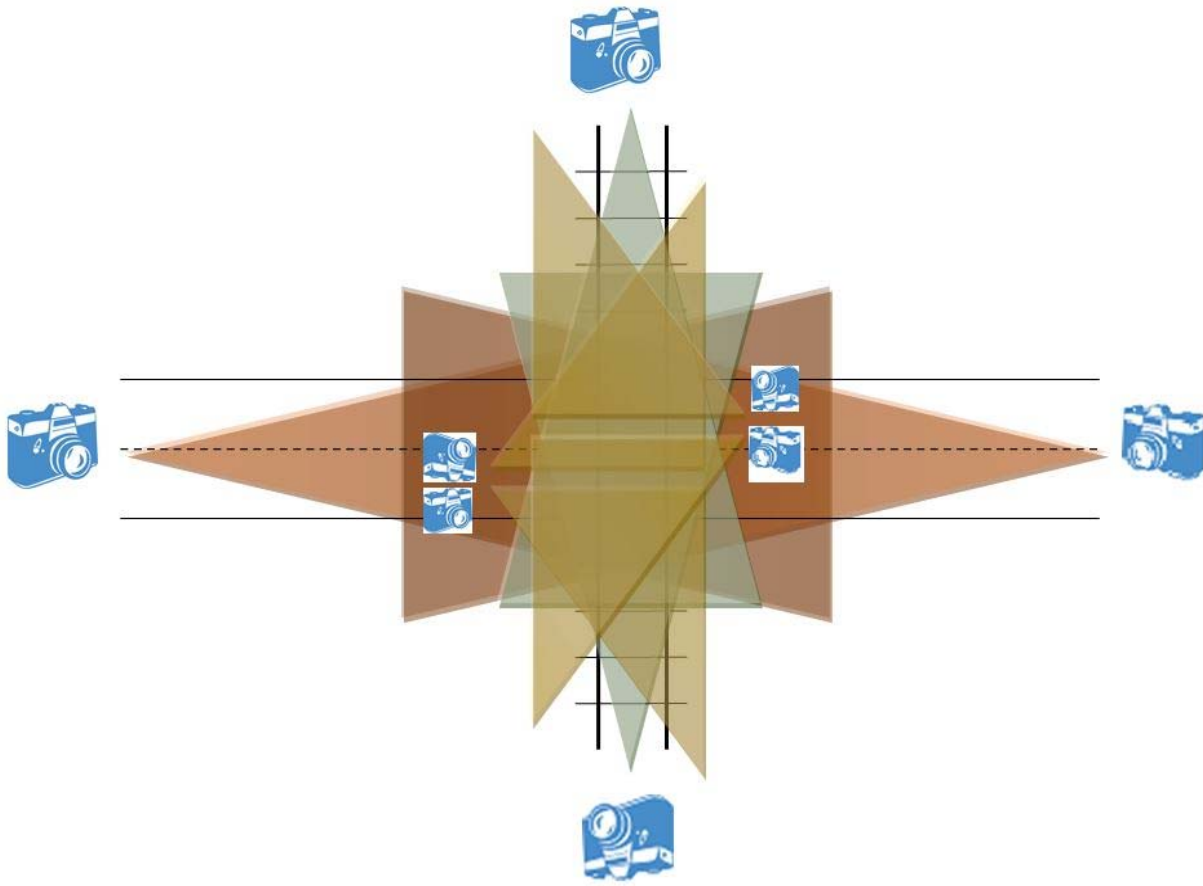
Details of Collisions:

No grade crossing-related vehicle collisions.

NOTE: All references to direction in this safety review are keyed to this diagram.



SCENE PHOTOGRAPHS



Source	Item	Reference
Look-up	Track Type: Class 3	
Rail	Number of Tracks: 1	
Rail	Maximum Railway Operating Speed, $V_{T=}$ 40 mph = 64.4 km/h	
Rail	Daily Train Volume Freight trains / day: 5 Passenger trains / day: 0	
Rail	Switching during daytime? No Switching during nighttime? No	
Look-up	Roadway Classification: Rural Collector Undivided	
Road	Avg. Annual Daily Traffic, AADT = 1,400 vpd Year of count: 2020	
Road	Future AADT = 1,400 vpd Forecast year: 2020	Note 2.
Road T	Other special road users? Type: N/A Daily Volume: N/A vpd	
Road	High seasonal fluctuation in volumes? N/A	
Road T	Is crossing on a School Bus route? Yes	
Road T	Do Dangerous Goods trucks use this roadway? Not Observed	
Road T	Cyclist Volumes = N/A cyclists / day Year of count:	
Road T	Pedestrian Volume = N/A peds / day Year of count:	
Road T	Elderly Volume = Not Observed	Table M-1
Road T	Assistive Device User Volume = Not Observed	
Road T	Visually Impaired Person Volume = Not Observed	
Road T	Children and Youth Volume = Not Observed	
Road T	Design Speed: 50 km/h Posted Speed: 50 km/h Maximum Operating Speed: 50 km/h	
Road T	Road Surface Type: Asphalt	
Road T	Sidewalk Surface Type: N/A	
Road T	Bike Lane Surface Type: N/A	
Road T	Multi-Use Path Surface Type: N/A	
observe	Surrounding Land Use: Industrial Urban / rural? Urban	
observe	Any schools, retirement homes, etc. nearby? Yes	

Notes:

T indicates information should be confirmed by field observation.

1. Road Authority should provide plans if available.

2. Estimate future AADT until next assessment (max. 7 years) if significant developments are expected or if a planned bypass may reduce volumes.

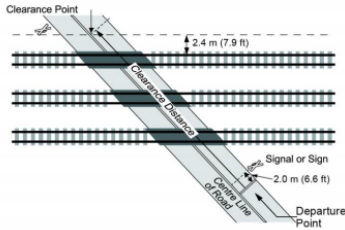
Comments Following Site Visit:

- Lamont High and Elementary schools are located approx. 500m north of the crossing.
- Lamont Arena located approx. 300m north of the crossing.
- No vulnerable user volume data available or observed.
- No sidewalks/bike lanes/multi-use paths present.
- Street lights provided along east side of north approach.

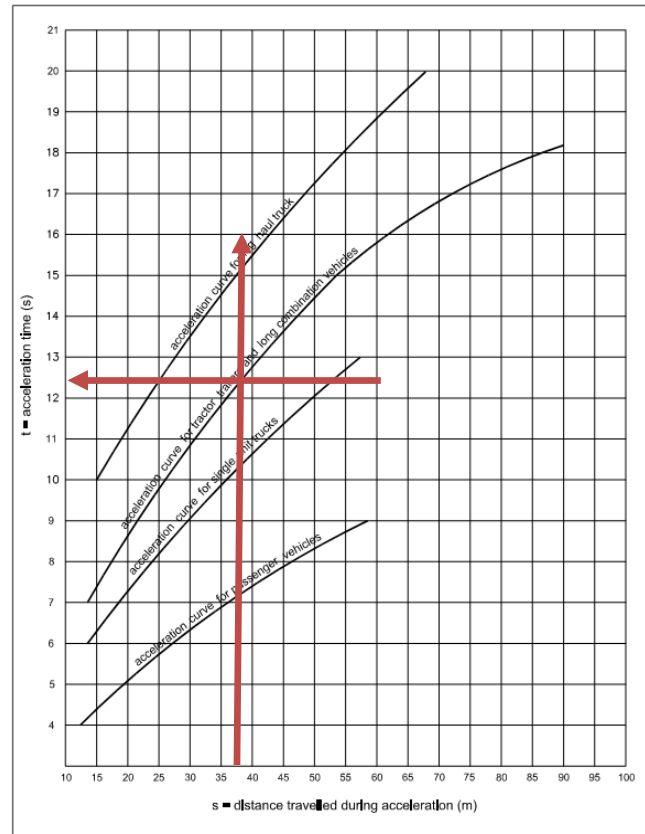
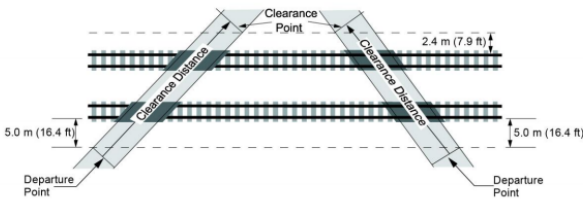
Figure 2.3.3.3 Assumed Acceleration Curves (Acceleration From Stop Control on Minor Road)¹⁰

Figure 10-1 – Clearance Distance (cd) for Grade Crossings

(a) For Grade Crossings with a Warning System or Railway Crossing Sign



(b) For Grade Crossings without a Warning System or Railway Crossing Sign



Geometric Design Guide for Canadian Roads

Table 2.3.3.2 Ratios of Acceleration Times on Grades

Design Vehicle	Cross Road Grade, %				
	-4	-2	0	+2	+4
Passenger Car	0.7	0.9	1.0	1.1	1.3
Single Unit Truck	0.8	0.9	1.0	1.1	1.3
Tractor-Semitrailer	0.8	0.9	1.0	1.2	1.7

Source	Item	Reference
	Design Vehicle	
Road	Type: WB-20 Tractor Semitrailers	Art. 10.3.1
	Length, L = 22.7 m	Art. 10.3.1
look-up	Stopping Sight Distance, SSD = 110 m	*Note
measure	Clearance Distance, cd = 15 m	Fig. 10-1
	Vehicle Travel Distance, S = L + cd = 37.7 m	Art. 10.2.1
	Vehicle Departure time, T _D = J + T = 14.5 sec	Art. 10.3.2
	J = 2 sec = Driver's reaction time	Art. 10.3.2
	T = (t x G) T= the time for the design vehicle to travel through S	
	T = 12.5 sec	
look-up	t = time for the design vehicle to accelerate through S t = 12.5 sec	GDG Fig. 2.3.3.3
look-up	G = ratio of acceleration time on grade/grade adjustment factor G = 1.0	GDG T2.3.3.2
	Road Grade Effect:	
Road T	Maximum general approach grade within 'S' = 0 % (Used for SSD Calculation)	
	Maximum general approach grade within 'S' = 0 % (Used for G Calculation)	
observe	Do field acceleration times exceed T _D ? Not Observed	
	Pedestrian, Cyclist & Assistive Devices Departure Time T_P = cd / V_P	Art. 10.3.3
calculate	T _P = 12.5 sec V _P = 1.2 m/s (maximum 1.22m/s)	Art. 10.3.3

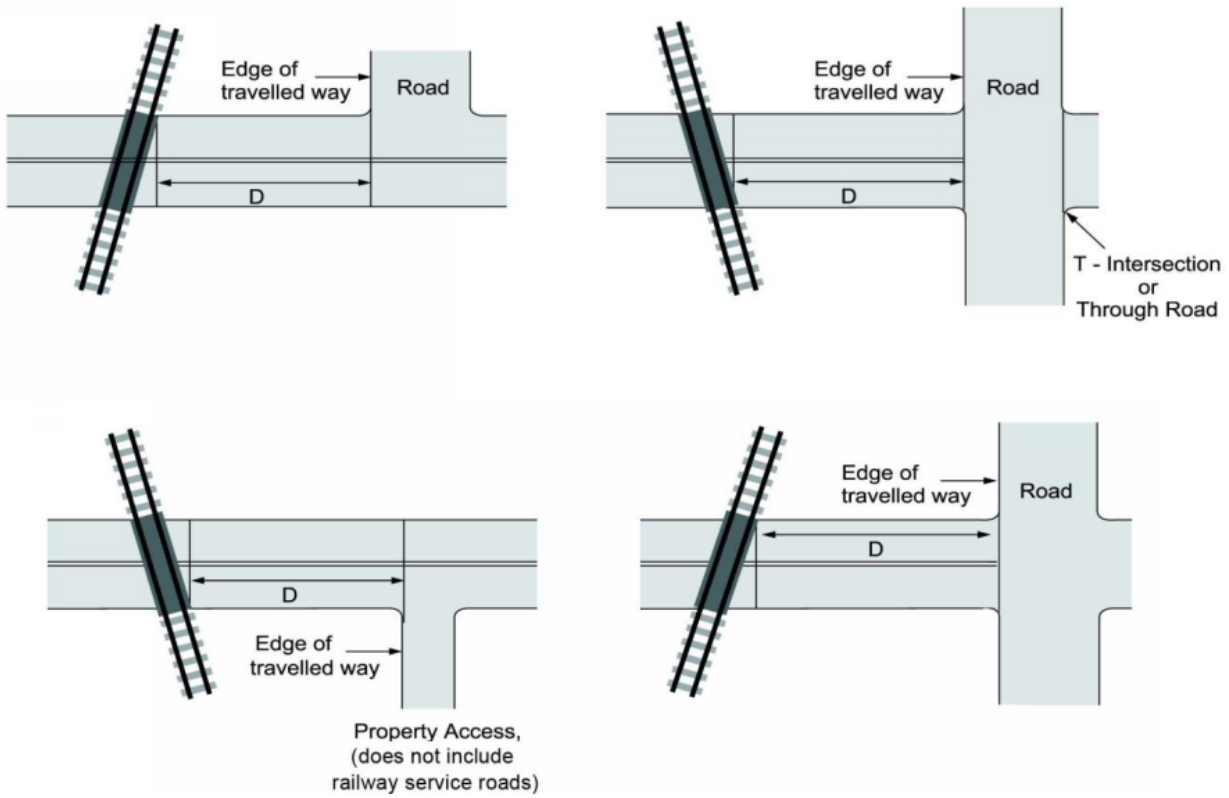
T indicates information should be confirmed by field observation

*Note: Refer to Factor 5 in Transport Canada: Guide for Determining Minimum Sightlines at Grade Crossings

Comments Following Site Visit:

No comments.

Figure 11-1 – Restrictions on the Proximity of Intersections and Entrances to Public Grade Crossings



Source	Item	Reference
look-up	Maximum Railway Operating Speed, $V_{T=}$	40 mph
measure	"D" N approach:	55 m
	"D" S approach:	66 m
observe	Is "D" less than 30m for either approach and does the maximum train speed exceed 15 mph?	No
observe	Are there pedestrian crossings on either road approach that could cause vehicles to queue back to the tracks?	No
observe	Is "D" insufficient such that road vehicles might queue onto the rail tracks?	No
observe	Is "D" insufficient such that road vehicles turning from a side street might not see warning devices for the crossing?	No

Comments Following Site Visit:
 -D on north and south approaches exceeds 30m.

GCS Article 5

Figure 5-1 – Grade Crossing Surface Dimensions

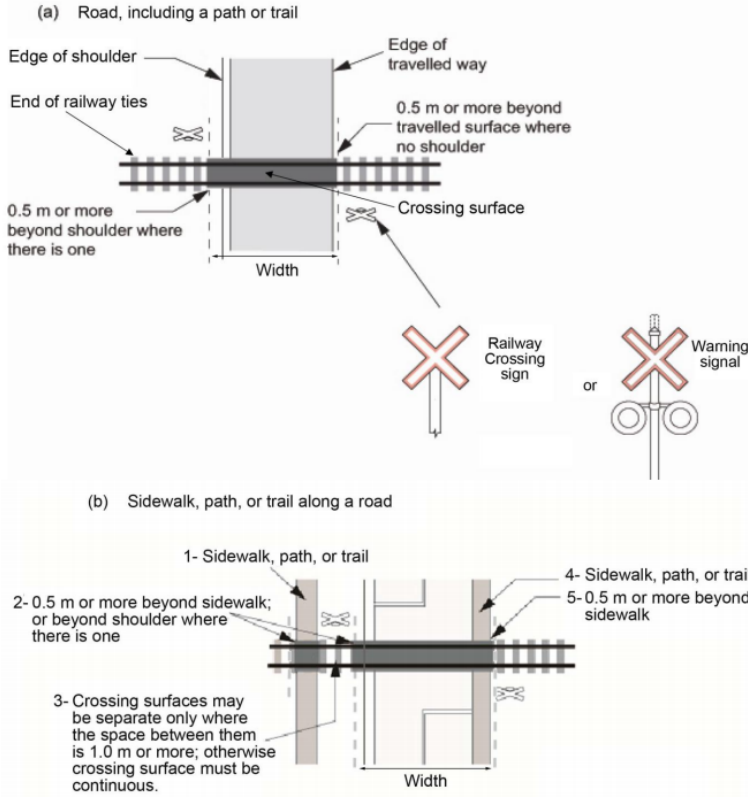
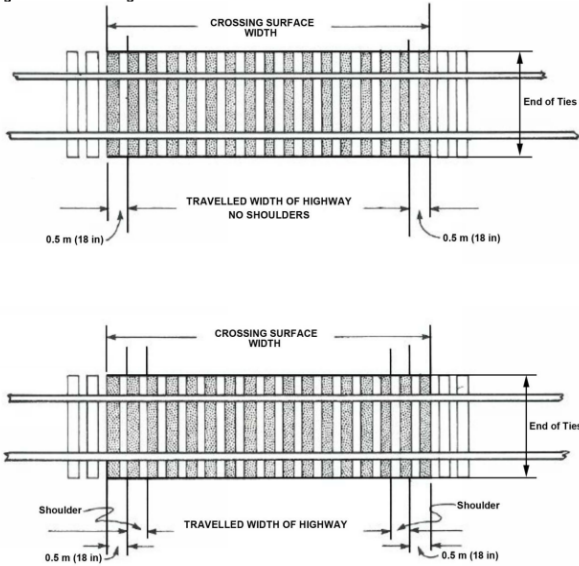


Table 5-1 Crossing Grade Crossing Surface – Cross Section

a) Flangeway		
Width	Minimum	65 mm
	Maximum for	
	Public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices (only the portion of the crossing surface used by persons with assistive devices)	75 mm
	All other grade crossings	120 mm
Depth:	Minimum	50 mm
	Maximum for	
	Public sidewalks, paths and trails designated by the road authority for use by persons using assistive devices (only the portion of the crossing surface used by persons with assistive devices)	75 mm
	All other grade crossings	No limit
(b) Field side gap		
A space is permitted on the outer side of the rail at rural locations, except for public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices.		
	Maximum width	120 mm
	Maximum depth	No limit
(c) Elevation of the top of the rail with respect to the crossing surface		
The top of the crossing surface must be installed as close as possible to the top of the rail within the wear limits below.		
Wear limits		
Public sidewalk, path or trail designated by the road authority for use by persons using assistive devices (only the portion of the crossing surface used by persons with assistive devices)		

Figure 3-1 – Crossing Surface




	Maximum distance of the top of the rail above crossing surface	13 mm
	Maximum distance of the top of the rail below crossing surface	7 mm
	All other public grade crossings: Maximum distance of the top of the rail above or below the crossing surface	25 mm
	Private grade crossings: Maximum distance of the top of the rail above or below the crossing surface	50 mm

Source	Item	Reference
observe	Is the crossing smooth enough to allow road vehicles, pedestrians, cyclists, and other road users to cross at their normal speed without consequence? Comment below. Yes	Art. 5.1
observe	Grade Crossing Surface material: Asphalt	
observe	Approach Road Surface Type: Asphalt	
observe	Approach Road Surface Condition: N approach Good S approach Good	
observe	Roadway Illumination? Yes	
measure	Grade Crossing Surface width 14 m (minimum width of travelled way and shoulder plus 0.5m on each side)	Fig 3-1 / 5-1
measure	Road Surface extension beyond travel lanes (minimum = 0.5m each side) 1.9 m on N approach 1.0 m on S approach	Fig 3-1 / 5-1
measure	Sidewalk/Path/Trail crossing width (minimum = 1.5m) N/A m on N approach N/A m on S approach	Fig 5-1
measure	Sidewalk/Path/Trail extension beyond sidewalk (minimum = 0.5m) N/A m on N approach N/A m on S approach	Fig 5-1
measure	Distance between Travel Lane and Sidewalk N/A m on N approach N/A m on S approach	Fig 5-1
	Cross-Section:	
measure	Flangeway width = 90 mm (min = 65mm; max = 75mm ¹ or 120mm)	Table 5-1
measure	Flangeway depth = 45 mm (min = 50mm; max = 75mm ¹ or no limit)	Table 5-1
measure	Field Side Gap width = none mm (maximum = 120 mm or 0')	Table 5-1
measure	Field Side Gap depth = none mm (maximum = no limit or 0')	Table 5-1
measure	Elevation of Top Rail above road surface = N/A mm (maximum = 13mm ¹ , 25mm, or 50mm)	Table 5-1
measure	Elevation of Top Rail below road surface = -17 mm (maximum = -7mm ¹ , -25mm, or -50mm)	Table 5-1

1. Public sidewalks, paths or trails designed by the road authority for use of persons using assistive devices

Comments Following Site Visit:
-Flangeway width and depth are within acceptable limits. -Field side gap was filled by compressible flange filler. -Elevation top of rail within acceptable limits.

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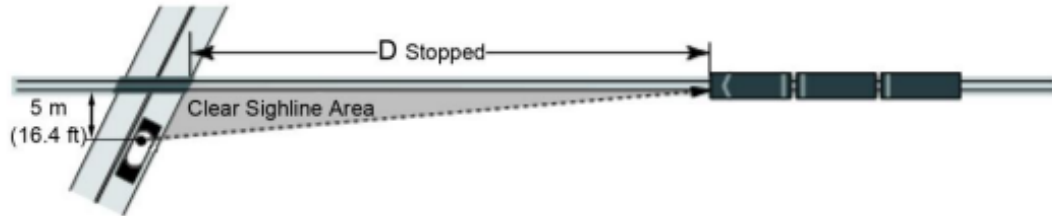
Source	Item	Reference
	Are horizontal and vertical alignments smooth and continuous throughout SSD?	
observe	N Approach Yes S Approach Yes	Art. 6-1
	Are the road lanes at least the same width on the crossing as on the road approaches?	
observe	N Approach Yes S Approach Yes	Art. 6-4
	Grades:	
	Road Classification = Rural Collector Undivided RC RCU	Art. 6-2 /
	Allowable Difference between roadway gradient and railway cross-slope= 1 %	GDG T-2.3.13.1
observe	Road approach gradient at crossing: 2 % on N approach 2 % on S approach	Art. 6-2 /
observe	Railway Cross Slope: 0 %	GDG T-2.3.13.1
	Are the allowable difference between the road approach gradient and railway cross-slope, or the railway gradient and the road approach cross-slope, in accordance with the design standards of the Geometric Design Guide (Table 2.3.13.1)?	
observe	N Approach: Yes S Approach: Yes	Art. 6-2 /
		GDG T-2.3.13.1
Rail T	Are rail tracks super-elevated? N Approach: No S Approach: No	
	At Public Grade Crossings:	
measure	Within 8m= 1.3 % on N approach 2.5 % on S approach (maximum = 2%) 8m to 18m= 4.6 % on N approach 1.6 % on S approach (maximum = 5%)	Art. 6-3
		Art. 6-3
	At Private Grade Crossings:	
measure	Within 8m= N/A % on N approach N/A % on S approach (maximum = 2%) 8m to 18m= N/A % on N approach N/A % on S approach (maximum = 10%)	Art. 6-3
		Art. 6-3
	At Grade Crossings for Pedestrian or Cyclist Use Only:	
measure	Within 5m= N/A % on N approach N/A % on S approach (maximum = 2%)	Art. 6-3
	At Grade Crossings for Persons using Assistive Devices:	
measure	Within 5m= N/A % on N approach N/A % on S approach (maximum = 1%)	Art. 6-3
Road T	General approach grade: 2 % N (maximum = 5%) 2 % S (maximum = 5%)	
Road T	If train speeds > 15mph, what is the angle between the crossing and the roadway? (70° min and 110° max w/o warning system; 30° min and 150° max with warning system) 120 °	Art. 6.5
observe	Condition of Road Approaches: anything that might affect stopping/acceleration. Good	
observe	Is there any evidence that "low bed" trucks have difficulty negotiating the crossing? i.e. might they bottom-out or get stuck? No	 MUTCDC WA 52

T indicates information should be confirmed by field observation.

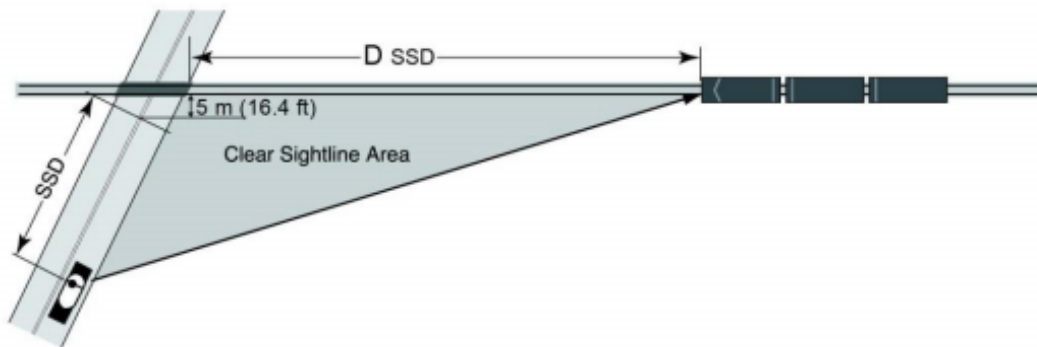
Comments Following Site Visit:
No comments

Figure 7-1 – Minimum Sightlines – Grade Crossings

(a) Sightlines for Users Stopped at a Grade Crossing (applicable to all quadrants).



(b) Sightlines for Users Approaching a Grade Crossing (applicable to all quadrants).



Driver Eye Height	= 1.05m	passenger vehicles, pedestrians, cyclists & assistive devices
	= 1.80m	buses & single-unit trucks
	= 2.10m	large trucks & tractor-trailers
Target Height	= 1.20m	above rails

Warning: some formulae are based on Imperial units while others are Metric

Source	Item	Reference
observe	Type of Grade Crossing: <input type="text" value="FLB"/> Are gates present? <input type="text" value="No"/>	
	SSD minimum = <input type="text" value="110"/> m	Sheet 5
measure	SSD actual: N approach = <input type="text" value=">110"/> m S approach = <input type="text" value="100"/> m	Art. 7.2
	D_{SSD} - Drivers Approaching a Grade Crossing w/o Stop Signs or Warning Systems D _{SSD} minimum = $1.47V_T \times T_{SSD}$ (ft) where V_T = railway design speed in mph (Sheet 5) $T_{SSD} = [(SSD + cd + L) / 0.278V]$ $T_{SSD} =$ <input type="text" value="10.6"/> s V = road design speed in km/h D _{SSD} minimum = <input type="text" value="625"/> ft <input type="text" value="190"/> m D _{SSD} actual: N approach = <input type="text" value=">500"/> m to driver's left; <input type="text" value=">350"/> m to driver's right S approach = <input type="text" value=">500"/> m to driver's left; <input type="text" value=">500"/> m to driver's right	Fig 7-1(b) Art. 7.2 Art. 7.2 Art. 7.2
measure		Fig 7-1
measure		Fig 7-1
	D_{STOPPED} - Drivers Stopped at a Grade Crossing with Stop Signs or Warning Systems w/o Gates D _{STOPPED-VEH} minimum = $1.47V_T \times T_D$ where T_D = design vehicle departure time (Sheet 5) D _{STOPPED-VEH} minimum = <input type="text" value="853"/> ft. <input type="text" value="260"/> m D _{STOPPED-VEH} actual: N approach = <input type="text" value=">350"/> m to driver's left; <input type="text" value="350"/> m to driver's right S approach = <input type="text" value=">350"/> m to driver's left; <input type="text" value=">350"/> m to driver's right	Fig 7-1(a) Art. 7.2 Art. 7.2
measure		Fig 7-1
measure		Fig 7-1
	D_{STOPPED} - Pedestrians, Cyclists & Persons Using Assistive Devices at a Grade Crossing w/o Gates: Ped./Cyclist Departure Time, T_P = <input type="text" value="12.5"/> sec. (from Sheet 5) Ped./Cyclist D _{STOPPED-PED} = $1.47V_T \times T_P$ where T_P = pedestrian departure time (Sheet 5) Ped./Cyclist D _{STOPPED-PED} = <input type="text" value="735"/> ft <input type="text" value="224"/> m Ped./Cyclist D _{STOPPED-PED} Actual: N approach = <input type="text" value=">350"/> m to cyclist's left; <input type="text" value="350"/> m to cyclist's right S approach = <input type="text" value=">350"/> m to cyclist's left; <input type="text" value=">350"/> m to cyclist's right	Art. 10.3.3 Art. 7.2 Art. 7.2
measure		Fig 7-1
measure		Fig 7-1
observe	Are there any obstacles within the sight triangles affect visibility? <input type="text" value="No"/>	

Comments Following Site Visit:

-SSD actual for South approach measured to NB stop control at Hwy 15 intersection.

-Dssd and Dstopped measured from SSDmin on North approach and from stop control across Hwy 15 on south approach.

-Signal bungalow located in northeast quadrant within sight triangle for vehicles stopped on north approach and looking left. Obstructs view vertically; however, can see beyond it down the rail.

GCS Article 8

Figure 8-1 – Railway Crossing Sign and Number of Tracks Sign

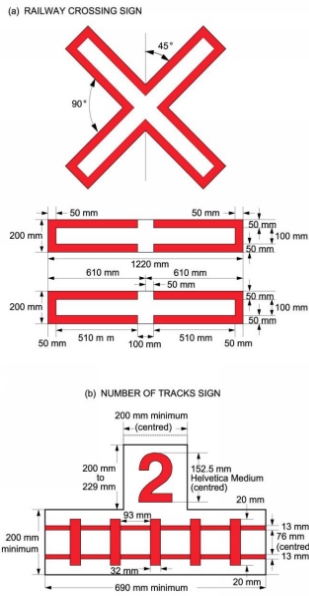


Figure 8-3 – Location of Railway Crossing Signs and Number of Tracks Signs (public grade crossings without warning systems)

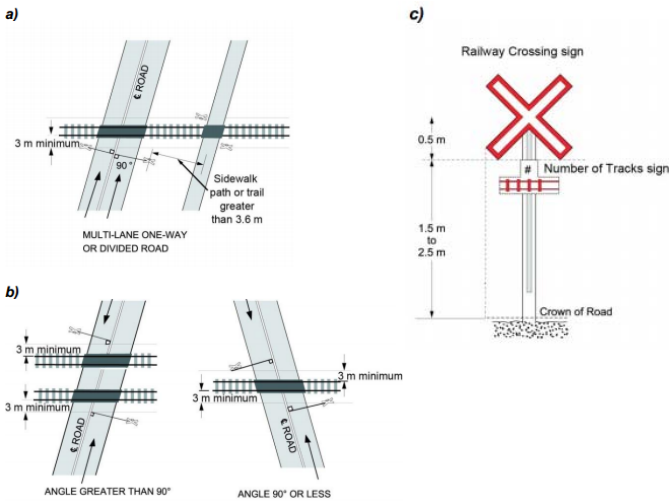


Figure 8-2 – Retroreflective Stripes on the Back of the Railway Crossing Sign and on the Sign Supporting Post (public grade crossings without a grade crossing warning system)

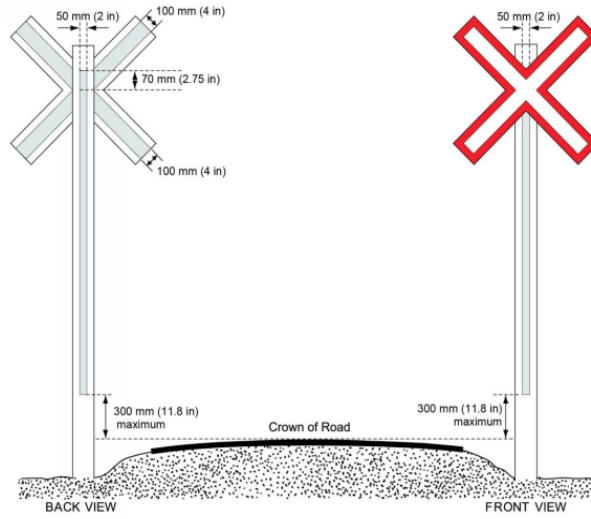
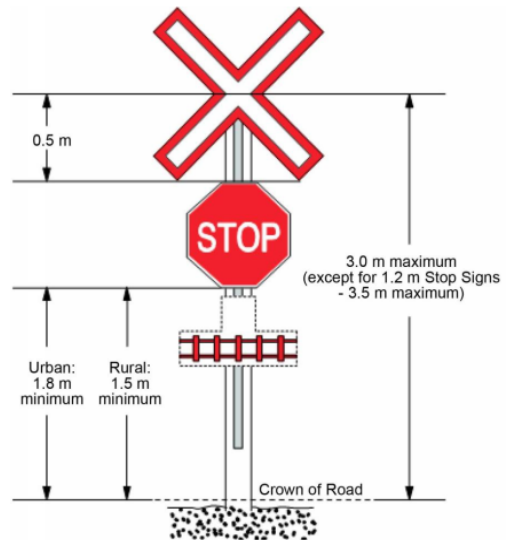



Figure 8-4 – Stop Signs




Source	Item	Reference
	RAILWAY CROSSING Sign and NUMBER OF TRACKS Sign 	Art. 8.1 and A2.2.7 MUTCDC
observe	Are signs present? N approach: Yes S approach: Yes	
measure	Location from railway (min. 3.0m): N: 4.0 m S: 3.0 m	Art. 8.1.5.b
measure	Location from curb (0.3m to 2.0m from curb, or 2.0 to 4.5m from edge of travelled way): N: 1.0 m S: 1.0 m	Art. 8.1.5.a
measure	Height (1.5m to 2.5m): N: N/A m S: N/A m	Fig 8-3
observe	Retroreflective stripes applied on the front and back of the Railway Crossing Sign supporting posts. N Front: No N Back: No	Fig 8-2
observe	S Front: No S Back: No	
measure	Retroreflectivity readings: N Sign: N/A cd/lux/m ² S Sign: N/A cd/lux/m ²	Fig 8-1
	Number of Tracks sign	Fig 8-1
observe	Are signs present? N approach: No S approach: No	
observe	Is the distance between two track centre lines > 30m?	N/A
observe	Is Number of Tracks sign provided for each railway crossing?	N/A
observe	Is the distance between the centre of a sidewalk, path or trail and the Railway Crossing Sign supporting post > 3.6m?	N/A
observe	Are separate Railway Crossing Signs provided for the sidewalk, path or trail?	N/A


Comments Following Site Visit:

- Railway crossing signs are provided and appear to be in good condition.
- Retroreflectivity was not measured.
- Unable to measure height to bottom of crossing sign. However, height to bottom of lights = approx. 2.5m

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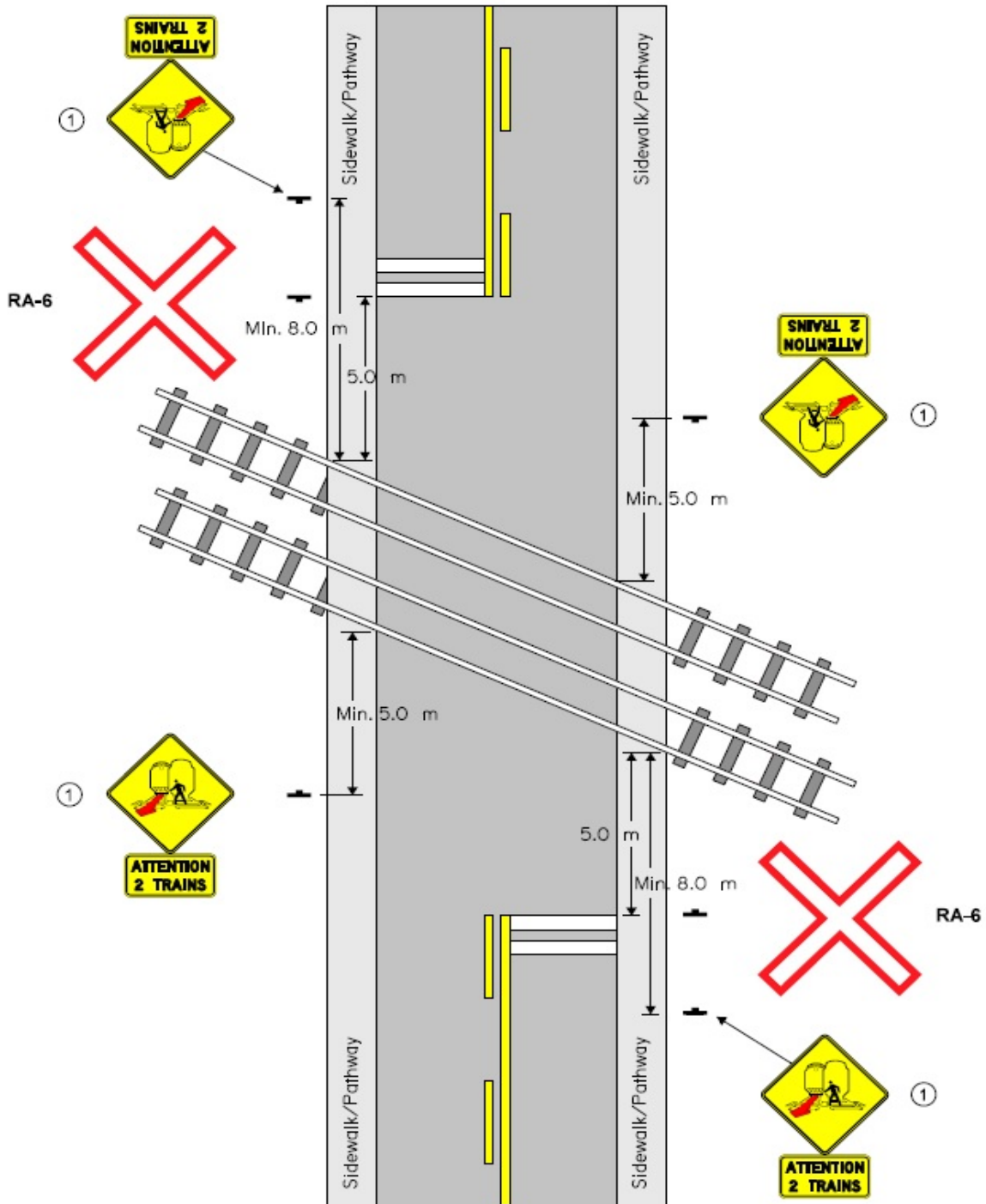
Source	Item				Reference
	RAILWAY CROSSING AHEAD Sign (WA-18) 				GCS Art. 8.2; MUTCDC Art. 3.4.2
	Posted speed limit?	50	km/h		
look-up	Are signs required?	N approach:	No	S approach:	No
observe	Are signs present?	N approach:	No	S approach:	No
observe	Appropriate orientation?	N approach:	N/A	S approach:	N/A
look-up	Distance required:	N approach:	N/A m	S approach:	N/A m
measure	Distance measured:	N approach:	N/A m	S approach:	N/A m
measure	Lateral placement:	N approach:	N/A m	S approach:	N/A m
measure	Height:	N approach:	N/A m	S approach:	N/A m

Comments Following Site Visit:
 Signs not currently present nor required.
 Not required according to grade crossing regulations/MUTCDC.


Source	Item				Reference
	ADVISORY SPEED Tab Sign (WA-7S) 				GCS Art. 8.2; MUTCDC Art. 3.2.5
	Posted speed limit?	50	km/h		
observe	Advisory speed limit?	N/A	km/h		
observe	Are signs present?	N approach:	No	S approach:	No
measure	Distance measured:	N approach:	N/A m	S approach:	N/A m
measure	Lateral placement:	N approach:	N/A m	S approach:	N/A m
measure	Height:	N approach:	N/A m	S approach:	N/A m


Comments Following Site Visit:
 Advisory speed tabs not present nor required.

SECOND TRAIN EVENT SIGN INSTALLATION



Note (1): Track clearance standards, which vary according to the company managing the railway, must be adhered to.

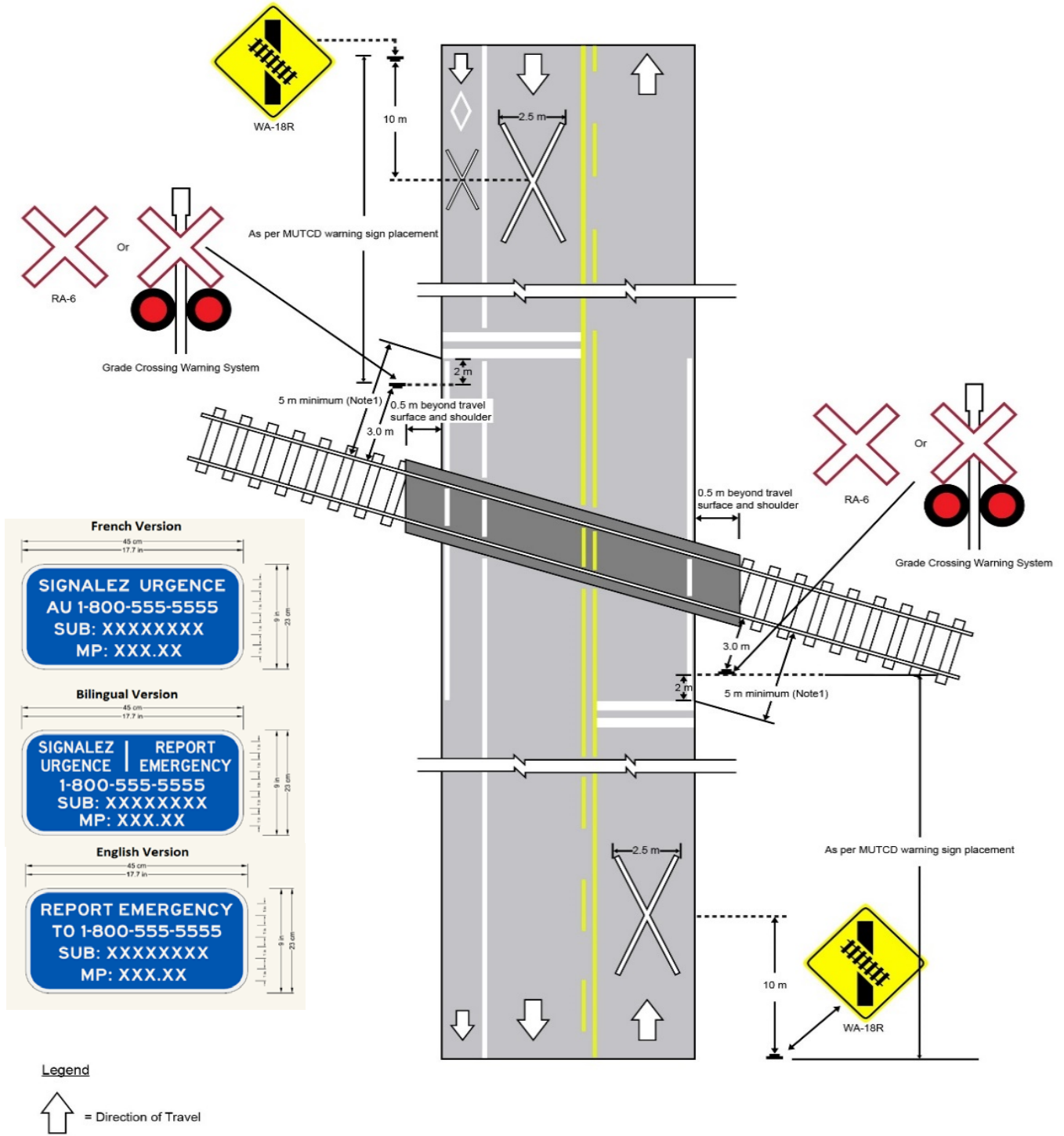
Source	Item				Reference	
	SECOND TRAIN EVENT WARNING Sign (WC-27 and WC-27S) 				Sect. A3.4.13 MUTCDC	
look-up	Are signs required?	N approach:	No	S approach:	No	
observe	Are signs present?	N approach:	No	S approach:	No	
measure	Distance from nearest rail:	N approach:	N/A m	S approach:	N/A m	(Max 0.5 m)
measure	Lateral placement:	N approach:	N/A m	S approach:	N/A m	(0.3m - 1m)
measure	Height:	N approach:	N/A m	S approach:	N/A m	(2m from top of sidewalk)
Comments Following Site Visit:						
- Signs not present nor required.						

Source	Item				Reference
	DO NOT STOP ON TRACKS Sign (RB-59) 				Sect. A2.8.4 MUTCDC
look-up	Are signs required?	N approach:	No	S approach:	No
observe	Are signs present?	N approach:	No	S approach:	No
measure	Distance from nearest rail:	N approach:	N/A m	S approach:	N/A m
measure	Lateral placement:	N approach:	N/A m	S approach:	N/A m
measure	Height:	N approach:	N/A m	S approach:	N/A m

T indicates information should be confirmed by field observation

Comments Following Site Visit:					
- Signs not present nor required.					

Typical Grade Crossing with Vehicular Road and Bicycle Lane



Source	Item	Reference
	EMERGENCY NOTIFICATION Sign	Art. 8.5
observe	Are signs present? N approach: Yes S approach: Yes	
observe	Is sign oriented to face traffic approaching the grade crossing or parallel to the road? N approach: Yes S approach: Yes	Art. 8.5
observe	Is sign legible to road vehicles? N approach: Yes S approach: Yes	Art. 8.5
observe	What is the condition of the sign? N approach: Good S approach: Good	Art. 8.5

T indicates information should be confirmed by field observation

Comments Following Site Visit:

Signs are present as required.

Source	Item	Reference
	PAVEMENT MARKINGS	
observe	Do pavement markings conform to Part C of the MUTCDC? No	Art. 8.8
observe	Are there lines to delineate sidewalks/paths/bicycle paths? N/A	

Comments Following Site Visit:

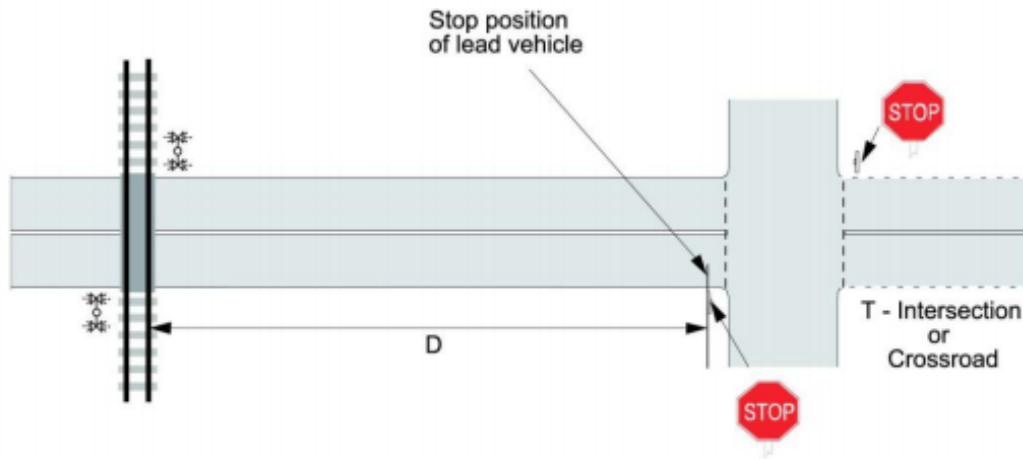
- Pavement markings do not conform with MUTCDC and are generally in poor condition (i.e. faded and worn).

General Comments Regarding Signs & Pavement Markings:

- No comments.

Figure 9-1 – Proximity of Warning Systems to Stop Signs and Traffic Signals

(a) Intersection with Stop Sign



(b) Intersection with Traffic Signal



Source	Item	Reference
	Warning System Warrants at Grade Crossings If any of A through E below are met, then a warning system is warranted	Art. 9
	Existing AADT = 1,400 vpd Forecast AADT = 1,400 vpd	Sheet 4
	Daily Train Volume = 5 trains per day	Sheet 4
	A. Cross-Product = 7,000 (2,000 min.) Warranted? YES	Art. 9.1.a
observe	B. Is there a sidewalk, path or trail? No Warranted? Maximum Rail Operating Speed = 40 mph Warranted if $V_T > 80\text{mph}$ without sidewalk OR if $V_T > 50\text{mph}$ with sidewalk NO	Art. 9.1.b,c
observe	C. Is railway design speed more than 15mph? Yes Warranted? Are there two or more lines of railway? No Can trains pass one another? No NO	Art. 9.1.d.i
measure	D. Is railway design speed more than 15mph? Yes Warranted? Is D < 30m at a stop-controlled intersection? No NO	Art. 9.1.d.ii Fig. 9-1a
measure	E. Is railway design speed more than 15mph? Yes Warranted? Is D < 60m at a signalized intersection? N/A NO	Art. 9.1.d.iii Fig. 9-1b

	Warning System Warrants for Grade Crossings with Gates: If any of A through E below are met, then a warning system with gates is warranted.	Art. 9.2.1.a
	A. Cross-Product = 7,000 (50,000 min.) Warranted? NO	
	B. Maximum Rail Operating Speed = 40 mph (max = 50mph) Warranted? NO	Sheet 4 Art. 9.2.1.c
observe	C. Are there two or more lines of railway? No Warranted? Can trains pass one another? No NO	Art. 9.2.1.b
measure	D. Is railway design speed more than 15mph? Yes Warranted? Is D < 30m at a stop-controlled intersection? No NO	Art. 9.2.1.d
measure	E. Is railway design speed more than 15mph? Yes Warranted? Is D < 60m at a signalized intersection? N/A NO	Sect. 9.2.1.e

	Warning System Warrants at Pedestrian Crossings: If Condition A is met, then a warning system is warranted. If Condition B is met, then a warning system with a gate is warranted	
Rail	A. Is the railway design speed more than 50mph? No Warranted? Is the sidewalk, path or trail outside the island circuit of an adjacent warning system? N/A NO	Art. 9.5
observe Rail	B. Is railway design speed more than 15mph? Yes Warranted? Are there two or more lines of railway? No Is the sidewalk, path or trail outside the island circuit of an adjacent warning system? N/A NO	Art. 9.6

Comments Following Site Visit:
- Crossing warrants Flashing Lights and Bells.

GCS Article 12

Figure 12-1 Warning Signal Assemblies

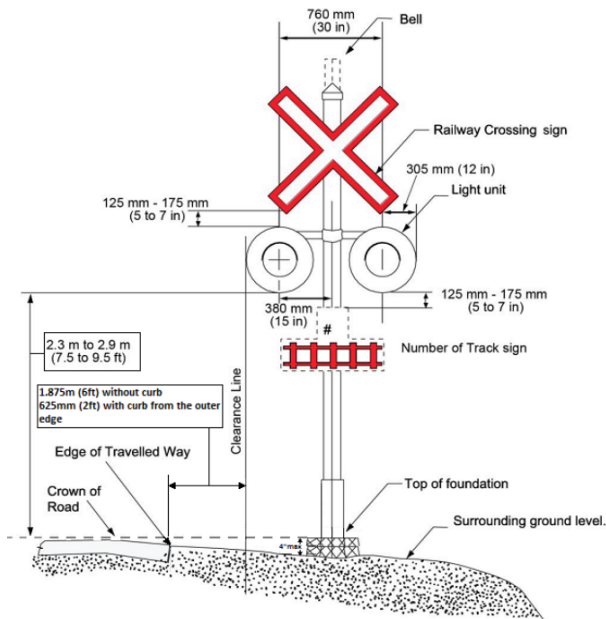
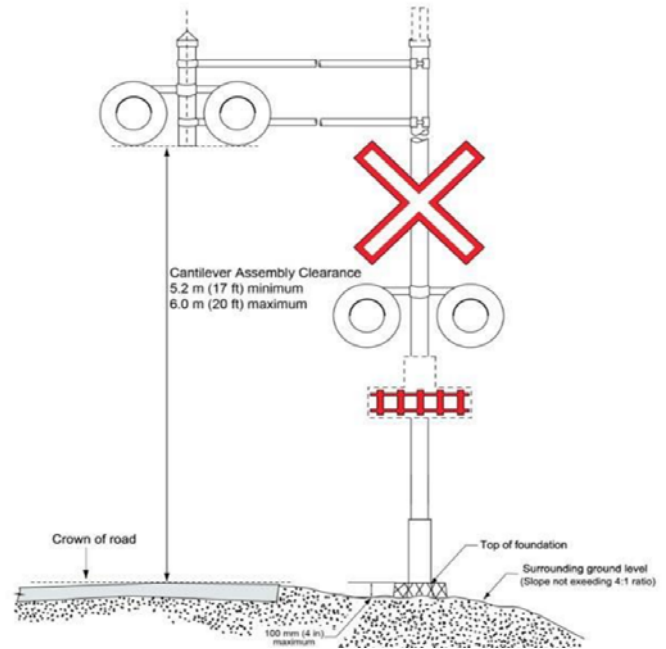


Figure 12-3 Cantilevers



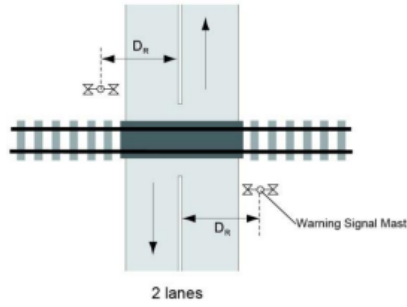
	Field Visit:		
measure	Warning System Clearance Distance from Curb:		
	Location from curb:	N: 1.0 m S: 1.0 m	Art. 12.1.a,b
	Minimum 625mm (2ft) from face of curb; or Minimum 1.875m (6ft) from edge of travelled way if no curb; or Minimum 625mm (2ft) from the outer edge of the road approach shoulder if no curb.		
measure	Distance between top of foundation and surrounding ground level (Max. 100mm (4in))		Art. 12.1.c
		N: 0.075 m S: 0.050 m	
measure	Slope of ground from foundation towards the travelled way (Max. 25% (4:1 ratio))		Art. 12.1.c
		N: 0.0 % S: 10.0 %	
observe	Light Units:	Yes Condition / alignment: Good	Art. 13, 14
observe	Bells:	Yes Condition: Good	Art. 15.1
observe	Gates:	No Condition: N/A	Art. 15.2
observe	Cantilever Lights:	No Condition: N/A	Art. 13.3
observe	Are warning signal assemblies & cantilevers in accordance with Figs 12-1 & 12-3?		Yes Fig 12-1 & 12-3
observe	Is warning system housing at least 9m from traveled way of the road and 8 m from the nearest rail & does not interfere with sightlines?		No Art. 7.2
observe	If only one sidewalk, is a bell located on the adjacent assembly?		No Sidewalk Art. 15.1.2
Rail T	Have all light units been aligned?		Not Observed Art. 14.2
Rail	Design Approach Warning Time: N approach = 30 sec S approach = 30 sec		
	Should be the greatest of:		
	- 20s, unless cd > 11m, increase the 20s by one second for each additional 3m	21 s	Art. 16.1.1
	- T _D	14.5 s	
	- T _P	12.5 s	
	- T _G + 15s (Gate decent time) + 5 s	30 s	
lookup	- Minimum warning time required for traffic signal pre-emption	0 s	
	- T _{SSD}	10.6 s	
Rail T	Actual Approach Warning Time:	N approach = N/A sec S approach = N/A sec	Art. 16.2

Comments Following Site Visit:

- Signal bungalow in the northeast quadrant is located within the sight triangle for a southbound driver stopped at the crossing.
- The flashing light unit alignment was not measured.

Figure 13-1 – Warning Signal Offsets Requiring Cantilevered Light Units

(a) Two-Way Road



(b) One-Way or Divided Road

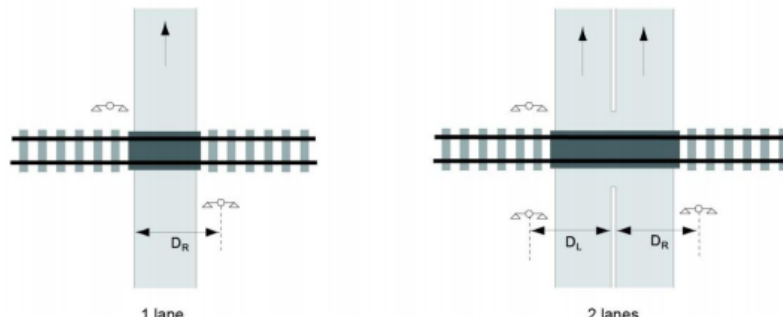
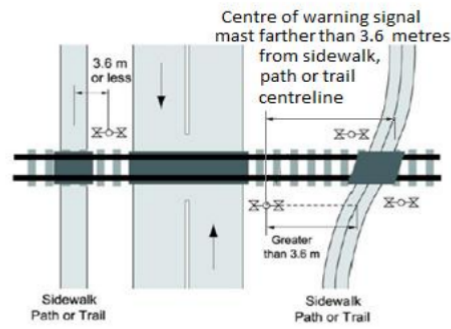
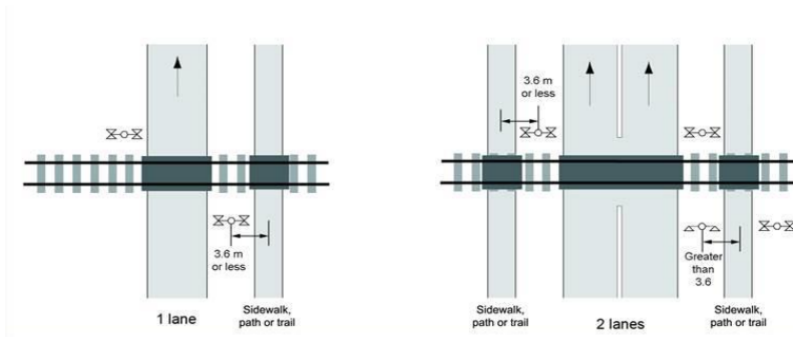


Figure 13-2 Sidewalks, Paths and Trails

a) Two-Way Road



b) One-Way Road

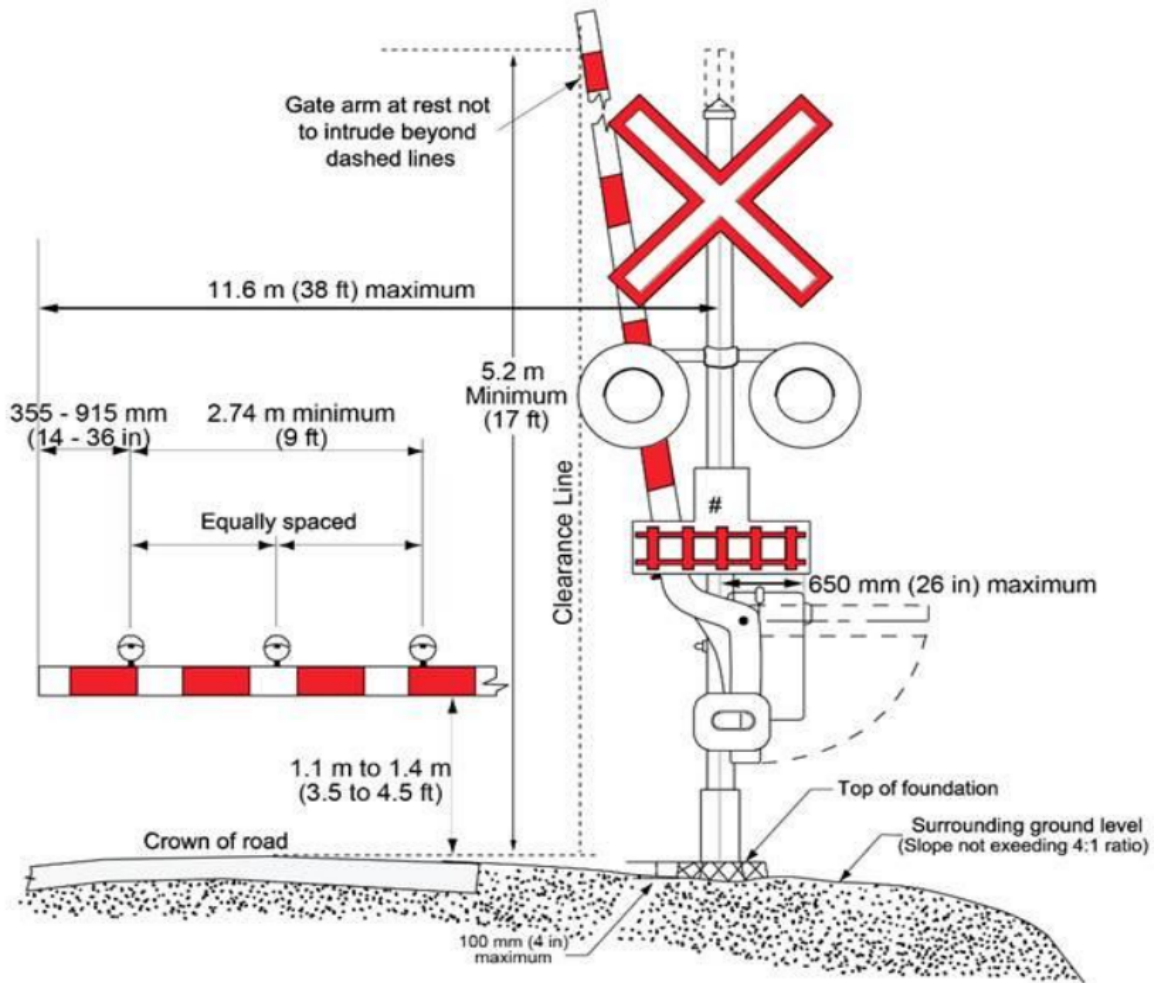


Source	Item	Reference
Number and Location		
measure	Alignment Height: N approach: 2.5 m S approach: 2.2 m	Fig 12-1
measure	Are Primary Light Units visible for at least the minimum SSD? N approach: Yes S approach: Yes	Art. 14.3.1.a
observe	Can back light units be seen by all stopped drivers for at least 15m?	Art. 14.5.1
observe	Are lights obscured by vehicles stopped on adjacent intersections?	No
observe	Are additional light units required for drivers as they begin to turn onto an approach road from an intersecting road/lane/parking lot, etc.?	No Art. 14.4
Cantilevered Light Units		
observe	Are lights present? N approach: No S approach: No	
measure	Distance from nearest rail: N approach: N/A m S approach: N/A m	Fig C1-6 MUTCDC
measure	Lateral Placement: N approach: N/A m S approach: N/A m	A1.7.2 MUTCDC
measure	Height: N approach: N/A m S approach: N/A m	A1.7.2 MUTCDC
measure	Does D_R exceed 7.7m? N approach: N/A S approach: N/A	Fig 13-1
look-up	Cantilever lights required? N approach: N/A S approach: N/A	
measure	Does D_L exceed 8.7m? N approach: N/A S approach: N/A	Fig 13-1
look-up	Cantilever lights required? N approach: No S approach: No	
Multiple Lanes		
observe	Can front light units be seen by all drivers in all lanes?	N/A
observe	Can back light units be seen by all stopped drivers in all lanes?	N/A
Sidewalks, paths, trails, etc.		
measure	Distance from path centerline to signal mast = N/A m (max. = 3.6m)	Art 13.4.1
observe	Are separate flashing light units required for pedestrians?	No Fig 13-2
measure	Alignment Height = N/A m (min. 1.6m above the centre of the sidewalk)	Art 14.6
measure	Distance of the flashing light units to the nearest rail= N/A m (min. 30m)	Art 14.6

Comments Following Site Visit:

- No comment.

Figure 12-2 Gates



Source	Item	Reference
	<p>Gate Arm for Vehicles: $T_G = \text{Gate arm clearance time is the greater of } T_{G_ssd} \text{ or } T_{G_stop}$ $T_{G_ssd} = \text{Gate Arm Clearance Distance from SSD/Max Road Operating Speed}$ $T_{G_ssd} = (SSD + 2m + L) / (0.27 * V)$ $T_{G_ssd} = 10.0 \text{ sec}$ $T_{G_stop} = \text{Gate Arm Clearance from stop} = J + (t_{G_stop} * G)$ $cd_{G_stop} = 2m + L = 24.7 \text{ m} \quad t_{G_stop} = 1.78 \text{ s}$ $T_{G_stop} = 3.8 \text{ sec}$ $T_G = 10.0 \text{ sec}$</p>	Art. 10.4.1
measure	Measure gate arm delay and compare with T_G : N approach: <input type="text" value="N/A"/> s S approach: <input type="text" value="N/A"/> s	
measure	Strips on gate arm are 406mm (16in.) wide? N: <input type="text" value="N/A"/> S: <input type="text" value="N/A"/>	Art. 12.1.d.i
observe	Strips on gate arm aligned vertically? N: <input type="text" value="N/A"/> S: <input type="text" value="N/A"/>	Art. 12.1.d.i
measure	Distance between the end of the gate arm and far edge of road approach (gap no larger than 1m): N approach: <input type="text" value="N/A"/> m S approach: <input type="text" value="N/A"/> m	Art. 12.1.e
observe	Do gates conform to Figure 12-2? N: <input type="text" value="N/A"/> S: <input type="text" value="N/A"/>	Fig 12-2
observe	<p>Check gate descent (10 to 15 sec) and ascent (6 to 12 sec) N Descent Time: <input type="text" value="N/A"/> sec. N Ascent Time: <input type="text" value="N/A"/> sec. S Descent Time: <input type="text" value="N/A"/> sec. S Ascent Time: <input type="text" value="N/A"/> sec.</p>	Art. 15.2.2
observe	<p>Gate Arm for Pedestrians, Cyclists, or both: Does the gate arm extend across the full width of the travelled way? N: <input type="text" value="N/A"/> S: <input type="text" value="N/A"/></p>	Art. 12.1.f.i
observe	If pedestrian path is < 3.5m, are there two lights on each gate arm? N: <input type="text" value="N/A"/> S: <input type="text" value="N/A"/>	Art. 12.2.f.ii

T indicates information should be confirmed by field observation

Comments Following Site Visit:
 - Gate arms not present nor required.

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Note: reference MUTCDC section A3.6.6, sign # WB-6



Source	Item	Reference
	PREPARE TO STOP AT RAILWAY CROSSING Sign (WB-6) is required if:	GCS Art 18 / MUTCDC A3.6.6
look-up	A. the grade crossing has or warrants an (automated) warning system. N approach: No S approach: No	
look-up	B. the road approach is an expressway. N approach: No S approach: No	
observe	C. at least one set of front light units on the warning system is not clearly visible from the SSD of at least one of the lanes of the road approach. N approach: No S approach: No	GCS Table 10.4 (GCR 43 and 51)
look-up	D. weather conditions repeatedly obscure the visibility of the warning system. N approach: No S approach: No	MUTCDC A3.6.6
	Are signs required? N approach: No S approach: No	MUTCDC A3.6.6
	Sign location:	
observe	Are signs present? N approach: No S approach: No	
measure	Distance from nearest rail: N approach: N/A m S approach: N/A m	
measure	Lateral Placement: N approach: N/A m S approach: N/A m	
measure	Height: N approach: N/A m S approach: N/A m	
	Calculated Distance of Light Units: (See <i>Advance Warning Flashers: Guidelines for Application and Installation</i> (TAC 2005)) $D = \frac{V_{t_{pr}}}{3.6} + \frac{V^2}{25.92(a + Gg)}$ V= 50 km/h (Posted speed limit) T _{pr} = 1.5 s (Perception/reaction time. Typically 1.5s) a= 2.6 m/s ² (Deceleration rate. Typically 2.6m/s ²) N approach G= 2 m/100m (Grade) S approach G= 2 m/100m (Grade) g= 9.81 m/s ² (gravitational acceleration 9.81m/s ²) Recommended Minimum AWF Distance from Railway = N approach: 55.3 m S approach: 55 m	<i>Advance Warning Flashers: Guidelines for Application and Installation</i> (TAC 2005)
look-up	Does measured distance meet the requirement? N approach: N/A S approach: N/A	
	Considering maximum prevailing speeds, geometry and traffic composition, check the following:	
observe	Does sign flash during operation of grade crossing warning system? N approach: N/A S approach: N/A	
measure	Distance from the sign to 2.4m beyond the furthest rail = N approach: N/A m S approach: N/A m	
observe	Does the sign flash before the actuation of the crossing warning system by the time required to travel from the sign to clear the crossing? N approach: N/A S approach: N/A	Art. 18.2.a
observe	Does the flashing sign precede the actuation of the descent of the gate arms by the time required to travel from the sign to clear the closest gate? N approach: N/A S approach: N/A	Art. 18.2.b

Comments Following Site Visit:

- Signs not present nor required.

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Source	Item	Reference
Road T	Are adjacent traffic signals interconnected with a grade crossing warning system? No	
Rail T	<u>note</u> : provide timing plan if interconnected.	
Road	Date of last pre-emption check? N/A	
	Warrants:	
	Is railway design speed more than 15mph? Yes	Warranted?
measure	Is D < 30m between traffic signal and rail? N/A	NO
	Field Checks:	
observe	Does interconnection provide adequate time to clear traffic from grade crossing before train's arrival? N/A	Art. 19.3
observe	Does interconnection prohibit road traffic from moving from the street intersection toward the grade crossing? N/A	Art. 19.3
observe	Any known queuing problems on the tracks? N/A	
observe	Are pedestrians accommodated during pre-emption? N/A	
observe	Have longer/slower vehicles been considered? N/A	
observe	Are supplemental signs needed for motorists? N/A	

T indicates information should be confirmed by field observation

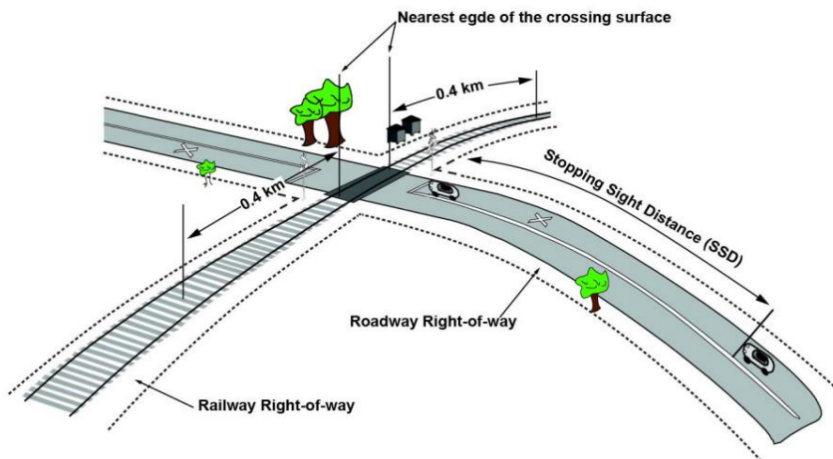
Comments Following Site Visit:
- Interconnection not required nor present.

GCS Appendix D

Table D-1 Requirements for Warning Systems at Public Grade Crossings within an Area without Whistling

	Column A		Column B	
Railway Design Speed	Grade Crossings for Vehicle Use		Grade Crossings For Sidewalks, Paths, or Trails with the centreline no closer than 3.6 m (12 ft) to a warning signal for vehicles	
	No. of Tracks		No. of Tracks	
	1	2 or more	1	2 or more
Column 1	Column 2	Column 3	Column 4	Column 5
1 – 25 km/h (15 mph)	FLB	FLB	No warning system requirement	No warning system requirements
25 – 81 km/h (16 – 50 mph)	FLB	FLB & G	FLB	FLB & G
Over 81 km/h (50 mph)	FLB & G	FLB & G	FLB & G	FLB & G
Legend :				
FLB is a warning system consisting of flashing lights and a bell.				
FLB & G is a warning system consisting of flashing lights, a bell and gates				

Figure D-1 Prescribed area for whistling cessation as per Article 23.1 of the RSA



Source	Item		Reference
Rail	Is train whistling prohibited at this crossing? 24 hrs per day?	No No	
observe	Is there evidence of routine unauthorized access (trespassing) on the rail line in the area of the crossing? Comment below.	No	
observe	Are the requirements of Table D-1 met?	Yes	Appendix D
look-up	What is the required type of warning system per Table D-1?	FLB	Appendix D

Comments Following Site Visit:

- No fencing along railway right of way.

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Human Factors:

- Control device visibility / background visual clutter.
- Driver workload through this area (i.e., are there numerous factors that simultaneously require the driver's attention such as traffic lights, pedestrian activity, merging/entering traffic, commercial signing, etc.).
- Driver expectancy of the environment (i.e., are the control measures in keeping with the design levels of the road system and adjacent environment).
- Need for positive guidance.
- Conflicts between road and railway signs and signals.

Environmental Factors:

- Extreme weather conditions.
- Lighting issues (night, dawn/dusk, tunnels, adjacent facilities, headlight or sunlight glare, etc.)
- Landscaping or vegetation.
- Integration w/ surrounding land use (e.g., parked vehicles blocking sightlines, merging traffic lanes, etc.)

All Road Users:

- Have needs of the following been met:
 - pedestrians (including strollers, baby carriages, and blind persons)
 - children
 - elderly
 - bicyclists
 - motorcyclists
 - over-sized trucks
 - buses
 - recreational vehicles
 - wheelchairs, scooters, walkers, etc.
 - rollerbladers

Comments Following Site Visit:

- No comments.

APPENDIX D – TRAFFIC COUNT DATA

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Turning Movement Summary Diagram

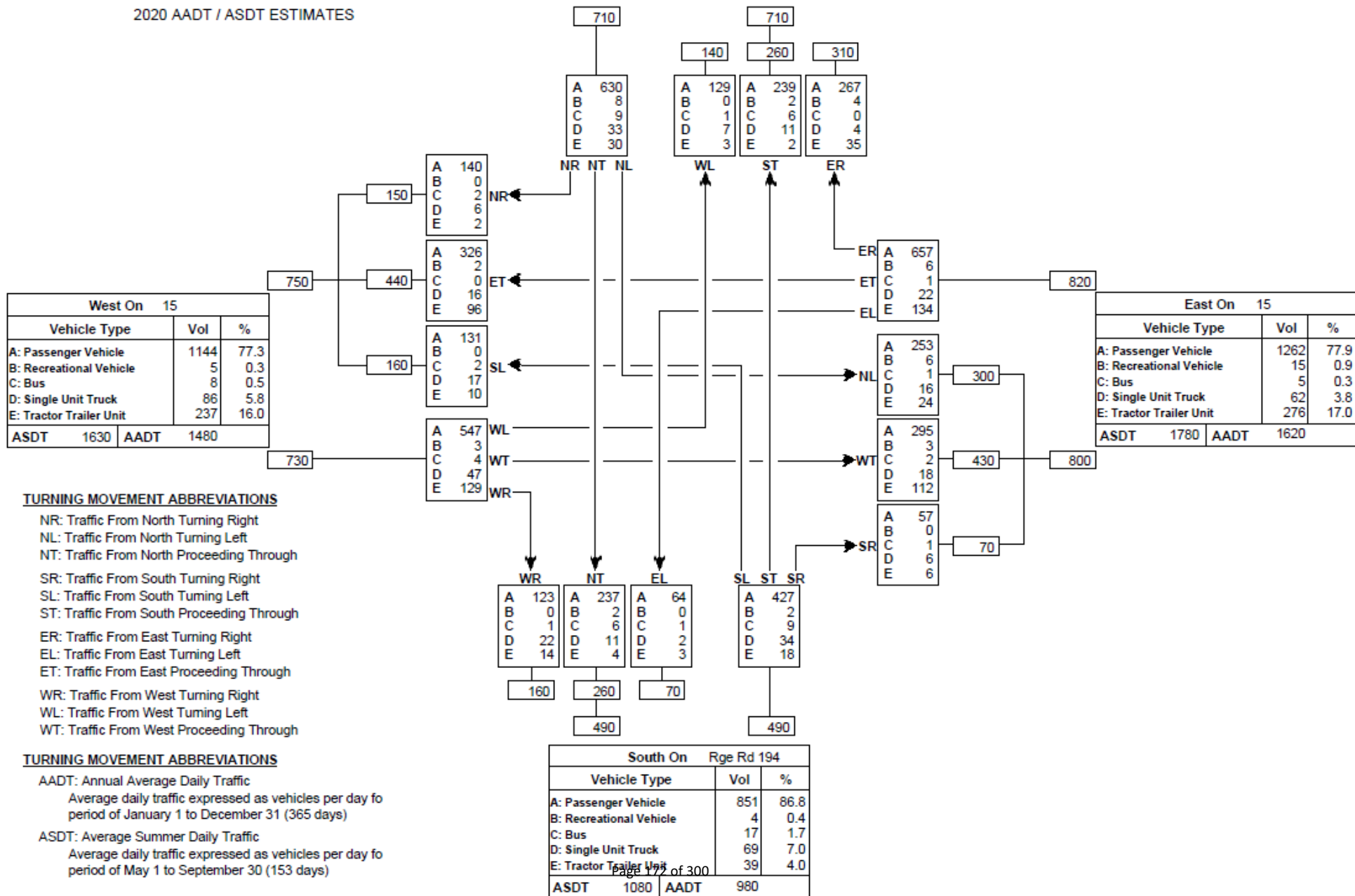
Reference No.: 997127

Intersection of:

15 & 831 W OF LAMONT EJ

2020 AADT / ASDT ESTIMATES

North On 831		
Vehicle Type	Vol	%
A: Passenger Vehicle	1265	89.1
B: Recreational Vehicle	14	1.0
C: Bus	16	1.1
D: Single Unit Truck	55	3.9
E: Tractor Trailer Unit	70	4.9
ASDT	1560	AADT
		1420





September 8, 2021
03-20-0074

Mr. Neil Renneberg
Select Engineering Consultants
Suite 100, 17413 – 107 Avenue NW
Edmonton, AB T5S 1E5

Dear Mr. Renneberg:

Re: **Grade Crossing Safety Assessment (Draft – for Review)**
CN Vegreville Sub, Mile 92.79 (50 Avenue) – Lamont, AB
Lamont Railway Crossing Safety Assessments

1. INTRODUCTION

At the request of the Town of Lamont, Bunt & Associates Engineering Ltd. (Bunt) completed a detailed safety assessment of the above captioned grade crossing for the existing conditions as observed on Wednesday, August 11, 2021. **Figure 1.1** shows the location of the grade crossing.

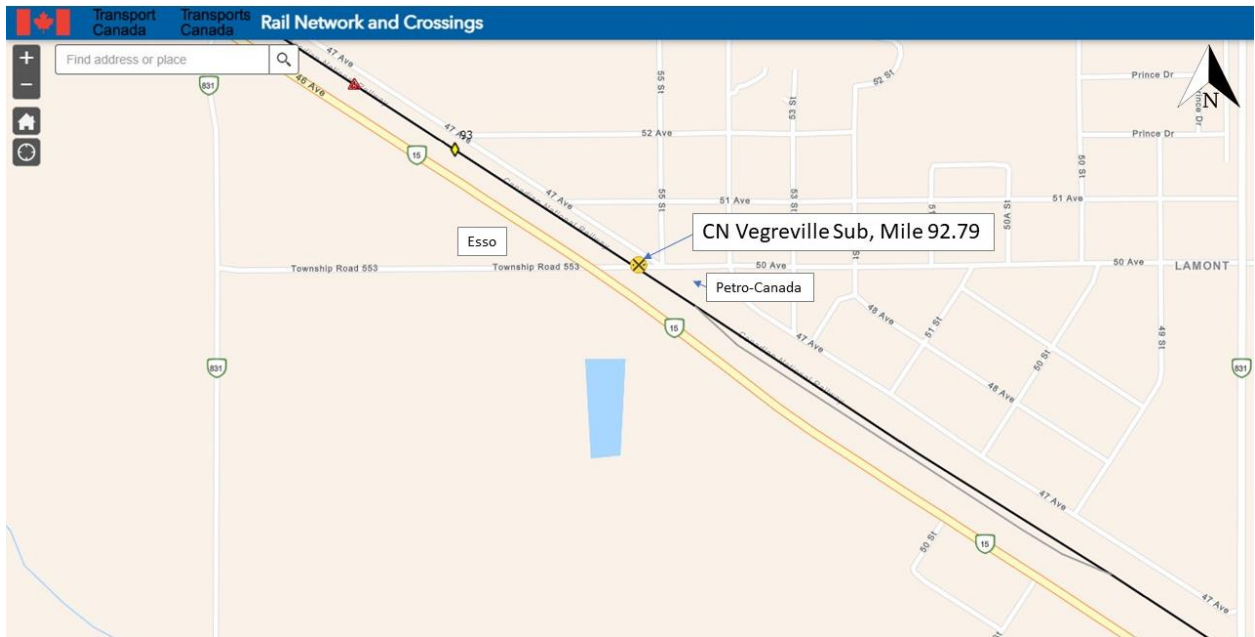


Figure 1.1 – Site Location

Source: Transport Canada (2021)

2. OBJECTIVES

Transport Canada updated the *Grade Crossings Regulations* and *Grade Crossings Standards* in 2019. Consequently, this detailed safety assessment of the 50 Avenue crossing was conducted in accordance with the methodology outlined in the *Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide* (Ottawa, ON: Transport Canada, April 2005) to:

- Address the needs of pedestrians, cyclists, and emergency vehicles.
- Identify the improvements that are required to ensure that the grade crossing complies with Transport Canada's updated *Grade Crossings Regulations* and *Grade Crossings Standards* of 2019.
- Identify the improvements that are required to facilitate whistle cessation at the subject crossing.
- Identify the order of magnitude costs of such improvements.
- Assess when these improvements should be implemented, such as:
 - **High** – Basic Requirement as per Section 58 of the *Grade Crossings Regulations* or safety related. Improvements must be implemented forthwith.
 - **Medium** – Additional Requirement as per Section 59 of the *Grade Crossings Regulations* and must be implemented by November 27, 2021.
 - **Low** – Improvements must be implemented as soon as practicable.
- Identify the party (Road Authority or Railway Company) that is responsible for the improvements.

3. METHODOLOGY

In order to complete the safety review of the subject crossing, Bunt completed the following work program:

- Background Information – Obtained available data pertaining to the subject grade crossing, including:
 - Reviewing data received from the Town;
 - Coordinating and consulting with the Railway Company (CN) to facilitate a safe field investigation / audit and acquisition of rail data; and
 - Obtaining traffic and crash data from the appropriate agencies:
 - Transportation Safety Board of Canada – 5-year railway collision data.
- Field Investigation / Audit – Deployed a team to conduct a field investigation/audit of the subject railway crossing and adjacent roads and to record the findings in Appendix C2: Field Data Forms for Active Crossings of the *Canadian Road / Railway Grade Crossing Detailed Safety Assessment Field Guide* (Ottawa: Transport Canada, April 2005). This task included:
 - Visually examining the railway crossing and adjacent roads;
 - Reviewing traffic volume data (see **Appendix D**);
 - Assessing railway crossing sight distance and queuing;
 - Identifying and recording any indication of trespassing in the area;

- Identifying and recording the type, condition, length, and height of any existing fencing in the area;
- Railway Crossing Assessment – Assessed the subject crossing using the criteria identified in the *Grade Crossings Regulations*, which included:
 - Analyzing traffic, collision, and rail activity data;
 - Reviewing the crash history at the railway crossing;
 - Assessing railway crossing sight distance and queuing;
 - Identifying any higher level of crossing protection needed to address potential sightline issues and to facilitate anti-whistling; and
 - Identifying remedial works and associated Class D cost estimates that are required to ensure the crossings meet the Basic Requirements as well as improvements required to permit whistle cessation.

The current acts, regulations, standards, and guidelines governing these federally regulated grade crossings as encapsulated in the *Grade Crossing Handbook* (Transport Canada, July 2019) and referred to as needed included:

- *Railway Safety Act* (RSA)
- *Grade Crossings Regulations* (Transport Canada, November 2014 amended March 2019)
- *Grade Crossings Standards* (Transport Canada, July 2014 amended April 2019)
- *Supplemental Engineering Design Guidance for Vulnerable Road Users at Grade Crossings* (Transport Canada, April 2019)

Other documents of note included:

- *Geometric Design Guide for Canadian Roads* (Transportation Association of Canada (TAC), June 2017)
- *Manual of Uniform Traffic Control Devices for Canada* (TAC, January 2014)

4. FIELD INVESTIGATION/AUDIT AND ASSESSMENT TEAM

The field investigation/audit of the subject grade crossing and adjacent roads was completed on Wednesday, August 11, 2021 between 12:00 and 1:30 p.m. The assessment team included:

- Ms. Nicole Farn, P.Eng, Bunt & Associates Engineering Ltd.
- Ms. Lena Yuan, TT, Bunt & Associates Engineering Ltd.

The railway company was invited to participate in the field investigation / audit but were not available to participate at the time of the visit. The weather was sunny, clear, and windy, and the roads were dry.

5. FINDINGS

5.1 Key Features

50 Avenue, running east-west through the Town of Lamont intersects Canadian National (CN) Railway tracks at a grade crossing equipped with flashing light units and bells at the west end of Town. For the purposes of this report, 50 Avenue is described in an east-west orientation while the rail line is described as north-south. **Figure 5.1** illustrates key features of the grade crossing, while photos of the crossing can be found in **Appendix A**. Key features include:

Railway Tracks

- The railway track is a single track along which freight trains can travel at speeds of up to 40 mph.
- The train volume averages 5 daily trains based on data obtained from Transport Canada.

Road Approaches

- In the vicinity of the crossing, 50 Avenue is a two-lane asphalt Rural Local Undivided roadway with no sidewalk accommodation on either side. The posted speed limit is 50 km/hr, and the Average Annual Daily Traffic (AADT) is in the order of 1,980 vehicles per day.
- Design vehicle – WB20 semi-tractor trailer

Vulnerable Road Users

- There are no pedestrian or cyclist facilities provided at the subject crossing.
- Pedestrian and cycling traffic is anticipated to be low.

Crossing Surface

- Asphalt crossing surface with rubber flangeway gap fillers with a crossing angle of 40 degrees.

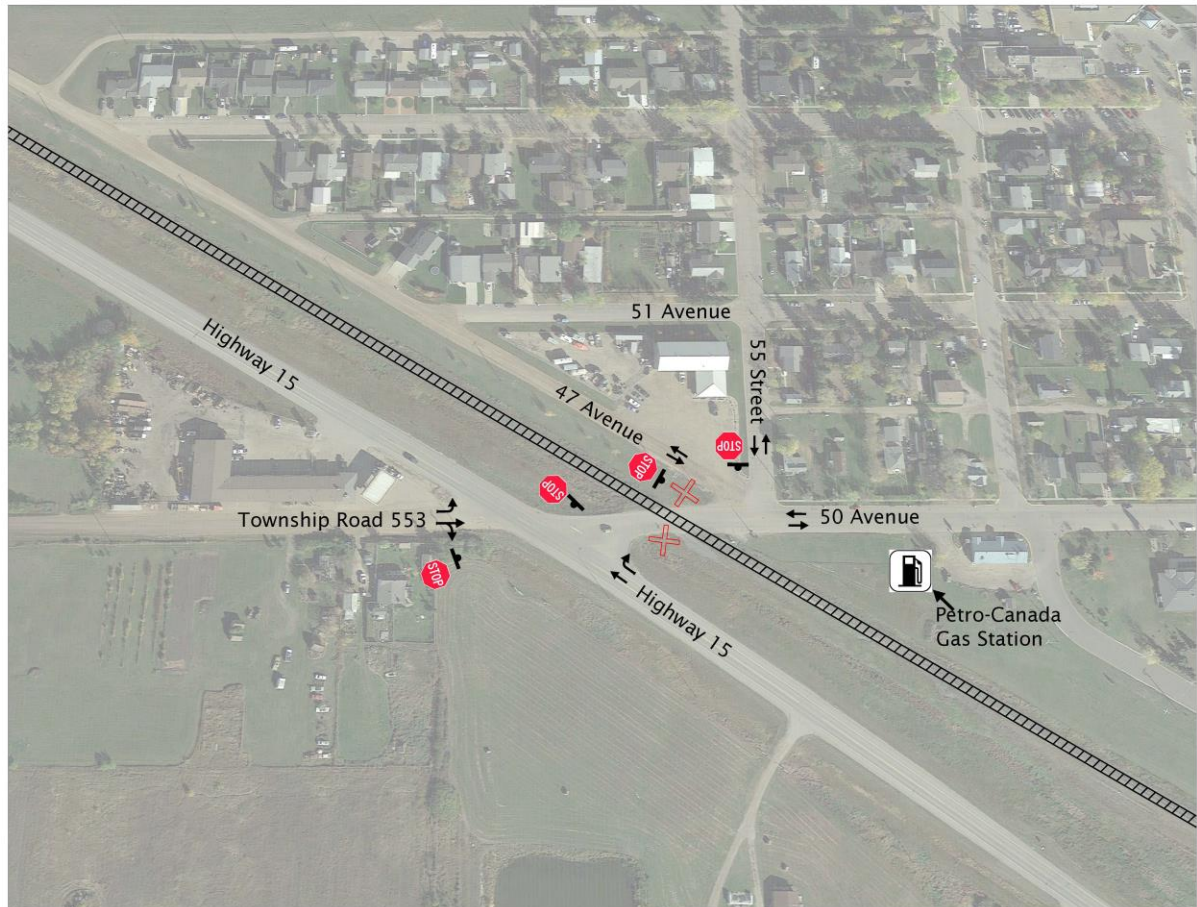


Figure 5.1 – Key features of the 50 Avenue grade crossing

Warning System

- Vehicles crossing the tracks are controlled by a RAILWAY CROSSING sign and flashing light units on each approach, and a bell on the east approach; all maintained by CN.
- Drivers turning northbound right from Hwy 15 onto 50 Ave cannot see the flashing light units.

Traffic Control Devices

- There are no prescribed traffic control devices at the railway crossing.
- In the vicinity of the crossing, a WB stop sign is located at the intersection of 50 Avenue with Highway 15 approximately 40 m west of the railway crossing.
- 55 Street intersects 50 Avenue as the stop-controlled north leg of a T-intersection <30 m (approximately 25 m) east of the railway crossing.

Fencing & Gates

- Neither fencing nor gates delineate the railway right-of-way within 400 m east or west of the crossing.

Sightlines

- Stopping Sight Distance (SSD)
 - East approach - 110 m required and achieved.
 - West approach - 110 m required if approach was free-flow. However, the intersection of Hwy 15 with 50 Avenue west of the crossing reduces the SSD required to 85 m from the stop-controlled west approach to Highway 15.
- Stopping design distance (D_{SSD}) and departure design distance ($D_{Stopped}$) do not apply at the crossing given the current level of protection.

Safety

- Transportation Safety Board of Canada – no grade crossing-related railway collisions reported within the past five years.

Whistle Cessation

- Train whistling currently occurs at this crossing and is required.
- No evidence of routine trespassing was observed.

Cross-product

- As illustrated in **Figure 5.2**, the minimum level of control that should be provided is flashing lights and bells. As noted earlier, the grade crossing is currently equipped with flashing lights and bells to actively warn motorists, cyclists, and pedestrians of approaching trains.

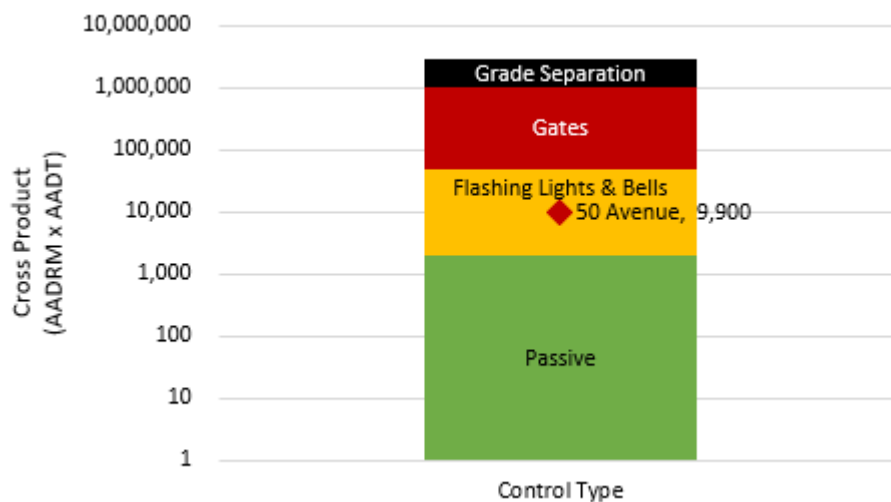


Figure 5.2 – Cross-Product at the 50 Avenue grade crossing

Outstanding issues that affect safety and whistle cessation are outlined in **Appendix B** along with the suggested remediation. As data about the crossing were collected in accordance with Transport Canada's *Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide*, the completed field data forms are attached as **Appendix C**.

6. RECOMMENDATIONS AND CONCLUSIONS

A field investigation / audit of the public grade crossing located at 50 Avenue in Lamont, AB identified the following issues:

1. In order for this crossing to comply with the Basic Requirements as per Section 58 of the *Grade Crossings Regulations* and the safety related requirements identified in the *Grade Crossings Regulations* and *Grade Crossings Standards*, the following measures should be implemented forthwith (High Priority).
 - a. Install supplemental flashing light units on the warning system on the west approach.
2. In order for this crossing to comply with the additional requirement as per Section 59 of the *Grade Crossings Regulations*, the road authority should implement the following measures by November 27, 2021 (Medium Priority):
 - a. Install DO NOT STOP ON TRACKS sign on the west approach.
3. In order for this crossing to comply with the remaining requirements identified in the *Grade Crossings Regulations* and *Grade Crossings Standards*, the road authority and railway company should implement the following measures as soon as practicable (Low Priority):
 - a. Paint double stop bars, RAILWAY CROSSING 'X' symbol pavement markings, and longitudinal pavements markings as per MUTCDC standards on both approaches.
4. No measures would be required for the Highway 50 Avenue Crossing to be eligible for whistle cessation based on the criteria as set out in the *Railway Safety Act*.

Table 6.1 - Order of Magnitude Cost Estimate at 50 Avenue

ITEM	RECOMMENDED ACTION	RESPONSIBILITY		ORDER OF MAGNITUDE COST	PRIORITY			WHISTLE CESSATION
		ROAD AUTHORITY	RLWY CO.		HIGH	MEDIUM	LOW	
1	Add supplemental flashing light units on the existing warning system on the west approach.			\$1,200	X			
2	Install DO NOT STOP ON TRACKS sign on west approach	X		\$600		X		
3	Paint double stop bars, RAILWAY CROSSING 'X' symbol, and longitudinal pavements markings on both approaches.	X		\$10,000			X	
COST ESTIMATE (+/- 30%)				\$11,800				

- Notes:
1. Cost estimation based on information in Bunt files.
 2. All costs related to rail replacements or improvements must be confirmed by the railway company.
 3. Price does not include cost for any permits or fees associated with railway work.
 4. Price does not include any soft engineering costs (i.e. Geotechnical engineering or environmental engineering).
- High - Basic Requirement as per Section 58 of the Grade Crossings Regulations or safety related. Improvement must be implemented forthwith.
- Medium - Additional Requirement as per Section 59 of the Grade Crossings Regulations and must be implemented by November 27, 2021.
- Low - Improvement must be implemented as soon as practicable.

Note: The safety assessment of the grade crossing at CN Vegreville Sub, Mile 92.79 (50 Avenue) in Lamont, AB covers physical features which may affect road and rail user safety and identifies potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this assessment were to be addressed, this would not confirm that the crossing is 'safe', rather, adoption of the recommendations should improve the level of safety at this facility.

If you have any questions regarding our review, please call me at (780) 732-5373 Ext. 222 or e-mail me at nfarn@bunteng.com.

Yours truly,
Bunt & Associates

Nicole Farn, P.Eng.
 Senior Transportation Engineer

- Appendix A – Site Photographs
- Appendix B – Outstanding Safety Issues
- Appendix C – Field Assessment Forms
- Appendix D – Traffic Count Data

APPENDIX A – SITE PHOTOGRAPHS

Date of Pictures: Wednesday, August 11, 2021



Photo 1: Looking West along 50 Avenue towards railway crossing



Photo 2: Looking West along 50 Avenue at railway crossing



Photo 3: Looking Left from East approach



Photo 4: Looking Right from East approach



Photo 5: Looking East along 50 Avenue towards railway crossing



Photo 6: Looking East along 50 Avenue at railway crossing



Photo 7: Looking Left from West approach



Photo 8: Looking Right from West approach



Photo 9: Looking South at Railway Crossing



Photo 10: Looking North at Railway Crossing

APPENDIX B – OUTSTANDING SAFETY ISSUES

Table B.1: Outstanding Safety and Whistle Cessation Issues

OBSERVATION	SUGGESTED ACTION	RESPONSIBILITY		BASIC REQ	WHISTLE CESS. REQ	PRIORITY	ORDER OF MAGNITUDE COST
		ROAD AUTH.	RLWY CO.				
GCS ARTICLE 7 - SIGHTLINES							
1. Signal bungalow located in southeast quadrant is within site triangle for vehicles stopped on east approach and looking left. Obstructs view immediately behind it; however can see beyond it down the rail.	No action required.						
GCS ARTICLE 8 - SIGNS							
2. DO NOT STOP ON TRACKS sign required for EB vehicles on west approach given location of downstream intersection <30m from tracks.	Install DO NOT STOP ON TRACKS sign on west approach.	X				Medium	\$600
3. Pavement markings are worn and generally not visible on either approach.	Paint double stop bars, RAILWAY CROSSING 'X' symbol pavement marking and longitudinal pavement markings, as per MUTCDC standards on both approaches.	X				Low	\$10,000
GCS ARTICLE 9 - WARNING SYSTEM SPECIFICATION							
4. Drivers turning northbound right from Hwy 15 onto 50 Ave cannot see the flashing light units.	Add supplemental flashing light units on the existing warning system on the west approach.		X			High	\$1,200
GCS ARTICLE 11 - LOCATION OF GRADE CROSSINGS							
5. On east approach, there is less than 30m between the tracks and a local roadway intersection.	See Note 2.						
GCS APPENDIX D - WHISTLING CESSATION							
6. The current warning system (FLB) meets the requirement for whistle cessation.	No action required.						
TOTAL (+/- 30%):							HIGH - \$1,200 MEDIUM - \$600 LOW - \$10,000 TOTAL - \$11,800 WHISTLE CESSATION - \$0 TOTAL IF WHISTLE CESSATION IS REQUIRED - \$11,800

- Notes:
1. Cost estimation based on information in Bunt files.
 2. All costs related to rail replacements or improvements must be confirmed by the railway company.
 3. Price does not include cost for any permits or fees associated with railway work.
 4. Price does not include any soft engineering costs (i.e. geotechnical engineering or environmental engineering).
 5. The assignment of responsibility (Railway Company, Road Authority) reflects the *Grade Crossings Regulations*, and does not reflect financial responsibility and any other agreements between the Railway Company and the Road Authority.
- High** – Basic Requirement as per Section 58 of the *Grade Crossings Regulations* or safety related. Improvement must be implemented forthwith.
- Medium** – Additional Requirement as per Section 59 of the *Grade Crossings Regulations* and must be implemented by November 27, 2021.
- Low** – Improvement should be implemented as soon as practicable.

APPENDIX C – FIELD ASSESSMENT FORMS

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Appendix C2: FIELD DATA FORMS



Active Crossings

Mile 92.79 (50 Avenue) Vegreville Subdivision, CN Railway
Lamont, AB

NOTE: The safety assessment of this grade crossing covers physical features which may affect road and rail user safety, and identifies potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this assessment were to be addressed, this would not confirm that the crossing is 'safe', rather, adoption of the recommendations should improve the level of safety at this facility.

This assessment is based on the operation and site conditions noted. Should any operation and site conditions change, this assessment will no longer be valid and the grade crossing should be reassessed. Operation and site condition changes may include, but not limited to, design vehicle, posted roadway speed, major user groups such as cyclists for new bike route, road classification, addition of sidewalk, new bikeway, train speed, train frequency, road traffic volume range, new truck or transit route designation, etc.

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Date of Assessment: Wednesday, August 11, 2021

Assessment Team Members & Affiliations: Ms. Nicole Farn, P.Eng - Bunt
Ms. Lena Yuan, TT - Bunt

Reason for Assessment:

<input type="checkbox"/> periodic assessment	<input type="checkbox"/> significant change in infrastructure	<input type="checkbox"/> significant change in road or rail volumes
<input checked="" type="checkbox"/> cessation of whistling	<input type="checkbox"/> significant change in train operations	<input type="checkbox"/> significant change in road or rail speeds
<input type="checkbox"/> change in vehicle types	<input type="checkbox"/> 2+ fatal collisions in 5yr. period	<input type="checkbox"/> other collision experience (see below)

Track 1

Railway Company:	CN Railway		
Crossing Location:	50th Avenue		
Location Number:	16652		
Municipality:	Town of Lamont		
Railway:	CN Railway		
Subdivision:	Vegreville	Mile:	92.79
Spur:	--	Mile:	--
Type of Grade Crossing:	FLB		
Track Type:	Class 3		

Road Authority:	Town of Lamont
Road Name / Number:	50 Avenue
Province:	Alberta
Location Reference:	53.75993, -112.79196
Road Classification:	Rural Local Undivided
Notes:	- Classification as per 2018-02-06 Road Authority Crossing Form provided.

Collision History (5-year period):	-		
Property Damage Collisions:	0		
+ Personal Injury Collisions:	0	Number of Persons Injured:	0
+ Fatal Injury Collisions:	0	Number of Persons Killed:	0
= Total Collisions in last 5 year period:	0		

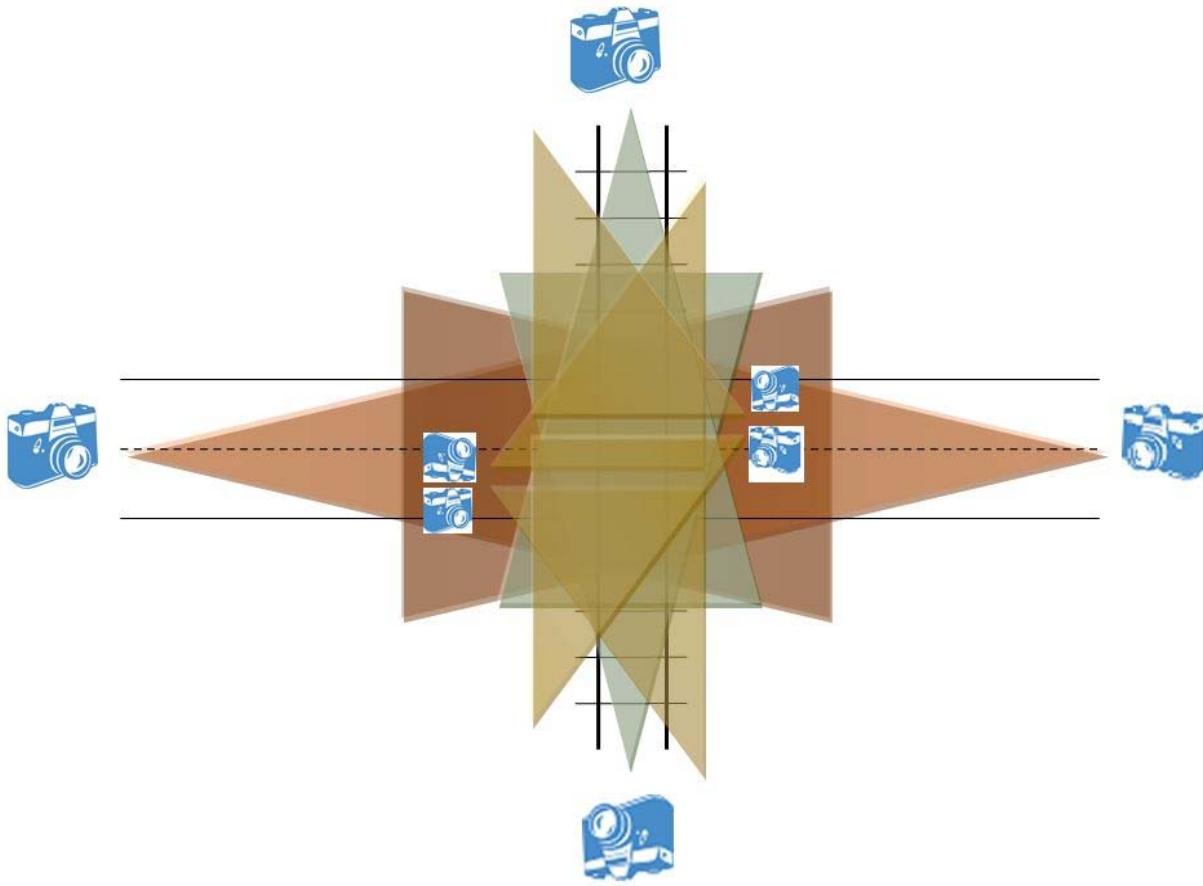
Details of Collisions:

No grade crossing-related vehicle collisions.

NOTE: All references to direction in this safety review are keyed to this diagram.



SCENE PHOTOGRAPHS



Source	Item	Reference
Look-up	Track Type: Class 3	
Rail	Number of Tracks: 1	
Rail	Maximum Railway Operating Speed, $V_{T=}$ 40 mph = 64.4 km/h	
Rail	Daily Train Volume Freight trains / day: 5 Passenger trains / day: 0	
Rail	Switching during daytime? No Switching during nighttime? No	
Look-up	Roadway Classification: Rural Local Undivided	
Road	Avg. Annual Daily Traffic, AADT = 1,980 vpd Year of count: 2020	
Road	Future AADT = 1,980 vpd Forecast year: 2020	Note 2.
Road T	Other special road users? Type: N/A Daily Volume: N/A vpd	
Road	High seasonal fluctuation in volumes? N/A	
Road T	Is crossing on a School Bus route? Not Observed	
Road T	Do Dangerous Goods trucks use this roadway? Not Observed	
Road T	Cyclist Volumes = N/A cyclists / day Year of count: N/A	
Road T	Pedestrian Volume = N/A peds / day Year of count: N/A	
Road T	Elderly Volume = High	Table M-1
Road T	Assistive Device User Volume = Not Observed	
Road T	Visually Impaired Person Volume = Not Observed	
Road T	Children and Youth Volume = Moderate	
Road T	Design Speed: 50 km/h Posted Speed: 50 km/h Maximum Operating Speed: 50 km/h	
Road T	Road Surface Type: Asphalt	
Road T	Sidewalk Surface Type: Concrete	
Road T	Bike Lane Surface Type: N/A	
Road T	Multi-Use Path Surface Type: N/A	
observe	Surrounding Land Use: Residential Urban / rural? Urban	
observe	Any schools, retirement homes, etc. nearby? Yes	

Notes:

T indicates information should be confirmed by field observation.

1. Road Authority should provide plans if available.
2. Estimate future AADT until next assessment (max. 7 years) if significant developments are expected or if a planned bypass may reduce volumes.

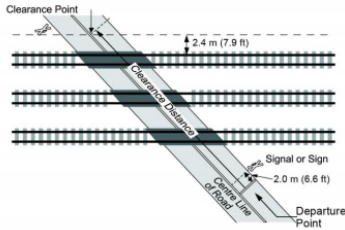
Comments Following Site Visit:

- 50 Avenue has curb and gutter east of 55 Street and has shoulders west of 55 Street.
- No vulnerable user volume data available or observed.
- No sidewalks/bike lanes/multi-use paths present.
- Street lights provided on Hwy 15 and on east approach (50 Ave) of rail crossing.

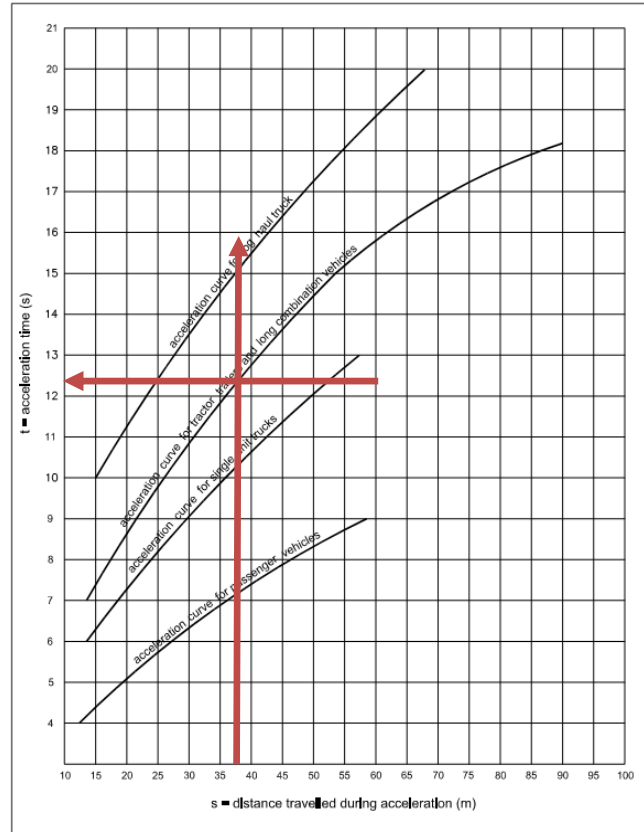
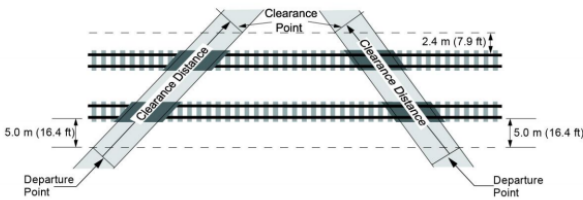
Figure 2.3.3.3 Assumed Acceleration Curves (Acceleration From Stop Control on Minor Road)¹⁰

Figure 10-1 – Clearance Distance (cd) for Grade Crossings

(a) For Grade Crossings with a Warning System or Railway Crossing Sign



(b) For Grade Crossings without a Warning System or Railway Crossing Sign



Geometric Design Guide for Canadian Roads

Table 2.3.3.2 Ratios of Acceleration Times on Grades

Design Vehicle	Cross Road Grade, %				
	-4	-2	0	+2	+4
Passenger Car	0.7	0.9	1.0	1.1	1.3
Single Unit Truck	0.8	0.9	1.0	1.1	1.3
Tractor-Semitrailer	0.8	0.9	1.0	1.2	1.7

Source	Item	Reference
	Design Vehicle	
Road	Type: WB-20 Tractor Semitrailers	Art. 10.3.1
	Length, L = 22.7 m	Art. 10.3.1
look-up	Stopping Sight Distance, SSD = 110 m	*Note
measure	Clearance Distance, cd = 15 m	Fig. 10-1
	Vehicle Travel Distance, S = L + cd = 37.7 m	Art. 10.2.1
	Vehicle Departure time, $T_D = J + T = 14.5$ sec	Art. 10.3.2
	J = 2 sec = Driver's reaction time	Art. 10.3.2
	$T = (t \times G)$ T= the time for the design vehicle to travel through S	
	T= 12.5 sec	
look-up	t= time for the design vehicle to accelerate through S t= 12.5 sec	GDG Fig. 2.3.3.3
look-up	G = ratio of acceleration time on grade/grade adjustment factor G= 1.0	GDG T2.3.3.2
	Road Grade Effect:	
Road T	Maximum general approach grade within 'S'= 0 % (Used for SSD Calculation)	
	Maximum general approach grade within 'S'= 0 % (Used for G Calculation)	
observe	Do field acceleration times exceed T_D ? Not Observed	
	Pedestrian, Cyclist & Assistive Devices Departure Time $T_P = cd / V_P$	Art. 10.3.3
calculate	$T_P = 12.5$ sec $V_P = 1.2$ m/s (maximum 1.22m/s)	Art. 10.3.3

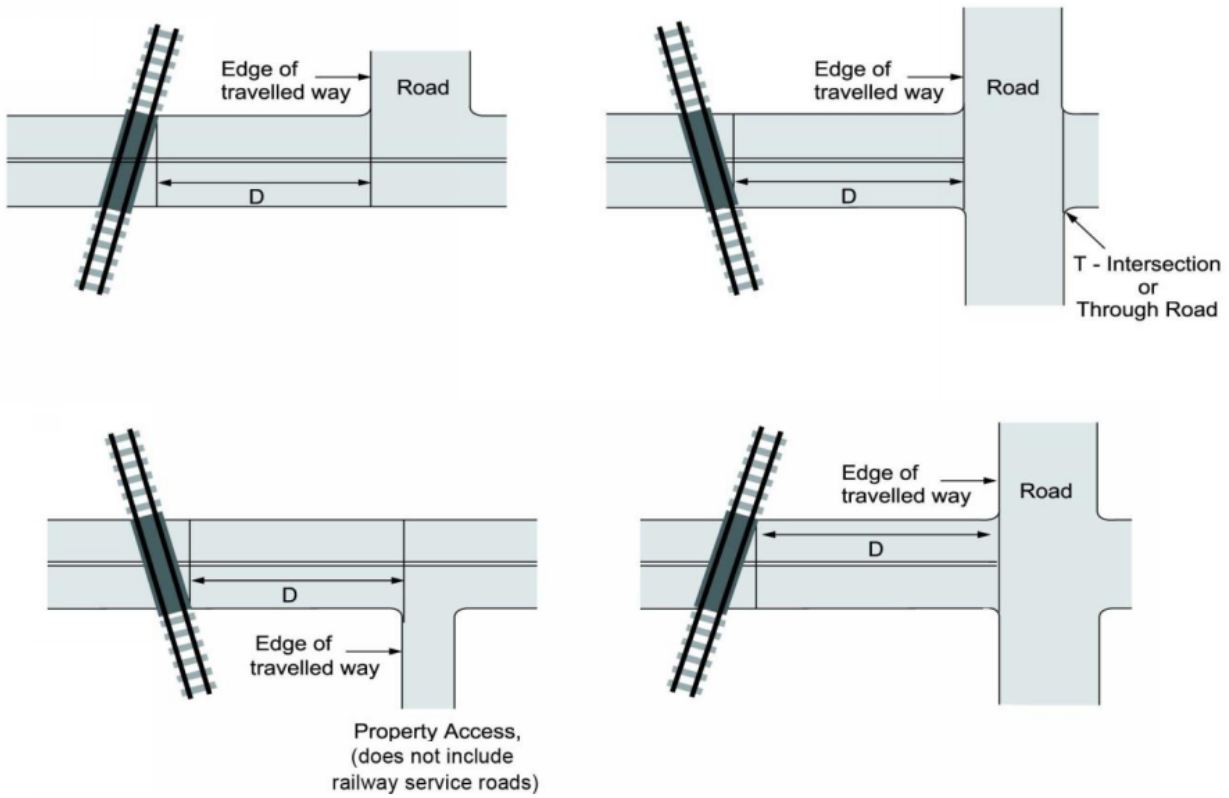
T indicates information should be confirmed by field observation

*Note: Refer to Factor 5 in Transport Canada: Guide for Determining Minimum Sightlines at Grade Crossings

Comments Following Site Visit:

- No comments.

Figure 11-1 – Restrictions on the Proximity of Intersections and Entraneeways to Public Grade Crossings



Source	Item	Reference
look-up	Maximum Railway Operating Speed, $V_{T=}$ 40 mph	
measure	"D" E approach: 25 m "D" W approach: 38 m	Figure 11-1
observe	Is "D" less than 30m for either approach and does the maximum train speed exceed 15 mph? No	
observe	Are there pedestrian crossings on either road approach that could cause vehicles to queue back to the tracks? No	
observe	Is "D" insufficient such that road vehicles might queue onto the rail tracks? Yes	
observe	Is "D" insufficient such that road vehicles turning from a side street might not see warning devices for the crossing? No	

Comments Following Site Visit:

- 'D' E approach represents distance between rail and 55 Street, which is less than 30m. No vehicles were observed trapped in the subject segment.

GCS Article 5

Figure 5-1 – Grade Crossing Surface Dimensions

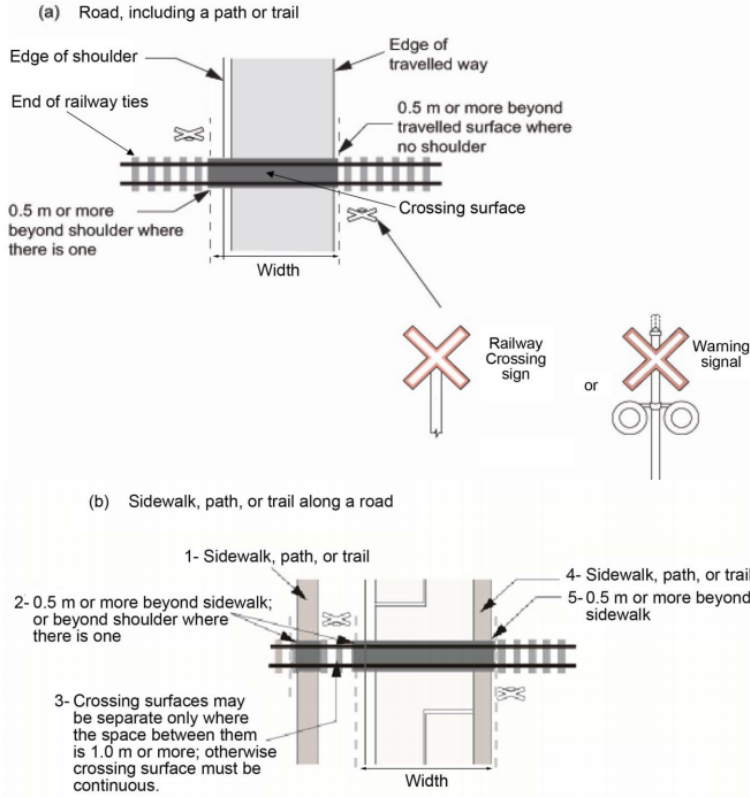
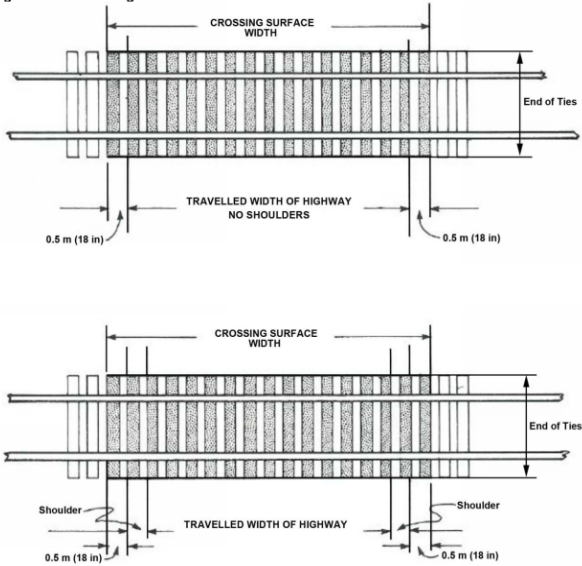


Table 5-1 Crossing Grade Crossing Surface – Cross Section

a) Flangeway		
Width	Minimum	65 mm
	Maximum for	
	Public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices (only the portion of the crossing surface used by persons with assistive devices)	75 mm
	All other grade crossings	120 mm
Depth:	Minimum	50 mm
	Maximum for	
	Public sidewalks, paths and trails designated by the road authority for use by persons using assistive devices (only the portion of the crossing surface used by persons with assistive devices)	75 mm
	All other grade crossings	No limit
(b) Field side gap		
A space is permitted on the outer side of the rail at rural locations, except for public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices.		
	Maximum width	120 mm
	Maximum depth	No limit
(c) Elevation of the top of the rail with respect to the crossing surface		
The top of the crossing surface must be installed as close as possible to the top of the rail within the wear limits below.		
Wear limits		
Public sidewalk, path or trail designated by the road authority for use by persons using assistive devices		
(only the portion of the crossing surface used by persons with assistive devices)		

Figure 3-1 – Crossing Surface




	Maximum distance of the top of the rail above crossing surface	13 mm
	Maximum distance of the top of the rail below crossing surface	7 mm
All other public grade crossings: Maximum distance of the top of the rail above or below the crossing surface		25 mm
Private grade crossings: Maximum distance of the top of the rail above or below the crossing surface		50 mm

Source	Item	Reference
observe	Is the crossing smooth enough to allow road vehicles, pedestrians, cyclists, and other road users to cross at their normal speed without consequence? Comment below. Yes	Art. 5.1
observe	Grade Crossing Surface material: Asphalt	
observe	Approach Road Surface Type: Asphalt	
observe	Approach Road Surface Condition: E approach Good W approach Good	
observe	Roadway Illumination? Yes	
measure	Grade Crossing Surface width 21.4 m (minimum width of travelled way and shoulder plus 0.5m on each side)	Fig 3-1 / 5-1
measure	Road Surface extension beyond travel lanes (minimum = 0.5m each side) 1.4 m on E approach 1.4 m on W approach	Fig 3-1 / 5-1
measure	Sidewalk/Path/Trail crossing width (minimum = 1.5m) N/A m on E approach N/A m on W approach	Fig 5-1
measure	Sidewalk/Path/Trail extension beyond sidewalk (minimum = 0.5m) N/A m on E approach N/A m on W approach	Fig 5-1
measure	Distance between Travel Lane and Sidewalk N/A m on E approach N/A m on W approach	Fig 5-1
	Cross-Section:	
measure	Flangeway width = 70 mm (min = 65mm; max = 75mm ¹ or 120mm)	Table 5-1
measure	Flangeway depth = 65 mm (min = 50mm; max = 75mm ¹ or no limit)	Table 5-1
measure	Field Side Gap width = 12 mm (maximum = 120 mm or 0 ¹)	Table 5-1
measure	Field Side Gap depth = 25 mm (maximum = no limit or 0 ¹)	Table 5-1
measure	Elevation of Top Rail above road surface = 13 mm (maximum = 13mm ¹ , 25mm, or 50mm)	Table 5-1
measure	Elevation of Top Rail below road surface = 13 mm (maximum = -7mm ¹ , -25mm, or -50mm)	Table 5-1

1. Public sidewalks, paths or trails designed by the road authority for use of persons using assistive devices

Comments Following Site Visit:
-Flangeway width and depth are within acceptable limits. -Field side gap was filled by compressible flange filler. Flange filler failing on north side of the crossing. -Elevation top of rail within acceptable limits.

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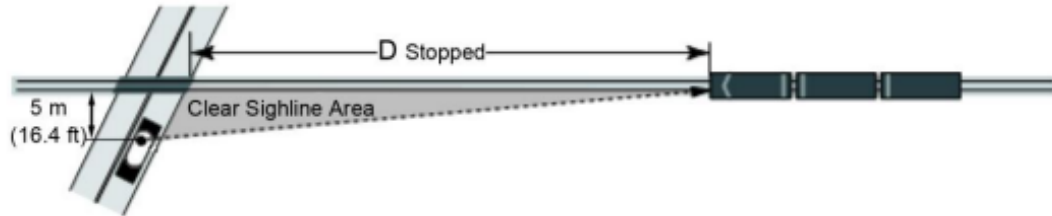
Source	Item	Reference
observe	Are horizontal and vertical alignments smooth and continuous throughout SSD? E Approach Yes W Approach Yes	Art. 6-1
observe	Are the road lanes at least the same width on the crossing as on the road approaches? E Approach Yes W Approach Yes	Art. 6-4
	Grades:	
	Road Classification = Rural Local Undivided RLU	Art. 6-2 / GDG T-2.3.13.1
observe	Allowable Difference between roadway gradient and railway cross-slope= 2 %	
observe	Road approach gradient at crossing: 2 % on E approach 2 % on W approach	Art. 6-2 / GDG T-2.3.13.1
observe	Railway Cross Slope: 0 %	
observe	Are the allowable difference between the road approach gradient and railway cross-slope, or the railway gradient and the road approach cross-slope, in accordance with the design standards of the Geometric Design Guide (Table 2.3.13.1)? E Approach: Yes W Approach: Yes	Art. 6-2 / GDG T-2.3.13.1
Rail T	Are rail tracks super-elevated? E Approach: No W Approach: No	
measure	At Public Grade Crossings: Within 8m= 2 % on E approach 2 % on W approach (maximum = 2%) 8m to 18m= 3 % on E approach <1 % on W approach (maximum = 5%)	Art. 6-3 Art. 6-3
measure	At Private Grade Crossings: Within 8m= N/A % on E approach N/A % on W approach (maximum = 2%) 8m to 18m= N/A % on E approach N/A % on W approach (maximum = 10%)	Art. 6-3 Art. 6-3
measure	At Grade Crossings for Pedestrian or Cyclist Use Only: Within 5m= N/A % on E approach N/A % on W approach (maximum = 2%)	Art. 6-3
measure	At Grade Crossings for Persons using Assistive Devices: Within 5m= N/A % on E approach N/A % on W approach (maximum = 1%)	Art. 6-3
Road T	General approach grade: 2 % E (maximum = 5%) 2 % W (maximum = 5%)	
Road T	If train speeds > 15mph, what is the angle between the crossing and the roadway? (70° min and 110° max w/o warning system; 30° min and 150° max with warning system) 40 °	Art. 6.5
observe	Condition of Road Approaches: anything that might affect stopping/acceleration. Good	
observe	Is there any evidence that "low bed" trucks have difficulty negotiating the crossing? i.e. might they bottom-out or get stuck? No 	MUTCDC WA 52

T indicates information should be confirmed by field observation.

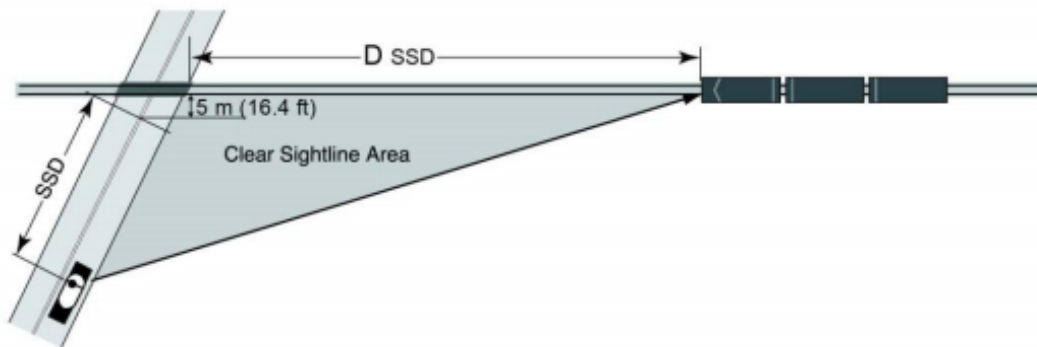
Comments Following Site Visit:
- No comments.

Figure 7-1 – Minimum Sightlines – Grade Crossings

(a) Sightlines for Users Stopped at a Grade Crossing (applicable to all quadrants).



(b) Sightlines for Users Approaching a Grade Crossing (applicable to all quadrants).



Driver Eye Height	= 1.05m	passenger vehicles, pedestrians, cyclists & assistive devices
	= 1.80m	buses & single-unit trucks
	= 2.10m	large trucks & tractor-trailers
Target Height	= 1.20m	above rails

Warning: some formulae are based on Imperial units while others are Metric

Source	Item	Reference
observe	Type of Grade Crossing: <input type="text" value="FLB"/> Are gates present? <input type="text" value="No"/>	
	SSD minimum = <input type="text" value="110"/> m	Sheet 5
measure	SSD actual: E approach = <input type="text" value=">110"/> m W approach = <input type="text" value="85"/> m	Art. 7.2
	D_{SSD} - Drivers Approaching a Grade Crossing w/o Stop Signs or Warning Systems D _{SSD} minimum = $1.47V_T \times T_{SSD}$ (ft) where V_T = railway design speed in mph (Sheet 5) $T_{SSD} = [(SSD + cd + L) / 0.278V]$ $T_{SSD} =$ <input type="text" value="10.6"/> s V = road design speed in km/h D _{SSD} minimum = <input type="text" value="625"/> ft <input type="text" value="190"/> m D _{SSD} actual: E approach = <input type="text" value="60"/> m to driver's left; <input type="text" value="30"/> m to driver's right W approach = <input type="text" value=">400"/> m to driver's left; <input type="text" value=">400"/> m to driver's right	Fig 7-1(b) Art. 7.2 Art. 7.2 Art. 7.2
measure		Fig 7-1
measure		
	D_{STOPPED} - Drivers Stopped at a Grade Crossing with Stop Signs or Warning Systems w/o Gates D _{STOPPED-VEH} minimum = $1.47V_T \times T_D$ where T_D = design vehicle departure time (Sheet 5) D _{STOPPED-VEH} minimum = <input type="text" value="853"/> ft. <input type="text" value="260"/> m D _{STOPPED-VEH} actual: E approach = <input type="text" value=">400"/> m to driver's left; <input type="text" value=">400"/> m to driver's right W approach = <input type="text" value=">400"/> m to driver's left; <input type="text" value=">400"/> m to driver's right	Fig 7-1(a) Art. 7.2 Art. 7.2
measure		Fig 7-1
measure		
	D_{STOPPED} - Pedestrians, Cyclists & Persons Using Assistive Devices at a Grade Crossing w/o Gates: Ped./Cyclist Departure Time, $T_P =$ <input type="text" value="12.5"/> sec. (from Sheet 5) Ped./Cyclist D _{STOPPED-PED} = $1.47V_T \times T_P$ where T_P = pedestrian departure time (Sheet 5) Ped./Cyclist D _{STOPPED-PED} = <input type="text" value="735"/> ft <input type="text" value="224"/> m Ped./Cyclist D _{STOPPED-PED} Actual: E approach = <input type="text" value=">400"/> m to cyclist's left; <input type="text" value=">400"/> m to cyclist's right W approach = <input type="text" value=">400"/> m to cyclist's left; <input type="text" value=">400"/> m to cyclist's right	Art. 10.3.3 Art. 7.2 Art. 7.2
measure		Fig 7-1
measure		
observe	Are there any obstacles within the sight triangles affect visibility? <input type="text" value="Yes"/>	

Comments Following Site Visit:

- SSD actual for West approach measured to EB stop control across Hwy 15 intersection. Intersections are slightly offset and do not align perfectly across the highway.
- Dssd measured from SSDmin on East approach and from stop control across Hwy 15 on west approach.
- While Dssd and Dstopped from west approach looking left is long, the angle of the intersecting road/rail is acute, which makes looking down the track more difficult.
- From the east approach at SSDmin and looking to the right, landscaping and the residential building in the lot in the southwest quadrant of 50 Ave/55 Street obstructs the view of the rail line. Looking to the left, the existing gas station obstructs the view of the rail line.
- FLB precludes the need for the Dssd being met.

GCS Article 8

Figure 8-1 – Railway Crossing Sign and Number of Tracks Sign

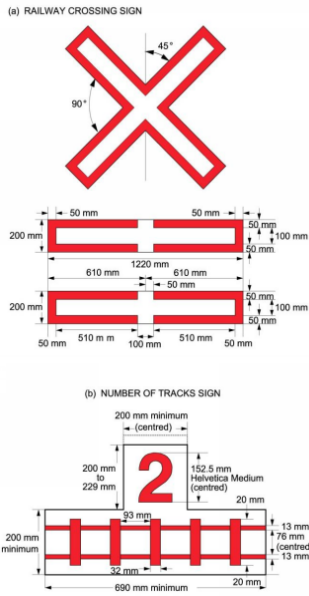


Figure 8-3 – Location of Railway Crossing Signs and Number of Tracks Signs (public grade crossings without warning systems)

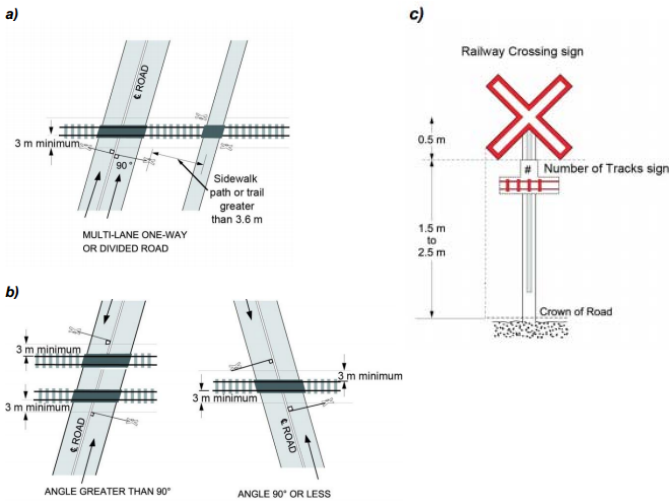


Figure 8-2 – Retroreflective Stripes on the Back of the Railway Crossing Sign and on the Sign Supporting Post (public grade crossings without a grade crossing warning system)

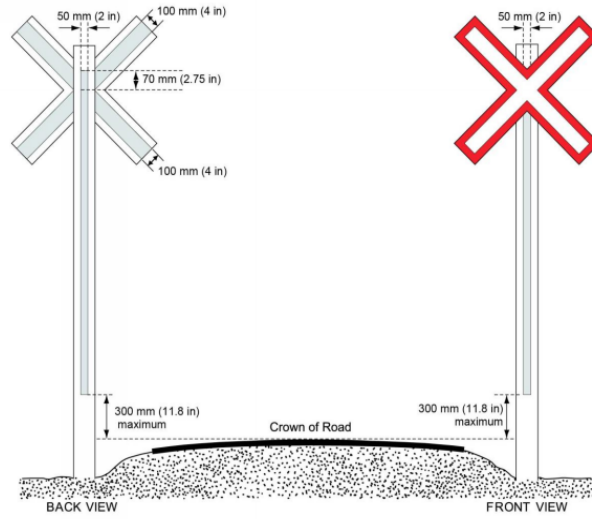
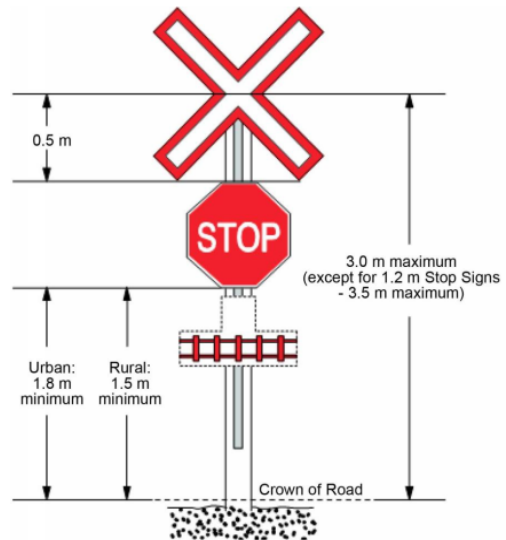



Figure 8-4 – Stop Signs




Source	Item	Reference
	RAILWAY CROSSING Sign and NUMBER OF TRACKS Sign 	Art. 8.1 and A2.2.7 MUTCDC
observe	Are signs present? E approach: Yes W approach: Yes	
measure	Location from railway (min. 3.0m): E: 11.5 m W: 12.8 m	Art. 8.1.5.b
measure	Location from curb (0.3m to 2.0m from curb, or 2.0 to 4.5m from edge of travelled way): E: 2.8 m from edge of asphalt W: 1.8 m from edge of asphalt	Art. 8.1.5.a
measure	Height (1.5m to 2.5m): E: N/A m W: N/A m	Fig 8-3
observe	Retroreflective stripes applied on the front and back of the Railway Crossing Sign supporting posts. E Front: No E Back: No	Fig 8-2
observe	W Front: No W Back: No	
measure	Retroreflectivity readings: E Sign: N/A cd/lux/m ² W Sign: N/A cd/lux/m ²	Fig 8-1
	Number of Tracks sign	Fig 8-1
observe	Are signs present? E approach: No W approach: No	
observe	Is the distance between two track centre lines > 30m?	N/A
observe	Is Number of Tracks sign provided for each railway crossing?	N/A
observe	Is the distance between the centre of a sidewalk, path or trail and the Railway Crossing Sign supporting post > 3.6m?	N/A
observe	Are separate Railway Crossing Signs provided for the sidewalk, path or trail?	N/A


Comments Following Site Visit:

- Raiway crossing signs are provided and appear to be in good condition.
- Retroreflectivity was not measured.
- Unable to measure height to bottom of crossing sign. However, height to bottom of lights = approx. 2.5m

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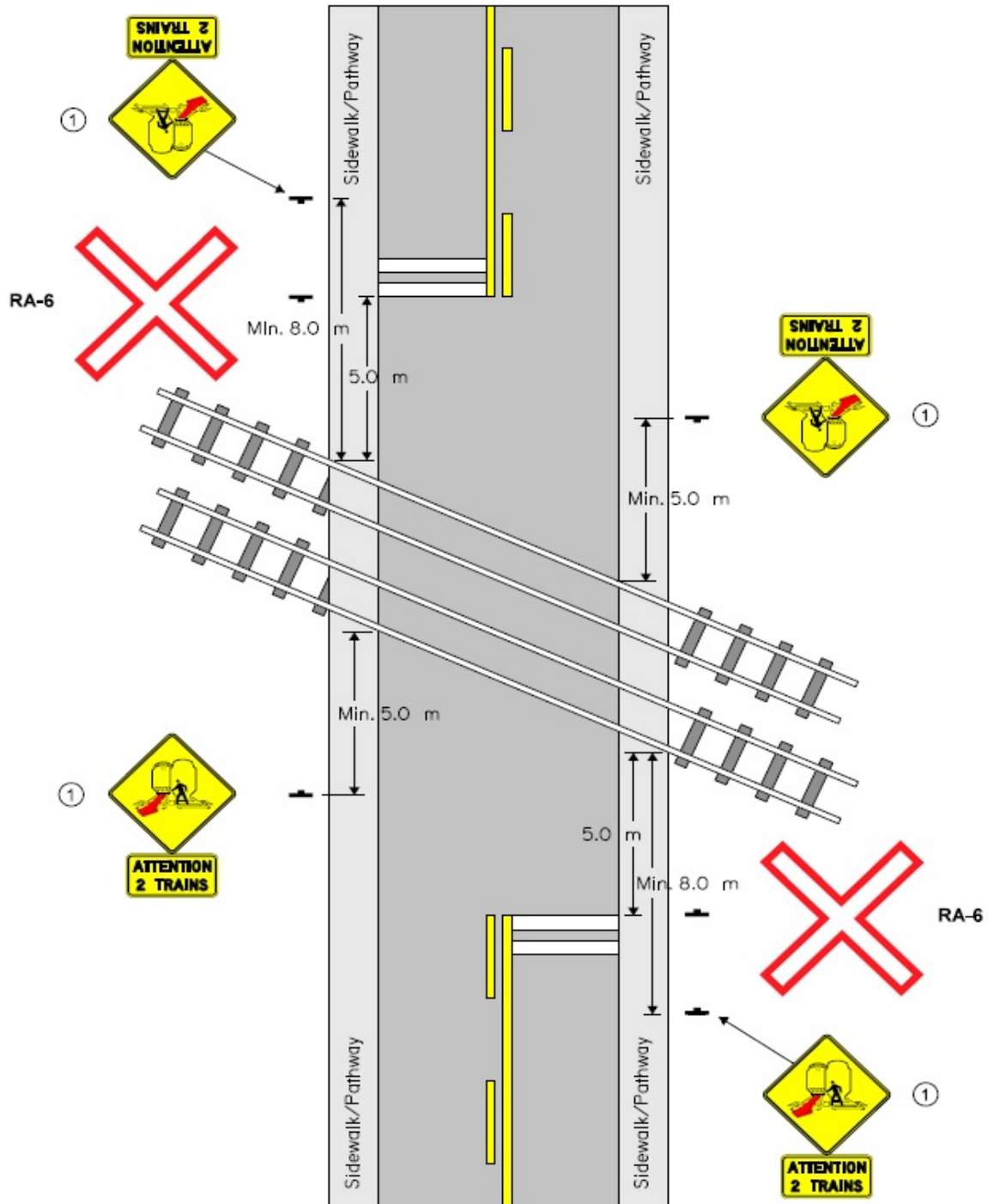
Source	Item				Reference
	RAILWAY CROSSING AHEAD Sign (WA-18) 				GCS Art. 8.2; MUTCDC Art. 3.4.2
	Posted speed limit?	50	km/h		
look-up	Are signs required?	E approach:	No	W approach:	No
observe	Are signs present?	E approach:	No	W approach:	No
observe	Appropriate orientation?	E approach:	N/A	W approach:	N/A
look-up	Distance required:	E approach:	N/A m	W approach:	N/A m
measure	Distance measured:	E approach:	N/A m	W approach:	N/A m
measure	Lateral placement:	E approach:	N/A m	W approach:	N/A m
measure	Height:	E approach:	N/A m	W approach:	N/A m

Comments Following Site Visit:
 - Signs not currently present nor required.


Source	Item				Reference
	ADVISORY SPEED Tab Sign (WA-7S) 				GCS Art. 8.2; MUTCDC Art. 3.2.5
	Posted speed limit?	50	km/h		
observe	Advisory speed limit?	N/A	km/h		
observe	Are signs present?	E approach:	No	W approach:	No
measure	Distance measured:	E approach:	N/A m	W approach:	N/A m
measure	Lateral placement:	E approach:	N/A m	W approach:	N/A m
measure	Height:	E approach:	N/A m	W approach:	N/A m


Comments Following Site Visit:
 Advisory speed tabs not present nor required.

SECOND TRAIN EVENT SIGN INSTALLATION



Note (1): Track clearance standards, which vary according to the company managing the railway, must be adhered to.

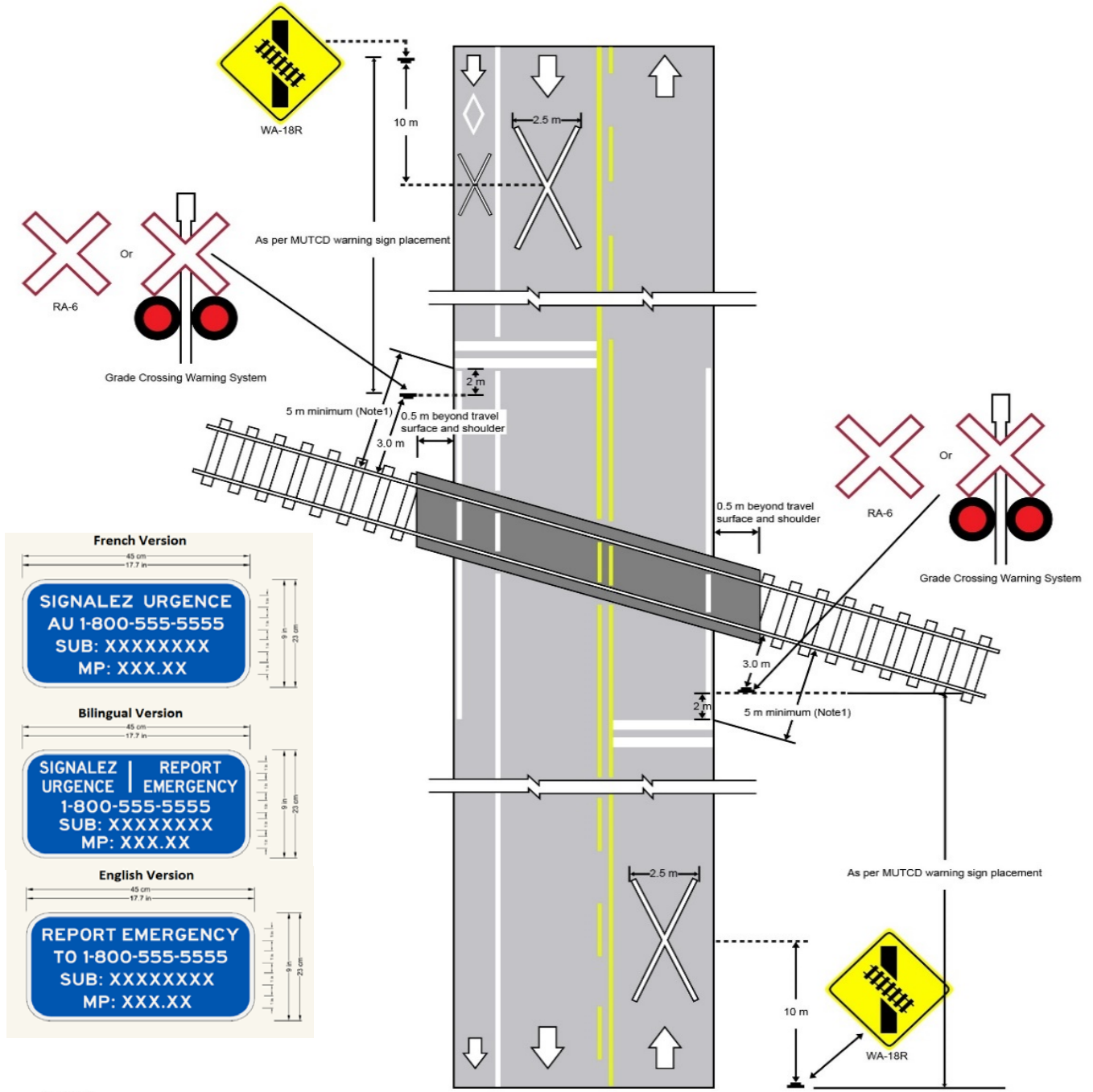
Source	Item				Reference	
	SECOND TRAIN EVENT WARNING Sign (WC-27 and WC-27S) 				Sect. A3.4.13 MUTCDC	
look-up	Are signs required?	E approach:	No	W approach:	No	
observe	Are signs present?	E approach:	No	W approach:	No	
measure	Distance from nearest rail:	E approach:	N/A m	W approach:	N/A m	(Max 0.5 m)
measure	Lateral placement:	E approach:	N/A m	W approach:	N/A m	(0.3m - 1m)
measure	Height:	E approach:	N/A m	W approach:	N/A m	(2m from top of sidewalk)
Comments Following Site Visit:						
- Signs not present nor required.						

Source	Item				Reference
	DO NOT STOP ON TRACKS Sign (RB-59) 				Sect. A2.8.4 MUTCDC
look-up	Are signs required?	E approach:	No	W approach:	Yes
observe	Are signs present?	E approach:	No	W approach:	No
measure	Distance from nearest rail:	E approach:	N/A m	W approach:	N/A m
measure	Lateral placement:	E approach:	N/A m	W approach:	N/A m
measure	Height:	E approach:	N/A m	W approach:	N/A m

T indicates information should be confirmed by field observation

Comments Following Site Visit:					
- Signs not present, but should be installed for EB traffic on the west approach.					

Typical Grade Crossing with Vehicular Road and Bicycle Lane



French Version

45 cm
17.7 in

23 cm
9 in

SIGNALEZ URGENCE
AU 1-800-555-5555
SUB: XXXXXXXX
MP: XXX.XX

Bilingual Version

45 cm
17.7 in

23 cm
9 in

SIGNALEZ | REPORT
URGENCE | EMERGENCY
1-800-555-5555
SUB: XXXXXXXX
MP: XXX.XX

English Version

45 cm
17.7 in

23 cm
9 in

REPORT EMERGENCY
TO 1-800-555-5555
SUB: XXXXXXXX
MP: XXX.XX

Legend



Source	Item	Reference
	EMERGENCY NOTIFICATION Sign	Art. 8.5
observe	Are signs present? E approach: Yes W approach: Yes	
observe	Is sign oriented to face traffic approaching the grade crossing or parallel to the road? E approach: Yes W approach: Yes	Art. 8.5
observe	Is sign legible to road vehicles? E approach: Yes W approach: Yes	Art. 8.5
observe	What is the condition of the sign? E approach: Good W approach: Good	Art. 8.5

T indicates information should be confirmed by field observation

Comments Following Site Visit:

Signs are present as required.

Source	Item	Reference
	PAVEMENT MARKINGS	
observe	Do pavement markings conform to Part C of the MUTCDC? No	Art. 8.8
observe	Are there lines to delineate sidewalks/paths/bicycle paths? N/A	

Comments Following Site Visit:

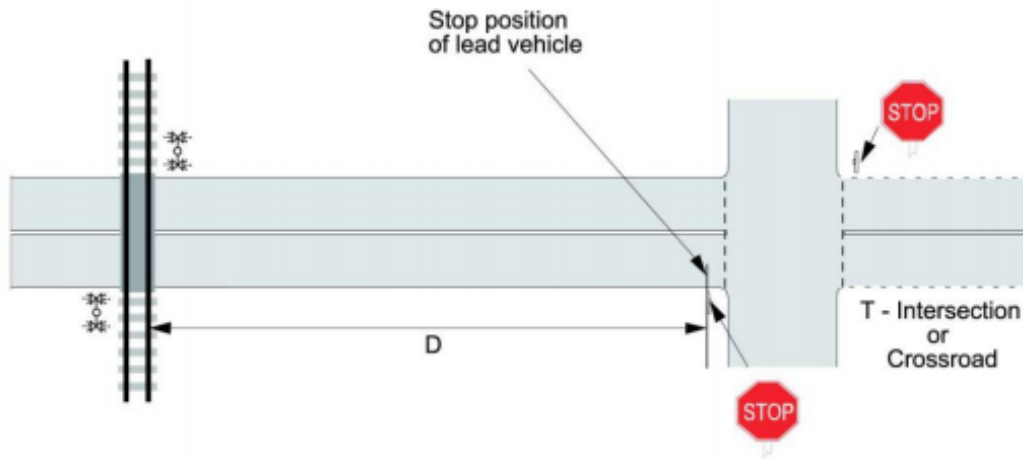
- Pavement markings do not conform with MUTCDC and are generally not visible (i.e. faded and worn).

General Comments Regarding Signs & Pavement Markings:

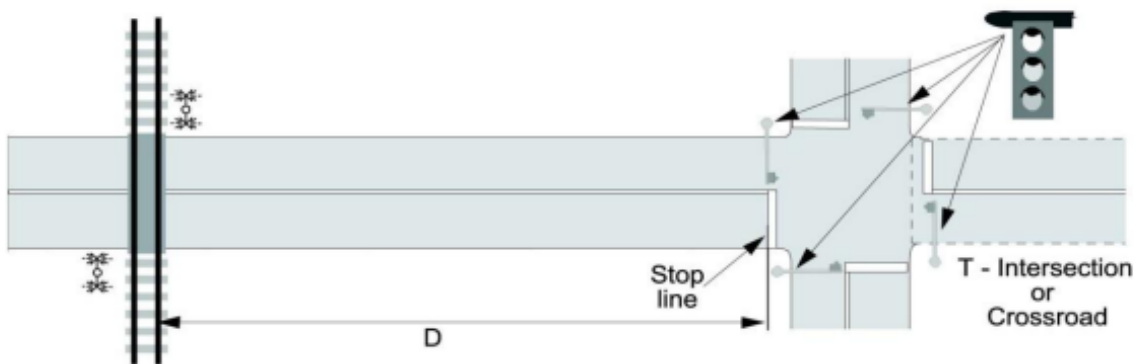
No comments.

Figure 9-1 – Proximity of Warning Systems to Stop Signs and Traffic Signals

(a) Intersection with Stop Sign



(b) Intersection with Traffic Signal



Source	Item	Reference
	Warning System Warrants at Grade Crossings If any of A through E below are met, then a warning system is warranted	Art. 9
	Existing AADT = 1,980 vpd Forecast AADT = 1,980 vpd	Sheet 4
	Daily Train Volume = 5 trains per day	Sheet 4
	A. Cross-Product = 9,900 (2,000 min.) Warranted? YES	Art. 9.1.a
observe	B. Is there a sidewalk, path or trail? No Warranted? Maximum Rail Operating Speed = 40 mph Warranted if $V_T > 80\text{mph}$ without sidewalk OR if $V_T > 50\text{mph}$ with sidewalk NO	Art. 9.1.b,c
observe	C. Is railway design speed more than 15mph? Yes Warranted? Are there two or more lines of railway? No Can trains pass one another? N/A NO	Art. 9.1.d.i
measure	D. Is railway design speed more than 15mph? Yes Warranted? Is D < 30m at a stop-controlled intersection? No NO	Art. 9.1.d.ii Fig. 9-1a
measure	E. Is railway design speed more than 15mph? Yes Warranted? Is D < 60m at a signalized intersection? N/A NO	Art. 9.1.d.iii Fig. 9-1b

	Warning System Warrants for Grade Crossings with Gates: If any of A through E below are met, then a warning system with gates is warranted.	Art. 9.2.1.a
	A. Cross-Product = 9,900 (50,000 min.) Warranted? NO	
	B. Maximum Rail Operating Speed = 40 mph (max = 50mph) Warranted? NO	Sheet 4 Art. 9.2.1.c
observe	C. Are there two or more lines of railway? No Warranted? Can trains pass one another? N/A NO	Art. 9.2.1.b
measure	D. Is railway design speed more than 15mph? Yes Warranted? Is D < 30m at a stop-controlled intersection? No NO	Art. 9.2.1.d
measure	E. Is railway design speed more than 15mph? Yes Warranted? Is D < 60m at a signalized intersection? N/A NO	Sect. 9.2.1.e

	Warning System Warrants at Pedestrian Crossings: If Condition A is met, then a warning system is warranted. If Condition B is met, then a warning system with a gate is warranted	
Rail	A. Is the railway design speed more than 50mph? No Warranted? Is the sidewalk, path or trail outside the island circuit of an adjacent warning system? N/A NO	Art. 9.5
observe Rail	B. Is railway design speed more than 15mph? Yes Warranted? Are there two or more lines of railway? No Is the sidewalk, path or trail outside the island circuit of an adjacent warning system? N/A NO	Art. 9.6

Comments Following Site Visit:
- Crossing warrants Flashing Lights and Bells.

GCS Article 12

Figure 12-1 Warning Signal Assemblies

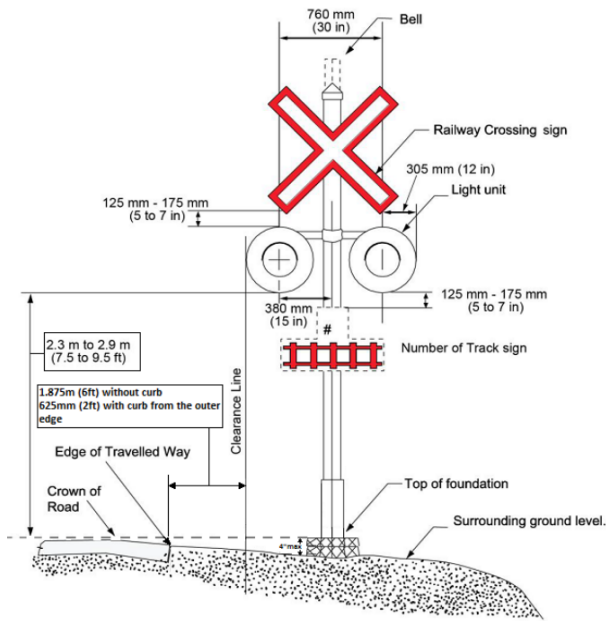
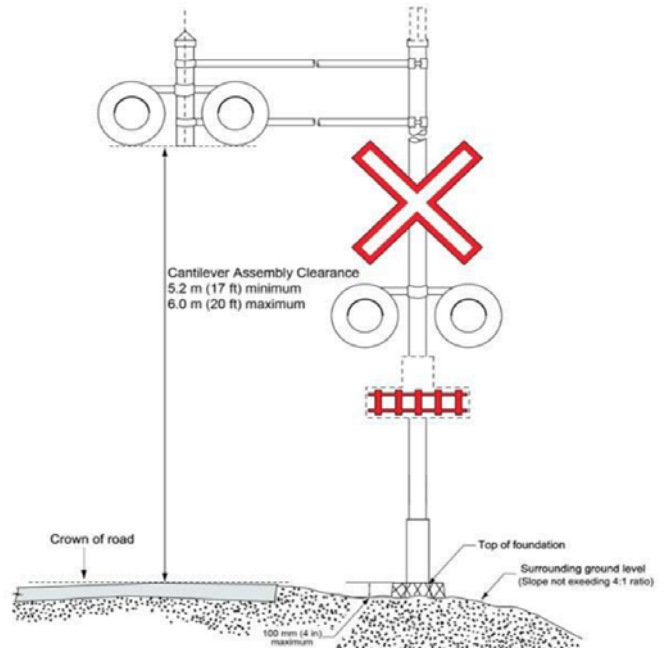


Figure 12-3 Cantilevers



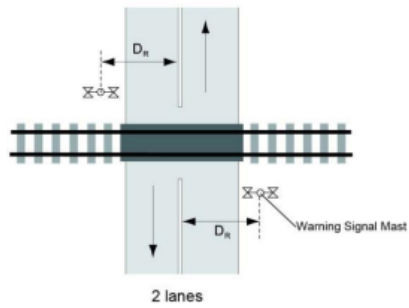
	Field Visit:		
measure	Warning System Clearance Distance from Curb:		
	Location from curb:	E: 2.8 m W: 1.8 m	Art. 12.1.a,b
	Minimum 625mm (2ft) from face of curb; or Minimum 1.875m (6ft) from edge of travelled way if no curb; or Minimum 625mm (2ft) from the outer edge of the road approach shoulder if no curb.		
measure	Distance between top of foundation and surrounding ground level (Max. 100mm (4in))		Art. 12.1.c
	E:	0.050 m W: 0.065 m	
measure	Slope of ground from foundation towards the travelled way (Max. 25% (4:1 ratio))		Art. 12.1.c
	E:	5.0 % W: 0.0 %	
observe	Light Units:	Yes Condition / alignment: Good	Art. 13, 14
observe	Bells:	Yes Condition: Good	Art. 15.1
observe	Gates:	No Condition: N/A	Art. 15.2
observe	Cantilever Lights:	No Condition: N/A	Art. 13.3
observe	Are warning signal assemblies & cantilevers in accordance with Figs 12-1 & 12-3?		Not Observed Fig 12-1 & 12-3
observe	Is warning system housing at least 9m from traveled way of the road and 8 m from the nearest rail & does not interfere with sightlines?		No Art. 7.2
observe	If only one sidewalk, is a bell located on the adjacent assembly?		No Sidewalk Art. 15.1.2
Rail T	Have all light units been aligned?		Not Observed Art. 14.2
Rail	Design Approach Warning Time: E approach = 30 sec W approach = 30 sec		
	Should be the greatest of:		
	- 20s, unless cd > 11m, increase the 20s by one second for each additional 3m	21 s	Art. 16.1.1
	- T _D	14.5 s	
	- T _P	12.5 s	
	- T _G + 15s (Gate decent time) + 5 s	30 s	
lookup	- Minimum warning time required for traffic signal pre-emption	0 s	
	- T _{SSD}	10.6 s	
Rail T	Actual Approach Warning Time:	E approach = N/A sec W approach = N/A sec	Art. 16.2

Comments Following Site Visit:

- Warning system housing location does not meet minimum separation from road or rail. Location is 4.3m from edge of asphalt and 2.4m to nearest rail.
- The flashing light unit alignment was not measured.

Figure 13-1 – Warning Signal Offsets Requiring Cantilevered Light Units

(a) Two-Way Road



(b) One-Way or Divided Road

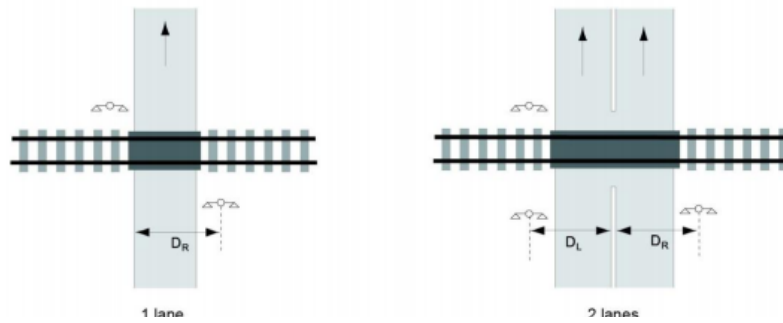
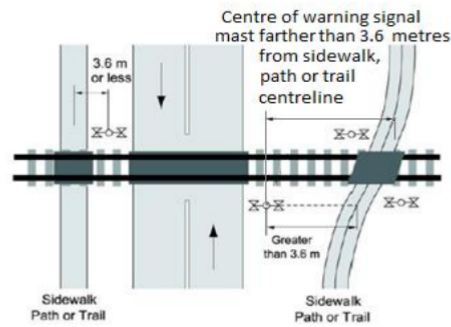
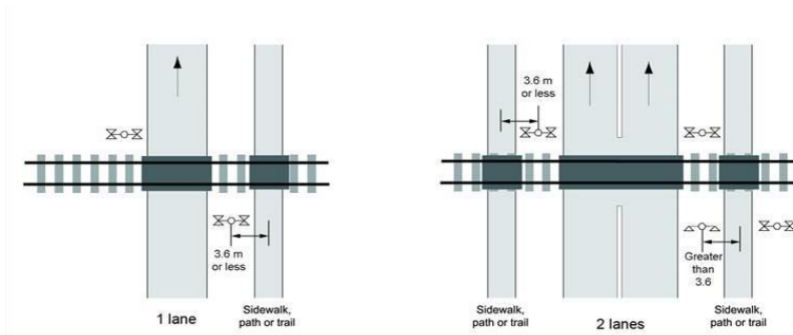


Figure 13-2 Sidewalks, Paths and Trails

a) Two-Way Road



b) One-Way Road

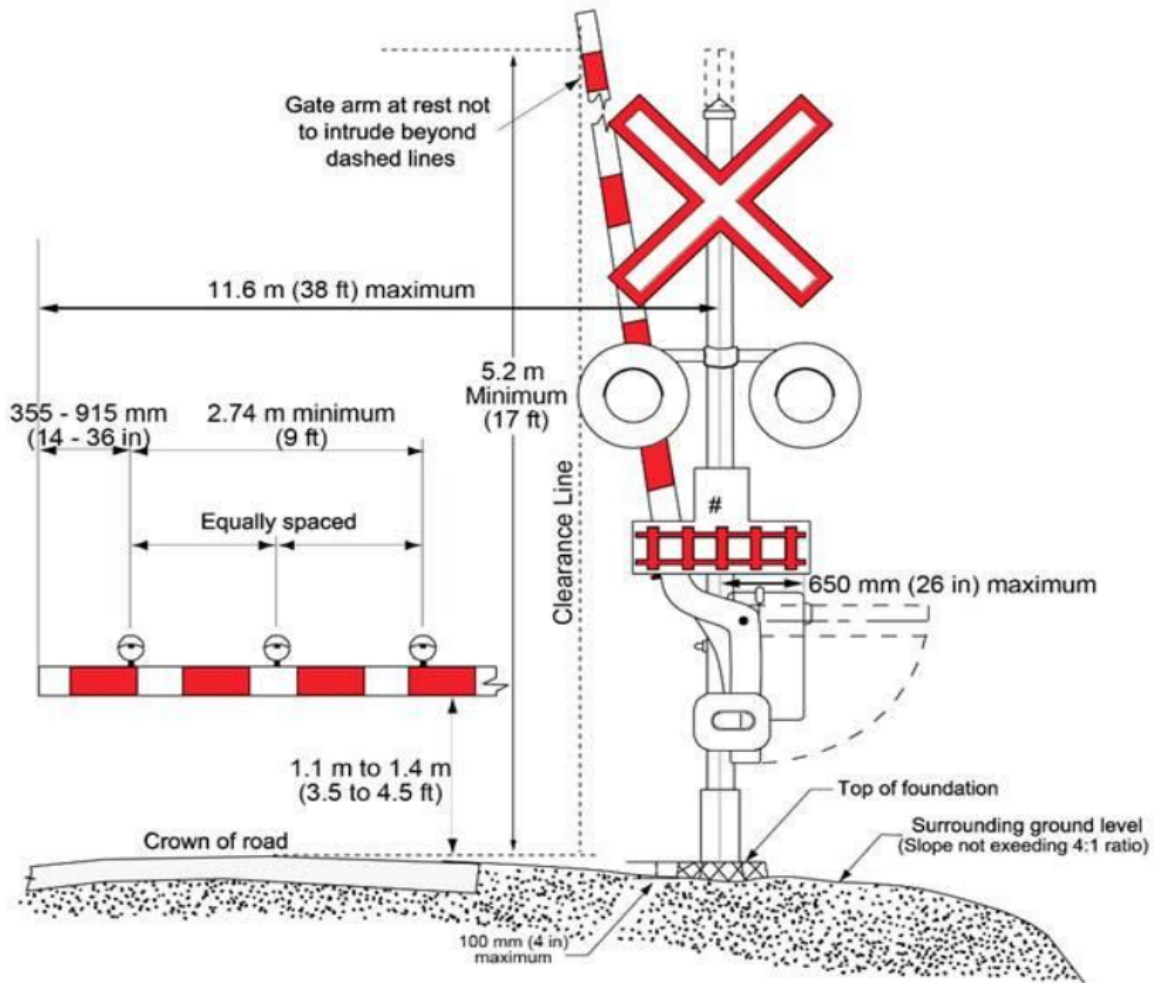


Source	Item	Reference
Number and Location		
measure	Alignment Height: E approach: 2.6 m W approach: 2.6 m	Fig 12-1
measure	Are Primary Light Units visible for at least the minimum SSD? E approach: Yes W approach: Yes	Art. 14.3.1.a
observe	Can back light units be seen by all stopped drivers for at least 15m?	Art. 14.5.1
observe	Are lights obscured by vehicles stopped on adjacent intersections?	No
observe	Are additional light units required for drivers as they begin to turn onto an approach road from an intersecting road/lane/parking lot, etc.?	Art. 14.4
Cantilevered Light Units		
observe	Are lights present? E approach: No W approach: No	
measure	Distance from nearest rail: E approach: N/A m W approach: N/A m	Fig C1-6 MUTCDC
measure	Lateral Placement: E approach: N/A m W approach: N/A m	A1.7.2 MUTCDC
measure	Height: E approach: N/A m W approach: N/A m	A1.7.2 MUTCDC
measure	Does D_R exceed 7.7m? E approach: N/A W approach: N/A	Fig 13-1
look-up	Cantilever lights required? E approach: N/A W approach: N/A	
measure	Does D_L exceed 8.7m? E approach: N/A W approach: N/A	Fig 13-1
look-up	Cantilever lights required? E approach: No W approach: No	
Multiple Lanes		
observe	Can front light units be seen by all drivers in all lanes?	N/A
observe	Can back light units be seen by all stopped drivers in all lanes?	N/A
Sidewalks, paths, trails, etc.		
measure	Distance from path centerline to signal mast = N/A m (max. = 3.6m)	Art 13.4.1
observe	Are separate flashing light units required for pedestrians?	No
measure	Alignment Height = N/A m (min. 1.6m above the centre of the sidewalk)	Art 14.6
measure	Distance of the flashing light units to the nearest rail= N/A m (min. 30m)	Art 14.6

Comments Following Site Visit:

- Drivers turning right from Hwy 15 onto 50 Ave cannot see the flashing light units.
 - Alignment height measured from ground to bottom of lights.

Figure 12-2 Gates



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Note: reference MUTCDC section A3.6.6, sign # WB-6



Source	Item	Reference
	PREPARE TO STOP AT RAILWAY CROSSING Sign (WB-6) is required if:	GCS Art 18 / MUTCDC A3.6.6
look-up	A. the grade crossing has or warrants an (automated) warning system. E approach: No W approach: No	
look-up	B. the road approach is an expressway. E approach: No W approach: No	
observe	C. at least one set of front light units on the warning system is not clearly visible from the SSD of at least one of the lanes of the road approach. E approach: No W approach: No	GCS Table 10.4 (GCR 43 and 51)
look-up	D. weather conditions repeatedly obscure the visibility of the warning system. E approach: No W approach: No	MUTCDC A3.6.6
	Are signs required? E approach: No W approach: No	MUTCDC A3.6.6
	Sign location:	
observe	Are signs present? E approach: No W approach: No	
measure	Distance from nearest rail: E approach: N/A m W approach: N/A m	
measure	Lateral Placement: E approach: N/A m W approach: N/A m	
measure	Height: E approach: N/A m W approach: N/A m	
	Calculated Distance of Light Units: (See <i>Advance Warning Flashers: Guidelines for Application and Installation</i> (TAC 2005))	
look-up	$D = \frac{Vt_{pr}}{3.6} + \frac{V^2}{25.92(a+Gg)}$	<i>Advance Warning Flashers: Guidelines for Application and Installation</i> (TAC 2005)
look-up	V= 50 km/h (Posted speed limit) T _{pr} = 1.5 s (Perception/reaction time. Typically 1.5s) a= 2.6 m/s ² (Deceleration rate. Typically 2.6m/s ²)	
	E approach G= 2 m/100m (Grade) W approach G= 2 m/100m (Grade) g= 9.81 m/s ² (gravitational acceleration 9.81m/s ²)	
	Recommended Minimum AWF Distance from Railway = E approach: 55.3 m W approach: 55 m	
look-up	Does measured distance meet the requirement? E approach: N/A W approach: N/A	
	Considering maximum prevailing speeds, geometry and traffic composition, check the following:	
observe	Does sign flash during operation of grade crossing warning system? E approach: N/A W approach: N/A	
measure	Distance from the sign to 2.4m beyond the furthest rail = E approach: N/A m W approach: N/A m	
observe	Does the sign flash before the actuation of the crossing warning system by the time required to travel from the sign to clear the crossing? E approach: N/A W approach: N/A	Art. 18.2.a
observe	Does the flashing sign precede the actuation of the descent of the gate arms by the time required to travel from the sign to clear the closest gate? E approach: N/A W approach: N/A	Art. 18.2.b

Comments Following Site Visit:
- Signs not present nor required.

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Source	Item	Reference
Road T	Are adjacent traffic signals interconnected with a grade crossing warning system? No	
Rail T	<u>note</u> : provide timing plan if interconnected.	
Road	Date of last pre-emption check? N/A	
	Warrants:	
	Is railway design speed more than 15mph? Yes	Warranted?
measure	Is D < 30m between traffic signal and rail? No	NO
	Field Checks:	
observe	Does interconnection provide adequate time to clear traffic from grade crossing before train's arrival? N/A	Art. 19.3
observe	Does interconnection prohibit road traffic from moving from the street intersection toward the grade crossing? N/A	Art. 19.3
observe	Any known queuing problems on the tracks? N/A	
observe	Are pedestrians accommodated during pre-emption? N/A	
observe	Have longer/slower vehicles been considered? N/A	
observe	Are supplemental signs needed for motorists? N/A	

T indicates information should be confirmed by field observation

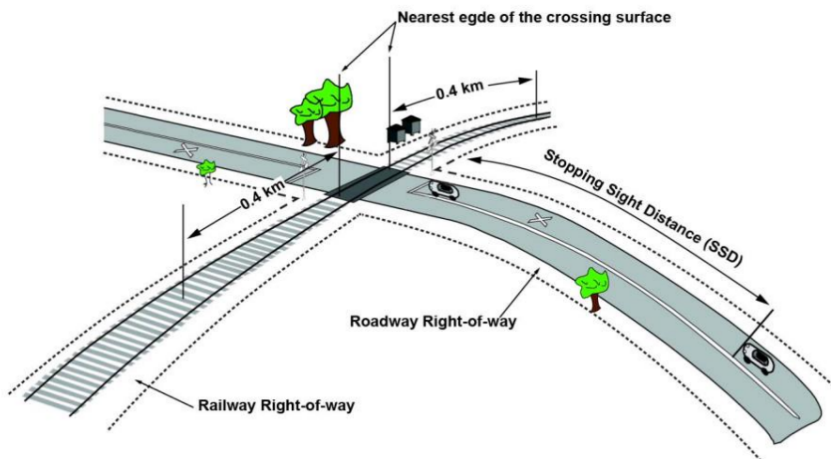
Comments Following Site Visit:
- Interconnection not required nor present.

GCS Appendix D

Table D-1 Requirements for Warning Systems at Public Grade Crossings within an Area without Whistling

	Column A		Column B	
Railway Design Speed	Grade Crossings for Vehicle Use		Grade Crossings For Sidewalks, Paths, or Trails with the centreline no closer than 3.6 m (12 ft) to a warning signal for vehicles	
	No. of Tracks		No. of Tracks	
	1	2 or more	1	2 or more
Column 1	Column 2	Column 3	Column 4	Column 5
1 – 25 km/h (15 mph)	FLB	FLB	No warning system requirement	No warning system requirements
25 – 81 km/h (16 – 50 mph)	FLB	FLB & G	FLB	FLB & G
Over 81 km/h (50 mph)	FLB & G	FLB & G	FLB & G	FLB & G
Legend :				
FLB is a warning system consisting of flashing lights and a bell.				
FLB & G is a warning system consisting of flashing lights, a bell and gates				

Figure D-1 Prescribed area for whistling cessation as per Article 23.1 of the RSA



Source	Item		Reference
Rail	Is train whistling prohibited at this crossing? 24 hrs per day?	No No	
observe	Is there evidence of routine unauthorized access (trespassing) on the rail line in the area of the crossing? Comment below.	No	
observe	Are the requirements of Table D-1 met?	Yes	Appendix D
look-up	What is the required type of warning system per Table D-1?	FLB	Appendix D

Comments Following Site Visit:

- No fencing along railway right of way.

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Human Factors:

- Control device visibility / background visual clutter.
- Driver workload through this area (i.e., are there numerous factors that simultaneously require the driver's attention such as traffic lights, pedestrian activity, merging/entering traffic, commercial signing, etc.).
- Driver expectancy of the environment (i.e., are the control measures in keeping with the design levels of the road system and adjacent environment).
- Need for positive guidance.
- Conflicts between road and railway signs and signals.

Environmental Factors:

- Extreme weather conditions.
- Lighting issues (night, dawn/dusk, tunnels, adjacent facilities, headlight or sunlight glare, etc.)
- Landscaping or vegetation.
- Integration w/ surrounding land use (e.g., parked vehicles blocking sightlines, merging traffic lanes, etc.)

All Road Users:

- Have needs of the following been met:
 - pedestrians (including strollers, baby carriages, and blind persons)
 - children
 - elderly
 - bicyclists
 - motorcyclists
 - over-sized trucks
 - buses
 - recreational vehicles
 - wheelchairs, scooters, walkers, etc.
 - rollerbladers

Comments Following Site Visit:

APPENDIX D – TRAFFIC COUNT DATA

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Turning Movement Summary Diagram

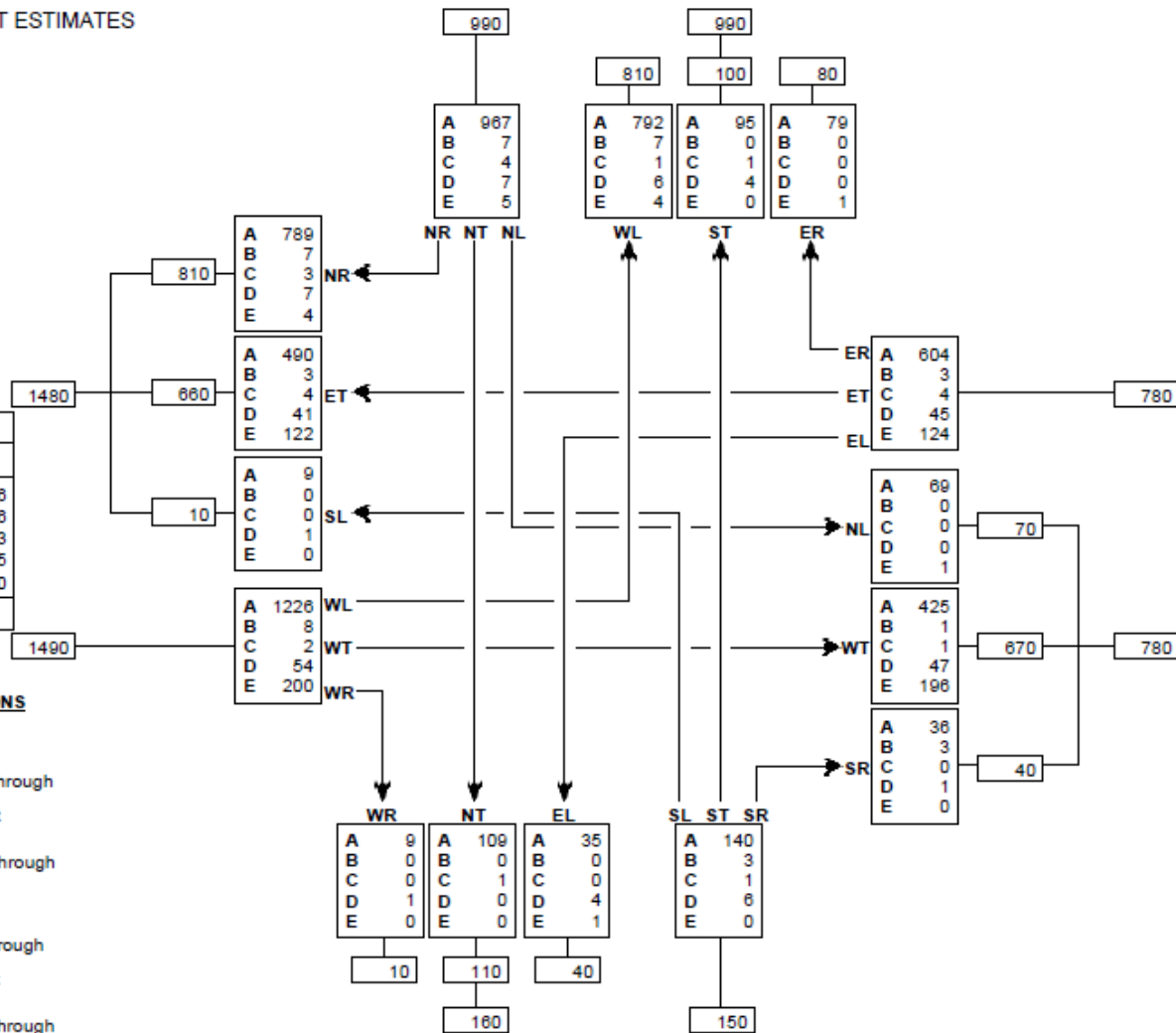
Reference No.: 70000860
 Intersection of:
 15 & TWP RD 553 LAMONT

2020 AADT / ASDT ESTIMATES

North On 50 Ave		
Vehicle Type	Vol	%
A: Passenger Vehicle	1933	97.8
B: Recreational Vehicle	14	0.7
C: Bus	6	0.3
D: Single Unit Truck	17	0.9
E: Tractor Trailer Unit	10	0.5
ASDT	2180	AADT
		1980

West On 15		
Vehicle Type	Vol	%
A: Passenger Vehicle	2514	84.8
B: Recreational Vehicle	18	0.6
C: Bus	9	0.3
D: Single Unit Truck	103	3.5
E: Tractor Trailer Unit	326	11.0
ASDT	3310	AADT
		2970

East On 15		
Vehicle Type	Vol	%
A: Passenger Vehicle	1134	72.7
B: Recreational Vehicle	7	0.4
C: Bus	5	0.3
D: Single Unit Truck	93	6.0
E: Tractor Trailer Unit	321	20.6
ASDT	1720	AADT
		1560



TURNING MOVEMENT ABBREVIATIONS

- NR: Traffic From North Turning Right
- NL: Traffic From North Turning Left
- NT: Traffic From North Proceeding Through
- SR: Traffic From South Turning Right
- SL: Traffic From South Turning Left
- ST: Traffic From South Proceeding Through
- ER: Traffic From East Turning Right
- EL: Traffic From East Turning Left
- ET: Traffic From East Proceeding Through
- WR: Traffic From West Turning Right
- WL: Traffic From West Turning Left
- WT: Traffic From West Proceeding Through

TURNING MOVEMENT ABBREVIATIONS

- AADT: Annual Average Daily Traffic
Average daily traffic expressed as vehicles per day for period of January 1 to December 31 (365 days)
- ASDT: Average Summer Daily Traffic
Average daily traffic expressed as vehicles per day for period of May 1 to September 30 (153 days)

South On Twp Rd 553		
Vehicle Type	Vol	%
A: Passenger Vehicle	293	94.5
B: Recreational Vehicle	3	1.0
C: Bus	2	0.6
D: Single Unit Truck	11	3.5
E: Tractor Trailer Unit	1	0.3
ASDT	340	AADT
		310

September 8, 2021
03-20-0074

Mr. Neil Renneberg
Select Engineering Consultants
Suite 100, 17413 - 107 Avenue NW
Edmonton, AB T5S 1E5

Dear Mr. Renneberg:

Re: **Grade Crossing Safety Assessment (Draft - for Review)**
CN Vegreville Sub, Mile 93.26 (Range Road 195) – Lamont, AB
Lamont Railway Crossing Safety Assessments

1. INTRODUCTION

At the request of the Town of Lamont, Bunt & Associates Engineering Ltd. (Bunt) completed a detailed safety assessment of the above captioned grade crossing for the existing conditions as observed on Wednesday, August 11, 2021. **Figure 1.1** shows the location of the grade crossing.

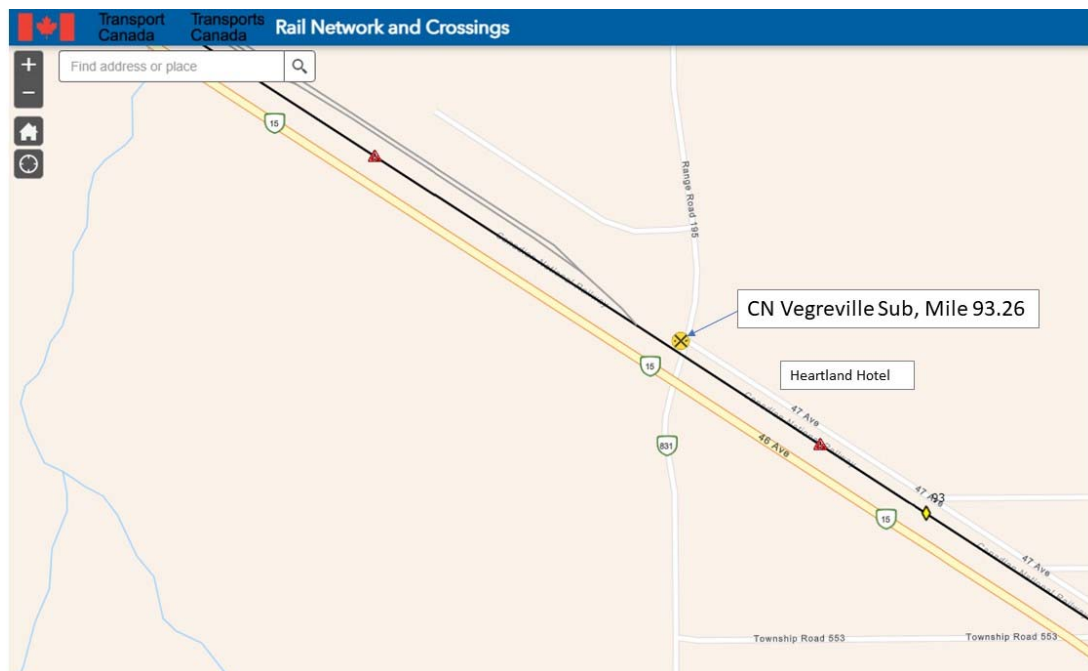


Figure 1.1 – Site Location

Source: Transport Canada (2021)

2. OBJECTIVES

Transport Canada updated the *Grade Crossings Regulations* and *Grade Crossings Standards* in 2019. Consequently, this detailed safety assessment of the Range Road 195 crossing was conducted in accordance with the methodology outlined in the *Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide* (Ottawa, ON: Transport Canada, April 2005) to:

- Address the needs of pedestrians, cyclists, and emergency vehicles.
- Identify the improvements that are required to ensure that the grade crossing complies with Transport Canada's updated *Grade Crossings Regulations* and *Grade Crossings Standards* of 2019.
- Identify the improvements that are required to facilitate whistle cessation at the subject crossing.
- Identify the order of magnitude costs of such improvements.
- Assess when these improvements should be implemented, such as:
 - **High** – Basic Requirement as per Section 58 of the *Grade Crossings Regulations* or safety related. Improvements must be implemented forthwith.
 - **Medium** – Additional Requirement as per Section 59 of the *Grade Crossings Regulations* and must be implemented by November 27, 2021.
 - **Low** – Improvements must be implemented as soon as practicable.
- Identify the party (Road Authority or Railway Company) that is responsible for the improvements.

3. METHODOLOGY

In order to complete the safety review of the subject crossing, Bunt completed the following work program:

- Background Information – Obtained available data pertaining to the subject grade crossing, including:
 - Reviewing data received from the Town;
 - Coordinating and consulting with the Railway Company (CN) to facilitate a safe field investigation / audit and acquisition of rail data; and
 - Obtaining traffic and crash data from the appropriate agencies:
 - Alberta Transportation – 5-year vehicle collision data; and
 - Transportation Safety Board of Canada – 5-year railway collision data.
- Field Investigation / Audit – Deployed a team to conduct a field investigation/audit of the subject railway crossing and adjacent roads and to record the findings in Appendix C1: Field Data Forms for Passive Crossings of the *Canadian Road / Railway Grade Crossing Detailed Safety Assessment Field Guide* (Ottawa: Transport Canada, April 2005). This task included:
 - Visually examining the railway crossing and adjacent roads;
 - Reviewing traffic volume data (see **Appendix D**);
 - Assessing railway crossing sight distance and queuing;

- Identifying and recording any indication of trespassing in the area;
- Identifying and recording the type, condition, length, and height of any existing fencing in the area;
- Railway Crossing Assessment – Assessed the subject crossing using the criteria identified in the *Grade Crossings Regulations*, which included:
 - Analyzing traffic, collision, and rail activity data;
 - Reviewing the crash history at the railway crossing;
 - Assessing railway crossing sight distance and queuing;
 - Identifying any higher level of crossing protection needed to address potential sightline issues and to facilitate anti-whistling; and
 - Identifying remedial works and associated Class D cost estimates that are required to ensure the crossings meet the Basic Requirements as well as improvements required to permit whistle cessation.

The current acts, regulations, standards, and guidelines governing these federally regulated grade crossings as encapsulated in the *Grade Crossing Handbook* (Transport Canada, July 2019) and referred to as needed included:

- *Railway Safety Act* (RSA)
- *Grade Crossings Regulations* (Transport Canada, November 2014 amended March 2019)
- *Grade Crossings Standards* (Transport Canada, July 2014 amended April 2019)
- *Supplemental Engineering Design Guidance for Vulnerable Road Users at Grade Crossings* (Transport Canada, April 2019)

Other documents of note included:

- *Geometric Design Guide for Canadian Roads* (Transportation Association of Canada (TAC), June 2017)
- *Manual of Uniform Traffic Control Devices for Canada* (TAC, January 2014)

4. FIELD INVESTIGATION/AUDIT AND ASSESSMENT TEAM

The field investigation/audit of the subject grade crossing and adjacent roads was completed on Wednesday, August 11, 2021 between 1:30 and 3:30 p.m. The assessment team included:

- Ms. Nicole Farn, P.Eng, Bunt & Associates Engineering Ltd.
- Ms. Lena Yuan, TT, Bunt & Associates Engineering Ltd.

The railway company was invited to participate in the field investigation / audit but were not available to participate at the time of the visit. The weather was sunny, clear, and windy, and the roads were dry.

5. FINDINGS

5.1 Key Features

Range Road 195 runs north-south at the west town boundary and intersects Canadian National (CN) Railway tracks at a passive grade crossing. For the purposes of this report, Range Road 195 is described in a north-south orientation while the rail line is described as east-west. **Figure 5.1** illustrates key features of the grade crossing, while photos of the crossing can be found in **Appendix A**. Key features include:

Railway Tracks

- The railway track is a single track along which freight trains can travel at speeds of up to 40 mph.
- Train volume averages 5 daily trains based on data obtained from Transport Canada.
- A railway siding is located about 75 m west of the crossing.

Road Approaches

- In the vicinity of the crossing, Range Road 195 is a two-lane asphalt Rural Collector Undivided roadway with no sidewalk accommodation on either side. The posted speed limit is 80 km/hr, and the Average Annual Daily Traffic (AADT) is in the order of 400 vehicles per day.
- Design vehicle – WB20 semi-tractor trailer

Vulnerable Road Users

- There are no pedestrian or cyclist facilities provided at the subject crossing.
- Pedestrian and cycling traffic is anticipated to be very low.

Crossing Surface

- Timber crossing surface with no flangeway gap fillers and a crossing angle of 100 degrees.

Warning System

- Passive crossing marked by STOP and RAILWAY CROSSING signs on the north approach and YIELD and RAILWAY CROSSING signs on the south approach.



Figure 5.1 – Key features of the Rge Rd 195 grade crossing

Traffic Control Devices

- Prescribed traffic control devices present at the crossing consist of a STOP sign on the north approach.
- A YIELD sign is present on the same post as the RAILWAY CROSSING sign on the south approach. This unconventional treatment (the yield sign would typically also be a stop sign) addresses the need for reducing driver confusion and the limited available storage distance between the crossing and Highway 15 on the south approach.
- A RAILWAY CROSSING AHEAD sign is required but is not present on the north approach.
- There are no pavement markings on either road approach.
- A STOP sign is located at the intersection of Rge Rd 195 with Highway 15 approximately 28 m south of the railway crossing.
- 47 Avenue intersects Rge Rd 195 as the stop-controlled east leg of a T-intersection approximately 21 m north of the railway crossing.

Fencing & Gates

- Neither fencing nor gates delineate the railway right-of-way within 400 m east or west of the crossing.

Sightlines

- Stopping Sight Distance (SSD)
 - North approach - 146 m required and achieved.
 - South approach - 135 m required if approach was free-flow. However, the intersection of Hwy 15 with Rge Rd 195 south of the crossing reduces the SSD to 55 m from the stop-controlled south approach to Highway 15.
- Stopping design distance (D_{SSD})
 - North approach – 144 m requirement is not met if railway equipment is present on siding; therefore, a stop condition is required (and present) on the north approach of the crossing.
 - South approach – 135 m requirement is met from the stop-controlled south approach to Highway 15.
- Departure design distance ($D_{STOPPED}$)
 - North approach – 242 m requirement is met.
 - South approach – 242 m requirement is met.

Safety

- AT- no grade crossing-related vehicle collisions reported within the past five years.
- Transportation Safety Board of Canada – no grade crossing-related railway collisions reported within the past five years.

Whistle Cessation

- Train whistling currently occurs at this crossing and is required.
- No evidence of routine trespassing was observed.

Cross-product

- As illustrated in **Figure 5.2**, the minimum level of control that should be provided is flashing lights and bells. As noted earlier, the grade crossing is currently passive with no warning system in place to warn motorists, cyclists, and pedestrians of approaching trains.

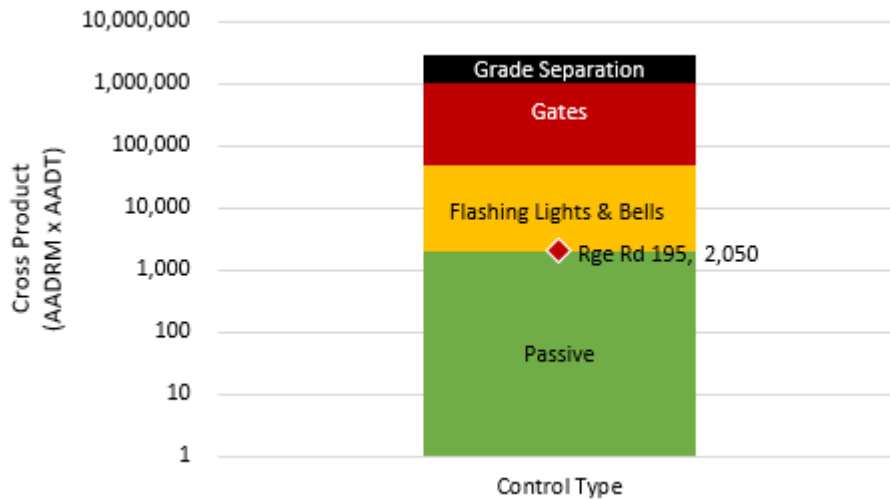


Figure 5.2 – Cross-Product at the Rge Rd 195 grade crossing

Outstanding issues that affect safety and whistle cessation are outlined in **Appendix B** along with the suggested remediation. As data about the crossing were collected in accordance with Transport Canada’s *Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide*, the completed field data forms are attached as **Appendix C**.

6. RECOMMENDATIONS AND CONCLUSIONS

A field investigation / audit of the public grade crossing located at Rge Rd 195 in Lamont, AB identified the following issues:

1. The crossing appears to comply with the Basic Requirements as per Section 58 of the *Grade Crossings Regulations* and the safety related requirements identified in the *Grade Crossings Regulations* and *Grade Crossings Standards* (High Priority).
2. The crossing appears to comply with the additional requirements of Section 59 identified in the *Grade Crossings Regulations* (Medium Priority).
 - a. Install Flashing Lights and Bells (FLB) warning system.
 - b. Install DO NOT STOP ON TRACKS sign on north approach.
3. In order for this crossing to comply with the remaining requirements identified in the *Grade Crossings Regulations* and *Grade Crossings Standards*, the road authority and railway company should implement the following measures as soon as practicable (Low Priority):
 - a. Install RAILWAY CROSSING AHEAD sign on north approach.
 - b. Remove YIELD sign on south approach.

- c. Paint double stop bars, RAILWAY CROSSING 'X' symbol pavement markings, and longitudinal pavements markings as per MUTCDC standards on both approaches.
 - d. Confirm horizontal and vertical curvature is appropriate on the north approach.
4. The installation of Flashing Lights and Bells at this crossing location would be required for it to be eligible for whistle cessation based on the criteria as set out in the *Railway Safety Act*:

Table 6.1 - Order of Magnitude Cost Estimate at Rge Rd 195

ITEM	RECOMMENDED ACTION	RESPONSIBILITY		ORDER OF MAGNITUDE COST	PRIORITY			WHISTLE CESSATION
		ROAD AUTHORITY	RLWY CO.		HIGH	MEDIUM	LOW	
1	Install RAILWAY CROSSING AHEAD sign on the north approach.	X		\$300			X	
2	Install DO NOT STOP ON TRACKS sign on west approach	X		\$300		X		
3	Paint double stop bars, RAILWAY CROSSING 'X' symbol pavement marking, and longitudinal pavements markings as per MUTCDC standards on both approaches.	X		\$10,000			X	
4	Install Flashing Lights and Bells at this crossing location.	X	X	\$300,000		X		X
				\$310,600				

- Notes:
- 1. Cost estimation based on information in Bunt files.
 - 2. All costs related to rail replacements or improvements must be confirmed by the railway company.
 - 3. Price does not include cost for any permits or fees associated with railway work.
 - 4. Price does not include any soft engineering costs (i.e. Geotechnical engineering or environmental engineering).
- High - Basic Requirement as per Section 58 of the Grade Crossings Regulations or safety related. Improvement must be implemented forthwith.
- Medium - Additional Requirement as per Section 59 of the Grade Crossings Regulations and must be implemented by November 27, 2021.
- Low - Improvement must be implemented as soon as practicable.

Note: The safety assessment of the grade crossing at CN Vegreville Sub, Mile 93.26 (Rge Rd 195) in Lamont, AB covers physical features which may affect road and rail user safety and identifies potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this assessment were to be addressed, this would not confirm that the crossing is 'safe', rather, adoption of the recommendations should improve the level of safety at this facility.

If you have any questions regarding our review, please call me at (780) 732-5373 Ext. 222 or e-mail me at nfarn@bunteng.com.

Yours truly,
Bunt & Associates

Nicole Farn, P.Eng.
Senior Transportation Engineer

Appendix A – Site Photographs
Appendix B – Outstanding Safety Issues
Appendix C – Field Assessment Forms
Appendix D – Traffic Count Data

APPENDIX A – SITE PHOTOGRAPHS

Date of Pictures: Wednesday, August 11, 2021



Photo 1: Looking South along Rge Rd 195 towards railway crossing



Photo 2: Looking South along Rge Rd 195 at railway crossing



Photo 3: Looking Left from North approach



Photo 4: Looking Right from North approach



Photo 5: Looking North along Rge Rd 195 towards railway crossing



Photo 6: Looking North along Rge Rd 195 at railway crossing



Photo 7: Looking Left from South approach



Photo 8: Looking Right from South approach



Photo 9: Looking East at Railway Crossing



Photo 10: Looking West at Railway Crossing

APPENDIX B – OUTSTANDING SAFETY ISSUES

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Table B.1: Outstanding Safety and Whistle Cessation Issues

OBSERVATION	SUGGESTED ACTION	RESPONSIBILITY		BASIC REQ	WHISTLE CESS. REQ	PRIORITY	ORDER OF MAGNITUDE COST
		ROAD AUTH.	RLWY CO.				
GCS ARTICLE 6 – ROAD GEOMETRY							
1. Concern about adequacy of the horizontal curvature in advance of the crossing on the north approach.	Confirm horizontal and vertical curvature is appropriate.	X				Low	TBD
GCS ARTICLE 8 – SIGNS							
2. RAILWAY CROSSING AHEAD sign required on the north approach.	Install RAILWAY CROSSING AHEAD sign on the north approach.	X		X		Low	\$300
3. DO NOT STOP ON TRACKS sign required for SB vehicles on north approach given location of downstream intersection < 30 m from tracks.	Install DO NOT STOP ON TRACKS sign on north approach.	X				Medium	\$300
4. Paintline markings are worn and generally not visible on either approach.	Paint double stop bars, RAILWAY CROSSING ‘X’ symbol pavement marking, and longitudinal pavements markings as per MUTCDC standards on both approaches.	X				Low	\$10,000
GCS ARTICLE 9 – WARNING SYSTEM SPECIFICATION							
5. Active warning system is warranted at this location (based on cross-product and location of downstream intersection).	Install Flashing Lights and Bells at this crossing location.	X	X		X	Medium	\$300,000
GCS ARTICLE 11 – LOCATION OF GRADE CROSSINGS							
6. On south approach, there is less than 30 m between the tracks and Highway 15.	See Note 4.	X				Medium	See Note 4
GCS APPENDIX D – WHISTLING CESSATION							
7. The existing passive crossing does not meet the warning system requirement for whistle cessation at a public crossing.	See Note 6.	X	X		X	Medium	See Note 6.
TOTAL (+/- 30%):							MEDIUM - \$300,300 LOW - \$10,300 TOTAL - \$310,600 TOTAL IF WHISTLE CESSATION IS REQUIRED - \$310,600

- Notes:
1. Cost estimation based on information in Bunt files.
 2. All costs related to rail replacements or improvements must be confirmed by the railway company.
 3. Price does not include cost for any permits or fees associated with railway work.
 4. Price does not include any soft engineering costs (i.e. geotechnical engineering or environmental engineering).
 5. The assignment of responsibility (Railway Company, Road Authority) reflects the *Grade Crossings Regulations*, and does not reflect financial responsibility and any other agreements between the Railway Company and the Road Authority.
- High** – Basic Requirement as per Section 58 of the *Grade Crossings Regulations* or safety related. Improvement must be implemented forthwith.
- Medium** – Additional Requirement as per Section 59 of the *Grade Crossings Regulations* and must be implemented by November 27, 2021.
- Low** – Improvement should be implemented as soon as practicable.

APPENDIX C – FIELD ASSESSMENT FORMS

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Appendix C1: FIELD DATA FORMS



Passive Crossings

Mile 93.26 (Range Road 195) Vegreville Subdivision, CN Railway
Lamont, AB

NOTE: The safety assessment of this grade crossing covers physical features which may affect road and rail user safety, and identifies potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this assessment were to be addressed, this would not confirm that the crossing is 'safe', rather, adoption of the recommendations should improve the level of safety at this facility.

This assessment is based on the operation and site conditions noted. Should any operation and site conditions change, this assessment will no longer be valid and the grade crossing should be reassessed. Operation and site condition changes may include, but not limited to, design vehicle, posted roadway speed, major user groups such as cyclists for new bike route, road classification, addition of sidewalk, new bikeway, train speed, train frequency, road traffic volume range, new truck or transit route designation, etc.

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Date of Assessment: Wednesday, August 11, 2021

Assessment Team Members & Affiliations: Ms. Nicole Farn, P.Eng - Bunt
Ms. Lena Yuan, TT - Bunt

Reason for Assessment: periodic assessment significant change in infrastructure significant change in road or rail volumes
 cessation of whistling significant change in train operations significant change in road or rail speeds
 change in vehicle types 2+ fatal collisions in 5yr. period other collision experience (see below)

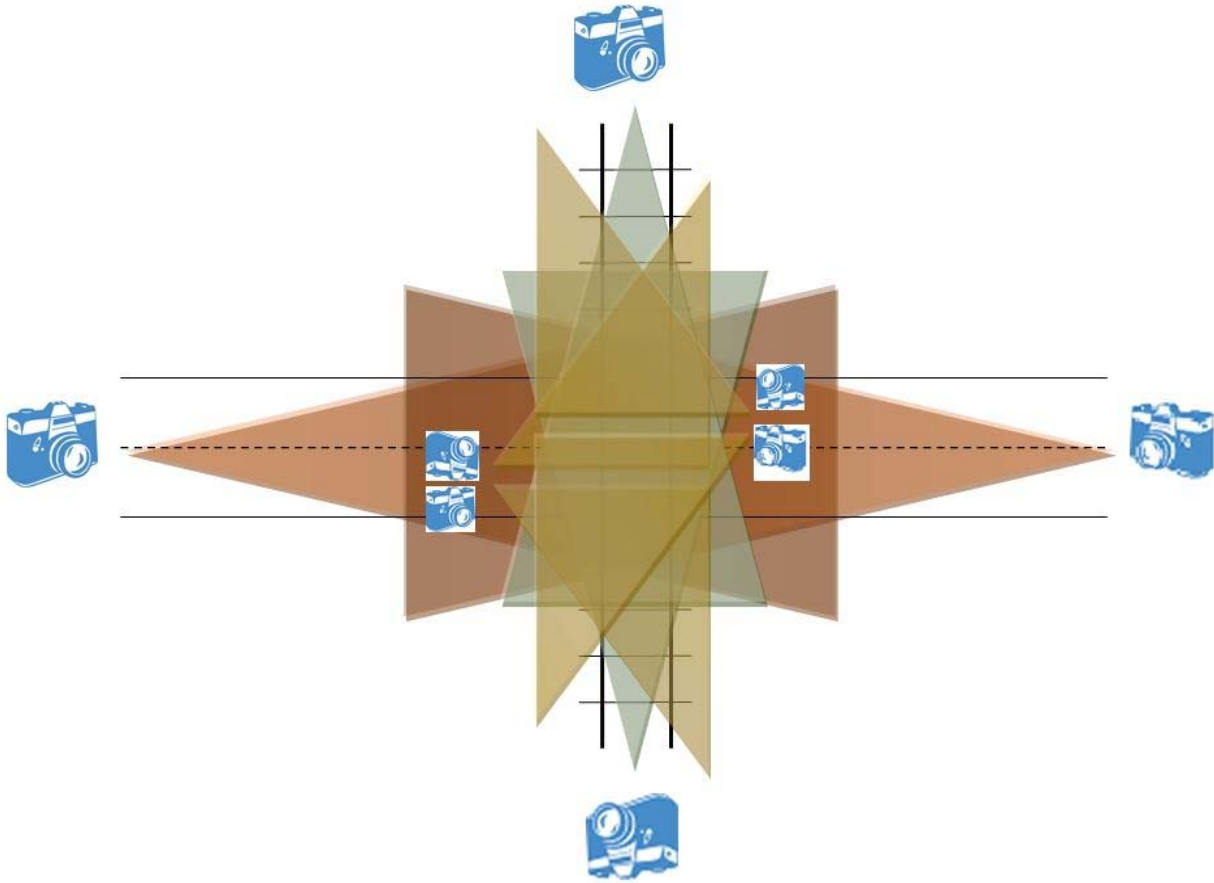
Track 1 (from west to east)

Railway Company:	CN Railway		
Crossing Location:	Range Road 195		
Location Number:	16653		
Municipality:	Lamont, AB		
Railway:	CN Railway		
Subdivision:	Vegreville	Mile:	93.26
Spur:	--	Mile:	
Type of Grade Crossing:	SRCS		
Track Type:	Class 3		

Road Authority:	Lamont County		
Road Name / Number:	Range Road 195		
Province:	Alberta		
Location Reference:	53.7639, -112.802		
Road Classification:	Rural Collector Undivided		
Notes:	N/A		

Collision History (5-year period):			
Property Damage Collisions:	<u>0</u>	Number of Persons Injured:	<u>0</u>
+ Personal Injury Collisions:	<u>0</u>	Number of Fatalities:	<u>0</u>
+ Fatal Collisions:	<u>0</u>		
= Total Collisions in last 5 year period:	<u>0</u>		
Details of Collisions:			
No grade crossing-related vehicle collisions.			

SCENE PHOTOGRAPHS



NOTE: All references to direction in this safety review are keyed to this diagram.



Source	Item	Reference
Rail	Maximum Railway Operating Speed, $V_T =$ 40 mph = 64 km/h	
Rail	Daily Train Volume Freight trains / day: 5 Passenger trains / day: 0	
Rail	Switching during daytime? Yes Switching during nighttime? Yes	
Rail	Number of Tracks: 1	
Road	Avg. Annual Daily Traffic, AADT = 410 vpd Year of count: 2020	
Road	High seasonal fluctuation in volumes? No	
Road	Pedestrian Volume = N/A peds / day	
Road T	Is crossing on a School Bus route? Not Observed	
Road T	Do Dangerous Goods trucks use this roadway? Not Observed	
Road	Cyclist Volumes = N/A cyclists / day	
Road T	Regular use of crossing by persons with Assistive Devices? No	
Road T	Other special road users? Type: No Daily Volume: 0	
Road	Forecasted AADT ² = 410 vpd Forecast year: 2020	
Road T	Design Speed: N approach 80 km/h S Approach: 80 km/h	
	Posted Speed: N approach 80 km/h S Approach: 80 km/h	
	Maxi. Operating Speed: N approach 80 km/h S Approach: 80 km/h	
	Notes: No comment.	
Road T	Road Surface Type: Asphalt	
observe	Surrounding Land Use: Industrial Urban / rural? Rural	
observe	Any schools, retirement homes, etc. nearby? NO	

Notes:

T indicates information should be confirmed by field observation

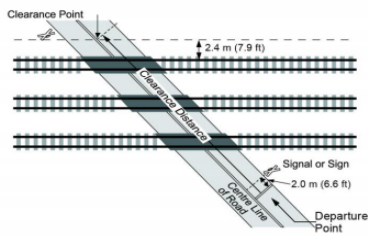
1. Road Authority should provide plans if available.
2. Forecast AADT until next assessment if significant developments are expected or if a planned bypass may reduce volumes

Comments Following Site Visit:

- Siding approximately 75m west of crossing.
- Curvature of Range Road 195 north and south approaches in order to cross Hwy 15 and the Vegreville sub at a less acute angle.

Figure 10-1 – Clearance Distance (cd) for Grade Crossings

(a) For Grade Crossings with a Warning System or Railway Crossing Sign



(b) For Grade Crossings without a Warning System or Railway Crossing Sign

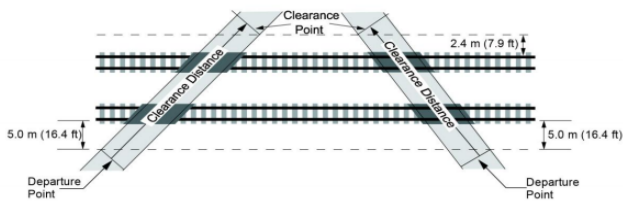
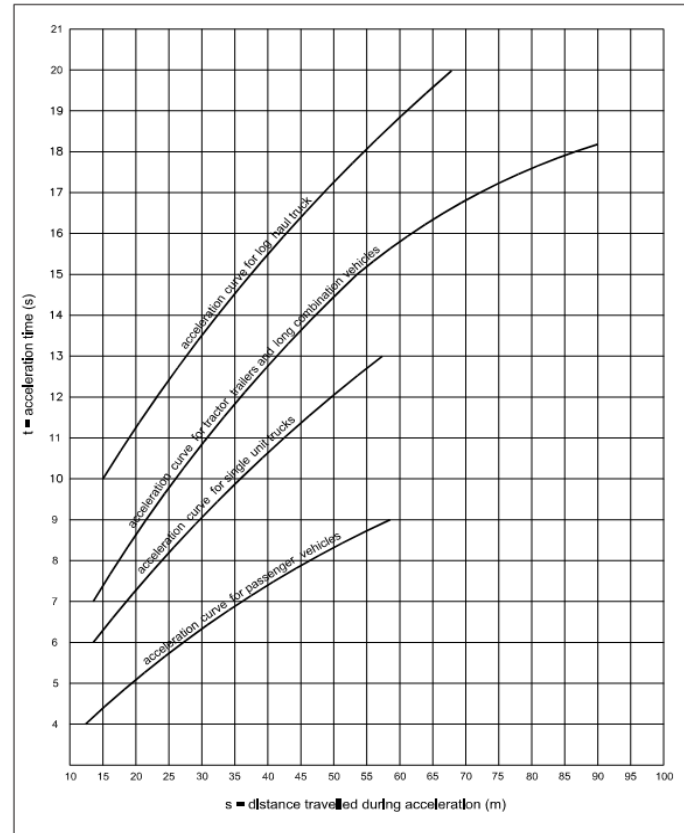


Figure 2.3.3.3 Assumed Acceleration Curves (Acceleration From Stop Control on Minor Road)¹⁰



Geometric Design Guide for Canadian Roads

Table 2.3.3.2 Ratios of Acceleration Times on Grades

Design Vehicle	Cross Road Grade, %				
	-4	-2	0	+2	+4
Passenger Car	0.7	0.9	1.0	1.1	1.3
Single Unit Truck	0.8	0.9	1.0	1.1	1.3
Tractor-Semitrailer	0.8	0.9	1.0	1.2	1.7

Source	Item	Reference
	Design Vehicle	
Road	Type: WB-20 Tractor Semitrailers	Art. 10.3.1
look-up	Length, L = 22.7 m	Art. 10.3.1
look-up	Stopping Sight Distance, SSD N approach = 146 m S Approach = 135 m	*Note
measure	Clearance Distance, cd = 10.0 m	Fig. 10-1
calculate	Vehicle Travel Distance, S = L + cd = 32.7 m	Art. 10.2.1
calculate	Vehicle Departure time, T_D = J + T = 13.5 sec	Art. 10.3.2
look-up	J = Driver's reaction time = 2.0 sec	Art. 10.3.2
	T = (t x G)	
calculate	T = the time for the design vehicle to travel through S = 11.5 sec	
look-up	t = time for the design vehicle to accelerate through S t = 11.5 sec	GDG Fig. 2.3.3.3
look-up	G = ratio of acceleration time on grade/grade adjustment factor G = 1.0	GDG T2.3.3.2
	Road Grade Effect:	
Road T	Maximum general approach grade within 'S' = -2 % (Used for SSD Calculation)	
	Maximum general approach grade within 'S' = 0 % (Used for G Cacluation)	
observe	Do field acceleration times exceed T _D ? Not Observed	
	Pedestrian, Cyclist & Assistive Devices Departure Time T_P = cd / V_P	Art. 10.3.3
look-up	T_P = 8.33 sec V_P = 1.2 m/s (maximum 1.2m/s)	Art. 10.3.3

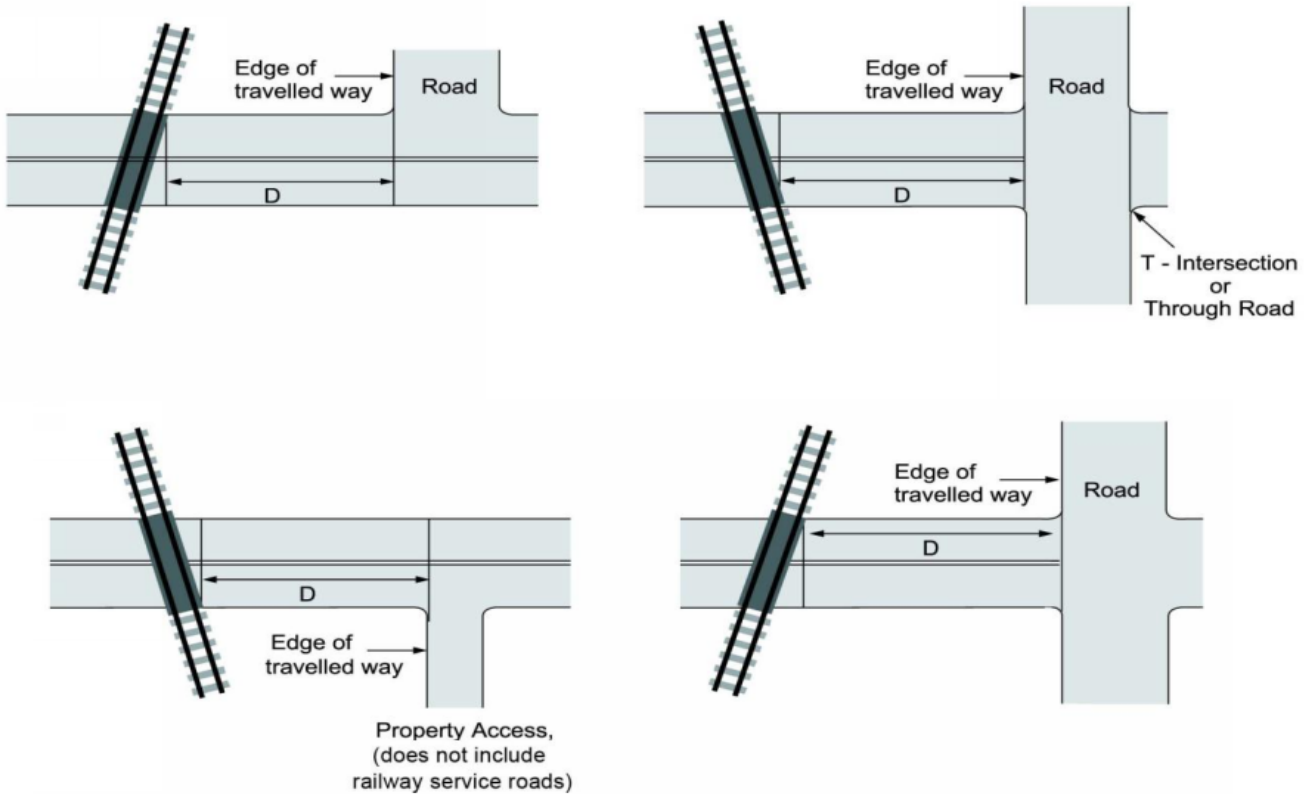
T indicates information should be confirmed by field observation

*Note: Refer to Table E-2 – Determine SSD in Grade Crossing Handbook (Transport Canada, 2019)

Comments Following Site Visit:

- No comments

Figure 11-1 – Restrictions on the Proximity of Intersections and Entranceways to Public Grade Crossings



Source	Item	Reference
measure	"D" should not be less than 30m for either approach if the train speed exceeds 15 mph. "D" S approach : 28.4 m "D" N approach : 21.5 m D < 30m No	Fig 11-1
observe	Are there pedestrian crossing on either road approach that could cause vehicles to queue back to the tracks? No	
observe	Is "D" insufficient such that road vehicles might queue onto the rail tracks? Yes	
observe	Is "D" insufficient such that road vehicles turning from a side street might not see warning devices for the crossing? No	

Comments Following Site Visit:

- D on south approach was observed to just accommodate a single tractor/trailer unit stopped at Hwy 15 stop sign.

GCS Section 5

Figure 5-1 – Grade Crossing Surface Dimensions

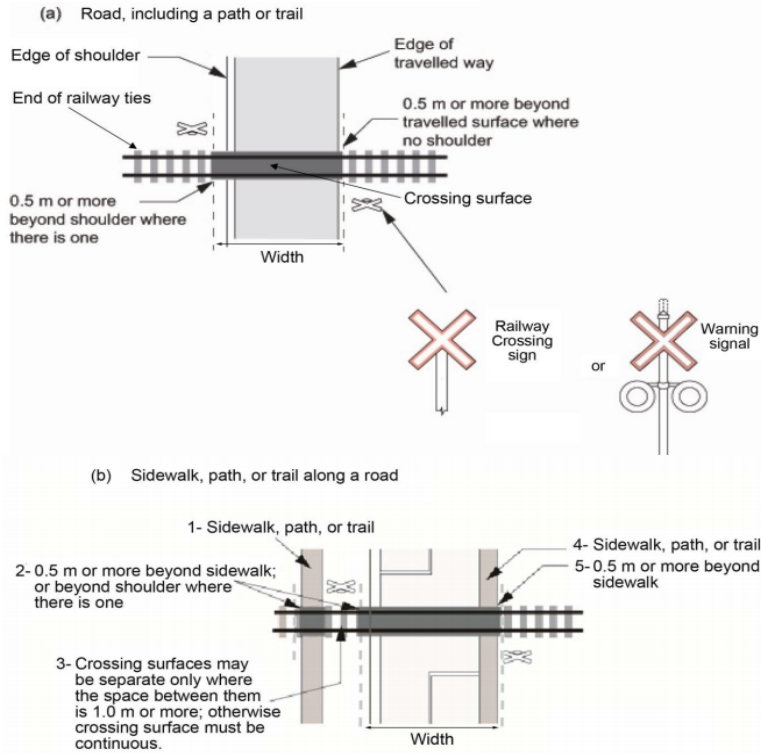
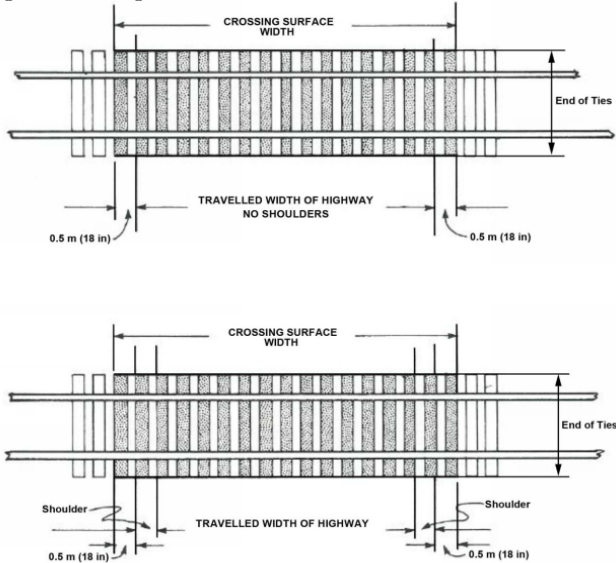


Table 5-1 Crossing Grade Crossing Surface – Cross Section

a) Flangeway		
Width	Minimum	65 mm
	Maximum for	
	Public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices (only the portion of the crossing surface used by persons with assistive devices)	75 mm
	All other grade crossings	120 mm
Depth:	Minimum	50 mm
	Maximum for	
	Public sidewalks, paths and trails designated by the road authority for use by persons using assistive devices (only the portion of the crossing surface used by persons with assistive devices)	75 mm
	All other grade crossings	No limit
(b) Field side gap		
A space is permitted on the outer side of the rail at rural locations, except for public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices.		
	Maximum width	120 mm
	Maximum depth	No limit
(c) Elevation of the top of the rail with respect to the crossing surface		
The top of the crossing surface must be installed as close as possible to the top of the rail within the wear limits below.		
Wear limits		
Public sidewalk, path or trail designated by the road authority for use by persons using assistive devices (only the portion of the crossing surface used by persons with assistive devices)		

Figure 3-1 – Crossing Surface



	Maximum distance of the top of the rail above crossing surface	13 mm
	Maximum distance of the top of the rail below crossing surface	7 mm
All other public grade crossings: Maximum distance of the top of the rail above or below the crossing surface		25 mm
Private grade crossings: Maximum distance of the top of the rail above or below the crossing surface		50 mm


Source	Item	Reference
observe	Is the crossing smooth enough to allow road vehicles, pedestrians, cyclists, and other road users to cross at their normal speed without consequence? Comment below. No	Art. 5.1
observe	Grade Crossing Surface material: Timbers	
observe	Approach Road Surface Type: Asphalt	
observe	Approach Road Surface Condition: N approach Good S approach Marginal	
observe	Roadway Illumination? No	
measure	Grade Crossing Surface width 11.5 m (minimum width of travelled way and shoulder plus 0.5m on each side)	Fig 3-1 / 5-1
measure	Road Surface extension beyond travel lanes (minimum = 0.5m each side) 1.4 m on N approach (east side) 1.3 m on S approach (east side)	Fig 3-1 / 5-1
measure	Sidewalk/Path/Trail crossing width (minimum = 1.5m) N/A m on N approach N/A m on S approach	Fig 5-1
measure	Sidewalk/Path/Trail extension beyond sidewalk (minimum = 0.5m) N/A m on N approach N/A m on S approach	Fig 5-1
measure	Distance Between Travel Lane and Sidewalk N/A m on N approach N/A m on S approach	Fig 5-1
Cross-Section:		
measure	Flangeway width = 65 mm (min = 65mm; max = 75mm ¹ or 120mm)	Table 5-1
measure	Flangeway depth = 165 mm (min = 50mm; max = 75mm ¹ or no limit)	Table 5-1
measure	Field Side Gap width = 100 mm (maximum = 120 mm or 0 ¹)	Table 5-1
measure	Field Side Gap depth = 150 mm (maximum = no limit or 0 ¹)	Table 5-1
measure	Elevation of Top Rail above road surface = 25 mm (maximum = 13mm ¹ , 25mm, or 50mm)	Table 5-1
measure	Elevation of Top Rail below road surface = 25 mm (maximum = -7mm ¹ , -25mm, or -50mm)	Table 5-1

1. Public sidewalks, paths or trails designed by the road authority for use of persons using assistive devices

Comments Following Site Visit:

- The crossing surface appears to be marginal. i.e. Loose timbers on crossing bounce around when vehicles cross.
- Flangeway and Field Side Gap width and depth appear to meet requirements.

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Source	Item	Reference
observe	Are horizontal and vertical alignments smooth and continuous throughout SSD? N Approach: Yes S Approach: Yes	Art. 6-1
observe	Are the road lanes at least the same width on the crossing as on the road approaches? N Approach: Yes S Approach: Yes	Art. 6-4
Grades:		
lookup calculate	Road Classification = Rural Collector Undivided RCU Allowable Difference between roadway gradient and railway cross-slope= 0 %	Art. 6-2 / GDG T-2.3.13.1
observe	Road approach gradient at crossing: -2 % on N approach 2 % on S approach Railway Cross Slope: 0 %	Art. 6-2 / GDG T-2.3.13.1
observe	Does the allowable difference between the road approach gradient and railway cross-slope, or the railway gradient and the road approach cross-slope, in accordance with the design standards of the Geometric Design Guide (Table 2.3.13.1)? N Approach: No S Approach: No	Art. 6-2 / GDG T-2.3.13.1
Rail T	Are rail tracks super-elevated? N Approach: No S Approach: No	
At Public Grade Crossings:		
measure	Within 8m= -2 % on N approach 2 % on S approach (maximum = 2%) 8m to 18m= -2 % on N approach 0 % on S approach (maximum = 5%)	Art. 6-3 Art. 6-3
At Private Grade Crossings:		
measure	Within 8m= N/A % on N approach N/A % on S approach (maximum = 2%) 8m to 18m= N/A % on N approach N/A % on S approach (maximum = 10%)	Art. 6-3 Art. 6-3
At Grade Crossings for Pedestrian or Cyclist Use Only:		
measure	Within 5m= N/A % on N approach N/A % on S approach (maximum = 2%)	Art. 6-3
At Grade Crossings for Persons using Assistive Devices:		
measure	Within 5m= N/A % on N approach N/A % on S approach (maximum = 1%)	Art. 6-3
Road T	General approach grade: -2 % N 2 % S (maximum = 5%)	
Road T	If train speeds exceed 15mph, what is the angle between the crossing and the roadway? 100 ° (70° min and 110° max w/o warning system; 30° min and 150° max with warning system)	Art. 6.5
observe	Condition of Road Approaches: anything that might affect stopping/acceleration. Adequate	
observe	Is there any evidence that "low bed" trucks have difficulty negotiating the crossing? i.e. might they bottom-out or get stuck? No 	MUTCDC WA 52

T indicates information should be confirmed by field observation

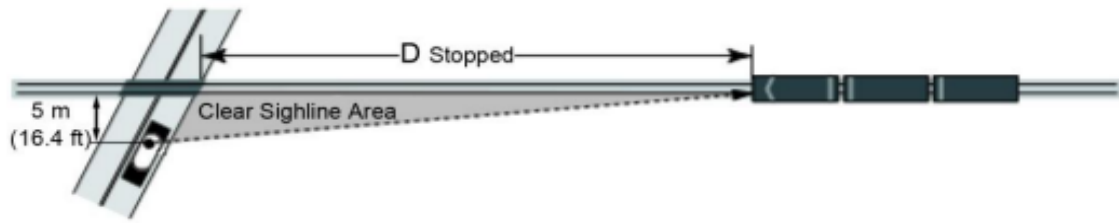
Comments Following Site Visit:

- Concern about adequacy of the horizontal curvature in advance of the crossing on the north approach.
- The change in gradient and road curvature may cause a vehicle to lose control if approaching at the posted speed.

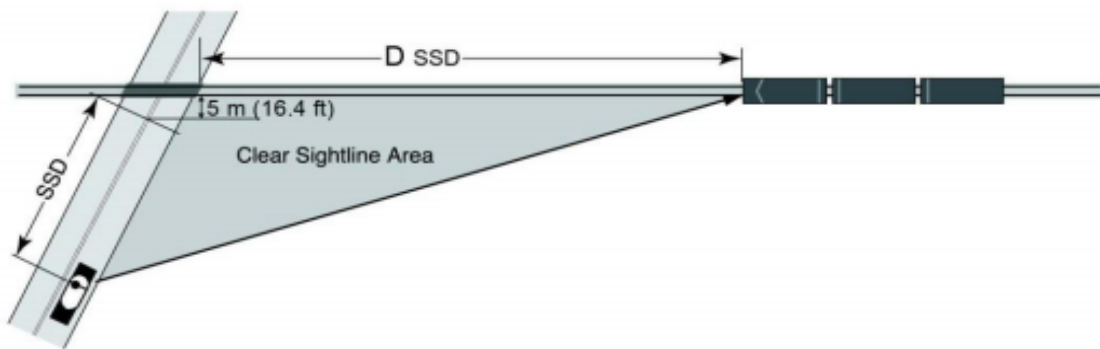
Section 7

Figure 7-1 – Minimum Sightlines – Grade Crossings

- (a) Sightlines for Users Stopped at a Grade Crossing (applicable to all quadrants).



- (b) Sightlines for Users Approaching a Grade Crossing (applicable to all quadrants).



Driver Eye Height	= 1.05m passenger vehicles, pedestrians, cyclists & assistive devices
	= 1.80m buses & single-unit trucks
	= 2.10m large trucks & tractor-trailers
Target Height	= 1.20m above rails

Warning: some formulae are based on Imperial units while others are Metric

Source	Item	Reference																
Observe	Type of Grade Crossing: SRCS Are gates present? No																	
	SSD minimum: N approach = 146 m S approach = 135 m	(from Sheet #4)																
measure	SSD actual: N approach = >145 m S approach = 55 m	Art. 7.2																
	Stopping Sight Distance (D_{SSD}) D _{SSD} - Drivers Approaching a Grade Crossing w/o Stop Signs or Warning Systems D _{SSD} minimum = 1.47V _T x T _{SSD} (ft) where V _T = railway design speed in mph (Sheet 4) T _{SSD} = [(SSD + cd + L) / 0.278V] where V = road design speed in km/h <table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">N approach</td> <td style="text-align: center;">S approach</td> <td></td> </tr> <tr> <td>T_{SSD} =</td> <td style="text-align: center;">8.0 sec</td> <td style="text-align: center;">7.5 sec</td> <td></td> </tr> <tr> <td>D_{SSD} minimum:</td> <td style="text-align: center;">472 ft</td> <td style="text-align: center;">443 ft</td> <td>Art. 7.2</td> </tr> <tr> <td>D_{SSD} minimum:</td> <td style="text-align: center;">144 m</td> <td style="text-align: center;">135 m</td> <td></td> </tr> </table> D _{SSD} actual: To driver's left >250 m To driver's left >250 m D _{SSD} actual: To driver's right 95 m To driver's right >250 m		N approach	S approach		T _{SSD} =	8.0 sec	7.5 sec		D _{SSD} minimum:	472 ft	443 ft	Art. 7.2	D _{SSD} minimum:	144 m	135 m		Art. 7.2 Art. 7.2 Art. 7.2
	N approach	S approach																
T _{SSD} =	8.0 sec	7.5 sec																
D _{SSD} minimum:	472 ft	443 ft	Art. 7.2															
D _{SSD} minimum:	144 m	135 m																
	Departure Design Distance (D_{STOPPED}) D _{STOPPED} - Drivers Stopped at a Grade Crossing with Stop Signs or Warning Systems w/o Gates D _{STOPPED-VEH} minimum = 1.47V _T x T _D where T _D = design vehicle departure time (Sheet #4) <table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">N approach</td> <td style="text-align: center;">S approach</td> <td></td> </tr> <tr> <td>D_{STOPPED-VEH} minimum =</td> <td style="text-align: center;">794 ft.</td> <td style="text-align: center;">794 ft.</td> <td>Art. 7.2</td> </tr> <tr> <td>D_{STOPPED-VEH} minimum =</td> <td style="text-align: center;">242 m</td> <td style="text-align: center;">242 m</td> <td></td> </tr> </table> D _{STOPPED-VEH} actual: To driver's left >250 m To driver's left >250 m D _{STOPPED-VEH} actual: To driver's right >250 m To driver's right >250 m		N approach	S approach		D _{STOPPED-VEH} minimum =	794 ft.	794 ft.	Art. 7.2	D _{STOPPED-VEH} minimum =	242 m	242 m		Art. 7.2 Art. 7.2				
	N approach	S approach																
D _{STOPPED-VEH} minimum =	794 ft.	794 ft.	Art. 7.2															
D _{STOPPED-VEH} minimum =	242 m	242 m																
	Departure Design Distance (D_{STOPPED})- Vulnerable Road Users D _{STOPPED-PED} - Vulnerable Road Users at a Grade Crossing w/o Gates: Ped Departure Time, TP = 8.3 sec. (from sheet #4) D _{STOPPED-PED} = 1.47VT x TP <table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">N approach</td> <td style="text-align: center;">S approach</td> <td></td> </tr> <tr> <td>D_{STOPPED-PED} minimum:</td> <td style="text-align: center;">490 ft</td> <td style="text-align: center;">490 ft.</td> <td></td> </tr> <tr> <td>D_{STOPPED-PED} minimum:</td> <td style="text-align: center;">149 m</td> <td style="text-align: center;">149 m</td> <td>Art. 7.2</td> </tr> </table> D _{STOPPED-PED} actual: To ped's left >250 m To ped's left >250 m D _{STOPPED-PED} actual: To ped' right >250 m To ped' right >250 m		N approach	S approach		D _{STOPPED-PED} minimum:	490 ft	490 ft.		D _{STOPPED-PED} minimum:	149 m	149 m	Art. 7.2	Art. 10.3.3 Art. 7.2 Art. 7.2				
	N approach	S approach																
D _{STOPPED-PED} minimum:	490 ft	490 ft.																
D _{STOPPED-PED} minimum:	149 m	149 m	Art. 7.2															
observe	Are there any obstacles within the sight triangles affect visibility? Yes																	

Comments Following Site Visit:

- SSD actual for South approach measured to NB stop control at Hwy 15 intersection.
- Dssd measured from SSDmin on North approach and from stop control across Hwy 15 on south approach.
- From SSD min on north approach, looking right, Dssd would be limited by trains stopped on siding west of the crossing (Dssd recorded above reflects this limitation).
- Available Dssd on the North approach requires a stop condition for southbound traffic.

GCS Section 8

Figure 8-1 – Railway Crossing Sign and Number of Tracks Sign

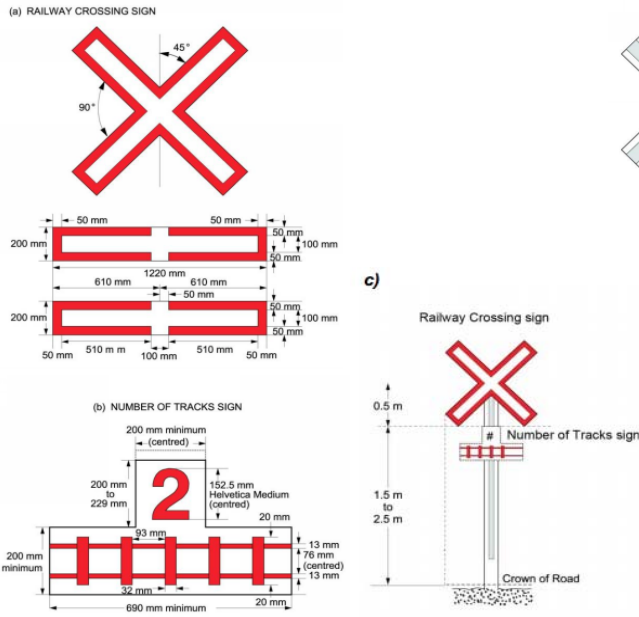


Figure 8-3 – Location of Railway Crossing Signs and Number of Tracks Signs (public grade crossings without warning systems)

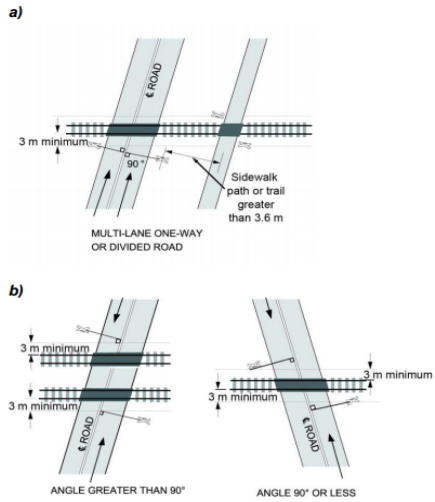


Figure 8-2 – Retroreflective Stripes on the Back of the Railway Crossing Sign and on the Sign Supporting Post (public grade crossings without a grade crossing warning system)

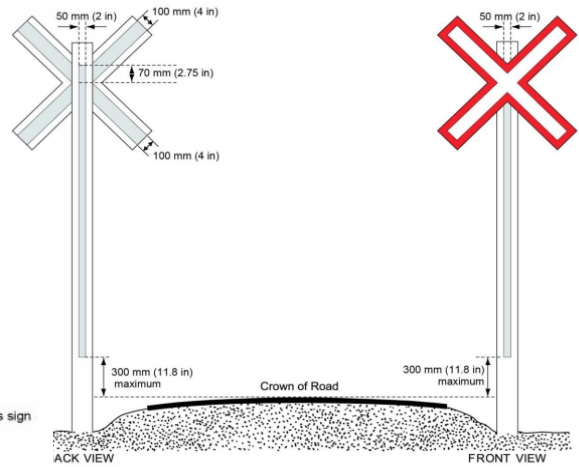
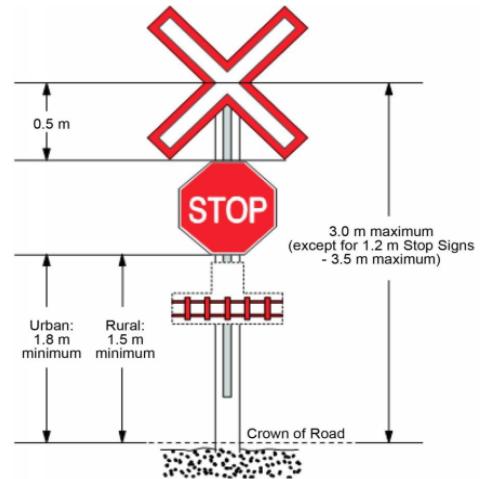



Figure 8-4 – Stop Signs




Source	Item	Reference
	Railway Crossing Sign and Number of Tracks sign 	Art. 8.1 and A2.2.7 MUTCDC
observe	Are signs present? N approach: Yes S approach: Yes	
measure	Location from railway (min. 3.0m): N: 3.6 m S: 3.5 m	Art. 8.1.5.b
measure	Location from curb (0.3m to 2.0m from curb, or 2.0 to 4.5m from edge of travelled way): N: 2.2 m S: 1.8 m	Art. 8.1.5.a
measure	Height (1.5m to 2.5m): N: 2.0 m S: 2.1 m	Fig 8-3
observe	Retroreflective stripes applied on the front and back of the Railway Crossing Sign supporting posts. N Front: Yes N Back: Yes	Fig 8-2
observe	S Front: No S Back: No	Fig 8-2
measure	Retroreflectivity readings: N Sign: N/A cd/lux/m ² S Sign: N/A cd/lux/m ²	Fig 8-1
observe	Is the distance between the centre of a sidewalk, path or trail and the Railway Crossing Sign supporting post > 3.6m? N/A	
observe	Are separate Railway Crossing Signs provided for the sidewalk, path or trail? N/A	
	Number of Tracks sign	Fig 8-1
observe	Are signs present? N approach: N/A S approach: N/A	
observe	Is the distance between two track centre lines > 30m? N/A	
observe	Is Number of Tracks sign provided for each railway crossing? N/A	Art. 8.1.6


Comments Following Site Visit:

- South approach sign post slightly turned and skewed to the east, away from approach vehicles.

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Source	Item				Reference
	Railway Crossing Ahead Sign (WA 18-20) 				GCS Art. 8.2; MUTCDC Art. 3.4.2
	Posted speed limit?	80	km/h		
look-up	Are signs required?	N approach:	Yes	S approach:	No
observe	Are signs present?	N approach:	No	S approach:	No
observe	Appropriate orientation?	N approach:	N/A	S approach:	N/A
look-up	Distance required:	N approach:	130 m	S approach:	N/A m
measure	Distance measured:	N approach:	N/A m	S approach:	N/A m
measure	Lateral placement:	N approach:	N/A m	S approach:	N/A m
measure	Height:	N approach:	N/A m	S approach:	N/A m

Comments Following Site Visit:
 - Sign required on north approach. Historical photography shows a sign on north approach; however, based on recent site visit, sign post is present but sign is no longer present.

Source	Item				Reference
	Advisory Speed Tab Sign (WA-7S) 				GCS Art. 8.2; MUTCDC Art. 3.2.5
	Posted speed limit?	80	km/h		
	Advisory speed limit?	N/A	km/h		
observe	Are signs present?	N approach:	No	S approach:	No
measure	Distance measured:	N approach:	N/A m	S approach:	N/A m
measure	Lateral placement:	N approach:	N/A m	S approach:	N/A m
measure	Height:	N approach:	N/A m	S approach:	N/A m


Comments Following Site Visit:
 - No signs present.

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Source	Item						Reference	
	STOP SIGN AHEAD (WB-1) 						Sect. A3.6.1 MUTCDC	
look-up	Are signs required?	N approach:	No	S approach:	No		Art. 8.3	
observe	Are signs present?	N approach:	No	S approach:	No		Art. 8.3	
measure	Distance from nearest rail:	N approach:	N/A	m	S approach:	N/A	m	
measure	Lateral placement:	N approach:	N/A	m	S approach:	N/A	m	A1.7.2 MUTCDC
measure	Height:	N approach:	N/A	m	S approach:	N/A	m	A1.7.2 MUTCDC

Comments Following Site Visit:

Signs not present nor required.

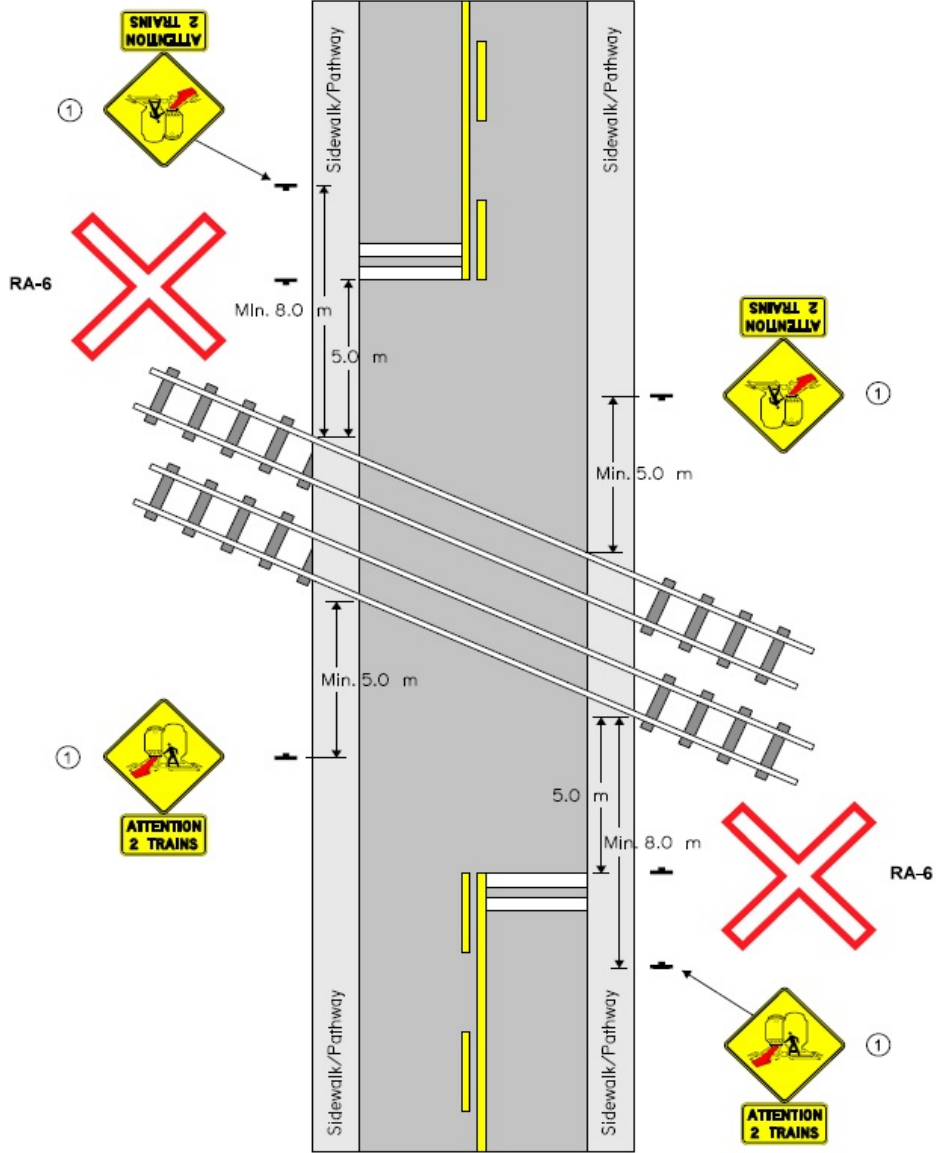
Source	Item						Reference	
	STOP SIGN (RA-1) 						Sect. A2.2.1 MUTCDC	
look-up	Are signs required?	N approach:	Yes	S approach:	No		Sect. 8.4	
observe	Are signs present?	N approach:	Yes	S approach:	No		check D _{STOPPED}	
	Are signs mounted on same post as Railway Crossing Signs?						Fig 8-4	
observe		N approach:	Yes	S approach:	Yes			
measure	Distance from nearest rail:	N approach:	3.6	m	S approach:	3.5	m	Fig 8-3
measure	Lateral Placement:	N approach:	2.2	m	S approach:	1.8	m	A1.7.2 MUTCDC
measure	Height (Urban=1.8m; Rural	N approach:	2.0	m to top of sign.	S approach:	N/A	m	Fig 8-4

T indicates information should be confirmed by field observation


Comments Following Site Visit:

- Stop sign below Railway Crossing sign on north approach.
- Yield sign on south approach. Yield sign not required.


SECOND TRAIN EVENT SIGN INSTALLATION



Note (1): Track clearance standards, which vary according to the company managing the railway, must be adhered to.

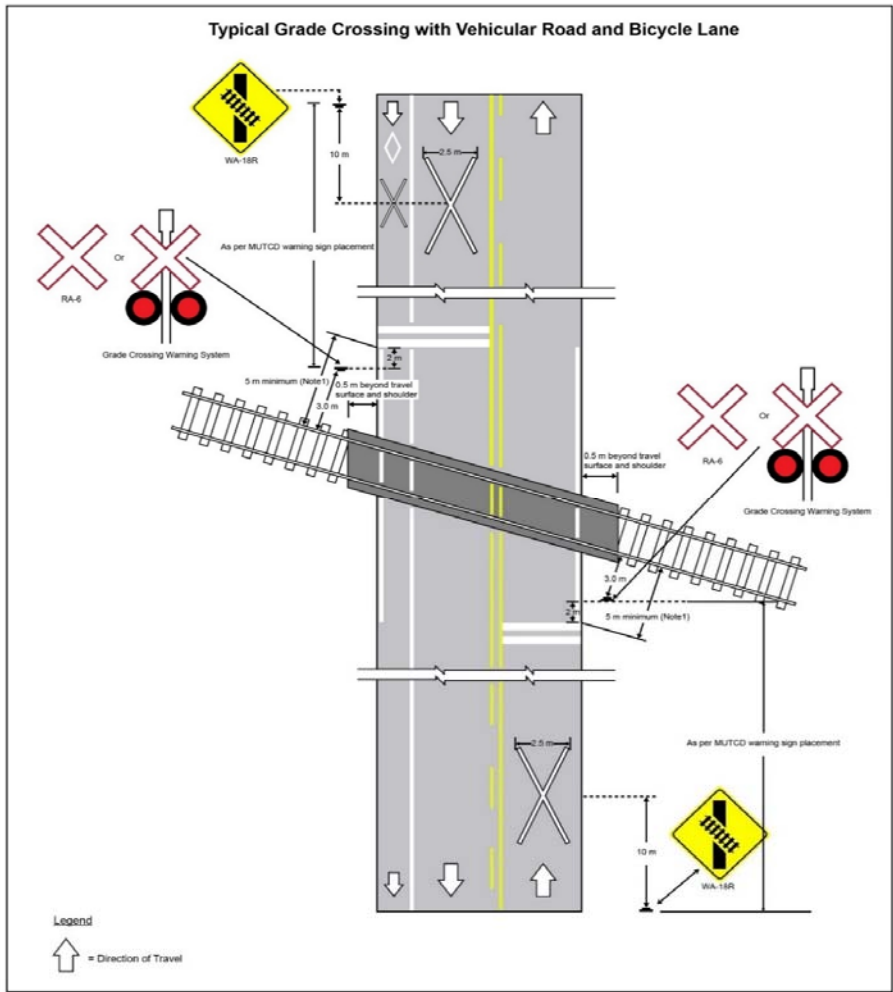
Source	Item				Reference
	SECOND TRAIN EVENT WARNING SIGN (WC-27 and WC-27S) 				Sect. A3.4.13 MUTCDC
look-up	Are signs required?	N approach:	No	S approach:	No
observe	Are signs present?	N approach:	No	S approach:	No
measure	Distance from nearest rail:	N approach:	N/A m	S approach:	N/A m
measure	Lateral placement:	N approach:	N/A m	S approach:	N/A m
measure	Height:	N approach:	N/A m	S approach:	N/A m

Comments Following Site Visit:
 - Signs not present nor required.

Source	Item				Reference
	DO NOT STOP ON TRACKS SIGN (RB-59) 				Sect. A2.8.4 MUTCDC
look-up	Are signs required?	N approach:	Yes	S approach:	No
observe	Are signs present?	N approach:	No	S approach:	No
measure	Distance from nearest rail:	N approach:	N/A m	S approach:	N/A m
measure	Lateral placement:	N approach:	N/A m	S approach:	N/A m
measure	Height:	N approach:	N/A m	S approach:	N/A m

T indicates information should be confirmed by field observation

Comments Following Site Visit:
 - Signs not present, but required on north approach.



French Version

45 cm
17.7 in.

9 in.
23 cm

SIGNEZ URGENCE
AU 1-800-555-5555
SUB: XXXXXXXX
MP: XXX.XX

English Version

45 cm
17.7 in.

9 in.
23 cm

REPORT EMERGENCY
TO 1-800-555-5555
SUB: XXXXXXXX
MP: XXX.XX

Bilingual Version

45 cm
17.7 in.

9 in.
23 cm

SIGNEZ | REPORT
URGENCE | EMERGENCY
1-800-555-5555
SUB: XXXXXXXX
MP: XXX.XX

ENS STANDARDIZATION PLATE	
SCALE	NTS
MATERIAL A	0.0625 IN. (22 GAUGE) VULCAN ALUMINUM, CORNER ROUND TO 1.5 IN.
MATERIAL B	3M HIGH INTENSITY WHITE PRISMATIC REFLECTIVE (8930)
COLOR	3M 100 SERIES TRANS BLUE (INK)

Source	Item	Reference
	EMERGENCY NOTIFICATION SIGN	
observe	Are signs present? N approach: Yes S approach: Yes	Art. 8.5
observe	Is sign oriented to face traffic approaching the grade crossing or parallel to the road? N approach: Yes S approach: Yes	Art. 8.5
observe	Is sign legible to road vehicles? N approach: Yes S approach: Yes	Art. 8.5
observe	What is the condition of the sign? N approach: Good S approach: Good	Art. 8.5

T indicates information should be confirmed by field observation

Comments Following Site Visit:
 - No comment.

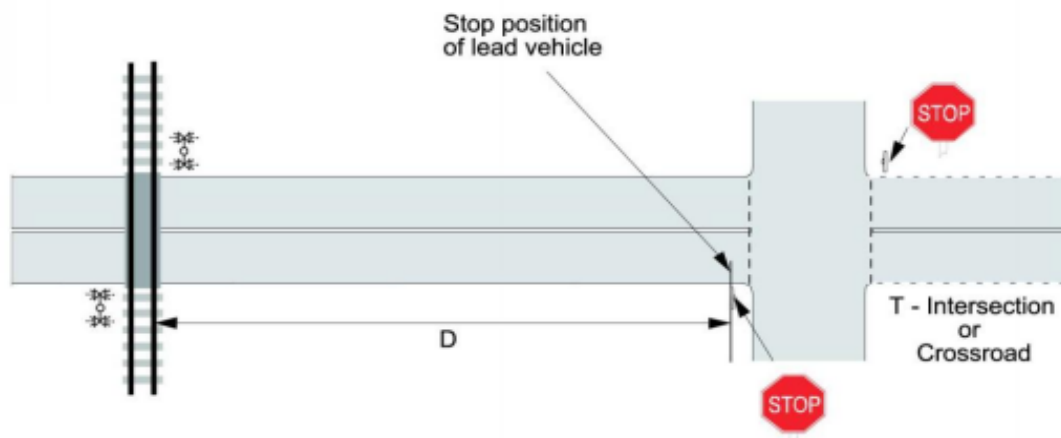
Source	Item	Reference
	PAVEMENT MARKINGS	
observe	Do pavement markings conform to Part C of the MUTCDC? No	Art. 8.8
observe	Are there lines to delineate sidewalks/paths/bicycle paths? N/A	

Comments Following Site Visit:
 No pavement markings present.

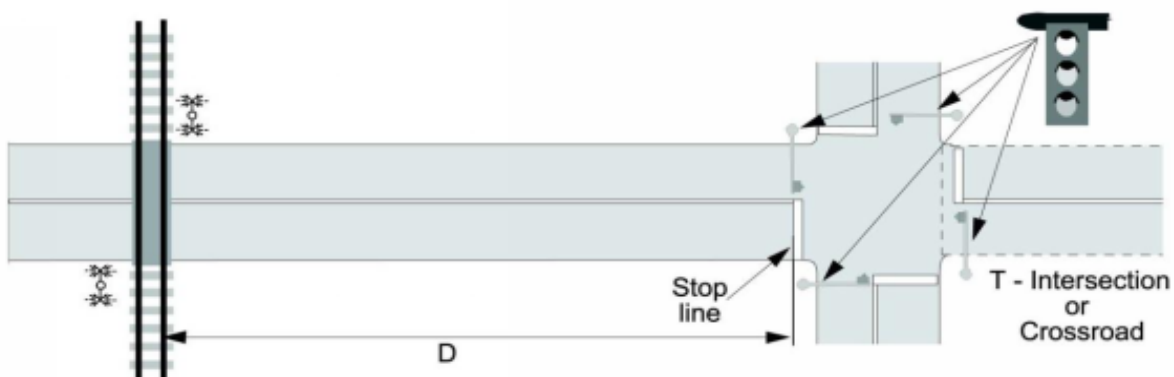
General Comments Regarding Signs & Pavement Markings:

Figure 9-1 – Proximity of Warning Systems to Stop Signs and Traffic Signals

(a) Near Stop Signs



(b) Near Traffic Signals



Source	Item	Reference
	Warning System Warrants at Grade Crossings If any of A through E below are met, then a warning system is warranted	Art. 9.1
	Existing AADT = 410 vpd Forecast AADT = 410 vpd	Sheet #3
	Daily Train Volume = 5 trains per day	Sheet #3
	A. Cross-Product = 2,050 (2,000 min.)	Warranted? YES Art. 9.1.a
observe	B. Is there a sidewalk, path or trail? Maximum Rail Operating Speed = 40 mph Warranted if $V_T \geq 80$ mph without sidewalk OR if $V_T \geq 50$ mph with sidewalk	No Warranted? NO Art. 9.1.b,c
observe	C. Is railway design speed more than 15mph? Are there two or more lines of railway?	Yes No Warranted? NO Art. 9.1.d.i
observe	Can trains pass one another?	N/A
	D. Is railway design speed more than 15mph? Is D < 30m at a stop-controlled intersection?	Yes Yes Warranted? YES Art. 9.1.d.ii Fig. 9-1a
measure	E. Is railway design speed more than 15mph? Is D < 60m at a signalized intersection?	Yes N/A Warranted? NO Art. 9.1.d.iii Fig. 9-1b
measure		

	Warning System Warrants for Grade Crossings with Gates: If any of A through E below are met, then a warning system with gates is warranted	
	A. Cross-Product = 2,050 (50,000 min.)	Warranted? NO Art. 9.2.1.a
	B. Maximum Rail Operating Speed = 40 mph (max = 50mph)	Warranted? NO Sheet #3 Art. 9.2.1.c
observe	C. Are there two or more lines of railway? Can trains pass one another?	No N/A Warranted? NO Art. 9.2.1.b
observe		
	D. Is railway design speed more than 15mph? Is D < 30m at a stop-controlled intersection?	Yes Yes Warranted? YES Art. 9.2.1.d
measure	E. Is railway design speed more than 15mph? Is D < 60m at a signalized intersection?	Yes N/A Warranted? NO Art. 9.2.1.e
measure		

	Warning System Warrants at Pedestrian Crossings If Condition A is met, then a warning system is warranted. If Condition B is met, then a warning system with gates is warranted	
Rail	A. Is the railway design speed more than 50mph? Is the sidewalk, path or trail outside the island circuit of an adjacent warning system?	No N/A Warranted? NO Art. 9.5
observe	B. Is railway design speed more than 15mph? Are there two or more lines of railway? Is the sidewalk, path or trail outside the island circuit of an adjacent warning system?	Yes No N/A Warranted? NO Art. 9.6
Rail		

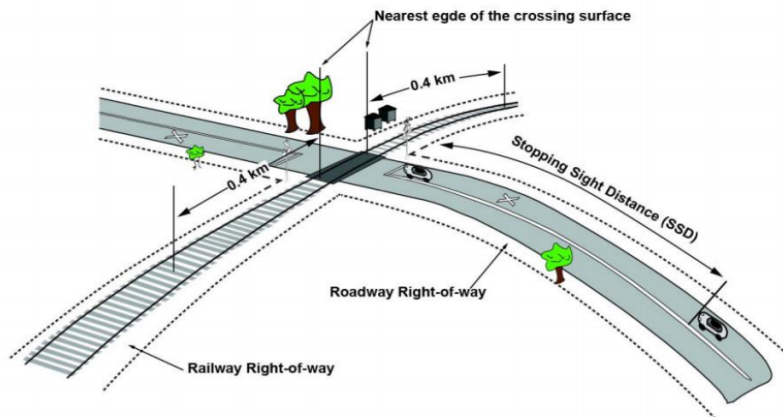
Comments Following Site Visit:

- Flashing lights and bells are warranted at this crossing.

Table D-1 Requirements for Warning Systems at Public Grade Crossings within an Area without Whistling

	Column A		Column B	
Railway Design Speed	Grade Crossings for Vehicle Use		Grade Crossings For Sidewalks, Paths, or Trails with the centreline no closer than 3.6 m (12 ft) to a warning signal for vehicles	
	No. of Tracks		No. of Tracks	
	1	2 or more	1	2 or more
Column 1	Column 2	Column 3	Column 4	Column 5
1 – 25 km/h (15 mph)	FLB	FLB	No warning system requirement	No warning system requirements
25 – 81 km/h (16 – 50 mph)	FLB	FLB & G	FLB	FLB & G
Over 81 km/h (50 mph)	FLB & G	FLB & G	FLB & G	FLB & G
Legend :				
FLB is a warning system consisting of flashing lights and a bell.				
FLB & G is a warning system consisting of flashing lights, a bell and gates				

Figure D-1 Prescribed area for whistling cessation as per Article 23.1 of the RSA



Source	Item		Reference
Rail	Is train whistling prohibited at this crossing? 24 hrs per day?	No No	
observe	Is there evidence of routine unauthorized access (trespassing) on the rail line in the area of the crossing? Comment below.	No	
observe	Are the requirements of Table D-1 met?	No	Appendix D
look-up	What is the required type of warning system per Table D-1?	FLB	Appendix D

Comments Following Site Visit:

- No fencing along right of way.
- Whistle cessation would necessitate flashing lights and bells.

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Additional Prompt Lists

Human Factors:

- Control device visibility / background visual clutter.
- Driver workload through this area (i.e., are there numerous factors that simultaneously require the driver's attention such as traffic lights, pedestrian activity, merging/entering traffic, commercial signing, etc.).
- Driver expectancy of the environment (i.e., are the control measures in keeping with the design levels of the road system and adjacent environment).
- Need for positive guidance.
- Conflicts between road and railway signs and signals.

Environmental Factors:

- Extreme weather conditions.
- Lighting issues (night, dawn/dusk, tunnels, adjacent facilities, headlight or sunlight glare, etc.)
- Landscaping or vegetation.
- Integration w/ surrounding land use (e.g., parked vehicles blocking sightlines, merging traffic lanes, etc.)

All Road Users:

- Have needs of the following been met:
 - pedestrians (including strollers, baby carriages, and blind persons)
 - children
 - elderly
 - bicyclists
 - motorcyclists
 - over-sized trucks
 - buses
 - recreational vehicles
 - wheelchairs, scooters, walkers, etc.
 - rollerbladers

Comments Following Site Visit:

Insert text.

APPENDIX D – TRAFFIC COUNT DATA

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Turning Movement Summary Diagram

North On Rge Rd 195		
Vehicle Type	Vol	%
A: Passenger Vehicle	251	61.2
B: Recreational Vehicle	0	0.0
C: Bus	3	0.7
D: Single Unit Truck	26	6.3
E: Tractor Trailer Unit	130	31.7
ASDT	460	AADT 410

Reference No.: 103550

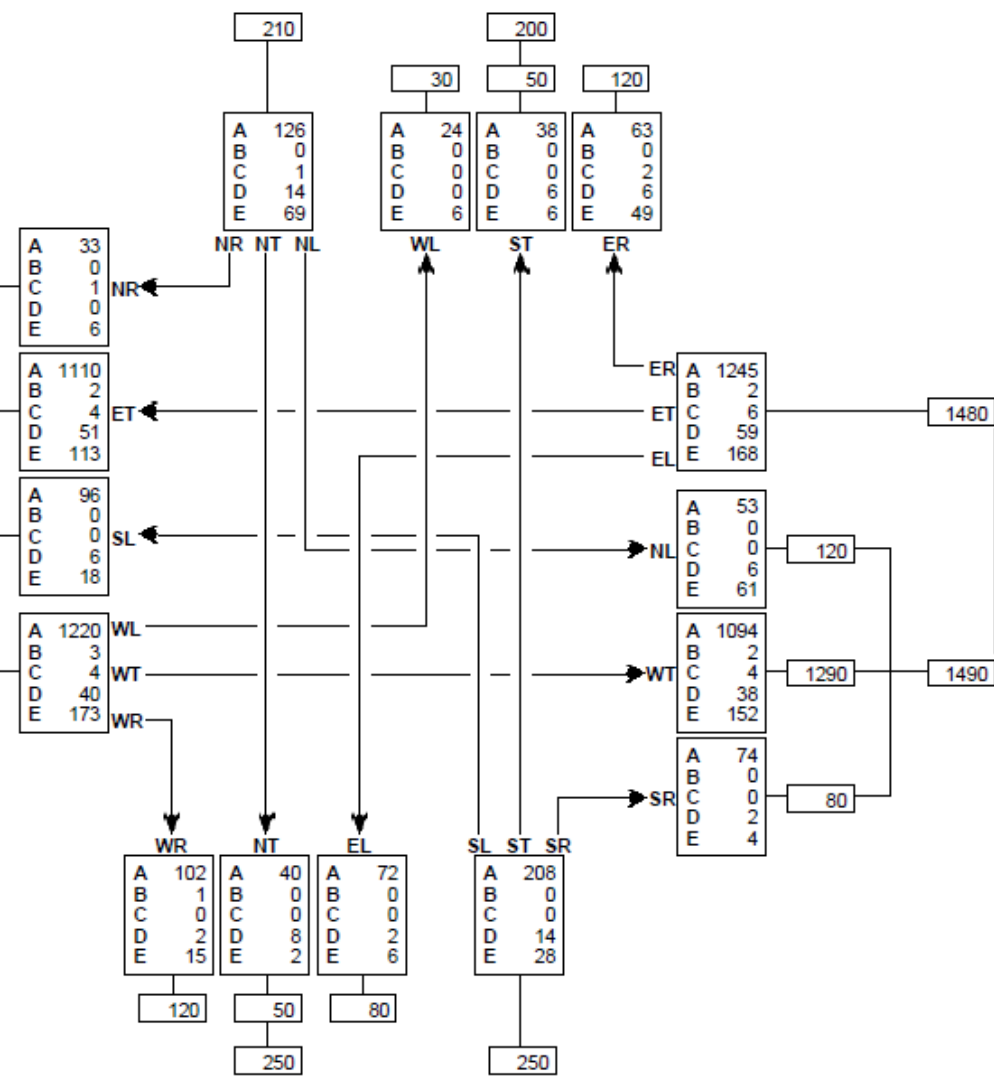
Intersection of:

15 & 831 W OF LAMONT WJ

2020 AADT / ASDT ESTIMATES

West On 15		
Vehicle Type	Vol	%
A: Passenger Vehicle	2459	85.4
B: Recreational Vehicle	5	0.2
C: Bus	9	0.3
D: Single Unit Truck	97	3.4
E: Tractor Trailer Unit	310	10.8
ASDT	3210	AADT 2880

East On 15		
Vehicle Type	Vol	%
A: Passenger Vehicle	2466	83.0
B: Recreational Vehicle	4	0.1
C: Bus	10	0.3
D: Single Unit Truck	105	3.5
E: Tractor Trailer Unit	385	13.0
ASDT	3310	AADT 2970



TURNING MOVEMENT ABBREVIATIONS

- NR: Traffic From North Turning Right
- NL: Traffic From North Turning Left
- NT: Traffic From North Proceeding Through
- SR: Traffic From South Turning Right
- SL: Traffic From South Turning Left
- ST: Traffic From South Proceeding Through
- ER: Traffic From East Turning Right
- EL: Traffic From East Turning Left
- ET: Traffic From East Proceeding Through
- WR: Traffic From West Turning Right
- WL: Traffic From West Turning Left
- WT: Traffic From West Proceeding Through

TURNING MOVEMENT ABBREVIATIONS

- AADT: Annual Average Daily Traffic**
Average daily traffic expressed as vehicles per day for period of January 1 to December 31 (365 days)
- ASDT: Average Summer Daily Traffic**
Average daily traffic expressed as vehicles per day for period of May 1 to September 30 (153 days)

South On 831		
Vehicle Type	Vol	%
A: Passenger Vehicle	422	84.4
B: Recreational Vehicle	1	0.2
C: Bus	0	0.0
D: Single Unit Truck	26	5.2
E: Tractor Trailer Unit	51	10.2
ASDT	560	AADT 500



September 8, 2021
03-20-0074

Mr. Neil Renneberg
Select Engineering Consultants
Suite 100, 17413 – 107 Avenue NW

Dear Mr. Renneberg:

Re: **Whistle Cessation Requirements (Draft)**
Lamont Railway Crossing Safety Assessments

As requested, Bunt & Associates Engineering Ltd. (Bunt) has prepared this report that identifies remedial work required at three railway crossings (and the associated costs) necessary to facilitate whistle cessation.

1. WHISTLE CESSATION REQUIREMENTS

Per Transport Canada's *Grade Crossings Regulations* Section 104 – Audible Warning, the following requirements are prescribed for an area that prohibits whistling on any railway equipment:

- a) The area must be located:
 - i. Within a railway right-of-way, on each side of a public grade crossing, and within 0.4 km from the outer edge of the crossing surface, as shown in **Figure 1**, and
 - ii. Within the road approach;
- b) The area must have a public grade crossing that has the applicable protection referred to in **Table 1**;
- c) The area must not have repeated incidents of unauthorized access to the line of railway; and
- d) The area must not require whistling for a grade crossing located outside the area.

Figure 1 refers to Figure D-1 in Appendix D – Whistling Cessation of Transport Canada's *Grade Crossings Standards* while Table 1 refers to Table D-1 of that same appendix, which summarizes the requirements for warning systems at public grade crossings within an area without whistling.

Figure 1 - Prescribed area for whistling cessation as per Article 23.1 of the RSA

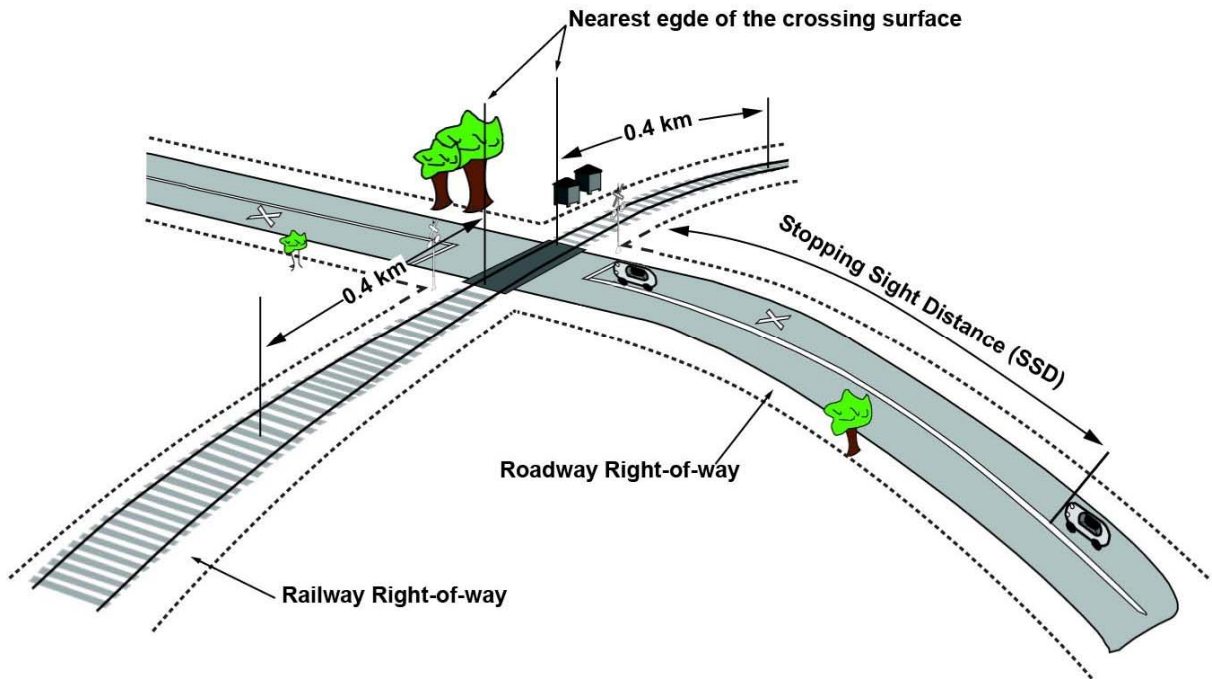


Table 1 - Railway Crossing Whistle Cessation Requirements

Railway Design Speed	Column A		Column B	
	Grade Crossings for Vehicle Use		Grade Crossings For Sidewalks, Paths, or Trails with the centreline no closer than 3.6 m (12 ft) to a warning signal for vehicles	
	No. of Tracks		No. of Tracks	
	1	2 or more	1	2 or more
Column 1	Column 2	Column 3	Column 4	Column 5
1 – 25 km/h (15 mph)	FLB	FLB	No warning system requirement	No warning system requirements
25 – 81 km/h (16 – 50 mph)	FLB	FLB & G	FLB	FLB & G
Over 81 km/h (50 mph)	FLB & G	FLB & G	FLB & G	FLB & G

Legend :
 FLB is a warning system consisting of flashing lights and a bell.
 FLB & G is a warning system consisting of flashing lights, a bell and gates

Note: If a warning system without a gate is indicated as being required in Table 1, guide fencing must be installed to deter persons from crossing the line of railway other than at the grade crossing. Furthermore, if a warning system is not indicated as being required in column 5 of Table 1, guide fencing must be installed, as well as a barrier that is intended to slow a person’s approach to the grade crossing and to encourage a person to look both ways before crossing the grade crossing.

2. FINDINGS

Grade Crossing Safety Assessments were completed for each of the crossings and are attached under separate cover in **Appendix A**. The recommended actions (and associated costs) to bring each crossing into compliance with the whistle cessation requirements are summarized in **Table 2**. It is of note that there were no signs of trespassing onto the railway right of way within 400m either side of these three crossings indicating that fencing and gates would not be required.

Table 2 – Summary of Whistle Cessation Requirements and Costs (by Crossing)

ITEM	RECOMMENDED ACTION	ORDER OF MAGNITUDE COST
CN Vegreville Sub Mile 92.08 (Highway 831)		
1	No action: Appropriate warning system (FLB) in place	-
CN Vegreville Sub Mile 92.79 (50 Avenue)		
2	No Action: Appropriate warning system (FLB) in place	-
CN Vegreville Sub Mile 93.26 (Rge Rd 195)		
3	Install warning system with Flashing Lights and Bells	\$300,000
TOTAL (+/- 30%)		\$300,000

- Notes:
1. Cost estimation based on information in Bunt files.
 2. All costs related to rail replacements or improvements must be confirmed by the railway company.
 3. Price does not include cost for any permits or fees associated with railway work.
 4. Price does not include any soft engineering costs (i.e. Geotechnical engineering or environmental engineering).

If you have any questions regarding our review, please call me at (780) 732-5373 Ext. 222 or e-mail me at nfarn@bunteng.com.

Yours truly,
Bunt & Associates

Nicole Farn, P.Eng
 Senior Transportation Engineer

Appendix A – Grade Crossing Safety Assessments (under separate cover)



MAYOR & COUNCIL REPORT

COUNCIL MEETING DATE: November 23, 2021

ELECTED OFFICIAL: Kirk Perrin

REPORT PERIOD: November 4, 2021 to November 16, 2021

Boards and Committees:

- **November 4, 2021 Economic Development Discussion**
- **November 8, 2021 Governance & Priorities Committee**

Town of Lamont Business:

- **November 4, 2021 Mayor Transition Discussion**
- **November 4, 2021 Buy Local campaign**

Professional Development (Workshops & Conferences):

- **November 10, 2021 Regional Council Orientation**

Lamont Functions and Events:

- **November 11, 2021 Remembrance Day Services**



MAYOR & COUNCIL REPORT

COUNCIL MEETING DATE: November 23,2021

ELECTED OFFICIAL: Linda Sieker

REPORT PERIOD: November 9 – November 17 2021

Boards and Committees:

- N/A

Town of Lamont Business:

- N/A

Professional Development (Workshops & Conferences):

- Nov 10 - Lamont County Regional Elected Officials Orientation

Lamont Functions and Events:

- Nov 11 – Remembrance Day Service



MAYOR & COUNCIL REPORT

COUNCIL MEETING DATE: November 23, 2021

ELECTED OFFICIAL: Jody Foulds

REPORT PERIOD: November 4, 2021 to November 16, 2021

Boards and Committees:

- **November 4, 2021 Economic Development Discussion**
- **November 8, 2021 Governance & Priorities Committee**

Town of Lamont Business:

- **N/A**

Professional Development (Workshops & Conferences):

- **November 10, 2021 Regional Council Orientation**

Lamont Functions and Events:

- **November 11, 2021 Remembrance Day Services**



MAYOR & COUNCIL REPORT

COUNCIL MEETING DATE: November 23, 2021

ELECTED OFFICIAL: Colleen Holowaychuk

REPORT PERIOD: November 10-16, 2021

Boards and Committees:

- **November 8, 2021 - Governance and Priorities Meeting**

Town of Lamont Business:

- **N/A**

Professional Development (Workshops & Conferences):

- **November 10, 2021 - Lamont County Regional Elected Officials Orientation**

Lamont Functions and Events:

- **November 11, 2021 – Remembrance Day Service.**

CAO REPORT

FOR THE PERIOD ENDING Nov 17, 2021

HIGHLIGHTS:

November 4, 2021

- Remembrance Day planning meeting.
- Weekly Operations and Infrastructure meeting - Analysis of year to date.
- Economic Development Committee – preliminary discussion.
- Realty – review of municipal properties for sale.

November 5, 2021

- Capital Budget review.
- Utility Cost Recovery Analysis.

November 8, 2021

- Weekly finance meeting.

November 9, 2021

- Capital Budget review.
- Utility Cost Recovery Analysis.

November 10, 2021

- Council Governance orientation workshop.

November 11 – November 15

- Away from office.

November 17, 2021

- AUMA/AM Conference

MEETINGS/EVENTS & PROFESSIONAL DEVELOPMENT:

- N/A



REQUEST FOR DECISION

REGULAR COUNCIL MEETING AGENDA

MEETING DATE: November 23, 2021

SUBJECT: Notice of Motion – Utility Rates

RECOMMENDATION

THAT Council direct Administration on how to proceed.

BACKGROUND

At the October 26, 2021 Council Meeting, Councillor Harvey made the following Notice of Motion:

“WHEREAS Council has reviewed the issue of budgeting a deficit with utilities, and

WHEREAS Council has discussed, and administration has agreed to work on a model closer to cost recovery, and

WHEREAS Alberta Environment and parks have long advised that utilities be 100% cost recovery, and

WHEREAS Alberta Municipal Affairs, through the What every Councillor Needs To Know handbook, page 15 notes that”...(full cost recovery is normal for utilities)”, and

WHEREAS a change to greater cost recovery in utilities will have an affect on decreasing the taxes required to subsidize them, and

WHEREAS a change to cost recovery for utilities will ensure that those renting properties are not provided a subsidized rate for utilities paid for by those who own properties, and

WHEREAS a change to full cost recovery will establish a reserve for infrastructure replacement,

BE IT RESOLVED that Council for the Town of Lamont directs the Chief Administrative Officer to develop a report that shows potential rate increases over the next 5 years that will ensure that there is full cost recovery for utilities including staffing time, and expenses related to the consumption charges and reserve for infrastructure related to the fixed charges.”

PREVIOUS COUNCIL/COMMITTEE DIRECTIONS

Not applicable.

ANALYSIS/RATIONALE

In accordance with Section 13(1), Procedural Bylaw 12-13, a Notice of Motion may be received by the CAO prior to the closing of the meeting. In this event, the member shall read the Notice of Motion which shall be recorded in the minutes and shall form part of the agenda for the subsequent meeting.

Response Options/Alternatives

1. THAT Council direct Administration on how to proceed.
2. That Council not request further action on this Notice of Motion.

Relevant Statutes/Master Plans/Documents

Not applicable.

Legislative Authority

Bylaw 12-13 – Procedural Bylaw

STAKEHOLDER ENGAGEMENT/COMMUNICATION

Not applicable.

BUDGET/FINANCIAL IMPACT

Once the Utility Rates Restructure Orientation information is accepted, the report will be posted on the Town Website.

ATTACHMENTS

Not applicable



REQUEST FOR DECISION

REGULAR COUNCIL MEETING AGENDA

MEETING DATE: November 23, 2021

SUBJECT: Notice of Motion - Council Remuneration and Expense Policy 11-06

RECOMMENDATION

THAT Council direct Administration to update Policy 11-06 Council Remuneration and Expense.

BACKGROUND

At the October 26, 2021 Council Meeting, Councillor Harvey made the following Notice of Motion:

“WHEREAS policy 11-06 for the remuneration and expenses of council may be dated, and

WHEREAS the Corporate Services Committee is no longer a part of our organization, and

WHEREAS under the Committees of Council section the following are listed that may or may not exist, Corporate Services Committee; Public Services Committee; Protection of Persons and Property Committee; Subdivision and Development Appeal Board ; and given that we did not appoint to the Municipal Planning Commission, although now a designated officer, again perhaps not appointed by this Council but the last, and

WHEREAS under External Committees the following are listed that may or may not need follow up, Lamont County Regional Economic development Initiative; Lamont County oil and gas Exploration, Extraction and Transportation Committee; Capital Region Board, and

WHEREAS 1c may be confusing in that it may allude to a per diem rate that is not stated.

THEREFORE BE IT RESOLVED that Council for the Town of Lamont directs the Chief Administrative Officer to review and possibly revise policy 11-06 and provide the recommendations back to Council for consideration.”

PREVIOUS COUNCIL/COMMITTEE DIRECTIONS

Not applicable.

ANALYSIS/RATIONALE

In accordance with Section 13(1), Procedural Bylaw 12-13, a Notice of Motion may be received by the CAO prior to the closing of the meeting. In this event, the member shall read the Notice of Motion which shall be recorded in the minutes and shall form part of the agenda for the subsequent meeting.

Response Options/Alternatives

1. THAT Council direct Administration to update Policy 11-06 Council Remuneration and Expense.
2. THAT Council direct Administration on how to proceed.
3. THAT Council not request further action on this Notice of Motion.

Relevant Statutes/Master Plans/Documents

Not applicable.

Legislative Authority

Bylaw 12-13 – Procedural Bylaw

STAKEHOLDER ENGAGEMENT/COMMUNICATION

Updated Policy will be circulated to all staff.

BUDGET/FINANCIAL IMPACT

N/A

ATTACHMENTS

Policy 11-06, Council Remuneration and Expense

CLOSED SESSION NOTICE

November 23, 2021

Tax Recovery Update Roll 26500

- *FOIP Section 16(2) – Disclosure Harmful to Business Interests of a Third Party*